Module V

THE NEW BORN

An Essential Element of Universal Health Coverage

World Health Organization

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THE NEWBORN

30.1 ADJUSTMENTS OF THE INFANT AT BIRTH AND IMMEDIATE POST DELIVERY PERIOD

30.1 ADJUSTMENTS OF THE INFANT AT BIRTH AND IMMEDIATE POST DELIVERY PERIOD

Birth is a miracle of nature and huge changes occur in the maternal and neonatal body at the time of birth. In the uterus, the foetus swims in a soft, warm, dark, and quiet world. The placenta provides nutrition and oxygen continuously. In labour, the uterine contractions and vaginal childbirth forcibly squeeze the foetus through the birth canal, limiting oxygenated blood flow during contractions and shifting the skull bones to accommodate the small space.

Immediately after birth, the newborn's system must make drastic adjustments to a world that is colder, brighter, and louder, and where he or she will experience hunger and thirst. The neonatal period (neo- = "new"; -natal = "birth") spans the first to the thirtieth day of birth

The first breath a newborn takes at birth inflates the lungs and dramatically alters the circulatory system, closing the three shunts that directed oxygenated blood away from the lungs and liver during foetal life. Clamping and cutting the umbilical cord collapses the three umbilical blood vessels. The proximal umbilical arteries remain a part of the circulatory system, whereas the distal umbilical arteries and the umbilical vein become fibrotic.

The newborn keeps warm by breaking down brown adipose tissue in the process of non-shivering thermogenesis. The first consumption of breast milk or formula milk the newborn's sterile gastrointestinal tract with beneficial bacteria that eventually establish themselves as the bacterial flora, which aid in digestion.

RESPIRATORY ADJUSTMENTS

Although the foetus "practices" breathing by inhaling amniotic fluid in utero, there is no air in the uterus and thus no true opportunity to breathe. There is also no need to breathe because the placenta supplies the foetus with all the oxygenated blood it needs. During pregnancy, the partially collapsed lungs are filled with amniotic fluid and show very little metabolic activity.

Several factors stimulate newborns to take their first breath at birth. First, labour contractions temporarily constrict umbilical blood vessels, reducing oxygenated blood flow to the foetus and elevating carbon dioxide levels in the blood. High carbon dioxide levels cause acidosis and stimulate the respiratory center in the brain, triggering the newborn to take a breath.

The first breath typically is taken within 10 seconds of birth, after mucus is aspirated from the infant's mouth and nose. The first breaths inflate the lungs to nearly full capacity and dramatically decrease lung pressure and resistance to blood flow, causing a major circulatory reconfiguration. Pulmonary alveoli open, and alveolar capillaries fill with blood. Amniotic fluid in the lungs drains or is absorbed, and the lungs immediately take over the task of the placenta, exchanging carbon dioxide for oxygen by the process of respiration.

CIRCULATORY ADJUSTMENTS

The process of clamping and cutting the umbilical cord collapses the umbilical blood vessels. For the most part, the collapsed vessels atrophy and become fibrotic remnants, existing in the mature circulatory system as ligaments of the abdominal wall and liver. The ductus venosus degenerates to become the ligamentum venosum beneath the liver. Only the proximal sections

of the two umbilical arteries remain functional, taking on the role of supplying blood to the upper part of the bladder

A newborn's circulatory system reconfigures immediately after birth. The three foetal shunts have been closed permanently, facilitating blood flow to the liver and lungs.The newborn's first breath is vital to initiate the transition from the foetal to the neonatal circulatory pattern. Inflation of the lungs decreases blood pressure throughout the pulmonary system, as well as in the right atrium and ventricle. In response to this pressure change, the flow of blood temporarily reverses direction through the foramen Ovale, moving from the left to the right atrium, and blocking the shunt with two flaps of tissue. The increased oxygen concentration also constricts the ductus arteriosus, ensuring that these shunts no longer prevent blood from reaching the lungs to be oxygenated.

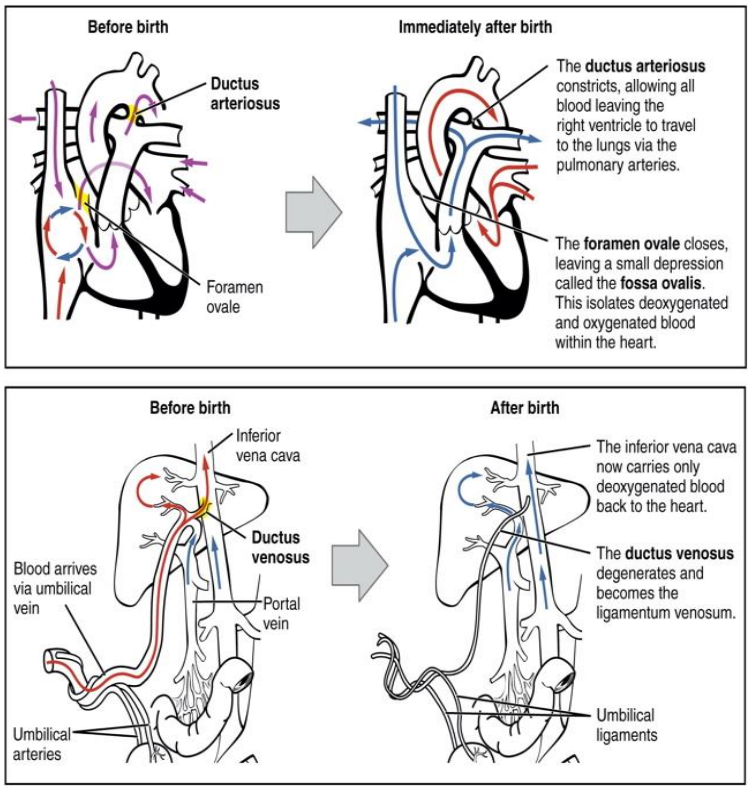

Figure 1. Neonatal Circulatory System.

THERMOREGULATORY ADJUSTMENTS

In the uterus, the foetus floats in warm amniotic fluid that is maintained at a temperature of approximately 98.6°F with very little fluctuation. Birth exposes newborns to a cooler environment in which they must regulate their own body temperature. Newborns have a higher ratio of surface area to volume than adults. This means that their body has less volume throughout which to produce heat, and more surface area from which to lose heat. As a result, newborns produce heat more slowly and lose it more quickly.

Newborns also have immature musculature that limits their ability to generate heat by shivering. Moreover, their nervous systems are underdeveloped, so they cannot quickly constrict superficial blood vessels in response to cold. They also have little subcutaneous fat for insulation. All these factors make it harder for newborns to maintain their body temperature.

Newborns, however, do have a special method for generating heat: non-shivering thermogenesis, which involves the breakdown of brown adipose tissue, or brown fat, which is distributed over the back, chest, and shoulders. Brown fat differs from the more familiar white fat in two ways:

- It is highly vascularized. This allows for faster delivery of oxygen, which leads to faster cellular respiration.
- It is packed with a special type of mitochondria that can engage in cellular respiration reactions that produce less ATP and more heat than standard cellular respiration reactions.

The breakdown of brown fat occurs automatically upon exposure to cold, so it is an important heat regulator in newborns. During foetal development, the placenta secretes inhibitors that prevent metabolism of brown adipose fat and promote its accumulation in preparation for birth.

GASTROINTESTINAL ADJUSTMENTS

In adults, the gastrointestinal tract harbors bacterial flora—trillions of bacteria that aid in digestion, produce vitamins, and protect from the invasion or replication of pathogens. In sharp contrast, the foetal intestine is sterile. The first consumption of breast milk or formula the neonatal gastrointestinal tract with beneficial bacteria that begin to establish the bacterial flora.

URINARY ADJUSTMENTS

The foetal kidneys filter blood and produce urine, but the neonatal kidneys are still immature and inefficient at concentrating urine. Therefore, newborns produce very dilute urine, making it particularly important for infants to obtain sufficient fluids from breast milk or formula. In a sense, wasting fluid. This increases their risk for dehydration, and makes it critical that caregivers provide newborns with enough fluid, especially during bouts of vomiting or diarrhea

HOMEOSTASIS IN THE NEWBORN

The neonatal homeostatic system differs significantly from that of older children and adults. All aspects of the coagulation system are affected with low levels of pro-coagulants except for Factors V and VIII and von Willebrand factor (VWF); the latter two being elevated throughout the neonatal period. The natural anticoagulants are reduced with the notable exception of alpha-2-macroglobulin, which is increased. The activity of the plasmin/plasminogen system is also relatively reduced. Notably, the vitamin K-dependent proteins are all reduced, as is anti-thrombin

APGAR SCORE

In the first few minutes following birth, a newborn undergoes dramatic systemic changes to be able to survive outside the uterus. An obstetrician, midwife, or FWW can estimate how well a newborn is doing by obtaining an Apgar score. The Apgar score was introduced in 1952 by the anaesthesiologist Dr. Virginia Apgar as a method to assess the effects on the newborn of anaesthesia given to the labouring mother. Healthcare providers now use it to assess the general wellbeing of the newborn, whether analgesics or anaesthetics were used.

Five criteria of APGAR score:

skin color,

heart rate,

reflex,

muscle tone and

respiration is assessed,

Each criterion is assigned a score of 0, 1, or 2. Scores are taken at 1 minute after birth and again at 5 minutes after birth. Each time that scores are taken, the five scores are added together. High scores (out of a possible 10) indicate the baby has made the transition from the womb well, whereas lower scores indicate that the baby may be in distress. The technique for determining an Apgar score is quick and easy, painless for the newborn, and does not require any instruments except for a stethoscope.

A convenient way to remember the five scoring criteria is to apply the mnemonic APGAR, for “appearance” (skin color), “pulse” (heart rate), “grimace” (reflex), “activity” (muscle tone), and “respiration.”

Of the five Apgar criteria, heart rate and respiration are the most critical. Poor scores for either of these measurements may indicate the need for immediate medical attention to resuscitate or stabilize the newborn. In general, any score lower than 7 at the 5-minute mark indicates that medical assistance may be needed. A total score below 5 indicates an emergency. Normally, a newborn will get an intermediate score of 1 for some of the Apgar criteria and will progress to a 2 by the 5-minute assessment. Scores of 8 or above are normal.

30.2 CONGENITAL ANAMOLIES

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A physical defect present in a baby at birth, irrespective of whether the defect is caused by a genetic factor or by prenatal events that are not genetic.In a malformation, the development of a structure is arrested, delayed, or misdirected early in embryonic life and the effect is permanent. The incidence of major congenital abnormalities is 2-3 % of all birth, hence every practicing midwife will at some time be confronted with the challenge of providing appropriate care and support for such babies and their families.

Causes and risk factors

Although approximately 50% of all congenital anomalies cannot be linked to a specific cause, there are some known genetic, environmental, and other causes or risk factors.

Genetic factors

Genes play an important role in many congenital anomalies. This might be through inherited genes that code for an anomaly or resulting from sudden changes in genes known as mutations. Consanguinity (when parents are related by blood) also increases the prevalence of rare genetic congenital anomalies and nearly doubles the risk for neonatal and childhood death, intellectual disability, and other anomalies.

Some ethnic communities (such as Ashkenazi Jews or Finns) have a comparatively high prevalence of rare genetic mutations such as Cystic Fibrosis and Haemophilia C.

Socioeconomic and demographic factors

Low-income may be an indirect determinant of congenital anomalies, with a higher frequency among resource-constrained families and countries. It is estimated that about 94% of severe congenital anomalies occur in low- and middle-income countries. An indirect determinant, this higher risk relates to a possible lack of access to sufficient, nutritious foods by pregnant women, an increased exposure to agents or factors such as infection and alcohol, or poorer access to healthcare and screening. Factors often associated with lower income may induce or increase the incidence of abnormal prenatal development.

Maternal age is also a risk factor for abnormal intrauterine foetal development. Advanced maternal age increases the risk of chromosomal abnormalities, including Down syndrome.

Environmental factors

Maternal exposure to certain pesticides and other chemicals, as well as certain medications, alcohol, tobacco and radiation during pregnancy, may increase the risk of having a foetus or neonate affected by congenital anomalies. Working or living near, or in, waste sites, smelters or mines may also be a risk factor, particularly if the mother is exposed to other environmental risk factors or nutritional deficiencies.

Infections

Maternal infections such as syphilis and rubella are a significant cause of congenital anomalies

in low- and middle-income countries.

Zika virus infection during pregnancy is a cause of microcephaly and other congenital abnormalities in the developing foetus and newborn. Zika infection in pregnancy also results in pregnancy complications such as foetal loss, stillbirth, and preterm birth.

Maternal nutritional status

Maternal folate insufficiency increases the risk of having a baby with a neural tube defect while excessive vitamin A intake may affect the normal development of an embryo or foetus

MAJOR CONGENITAL ANAMOLIES

External	Internal
• Neural tube defects • Anencephaly • Craniorachischisis • Iniencephaly • Encephalocele • Spina bifida • Microcephaly • Microtia/Anotia • Orofacial clefts • Cleft lip only • Cleft palate only • Cleft lip and palate • Exomphalos (omphalocele) • Gastroschisis • Hypospadias • Reduction defects of upper and lower limbs • Talipes equinovarus/club foot	• Congenital heart defects • Hypoplastic left heart syndrome • Common truncus • Interrupted aortic arch • Transposition of great arteries • Tetralogy of Fallot • Pulmonary valve atresia • Tricuspid valve atresia • Oesophageal atresia/ tracheoesophageal fistula • Large intestinal atresia/stenosis • Anorectal atresia/stenosis • Renal agenesis/hypoplasia
Chromosomal Trisomy 21 (Down syndrome)	

Identifiable congenital defects can be categorized in four ways:

- Chromosome and gene abnormalities: It is an excess or deficit of chromosomal material causing congenital defect.
- Teratogenic causes: A teratogen is any agent that raises the incidence of congenital abnormality. These include drugs, for example anticonvulsants, anticoagulants and heroin, alcohol, nicotine, etc.
- Multi factorial causes: These are due to a combination of the above two factors i.e., genetic defect in addition to one or more teratogenic influences.
- Unknown causes***:*** Despite a grown body of knowledge the specific cause of around 80% of abnormalities remains unspecified.

GASTROINTESTINAL MALFORMATIONS

Most of the abnormalities affecting this system call for prompt surgical intervention.

- Cleft lip and cleft palate: In cleft lip, the lip appears to be cut. This defect may be unilateral or bilateral. It is very often accompanied by cleft palate.
- Clefts in the palate may affect hard palate, soft palate, or both. It is recommended that during the initial examination of the infant the palate be examined by means of a good light source rather than by digital palpation. The greatest problem for these babies is initiating feeding. Expressed breast milk may be given by cup or spoon-feeding. Corrective surgery will be carried out at some stage as advised by the doctor.
- Exomphalos is when the bowel or other viscera protrude through the umbilicus. Very often these babies have other abnormalities. The extrusion of bowel, which is not covered by peritoneum, is very vulnerable to infection and injury.
- Immediate management is to cover the herniated abdominal contents with warm sterile saline swabs or a sterile Silastic bag and transfer the baby to a hospital immediately.
- Imperforate Anus: An imperforate anus should be obvious at birth on examination of the baby. The baby does not pass meconium. The situation requires that the baby should be referred promptly for surgery.

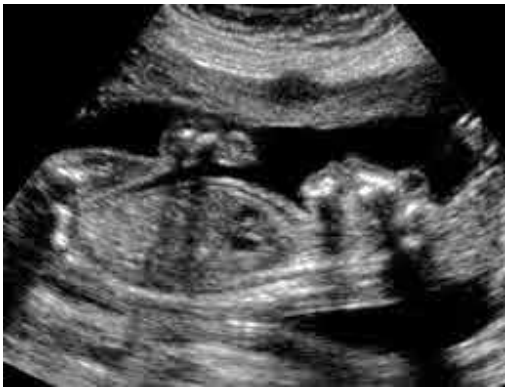
CONGENITAL CARDIAC DEFECTS

Cardiac defects presenting with cyanosis are easy to recognize*:* The persistence of central cyanosis in a baby (that is cyanosis of lips, mucous membranes, trunk), may be the first signs that a cardiac defect is present. Referral to hospital is essential.

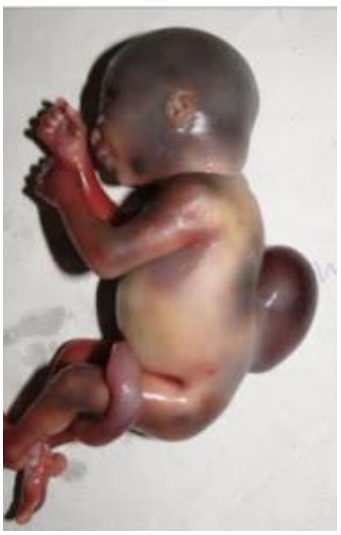
CENTRAL NERVOUS SYSTEM ABNORMALITIES

Ingestion of folic acid supplements prior to conception and during the early stages of pregnancy has helped to prevent abnormalities of the central nervous system. Some of them are described below and all of these conditions need the baby to be referred to a hospital immediately.

- **Anencephaly**: This major abnormality describes the absence of the forebrain and vault of the skull. It is a condition which is incompatible with life but occasionally such a baby is born alive.



- **Spina bifida aperta**: Spina bifida aperta results from failure of fusion of the vertebral column.
- **Meningocele:** There is no skin covering the defect which allows protrusion of the meninges, hence meningocele. The meningeal membrane may be flat or appear as a membranous sac with or without cerebrospinal fluid, but it does not contain neural tissue.
- **Meningomyelocele** on the other hand does not involve the spinal cord. When the



defect is at base of skull level it is known as an *encephalocele.*

- **Spina bifida occulta:** Spina bifida occulta is the most minor type of defect where the vertebra is bifid (split into two). There is usually no spinal cord involvement. A tuft of hair or sinus at the base of the spine may be noted on first examination of the baby
- **Hydrocephalus:** This is a condition which arises from a blockage in the circulation and absorption of cerebrospinal fluid. The large lateral ventricles increase in size and eventually compress the surrounding brain tissue. It is a commonly accompanied by the more severe spinda bifida lesions.
- **Microcephaly:** This is where the occipitofrontal circumference is more than two standard deviations below normal for gestational age. The disproportionately small head may be the result of intrauterine infection, for example rubella, a feature of foetal alcohol syndrome, or part of several defects in some trisomic disorders. Invariably the baby will be mentally impaired.

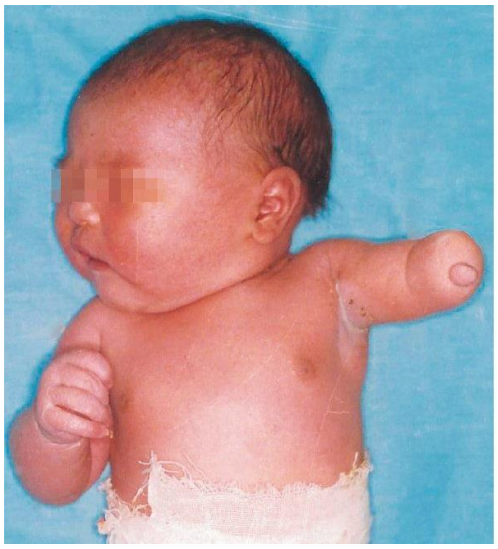
MUSCULOSKELETAL DEFORMATIES

Careful examination including separation and counting of the baby's fingers and toes during the initial examination is important, otherwise anomalies such as extra digits and webbing of fingers may go unnoticed.

- **Extra digits** (Polydactyly):
- In polydactyly, the extra digit (s) may be fully formed, or simply extra tissue attached by a pedicle. Where there is a rudimentary digit without bone involvement it is common practice to ligate the base of the digit and allow it to necrose; more complex attachments may require surgical removal.
- **Webbing** of fingers & toes (Syndactyly):
- More commonly affects the hands. It is a sheet or fold of skin attached between the fingers or toes lie that of a duck

Limb reduction anomalies:

Limb reduction defects comprise a wide range of possibilities. In some either a hand or a foot will be completely missing while in others a normal hand or foot will be present on the end of a shortened limb. Thalidomide, an anti-emetic, has been proved to be teratogenic in this context. The midwife should refer the baby to a hospital.



Talipes equinovarus (TEV):

Is the descriptive term for a deformity of the foot where the ankle is bent downwards (plantar flexed) and the front part of the foot is Turned inwards

Talipes calcaneovalgus (TCV):

Describes the opposite position where the foot is dorsi flexed and everted. In the mildest form the foot may easily be turned to the correct position. The midwife should encourage the mother to exercise the baby's foot in this way several times a day. More severe forms will require manipulation, splinting and / or surgical correction. The advice of an orthopaedic surgeon should be sought.

GENITOURINARY SYSTEM

- **Hypospadias**: Examination of a baby boy may reveal that the urethral meatus opens on to the under surface of the penis. It can be at any point along the length of the penis and in some cases will open on to the perineum.
- Hidden testes (Crypto-orchidism): This may be unilateral or bilateral. If on examination of the body after delivery the scrotum is empty, the undescended tests may be found in the inguinal pouch. Sometimes the testis in this position can be manipulated into the scrotal pouch. This helps well for future normal development. Testes that are found too high in the inguinal canal to manipulate into the scrotum may be malformed. Parents will be encouraged to have the baby examined at regular intervals. If descent of the testis has not occurred by the time the child is approaching school age, arrangements for surgery will be made.

- Ambiguous Genitalia: Ambiguity of genitalia may arise when examination of the baby reveals any of the following: a small hypo plastic penis, bifid scrotum, undescended testes (careful examination should be made to detect undescended tests in the inguinal canal). Or enlarged clitoris, incompletely separated, or poorly differentiated labia, in the female babies.

COMMONLY OCCURING SYNDROMES

- Mongolism or Down syndrome (Trisomy 21)
- The classic features of what is now known as Down syndrome include combination of facial features amongst mentally subnormal individuals such as widely set and obliquely slanted eyes, small nose and thick, rough tongue, small head with flat occiput; squat broad hands with incurving little finger; wide space between thumb and index finger; single palmar crease; babies born with Down syndrome also have a higher incidence of cardiac anomalies, leukemia and hypothyroidism. Intelligence quotient is below average at 40-80. It is important to know that may Down's babies grow up and learn many skills and can also behave in a civil manned. See the figure below.

- ***Klinefelter Syndrome (XXY)****:* This is an abnormality affecting boys, but it is not normally diagnosed until pubertal changes fail to occur.

Prevention of congenital anomalies

Preventive public health measures work to decrease the frequency of certain congenital anomalies through the removal of risk factors or the reinforcement of protective factors. Important interventions and efforts include:

- ensuring adolescent girls and mothers have a healthy diet including a wide variety of vegetables and fruit and maintain a healthy weight.
- ensuring an adequate dietary intake of vitamins and minerals, and particularly folic acid in adolescent girls and mothers.
- ensuring mothers avoid harmful substances, particularly alcohol and tobacco.
- avoidance of travel by pregnant women (and sometimes women of child-bearing age)

to regions experiencing outbreaks of infections known to be associated with congenital anomalies.

- reducing or eliminating environmental exposure to hazardous substances (such as heavy metals or pesticides) during pregnancy.
- controlling diabetes prior to and during pregnancy through counselling, weight management, diet and administration of insulin when required.
- ensuring that any exposure of pregnant women to medications or medical radiation (such as imaging rays) is justified and based on careful health risk–benefit analysis.
- vaccination, especially against the rubella virus, for children and women.
- increasing and strengthening education of health staff and others involved in promoting prevention of congenital anomalies.
- screening for infections, especially rubella, varicella, and syphilis, and consideration of treatment

30.3 RESUSCITATION OF THE NEWBORN

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Newborn or Neonate is the term applied to a baby from the time of his birth, till he is 4 weeks of age.

Neonatal Period is the initial four weeks of life.

Infancy means the first 12 months of life.

The transition from intrauterine to extra uterine existence is a dramatic one and demands considerable and effective physiological alternations by the baby to ensure survival. The fetus leaves an environment which has been completely life sustaining where his needs for oxygenation, nutrition, excretion, and thermoregulation have been met with minimal effort on his part.

Subjected to intermittent diminution of his oxygen supply during uterine contractions, compression followed by decompression of his head and chest, and extension of his limbs, hips and spine during delivery, the baby emerges from his mother to encounter light, noises, cool air, gravity, and tactile stimuli for the first time. Simultaneously he must make major adjustments in his respiratory and circulatory systems as well as control his body temperature. These initial adaptations are crucial to his subsequent well-being and should be facilitated by the midwife at the time of birth.

Extra uterine life presents a challenge to the newborn baby. The most important changes, those in the heart and lungs, take place at birth. However, continued adaptations are necessary in the first week of life as the neonate assumes independence from the maternal and placental nurturing which he enjoyed before birth. He remains dependent on his mother or other caregiver for nutrition and protection but is responsible for his own metabolism and homeostasis among other functions essential to survival.

THE NORMAL NEWBORN BABY

Assessing a baby's physical maturity is an important part of care. Maturity assessment is helpful in meeting a baby's needs if the dates of a pregnancy are uncertain. For example, a very small baby may actually be more mature than it appears by size and may need different care than a premature baby.

Breathing in a healthy newborn

Normally, a healthy baby starts to breath spontaneously immediately after delivery. If the breathing started spontaneously and is sustained by the baby without assistance, it indicates that:

- The fetus was not asphyxiated while in the uterus
- The respiratory system is functioning well
- The cardiovascular system (heart and blood vessels) is functioning well
- There is coordination by the brain of the movements required for sustained rhythmical breathing (brain is functioning well).

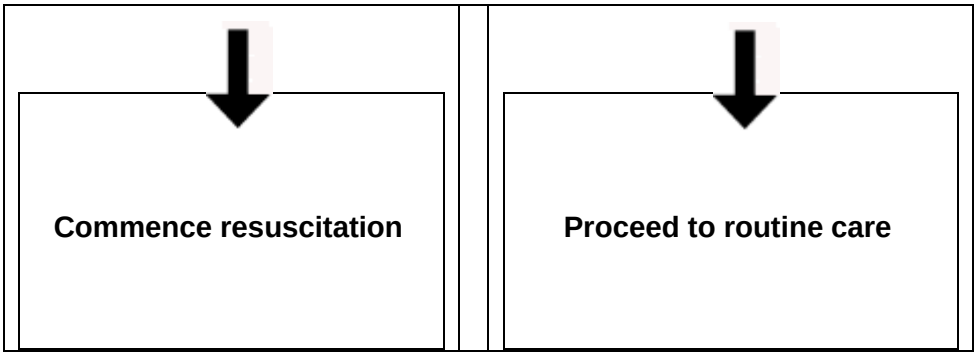
A full-term normal newborn who is breathing well has pinkish skin color and semi-flexed arms and legs; he has made a good transition from the mother's uterus to the outside world.

After the baby is born many changes happen in its body. Most importantly, the baby begins to use its lungs to get oxygen by breathing. For most babies this change happens without any problems, but some babies need help to start or continue breathing. For asphyxiated babies' resuscitation is lifesaving. About 5% – 10% of newborns need resuscitation.

Initial assessment

At birth, dry thoroughly and rapidly assess the neonate's condition:

The neonate	
• Is not breathing spontaneously or has difficulty breathing	• Is breathing or crying spontaneously
• Has poor muscle tone	• Has good muscle tone and responds when stimulated
• Has a heart rate less than or equal to 100 beats/minute	• Has a heart rate above 100 beats/minute
• Has persistent central cyanosis at 1 minute	• Becomes pink rapidly



Note: if the amniotic fluid is meconium-stained but the neonate is breathing spontaneously, wipe the face and start routine care as below.

Thermoregulation

- At birth:
- dry the neonate with a clean, dry cloth.
- wrap the neonate in another clean, dry cloth.
- place the neonate against the mother's (dried) body and cover with a dry cloth or blanket.
- Perform a full clinical examination with the neonate under an infant warmer. Cover the head with a cap to reduce heat loss.
- Axillary temperature should be kept between 36 and 37 °C, and the neonate should have pink, warm feetKeep the neonate in a warm room (between 23 and 25 °C). Delay bathing the neonate until 24 hours after birth. If it is not possible for cultural reasons, delay for at least 6 hours.

Cord clamping and cord care

Wait at least 1 to 3 minutes before clamping the cord (especially neonates weighing less than 2500 g).

Clamp the cord with two Kocher forceps 10 cm from the umbilicus and cut between the two forceps. Use sterile blade or scissors; a different pair than those used for episiotomy.

Tie off the cord with a Barr clamp or sterile thread (double ligature), leaving a 2 to 3 cm stump.

Disinfect the umbilicus: apply 7.1% chlorhexidine gluconate (delivering 4% chlorhexidine) to the tip, stump and base of the cord. If not available, disinfect with 10% povidone iodine. Put a single application at birth

Apgar Scoring:

Apgar scoring has been used as a systematic tool to assess and document the clinical status of the newborn at birth, at 1 and 5 minutes of life. There are five important clinical signs, which should be present after birth. These are called the vital signs: breathing, heart rate, color, tone and response.

Sign	Score = 0	Score = 1	Score = 2
Heart rate	Absent	Below 100 per minute	Above 100 per minute
Breathing effort	Absent	Weak, irregular, or gasping	Good, crying
Muscle tone	Flaccid	Some flexing of arms and legs	Well-flexed, or active movements of arms and legs
Reflex or irritability	No response	Grimace or weak cry	Good cry
Colour	Blue all over, or pale	Body pink, hands and feet blue	Pink all over

Measuring Apgar score:

Each of the five vital signs is given a score of 0,1 or 2. If the sign is normal a score of 2 is given. Mildly abnormal signs are given a score of 1. If the vital signs are very abnormal, a score of 0 is given. The score for each vital sign is then added together to give the Apgar score out of 10. The best possible score is 10 and worst is 0.

Apgar score Rating:

Greater than 6	Not Asphyxiated
Between 4—6	Moderately Asphyxiated
Less than 4	Severely Asphyxiated

Apgar score at 1 minute after birth is usually between 7 – 8because almost all new-borns have blue hands & feet at birth.

Clinical examination and assessment of risk factors

A full clinical examination of the neonate should be completed in the delivery room as soon as possible, under an infant warmer, by the birth attendant.The priority is to recognise danger signs that may indicate severe illness and to assess for risk factors for infection and hypoglycaemiaRecord all observations on a monitoring sheet.

EXAMINATION OF THE NEWBORN:

Essential new-born care includes the following actions

- Routine clinical examination
- Vital signs
- respiratory rate: normal range 30 to 60 breaths/minute
- heart rate: normal range 100 to 160 beats/minute
- temperature: normal range ≥ 36 °C and < 37.5 °C
- Weight (weigh the neonate naked on an appropriate scale, calibrated beforehand)
- Skin: see danger signs,
- Head: fontanelles, eyes, ears, oral cavity (palate, mucous membranes)
- Chest: respiratory effort, heart sounds, breath sounds
- Abdomen: shape, size, umbilicus, genital organs, anus, spine
- Extremities: limbs, feet, hands
- Neurology: posture, tone, reflexes (sucking, grasp, response to stimulation)

1 Clean childbirth and cord care

Principles of cleanliness are essential in both home and health post childbirth to prevent infection to the mother and baby. These are:

- Clean your hands
- Clean the mother's perineum
- Nothing unclean introduced vaginally
- Clean delivery surface
- Cleanliness in cord clamping and cutting.

The stump of the umbilical cord must be kept clean and dry to prevent infection. Wash it with soap and clean water only if it is soiled. Remember:

- Do not apply dressings or substances of any kind
- If the cord bleeds, re-tie it.

It usually falls off 4–7 days after birth, but until this happens, place the cord outside the nappy to prevent contamination with urine/faeces.

Do not put dirt or dung on the cord stump! Dirt and dung do not protect the stump — they cause serious infections.

2 Checking the new-born

Most babies are alert and strong when they are born. Other babies start slow, but as the first few minutes pass, they breathe and move better, get stronger, and become less blue.

Immediately after delivery, clear airways and stimulate the baby while drying. To see how healthy the baby is, watch for:

- Breathing: babies should start to breathe normally within seconds after birth. Babies who cry after birth are usually breathing well. But many babies breathe well and do not cry at all.
- Colour: the baby's skin should be a normal colour – not pale or bluish.
- Muscle tone: the baby should move his or her arms and legs vigorously.

All these things should be checked simultaneously within the first minute after birth.

Warmth and bonding

New-born babies are at increased risk of getting extremely cold. The mother and the baby should be kept skin-to-skin contact, covered with a clean, dry blanket. This should be done immediately after the birth, even before you cut the cord.

The mother's body will keep the baby warm, and the smell of the mother's milk will encourage him or her to suck. Be gentle with a new baby. The first hour is the best time for the mother and baby to be together, and they should not be separated. This time together will also help to start breastfeeding as early as possible.

Early breastfeeding

Breast feeding is good for the mother and baby. If everything is normal after the birth, the mother should breastfeed her baby right away. She may need some help getting started. The first milk to come from the breast is yellowish and is called colostrum. Some women think that colostrum is bad for the baby and do not breastfeed in the first day after the birth. But colostrum is very important! It is full of protein and helps to protect the baby from infections.

- Breastfeeding makes the uterus contract. This helps the placenta come out, and it may help prevent heavy bleeding.
- Breastfeeding helps the baby to clear fluid from his nose and mouth and breathe more easily.
- Breastfeeding is a good way for the mother and baby to begin to know each other.
- Breastfeeding comforts the baby.
- Breastfeeding can help the mother relax and feel good about her new baby.

If the baby does not seem able to breastfeed, see if it has a lot of mucus in his or her nose. To help the mucus drain, lay the baby across the mother's chest with its head lower than its body. Stroke the baby's back from the waist up to the shoulders. After draining the mucus, help the mother to put the baby to the breast again. You will learn a lot more about breastfeeding in the next Module in this curriculum on Postnatal Care.

Immediate essential newborn care

When the baby's umbilical cord is cut, there are many physiological changes inside the baby's body to allow it to make the necessary adaptation to life outside its mother. It is generally

tougher to survive in the outside world than in the relative safety of the uterus, so we need to provide basic care to the newborn to help it resist some potential health risks listed below

Health risks to newborns

Newborns need additional care to prevent:

- Spontaneous bleeding, usually from the gastrointestinal tract, due to Vitamin K deficiency
- Bleeding due to birth trauma (usually manifested late after delivery with swelling over scalp that requires immediate referral)
- Eye infections due to *Chlamydia trachomatis* and *Neisseria gonorrhea* (bacteria which are common causes of sexually transmitted infections; the baby can acquire these infections as it passes through the birth canal)
- Some vaccine preventable diseases such as poliomyelitis and tuberculosis
- Hypothermia (becoming too cold)
- Hypoglycemia (low blood glucose level)
- Mother-to-child transmission of HIV, if the mother is HIV-positive.

Physical examination

A complete physical exam is an important part of new-born care. The healthcare provider carefully checks each body system for health and normal function. The provider also looks for any signs of illness or birth defects. Physical exam of a new-born often includes:

- **General appearance.** This looks at physical activity, muscle tone, posture, and level of consciousness.
- **Skin.** This looks at skin colour, texture, nails, and any rashes.
- **Head and neck.** This looks at the shape of head, the soft spots (fontanelles) on the baby's skull, and the bones across the upper chest (clavicles).
- **Face.** This looks at the eyes, ears, nose, and cheeks.
- **Mouth.** This looks at the roof of the mouth (palate), tongue, and throat.
- **Lungs.** This looks at the sounds the baby makes when he or she breathes. This also looks at the breathing pattern.
- Heart sounds and pulses in the groin (femoral)
- **Abdomen.** This looks for any masses or hernias.
- **Genitals and anus.** This checks that the baby has open passages for urine and stool.

Arms and legs. This checks the baby's movement and development

Gestational age assessment

The healthcare provider will check how mature the baby is. This is an important part of care.

This check helps figure out the best care for the baby if the dates of a pregnancy are uncertain. For example, a very small baby may be more mature than he or she appears by size and may need different care than a premature baby needs.

Healthcare providers often use an exam called the Dubowitz/Ballard Examination for Gestational Age. This exam can closely estimate a baby's gestational age. The exam looks at a baby's skin and other physical features, plus the baby's movement and reflexes. The physical maturity part of the exam is done in the first 2 hours of birth. The movement and reflexes part of the exam is done within 24 hours after birth. The provider often uses the information from this exam to help with other maturity estimates.

Measurements

The hospital staff takes other measurements of each baby. These include:

- **Head circumference.** The distance around the baby's head.
- **Abdominal circumference.** The distance around the belly (abdomen).
- **Length.** The measurement from top of head to the heel.

The staff also checks these vital signs:

- **Temperature.** This checks that the baby can have a stable body temperature in normal room.
- **Pulse.** A new-born's pulse is normally 120 to 160 beats per minute.
- **Breathing rate.** A new-born's breathing rate is normally 40 to 60 breaths per minute.

Physical maturity

The physical maturity part of the Dubowitz/Ballard exam looks at physical features that look different at different stages of a baby's gestational age. Babies who are physically mature usually have higher scores than premature babies.

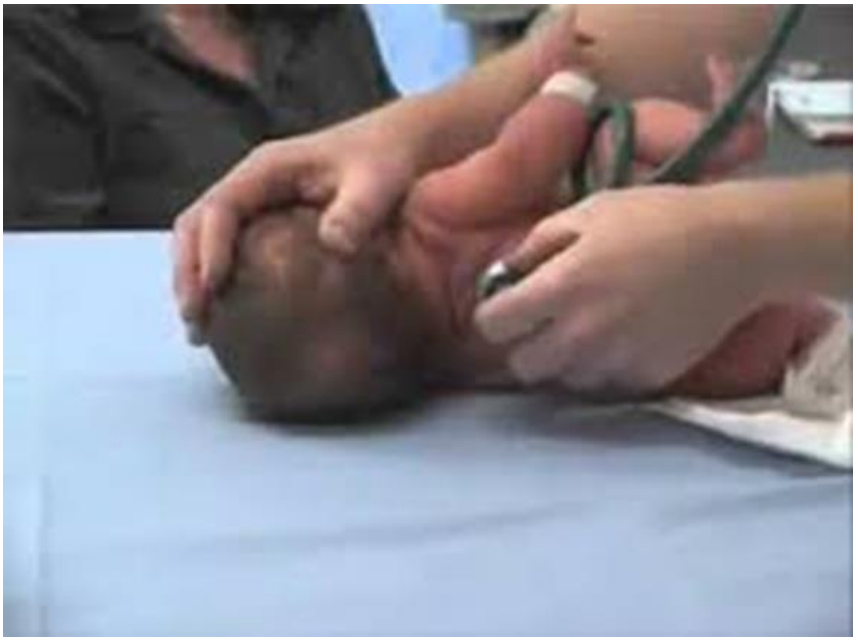
Points are given for each area of assessment. A low of -1 or -2 means that the baby is very immature. A score of 4 or 5 means that the baby is very mature (postmature). These are the areas looked at:

- **Skin textures.** Is the skin sticky, smooth, or peeling?
- **Soft, downy hair on the baby's body (lanugo).** This hair is not found on immature babies. It shows up on a mature infant but goes away for a postmature infant.
- **Plantar creases.** These are creases on the soles of the feet. They can be absent or range up to covering the entire foot.
- **Breast.** The provider looks at the thickness and size of breast tissue and the darker ring around each nipple (areola).
- **Eyes and ears.** The provider checks to see if the eyes are fused or open. He or she also checks the amount of cartilage and stiffness of the ears.
- **Genitals, male.** The provider checks for the testes and how the scrotum looks. It may be smooth or wrinkled

- **Genitals, female.** The provider checks the size of the clitoris and the labia and how they look.

RESPIRATORY SYSTEM

At birth the respiratory system is developmentally incomplete, growth of new alveoli continues for several years. The lumen of the peripheral airways is narrow which predisposes to airway obstruction.



The normal baby has a respiratory rate of 30-60 breaths per minute. His breathing is diaphragmatic, chest and abdomen rising and falling synchronously. The breathing pattern is erratic. Respirations are shallow and irregular, being interspersed with brief 10 to 15 second periods of apnea. This is known as periodic breathing.

CARDIOVASCULAR SYSTEM AND BLOOD

The changes in the baby's heart occur at birth, septa between the two upper chambers of the heart fuse and the foramen oval present during foetal life is closed and all cardiac output of blood is sent to the lungs once the newborn starts breathing through his lungs. The heart rate is rapid, 120-160 beats per minute, and fluctuates in accordance with the baby's respiratory function and activity or sleep state. Peripheral circulation is sluggish. This results in mild cyanosis of hands, and feet and in generalized mottling when the skin is exposed. Blood pressure fluctuates according to activity and ranges from 50-55 / 25-30 mm Hg to 50-80 mmHg in the first 10 days of life. Breakdown of excess red blood cells in the liver and spleen predisposes to jaundice in the first week.

TEMPERATURE REGULATION

The normal body temperature of the newborn ranges from 36.5˚C to 37.0˚C in the axilla, whereas, in the rectum it is from 36.7˚C to 37. 2˚C.Thermal control in the neonate remains

poor for some time. Owing to the immaturity of the hypothalamus, temperature regulation is inefficient, and the newborn remains vulnerable to hypothermia particularly when exposed to cold or draft, when wet, when unable to move about freely or when deprived of nutrition.

As a baby who is cold is unable to shiver, he will attempt to maintain his body heat by adopting a flexed foetal posture, increasing his respiratory rate and activity. He may also cry.

- Hypothermia is defined as a core temperature below 36.5°C.
- Hyperthermia is defined as an axillary temperature above 37.5°C.

Environments that are outside the neutral thermal environment may result in the infant developing hypothermia or hyperthermia. Babies who are too cold or too warm will try and regulate their temperature and this action, especially in the preterm and small for gestational age infant, can have a detrimental effect.

Letting infants get cold increases mortality and morbidity.

RENAL SYSTEM

Though the kidneys are functional in foetal life, their workload is minimal until after birth. They are functionally immature

The first urine passed by the baby is scant and clear. During the next few days, the urine is concentrated and reddish in color, owing to the presence of urates. This is sometimes confused with blood when it stains the diaper, the FWW should bear this in mind.

GASTEROINTESTINAL SYSTEM

The gastrointestinal tract of the neonate is structurally complete though functionally immature in comparison with that of the adult. The teeth are buried in the gums. The stomach has a small capacity (15-30ml) which increases rapidly in the first weeks of life. The cardiac sphincter of the stomach is weak, predisposing to regurgitation.

Regurgitation or the oozing of food out of the sides of the mouth is common in newborns, especially the breast fed. It may be due to the swallowing of a great deal of air, giving too large or too frequent feedings. It is more if babies are not facilitated to burp.

Vomiting the forceful expulsion of food, is less common than regurgitation. It should be reported to the physician promptly.

Stools During the first 2 or 3 days after birth, the stools are dark green in colour, sticky and odorless, and are known as meconium stools. They consist of intestinal secretions and cells, material swallowed before and during birth, mucus and bile. They are passed several times a day.

When food enters the stomach, a gastro colic reflex results in the opening of the ileocecal valve. The contents of the ileum pass into the large intestine and rapid peristalsis means that feeding is often accompanied by reflex emptying of the bowel. Physiological immaturity of the liver together with a high level of red cell break down, may result in a transient jaundice which is manifest on the third to fifth days.

IMMUNOLOGICAL ADAPTATIONS

Neonates demonstrate a marked susceptibility to infections, particularly those gaining entry through the mucosa of the respiratory and gastrointestinal system. Localization of infection is poor, ‘minor’ infections having the potential to become generalized very easily.

REPRODUCTIVE SYSTEM

Spermatogenesis in boys does not occur until puberty but the total complement of primordial follicles containing primitive ova is present in the ovaries of girls at birth. In both sexes withdrawal of maternal oestrogen results in breast engorgement sometimes accompanied by secretion of ‘milk’ by the fourth or fifth day. Baby girls may develop pseudo menstruation for the same reason. This is short-lived and needs no treatment.

MUSCULO-SKELETAL SYSTEM

The muscles are complete, growth occurring by hypertrophy rather than by hyperplasia. Weight:

A baby's birth weight is an important marker of health. Full-term babies are born between 37 and 41 weeks of pregnancy. The average weight for full-term babies is about 7 pounds (3.2 kg). In general, very small babies and very large babies are at greater risk for problems. Boys at birth weigh on the average about 3 kg., girls ¼ kg less. If he grows well, he will double his birth weight i.e., weigh 6 kg by the end of 5 months of age, and about 9 kg at 1 year of age i.e., triple his birth weight.

First babies are somewhat lighter on the average than later babies. Birth weight varies with the length of gestation. The neonate loses weight during the first three or four days after birth. The loss is accounted for by the emptying of bowel and bladder, removal of vernix caseosa, water loss through the skin, lungs and urine, and the small food intake. It has been referred to as the “physiological weight loss of the newborn.” The baby usually starts to gain on the third to fifth day of life, depending on his food intake. Birth weight is regained on the average at 7 to 10 days. Thereafter the weight gain is rapid, infants gaining ½ lb a week, on the average, so that the weight at birth is doubled at 4 to 5 months.

Length / Height:

The length of babies below 2 years of age is head to toe measurement in the standing position

of the baby. At birth, the newborn (measured from top of head to the sole of foot in supine position) is about 50 cm in length. And by 1 year of age, he becomes 72 cm long.

Head circumference:

The head circumference at birth is measured by taking the greatest distance around the forehead and the back of the head above the ears; it is 34 cms. In the 1st year of life, it grows 12 centimeters and becomes 46 cms on his 1st birthday. This increase in size of skull allows the brain to grow very rapidly during this period. If the skull does not grow, then the brain inside will not develop adequately. Therefore, it is very essential to provide a nutritious (specially containing proteins) and balanced diet during the first year of the infant to facilitate the growth of the brain. After one year the circumference grows slowly and increases 12 cm in the rest of life of an individual.

Sleep:

The newborn baby sleeps particularly all the time except when he is being breast fed. He awakens with a sharp cry and lapses back into sleep, after he has been fed. It is not until the baby is 3 to 8 weeks old that he takes a long nap, generally during at night.

Crying:

Newborns spend a considerable part of their waking time in crying. Among the common reasons for crying in newborns are hunger, vomiting, and soiled and wet diapers. Sometimes the cause for the crying is unknown. If the newborn’s crying is abnormal / prolonged, she/he should be referred to the doctor.

Hiccups:

Are common in young babies. They are generally due to the lodging of some food in the back of the throat.

What are the reflexes of a newborn?

The following are some of the normal reflexes seen in newborn babies.

- Root Reflex. This reflex begins when the corner of the baby's mouth is stroked or touched. ...
- Suck Reflex.
- Rooting helps the baby become ready to suck. ...
- Tonic Neck Reflex. ...
- Moro Reflex. ...
- Grasp Reflex. ...
- Babinski Reflex. ...
- Step Reflex

NEUROLOGICAL SYSTEM

In comparison with the other body systems, the nervous system is remarkably immature both anatomically and physiologically at birth.

Maturity of nerves and muscles

The healthcare provider does 6 checks of the baby's nerves and muscles.

A score is given to each area looked at. Typically, the more mature the baby is, the higher the score. These are the areas checked:

- **Posture.** This looks at how the baby holds his or her arms and legs.
- **Square window.** This looks at how far the baby's hands can be flexed toward the wrist.
- **Arm recoil**. This looks at how much the baby's arms "spring back" to a flexed position.
- **Popliteal angle.** This looks at how far the baby's knees extend.
- **Scarf sign.** This looks at how far the baby’s elbows can be moved across the baby's chest.
- **Heel to ear.** This looks at how near the baby's feet can be moved to the ears.

When the physical assessment score and the nerves and muscles score are added together, the healthcare provider can estimate the baby’s gestational age. Scores range from very low for immature babies to very high scores for mature and postmature babies.

The neonate is equipped with a wide range of reflex activities, the presence of which at varying ages provides indication of the normality and integrity of the neurological and skeleton muscular system.

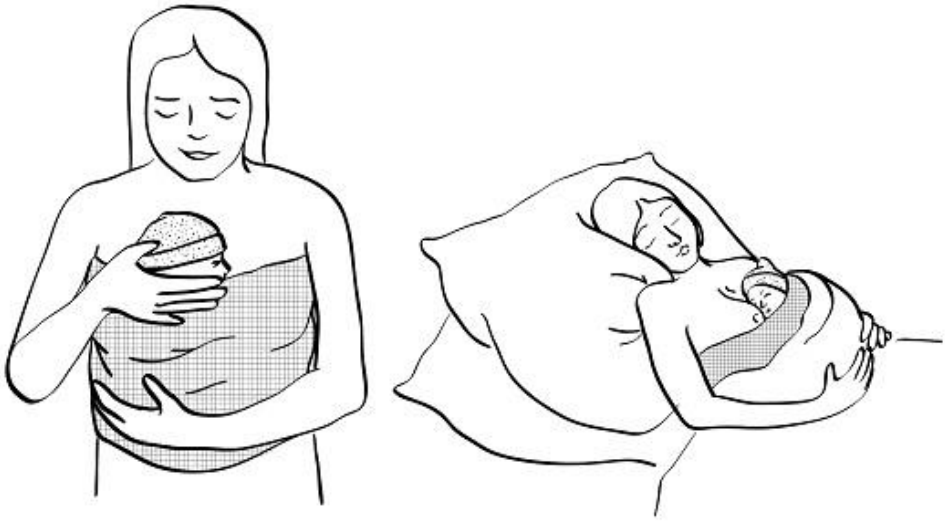
- **Moro reflex:** This reflex occurs in response to a sudden stimulus. It can be elicited by holding the baby at angle of 45˚ and then permitting the head to drop 1 or 2 cm. The infant responds by abducting and extending his arms with his fingers fanned, sometimes accompanied by a tremor. The arms then flex and embrace the chest. The reflex is symmetrical and is present for the first 8 weeks of life. Absence of the Moro reflex may indicate brain damage or immaturity. Persistence of the reflex beyond the age of 6 months is suggestive of mental retardation.
- **Rooting reflex:** In response to stroking of the cheek or side of the mouth the baby will turn towards the source of stimulus and open his mouth ready to suckle.
- **Sucking and swallowing reflexes** are well developed in the normal baby and are coordinated with breathing. This is essential for safe feeding and adequate nutrition.
- **Gag, cough and sneeze reflexes** protect the infant from airway obstruction.
- Blinking and corneal reflexes protect the eyes from trauma.
- **Grasp reflexes:** A palmar grasp is elicited by placing a finger or pencil in the palm of the baby’s hand. The finger or pencil is grasped firmly. A similar response can be demonstrated by stroking the base of the toes. (Plantar grasp).

Walking and stepping reflexes:

When supported upright with his feet touching a flat surface the baby simulates walking. held with the tibia in contact with the edge of a table the infant will step up.

- **Care** of Eyes: The baby's eyes do not need to be cleansed unless a discharge is present.
- Circumcision**:** Neonatal circumcision is a routine practice for male

KANGAROO CARE



The Kangaroo mother care is a method of caring for neonates that involves putting them on the mother's chest skin-to-skin, preferably 24 hours a day.-This method can be used for all non-sick neonates less than 2500 g (prematurity and/or intrauterine growth restriction).

The neonate is placed vertically against the mother's chest (may wear nappy and socks); the mouth should always be able to reach the nipple. Keep the neonate in position using a cloth.

If needed, use a blanket to keep the mother and neonate warm.When the mother is sleeping, her bust should be raised, and the neonate should be monitored.

The objectives of the Kangaroo care are:

- To keep the neonate warm and to prevent or treat hypothermia.
- To help get breastfeeding started and keep it going.
- To foster the mother-infant bond and reduce the neonate's stress.
- To reduce episodes of apnoea and bradycardia in preterm neonates.

Note: the skin-to-skin contact can also be done by the father, another family member, or a wet-nurse during periods when the mother is not available.

Vaccination*:*

BCG vaccination is given during the early neonatal period along with a dose of Poliomyelitis vaccine (zero dose) and Vaccination against hepatitis. The detailed immunization schedule given in “Child Care” should be pursued.

The monovalent Hepatitis B, oral Polio and BCG vaccines are recommended as soon as possible after birth for all neonates, including low birth weight and preterm neonates.

For the oral Polio vaccine, the dose administered at birth is an extra dose (called and recorded as “Dose 0”). It does not count as one of the 3 doses required by the Expanded Programme on Immunization during the postnatal period.

The hepatitis B birth dose is to prevent mother-to-child transmission of the virus. It should be administered as soon as possible, preferably in the delivery room, or at least within the first 24 hours of life. While it may still be administered after that time, the later the vaccine is administered, the less effective the protection

Neonatal vaccination

Vaccine	Contra-indications	Dose/route of administration
Hepatitis Bmonovalent	None but use only the monovalent vaccine	One dose = 5 to 10 micrograms (follow manufacturer's instructions)IM injection, anterolateral thigh
Polio oralbivalent (poliovirus types 1 and 3)Dose 0	None	One dose = 2 drops (approximately 0,1 ml)Oral route
BCG	Neonate whose mother has active tuberculosis	One dose = 0.05 mlIntradermal injection, deltoid region (junction of lower 2/3 and upper 1/3 lateral aspect of upper arm)

Start the neonate on isoniazid preventive therapy and administer the BCG vaccination when the isoniazid therapy is completed.

Prevention of Injury and Accident:

A baby should not be left unattended unless in his cot, as vigorous activity may result in his falling off a bed or table. Polythene bags or sheeting should not be used near a baby and waterproof mattress covers should enclose the mattress completely to prevent suffocation of the baby by a loose cover.

The temperature of bath water should be tested prior to immersing the baby to avoid scalding or chilling and the temperature of a bottle-feed tested before it is offered to the baby.

If safety pins are used to secure the napkin they should be inserted into the cloth from side to

side (not vertically) and with one hand protecting the baby's abdomen to avoid penetration of the skin or genitalia

Assessment for risk factors for neonatal infection

Prophylactic antibiotics for 48 hours (is indicated if the neonate presents with: major risk factor (except if, for PROM ≥ 18 hours or for maternal fever, the mother received adequate antibiotic therapy i.e., at least 2 doses of IV ampicillin administered 4 hours apart with the last dose administered within 4 hours prior to birth)

OR

minor risk factors (or more)

Major risk factors	**Minor risk factors**
Maternal fever (≥ 38 °C) before or during labour in preterm	Preterm or birth weight < 2000 g
Prolonged rupture of membranes (PROM) ≥ 18 hours	Resuscitation at birth
Foul-smelling, cloudy amniotic fluid	Meconium-stained amniotic fluid
Twin with clinical signs of infection	Home delivery

Assessment for risk factors for hypoglycaemia

Check blood glucose within one hour of birth in neonates with one of the following risk factors:

- Birth weight < 2500 g or > 4000 g
- Maternal diabetes
- Mother treated with labetalol
- Difficulty in breastfeeding (difficulty with sucking or attaching to the breast)

If blood glucose is normal (≥ 2.5 mmol/l or ≥ 45 mg/dl), observe that the neonate and breastfed at least every 3 hours. Check blood glucose before each meal until there are 3 consecutive normal results.

D. Assessment for mother-to-child transmissible diseases

If not done prior to birth, check if the mother may have any disease transmissible to the neonate

PREVENTIVE TREATMENTS ARE RECOMMENDED FOR:

Gonococcal conjunctivitis

As soon as possible, preferably within an hour of birth: apply a 1 cm strip of **1% tetracycline** eye ointment in each eye.

***Note*:** if the mother has a symptomatic genital infection at the time of delivery

Haemorrhagic disease of the new-born

Administer **phytomenadione** (vitamin K_1) IM in the anterolateral aspect of the thigh within the first few hours of life:

Neonate weighing 1500 g or more: 1 mg single dose (0.1 ml if 2 mg/0.2 ml ampoule)

Neonate weighing less than 1500 g: 0.5 mg single dose (0.05 ml if 2 mg/0.2 ml ampoule)

Rickets and vitamin D deficiency

Neonates particularly at risk (preterm, low birth weight, maternal malnutrition, contexts with prevalence of vitamin D deficiency) and if possible, all neonates should receive vitamin D for 6 months:

cholecalciferol (vitamin D_3) or ergocalciferol (vitamin D_2) PO:

Preterm or neonates living in contexts of high-risk vitamin D deficiency: 600 to 200 IU once daily. Term neonates: 400 to 800 IU once daily

Note: the number of IU per drop of oral solution varies according to manufacturers. Check instructions for use.

Mother-to-child HIV transmission

All neonates of HIV-infected mothers should receive antiretroviral treatment as soon as possible. See the specific PMTCT protocol.

ESSENTIAL CARE FOR ALL NEWBORNS:

- Tie the umbilical cord two finger-widths from the baby's abdomen and place a second tie two finger-widths away from the first one. Cut the cord between the first and second ties. Check that the umbilical cord stump is not bleeding and is not cut too short
- Apply tetracycline eye ointment once only, to prevent eye infections.
- Inject vitamin K (1 mg, intramuscularly) into the front of the baby's mid-thigh to prevent spontaneous bleeding.
- Give the first dose of oral polio vaccine and BCG vaccine (against tuberculosis) according to the guidelines in the Ethiopian Expanded Program of Immunization (EPI).

- The body temperature of the newborn must remain above 36oC. Place the baby on the mother's abdomen in skin-to-skin contact with her, where it can breastfeed. Cover them both with a blanket and put a warm hat or shawl over the baby's head.
- Ensure that the baby is suckling well, and the mother's breast is producing adequate milk. If breastmilk is not preferred, make sure that adequate replacement feeding is ready. Initiate early and exclusive breastfeeding unless there are good reasons to avoid it, e.g., in an HIV-positive mother.
- The baby should get preventive treatment to protect it from HIV if its mother is HIV-Infected

NEONATAL EXAMINATION

In the first examination the baby's weight and length is measured and recorded. Advice for BCG vaccination and conduct the first examination thoroughly.

The aims of the neonatal examination are:

- Diagnosis of congenital malformations
- Diagnosis of common minor problems, with advice about management or appropriate reassurance if no intervention is indicated
- Health education advice
- General parental reassurance

FIRST EXAMINATION OF THE NEWBORN

As soon as feasible, the FWW should examine the baby. The initial examination must be done with the greatest care to detect congenital defects and injuries, many of which may be easily overlooked.

Prior to examining the baby, the midwife should wash her hands to prevent infection. Her hands should be warm to prevent chilling of the infant. During the examination the baby should be naked in a warm, draft-free environment. There should be sufficient light to allow the midwife to see the baby clearly. The examination is performed in an orderly manner from the head of the infant to his feet.

RECOGNIZING ASPHYXIA

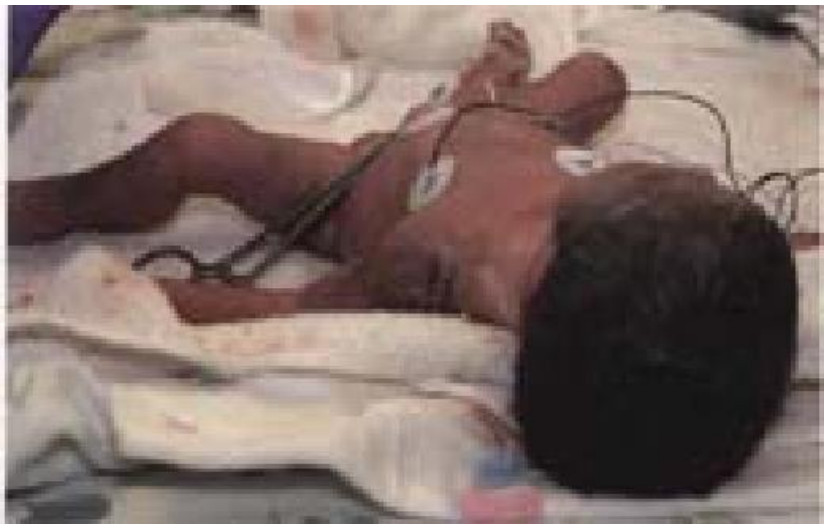
Newborn asphyxia

Asphyxia (shortage of oxygen) in the uterus is due to an inadequate supply of oxygen from the mother's blood or a problem in the placenta. This may result in:

- Asphyxia at birth (mild, moderate, or severe)
- Learning difficulties or cognitive impairment, which become apparent during childhood development; they are due to brain cells being destroyed by lack of oxygen during labour and delivery.
- Death of the newborn.

Gas exchange occurs when oxygen from the inhaled air is absorbed into the blood as it passes through the lungs, and waste carbon dioxide is released from the blood into the air that is breathed out However, neonatal asphyxia is mainly due to failure of the newborn to breathe after birth, or its heart fails to pump enough blood to the lungs for gas exchange, or it has low haemoglobin levels (anaemia) so it cannot deliver enough oxygen around the body.

The baby who cannot breathe cannot establish independent life outside the mother. Therefore, the purpose of neonatal resuscitation is to help the newborn to establish spontaneous breathing and facilitate oxygen delivery to its organs and tissues – particularly the brain, which is very quickly damaged by oxygen shortage. You may also need to resuscitate any baby that is severely anaemic due to blood loss during labour and delivery, or that continues to be *cyanotic* despite established breathing. Cyanosis is a bluish discolouration of the lips and skin, which occurs when there is insufficient oxygen in the blood.



A preterm newborn with problems: she looks cyanotic (bluish), her limbs are floppy because her muscle tone is not strong, and she has breathing problems.

To avoid the immediate and long-term complications of asphyxia, in addition to the labour and delivery care that you provide to the mother, and the routine newborn care of the baby (e.g., cutting the cord, keeping the baby warm), you also must provide life-saving interventions for any newborn who cannot breathe properly.

Causes of Asphyxia:

There are some conditions that put the babies at a higher risk of being asphyxiated.

- Maternal causes:
- Pre-eclampsia and eclampsia
- Abnormal bleeding (placenta previa or abruption-placentae)
- Prolonged or obstructed labour
- Fever in labour

- Severe infection (malaria, syphilis, HIV)
- Post-term pregnancy (after 42 weeks of pregnancy)
- Mechanical Causes:
- Difficult delivery (breech, multiple birth, stuck shoulders, vacuum extraction, forceps)
- Meconium in the amniotic fluid
- Umbilical cord
- Cord around the baby's neck
- Short cord
- Knot in the cord
- Prolapsed cord
- Neonatal Causes:
- Premature baby (before 37 weeks of pregnancy)
- Congenital or genetic anomalies
- Baby has too much fluid in mouth and throat

Assessing the degree of asphyxia

Moderate to severely asphyxiated babies usually require intensive resuscitation, so the next thing you must learn is how to grade asphyxia in a newborn. Within no more than 5 seconds after the birth, you should make a very rapid assessment to find out whether the baby is alive or dead, and (if it is alive) to assess whether it has any degree of asphyxia. A severely asphyxiated baby may not breathe at all, there may be no movement of its limbs (arms and legs), and the skin colour may be deeply blue or deeply white. A baby who is not breathing at all after birth, or who is only gasping for breath, or who is breathing less than 30 breaths per minute needs help immediately. If a baby does not breathe soon after birth, it may get brain damage or die. Most babies who are not breathing can be saved if resuscitated correctly and quickly.

Gasping is when the newborn can take only a few breaths with difficulty and with wide gaps in between; it is usually a sign that the baby is close to death.

Assessing the degree of asphyxia.

Signs	No asphyxia	Mild asphyxia	Moderate asphyxia	Severe asphyxia
Heart rate	Above 100 beats/minute	Above 100 beats/minute	Above 60 beats/minute	Below 60 beats/minute
Skin colour	Pink	Mild blue	Moderately blue	Deeply blue

Breathing pattern	Crying	Crying	Breathing but not strong	Not breathing, or gasping type
Limb movement	Moving well	Weakly moving	Floppy	Floppy
Meconium-stained	No	No	Maybe	Usually
Resuscitation	No need	Fast response	Good response	Takes a long time to respond

Assessment of the degree of asphyxia should not take you more than 5 seconds. Do it fast but don't panic.

Since neonatal resuscitation is an action that you need to perform rapidly (within one minute after delivery), it is better to *estimate* than to count the heart rate, and to *observe the pattern* of breathing rather than to count the respiratory rate. The table below gives a simplified description of the signs that indicate what is normal and abnormal immediately after birth.

Normal and abnormal physical findings in the newborn immediately after birth.

Signs	**Normal findings**	**Abnormal findings**
Colour	Should be pink	Blue or cyanosed (shortage of oxygen)
		White, pallor (anaemia)
		Yellowish (jaundice)
Breathing	40–60 breaths/minute	No breathing
		Breathing rate less than 30/minute
		Gasping (very few breaths with difficulty breathing)
Heart rate	120–160 beats/minute	No heartbeat at all
		Heartbeat less than 100/minute
Muscle tone	Full term new-born has semi-flexed arms and legs	Poor flexion of the limbs; arms and legs floppy (Figure 7.2), indicates moderate to

		severe asphyxia affecting the brain
Reflexes	Baby responds to a finger put into the roof of its mouth	No response to touching the roof of the baby's mouth

A healthy neonate is usually born cyanotic but turns pink within 30 seconds after breathing starts. In neonates with dark skin, it may be more difficult to assess skin colour change. If so, look at the soles of the feet, palms of the hands and mucous membranes to assess for the change from blueish to pink.

Significance of the Apgar score

1-minute score		**5-minute score**	
0 - 4	Asphyxia	0 - 6	Asphyxia
5 - 7	Difficulty adapting	7 - 8	Difficulty adapting
8 - 10	Good adaptation	9 - 10	Good adaptation

Feeding

Put the neonate to the breast as soon as possible within an hour of birth Breastfeeding on demand day and night (at least 8 times per 24 hours, i.e. every 3 hours).

RESUSCITATION OF THE NEWBORN

After the baby is born many changes happen in its body. Most importantly, the baby begins to use its lungs to get oxygen by breathing. For most babies this change happens without any problems, but some babies need help to start or continue breathing. For asphyxiated babies' resuscitation is lifesaving. About 5% – 10% of newborns need resuscitation.

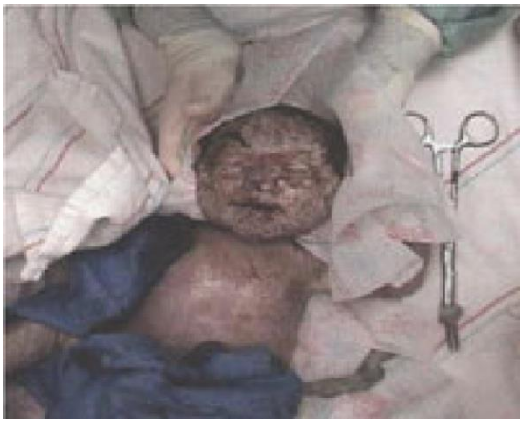
1 Basic equipment needed for newborn resuscitation

- Two clean linen/cotton cloths: one to dry the newborn and one to wrap him or her afterwards
- Plastic bulb syringe to remove secretions from the mouth and nose, especially when meconium is present
- Ambu-bag and mask to give oxygen directly into the baby's lungs
- A person trained in neonatal resuscitation (like you)
- Heat source (lamp) to provide warmth, if possible.

Before you start resuscitation

Before you apply any form of resuscitation, make sure that:

- *The baby* is alive: If the newborn doesn't appear to be alive, FIRST listen to its chest with a stethoscope. If there is no heartbeat, the baby is already dead
- You graded the extent of asphyxia: If you can hear a heartbeat, but you estimate it to be less than 60 beats/minute, apply heart massage first, then ventilate alternately on and off, till the heartbeat is above 60 beats/minute
- The baby is not deeply meconium stained: If the baby's skin is stained with meconium, or the oral and nasal cavities are filled with meconium-stained fluid (you should not resuscitate before suctioning the oral, nasal and pharyngeal areas. Ventilation will aggravate the baby's breathing problem because it will force the meconium-stained fluid deep into the baby's lungs, where it will block the gas exchange.



A baby who is not breathing (no signs of chest or nose movement) and with meconium stained all over its body.

NEONATAL RESUSCITATION

10% of neonates need help breathing properly at birth; this help comes in the form of tactile stimulation and/or airway clearing. For half of them, these procedures are not sufficient, and if the neonate is not breathing or is gasping despite stimulation/suction, ventilation is needed as of the first minute of life. A small percentage of ventilated new-borns will require more advanced resuscitation. The birth attendant in charge of the delivery is also responsible for the new-born. She/he should start resuscitation immediately then, if necessary, call for help.

Basic resuscitation

Hypothermia compromises resuscitation. Resuscitation should be done in a heated room, if possible, under an infant warmer.

Steps 1 to 5 should be performed in the first minute of life. Record all procedures on the monitoring sheet.

MODULE V

1 Stimulate the neonate by drying

Tactile stimulation can trigger spontaneous breathing. It is done by drying the neonate.

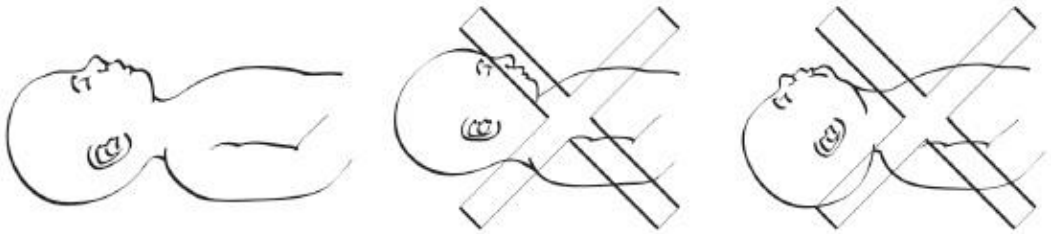
If the neonate starts to breathe or cry within 5 seconds, proceed to routine care

If not, stop stimulation and proceed to step 2.

2 Clear the airway

Lay the neonate on the back with the head in a neutral position avoid flexion or hyperextension of the neck, as this can obstruct the airway.

Head position for clearing the airway



Only in cases where there are copious secretions, suction the mouth gently i.e., not too deeply (maximum depth 2 cm from the lips) – and quickly (maximum duration 5 seconds) with a bulb syringe.

If neonate is still not breathing or not breathing well, proceed to step 3.

3 Stimulate the neonate

Rub the back and the soles of the feet vigorously but not roughly (do not shake, slap, or hang the infant by the feet, etc.). If the neonate is having difficulty breathing or still not breathing after 5 seconds: stop active stimulation and proceed to steps 4 and 5.

4 Clamp and cut the cord

If not already done, clamp and cut the cord.

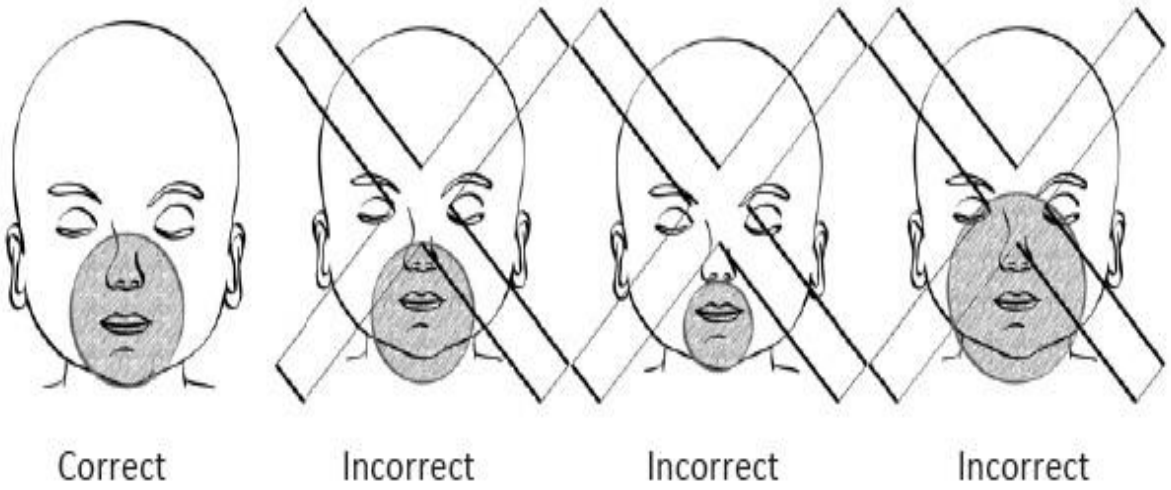
5 Perform bag-mask ventilation (room air)

Fit the mask over the nose and mouth. Press firmly to prevent air leaks. Hold it with one hand, with the thumb on one side and the index and middle fingers on the other With the other hand, squeeze the bag at a rate of 30 to 60 breaths/minute for 60 seconds. Ventilation is effective if the chest rises and falls.

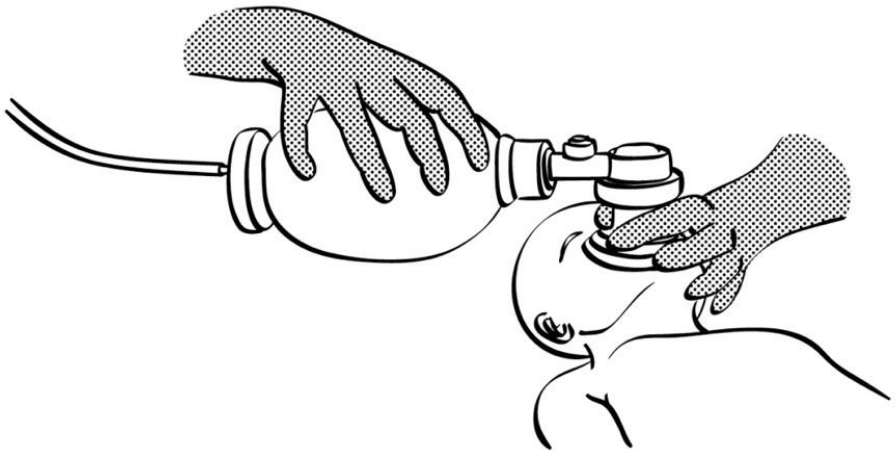
Attention, excessive ventilation pressure can cause a pneumothorax. If the chest fails to rise:

- Check the connection between the bag and the mask
- Correct the position of the mask on the face;

- Correct the head position.



Mask position



Manual ventilation

Check every minute for spontaneous respiratory effort (look for chest movement); do not take the mask off the neonate's face to check for spontaneous breathing. Continue manual ventilation until there is spontaneous respiratory effort.

Oxygenation

If oxygen is available: connect the ambu bag to an oxygen reservoir after 2 minutes of ventilation, setting it at a 2 litres/minute flow rate. Ventilation is a priority and should not be interrupted to connect the oxygen (have an assistant connect the oxygen).

Stop resuscitation if the neonate has:

No heart rate after 10 minutes.

No spontaneous respiration after 20 minutes of effective ventilation, even if the heart rate is

adequate.

After resuscitation

Re-evaluate all vital signs, look for danger signs and measure blood glucose. Perform a retroactive Apgar score assessment. Record the results on a monitoring sheet.

Transfer to a neonatal care unit is indicated if one of the following is present:

The neonate was ventilated with a mask for 2 minutes or more

The Apgar score was ≤ 4 at 1 minute or ≤ 6 at 5 minutes. Any danger sign is present. Keep the mother and neonate together where possible.

If the neonate appears well (no indications for transfer) or if transfer is necessary but impossible:

- Keep under observation for at least 24 hours.
- Every 2 hours, check for any danger signs and monitor vital signs.
- Ensure routine care Begin breastfeeding as soon as possible.

If the neonate deteriorates during close observation, decide for quick transfer

Apgar score at 1 minute after birth is usually between 7 - 8 because almost all new-borns have blue hands & feet at birth.

ACTIONS IN RESPONSE TO SIGNS OF NEONATAL ASPHYXIA

Checking the newborn's heart rate

The **apical heartbeat** (or AHB) is just another name for the heartbeat heard through a stethoscope over the area of the heart on the left side of the chest, It is called 'apical' because the heartbeat is heard directly from the surface of the heart.

Checking and counting the apical heartbeat (AHB) and feeling for the pulse at the base of the umbilical cord.

The initial actions

The list below sets out the actions you should take for *all* newborns in the sequence shown, irrespective of the degree of asphyxia:

- Fast drying
- Keeping the baby warm.
- Clearing the mouth and nose
- Apply gentle tactile stimulation to initiate or enhance breathing
- Simultaneously assessing the degree of asphyxia as shown earlier
- Positioning the baby for resuscitation if there are signs of asphyxia,

Now study each of these figures in turn. Look at them carefully and make sure that you read the captions and other notes associated with them.

Dry the baby quickly and keep it warm

Lay the baby on a warm surface away from drafts. Use a heat lamp or other overhead warmer, if available.

How to dry the baby: (top) lay the baby on its back and dry it thoroughly; (bottom left) remove the wet cloth; (bottom right) tilt the baby's chin to reposition the baby's head and keep its airway open.

Place the baby in skin-to-skin contact with the mother, covered by a warm blanket. Place a warm cap or shawl to cover the baby's head.

Clearing the mouth and nose

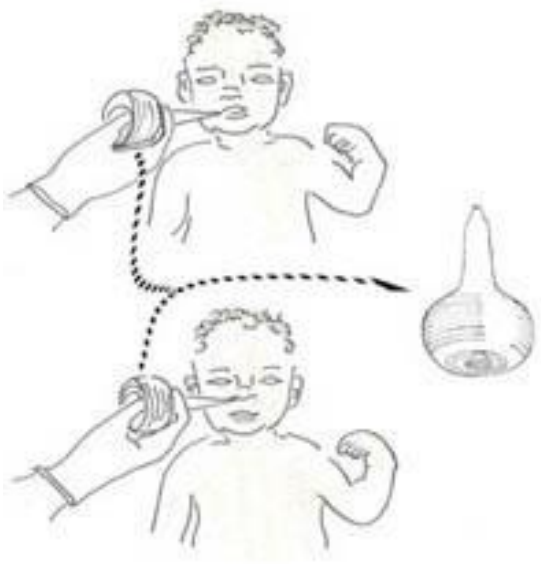
If a bulb syringe is available:

Suction the mouth first, then the baby's nose ('m' before 'n')

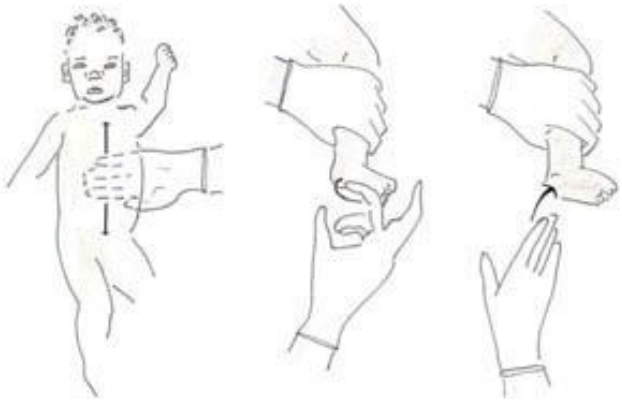
No deep suctioning with a bulb syringe! It can cause slowing of the heart rate (bradycardia).

If no bulb syringe:

Clear secretions from the mouth and nose with a clean, dry cloth.



Suctioning the newborn with a bulb syringe to clear mucus from its upper airway: (top) suction the mouth first; (bottom) then suction the baby's nose ('m' before 'n').



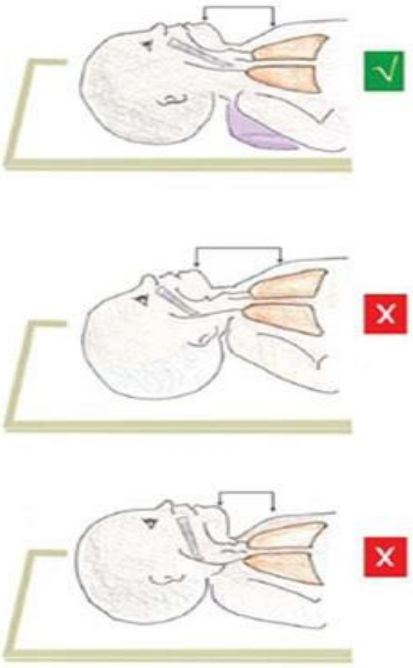
Apply gentle tactile stimulation to initiate or enhance breathing

How to give gentle tactile stimulation: (left) rub the baby's abdomen up and down; (center and right) flick the underside of the baby's foot with your fingers.

DO NOT stimulate by: These types of stimulation are dangerous and can damage the newborn.

- Slapping the back
- Squeezing the rib cage
- Forcing the baby's thighs into its abdomen
- Dilating the anal sphincter (the ring of muscle that closes the anus)
- Hot or cold compresses or baths
- Shaking the umbilical cord.

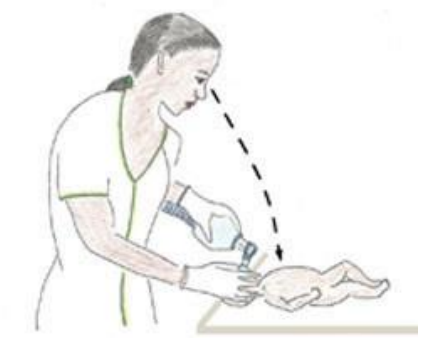
If you diagnose asphyxia, start resuscitation!



Position the newborn on his or her back with the neck slightly extended Open the airway by clearing the mouth and nose with suction using the bulb syringe

How to position the newborn's head to keep its airway open: (top) correct, the baby's chin is tilted the right amount; (middle) the baby's head is tilted too far back, placing pressure on the windpipe in its neck; (bottom) the baby's head is not tilted enough — its chin is too close to its chest and the airway is compressed.

- Position yourself at the head of the baby



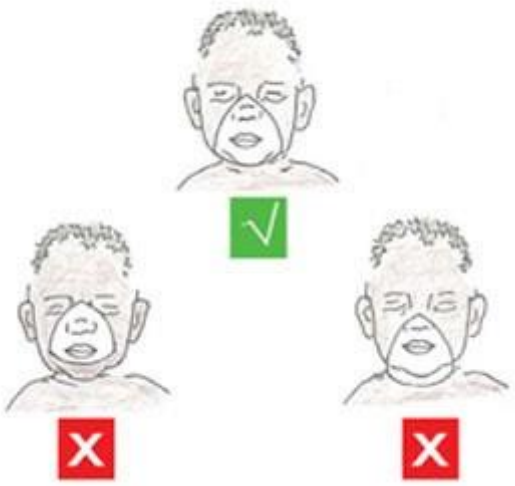
The correct position for newborn resuscitation using an ambu-bag.

If the apical heartbeat is > (more than) 60 beats/minute:

- Ventilate with the appropriate size of mask and a self-inflating ambu-bag. The mask should be fitted. Make a firm seal between the mask and the baby's face, so air cannot escape from under the edges of the mask. But don't force the mask down onto the baby's face because this could push its chin down towards its chest and compress its airway.

If the apical heartbeat is < (less than) 60 beats/minute:

- Apply heart massage and ventilate alternately (on and off ventilation) with the ambu-bag.

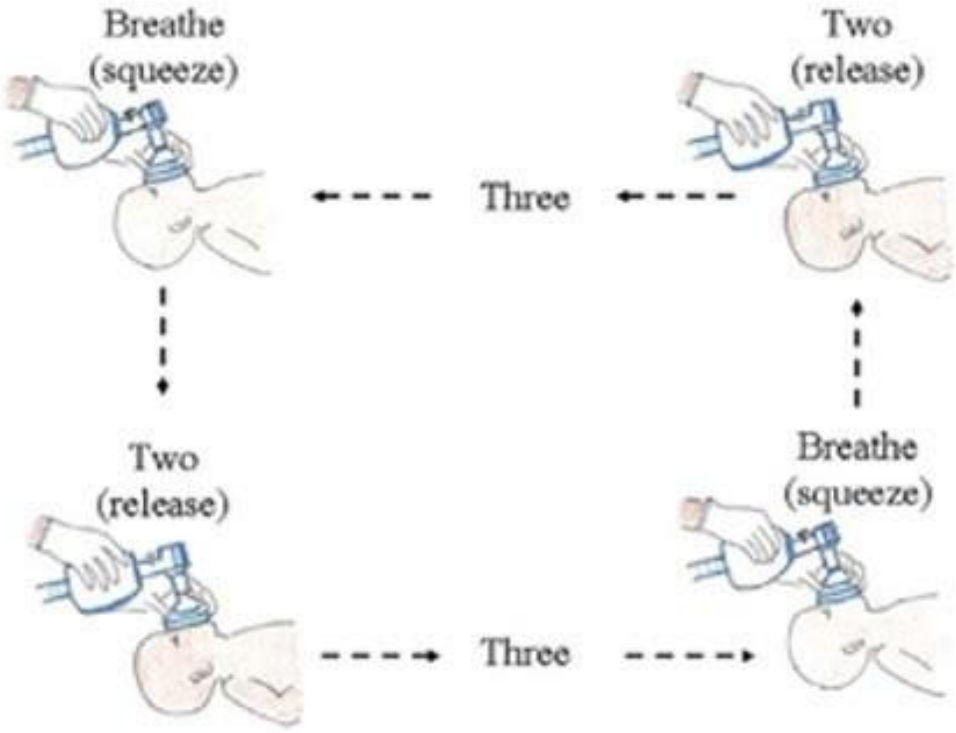


Correct and incorrect size of mask: (top) correct: Covers mouth, nose, and chin; (bottom left) incorrect: too large covers eyes and extends over chin; (bottom right) incorrect: too small does not cover nose and mouth.

Ventilate at 40 breaths per minute

Count out loud: 'Breathe two three' as you ventilate the baby (Squeeze the bag as you say 'Breathe' and release the pressure on the bag as you say 'two three'. This helps you to ventilate with an even rhythm, at a rate that the newborn's lungs are naturally adapted to.

The amount of air you are moving into and out of the lungs is the equivalent of about 40

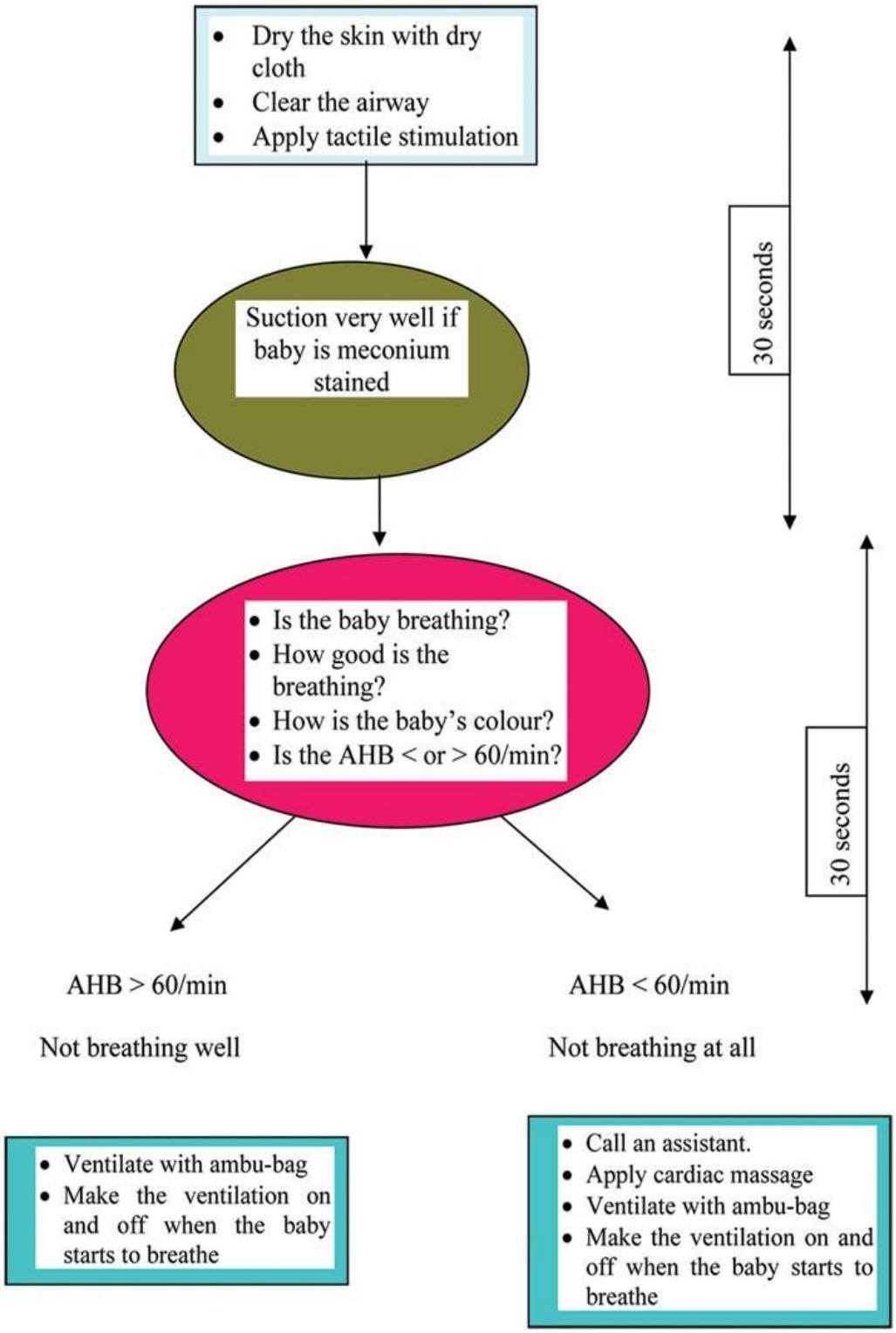


breaths per minute. Apply enough pressure to create a noticeable, gentle rise and fall in the baby's chest. The first few breaths may require higher pressures, but if the baby appears to be taking a very deep breath, you are using too much pressure.

Timing the rate of ventilation as you say 'Breathe two three'. Evaluate the baby during ventilation

The best sign of good ventilation and improvement in the baby's condition is an increase in heart rate to more than 100 beats/minute.

Summary of the steps in newborn resuscitation



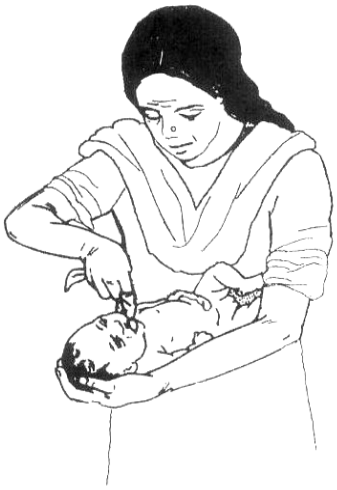
A summary of the steps in newborn resuscitation in the form of a flow chart.

Preparation:

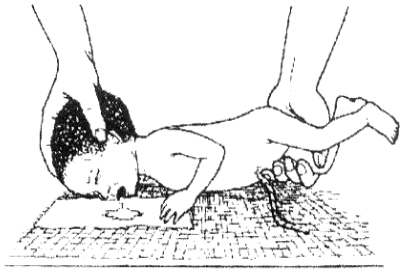
- Keep the room warm and free from drafts.
- Prepare flat and clean surface next to the mother
- Assemble equipment and supplies
- Three clothes (one to put under baby's neck, one to dry baby, one to warm baby after drying)
- Suction –Mucous extraction

For mouth-to-mouth resuscitation
2 Small bowls:
• 1 with soapy water
• 1 with clear water
4 Pieces of gauze:
• 1 to wipe baby's mouth and nose area with soapy water
• 1 to wipe baby's mouth and nose area with clear water
• 1 to dry baby's mouth and nose area
• 1 to place over baby's mouth and nose during resuscitation

For Ambu bag and mask resuscitation
Ambu bag:
• Bag volume should be 250 –400 ml
• Face mask
• Size of 1 for normal weight newborn
• Size 0 for a Low-Birth-Weight newborn



Cleaning the mouth and nose



Postural drainage of secretions

Mouth to mouth Resuscitation

Community settings with no facilities, neonatal resuscitation is possible by:

- Cleaning the mouth and the nose
- Employing postural drainage of secretions
- Mouth to mouth resuscitation

CARE AFTER RESUSCITATION

If Resuscitation is successful:

(a) Counsel / Advise:

- Talk with the mother and family about the resuscitation. Answer any questions they may have.
- Teach the mother to check her newborn for breathing and warmth and to contact the health worker if any findings are abnormal
- Encourage the mother to breastfeed as soon as possible. Babies with trouble breathing use a lot of energy. Breastfeeding will give the newborn more energy.
- Encourage the mother to keep the newborn warm by keeping the baby skin-to-skin.
- Explain to the mother and family how to recognize newborn danger signs and how to get care immediately if the baby has any danger signs.

(b) Give Care

- Check the newborn hourly for at least 6 hours for:

- Breathing problems (less than 30 or more than 60 breaths in 1 minute, in-drawing of the chest, grunting or gasping)
- Temperature that is too low (axillary temp below 36 °C / 96.8 °F) or too high (axillary temp above 37 °C / 98.6 °F)
- Give normal care for a newborn

(c) Record

- The newborn's condition at birth
- What you did during the resuscitation
- How long the resuscitation took place
- Results of the resuscitation

If resuscitation is 'not completely successful:'

After the Resuscitation, the baby will need referral if the following signs are present:

- Breathing less than 30 or more than 60 breaths in 1 minute
- In-drawing of the chest
- Grunting or gasping
- The baby's whole body is pale or blue

For this baby you will need to:

Talk with the mother and family about the resuscitation and how the baby is doing now.

Answer any questions they may have.

Explain that the baby needs special care by a doctor

-If the baby needs to be referred to another facility explain that the mother and family should go with the baby, if possible. If the mother is not able to go, someone else should go with the baby.

Explain to the mother that she should breastfeed as soon as possible and during the referral.

Explain why and how to keep the baby warm:

- Keep the baby's head covered
- Put the baby skin-to-skin with the mother
- Cover both the mother and baby with warm blankets

Continue to stimulate the baby, keep him warm and check his breathing and color.

Arrange for referral

Records

- Prepare records for referral

- Prepare records to be kept at your facility and home-based records to be kept by the family.

Resuscitation is not successful when there is no breathing after 20 minutes

30.4 CHECKLIST FOR INFANT RESUSCITATION

30.4 CHECKLIST FOR INFANT RESUSCITATION

Attending to a newborn baby using Ambu bag

Instructions:

Rate the performance of each task/activity observed using the following rating scale

0 -Task/Activity omitted

1 -Task/Activity incorrectly performed

2 -Task/Activity correctly performed (Hesitated)

3 -Task/Activity correctly done and with confidence

Task / Activity		**Rating**				
		0	1	2	3	N/A
1	Clears airway, mouth first and nose if necessary					
2	Keeps baby dry and warm					
3	Selects an appropriate mask size (1 for normal baby and 0 for small baby)					
4	Positions the baby with neck slightly extended, by placing a folded piece of cloth under the shoulders					
5	Forms a seal between the mask and baby's face					
	a) Places mask on baby's face to cover chin, mouth and nose					
	b) Places your thumb and index fingers on the mask and applies gentle pressure					
	c) Supports the chin with remaining 3 fingers; places the heel of his/her hand on the forehead to maintain position of the neck					

6	Checks seal					
	a) Pumps/squeezes bag 2 to 3 times with fingers only or whole hand depending on size of the bag					
	b) Observes for the rise of the chest					
7	Checks for probable cause and takes corrective action if the chest is not rising					
8	Ventilates the newborn with 30 – 60 breaths per minute if seal is formed (First ventilation requires higher inflation pressure than later ventilation)					
9	Stops after every minute and look for spontaneous breathing					
10	Continues until spontaneous cry/breathing begins (Stop breathing for baby when it starts to cry)					
11	Observes the chest for an easy rise and fall (breathing) when baby stops crying					
12	Continues breathing for baby if baby's breathing is slow (less than 30 breaths per minute) and seeks medical aid					
13	Stops the procedure if its breathing is 30 – 60 breaths per minute					
14	Ties cord and keeps baby dry and warm and continues to observe baby while attending to the mother					
15	Stops procedure if baby does not respond after 20 minutes					
16	Applies infection prevention procedure following use of Ambu bag					

30.5 BREAST FEEDING

30.5 BREAST FEEDING

Breastfeeding is one of the most effective ways to ensure child health and survival. However, nearly 2 out of 3 infants are not exclusively breastfed for the recommended 6 months. Breastmilk is the ideal food for infants. It is safe, clean and contains antibodies which help protect against many common childhood illnesses. Breastmilk provides all the energy and nutrients that the infant needs for the first months of life, and it continues to provide up to half or more of a child's nutritional needs during the second half of the first year, and up to one third during the second year of life. Inappropriate marketing of breast-milk substitutes continues to undermine efforts to improve breastfeeding rates and duration worldwide

According to WHO breastfeeding reduces child mortality and has health benefits that extend into adulthood. On a population basis, exclusive breastfeeding for the first six months of life is the recommended way of feeding infants, followed by continued breastfeeding with appropriate *complementary foods* for up to two years or beyond.

To enable mothers to establish and sustain exclusive breastfeeding for six months, WHO and UNICEF recommend:

- Initiation of breastfeeding within the first hour of life
- Exclusive breastfeeding - that is, the infant only receives breastmilk without any additional food or drink, not even water
- Breastfeeding on demand - that is, as often as the child wants, day and night
- No use of bottles, teats or pacifiers.

IMORTANCE OF BREAST MILK

Breastmilk is the natural first food for babies, it provides all the energy and nutrients that the infant needs for the first months of life, and it continues to provide up to half or more of a child's nutritional needs during the second half of the first year, and up to one-third during the second year of life.

Breastmilk promotes sensory and cognitive development and protects the infant against infectious and chronic diseases. Exclusive breastfeeding reduces infant mortality due to common childhood illnesses such as diarrhea or pneumonia, and helps for a quicker recovery during illness

Breastfed children perform better on intelligence tests, are less likely to be overweight or obese and less prone to diabetes later in life.

Breastfeeding contributes to the health and well-being of mothers, it helps to space children, reduces the risk of ovarian cancer and breast cancer, increases family and national resources,

is a secure way of feeding and is safe for the environment.

ADVANTAGES OF COLOSTRUM

- It is the first complete food “prepared by nature for the neonate and best suits his needs.
- It is easily digestible
- It is slightly laxative thus cleanses the stomach and intestines of the meconium and no other artificial “ghutti” or traditional pre-lacteal feed is required for this purpose.
- It provides anti-bodies for the baby thus serves as a “first immunization” building the immunity of the newborn, against a number of communicable diseases.
- Being almost free of germs it protects the neonate from diarrhea and other gastro-intestinal diseases.
- It helps in the separation and expulsion of the placenta.
- It prevents / controls post-partum haemorrhage.

ADVANTAGES OF BREAST FEEDING

Benefits for the Baby:

- Breast milk is suited to the baby’s needs and digestion.
- It is sterile, fresh and at body temperature, causing less work for mother.
- Breast milk contains the protective antibodies.
- It is the bonding factor between mother and baby.
- Breast feeding is more economical than artificial feeding since breast milk is affordable and achievable even by poor people.

- Breast fed babies have fewer illnesses in the first year of life.
- It contains certain essential amino acids like linoleic acid, which are important for the infants “growing” brain.

Benefits for the mothers:

- Helps in the involution of uterus.
- Reduces the risk of Breast Cancer.
- Saves mother from extra work of washing bottles and boiling milk.
- No need for other contraceptive till six months (if exclusively breast-fed).

THE ROLE OF THE FWW

Your role as the mother’s health care provider is very important. First you have to teach the mother how to ensure that the baby is adequately fed at the breast. Secondly you must help the mother to develop the necessary skills so that she is able to feed her baby by herself.

Please remember that these few immediate post-natal days are very important and somehow difficult for the new mother. She needs a lot of your support and technical help

WHAT MOTHER NEEDS TO BE TAUGHT:

On days one and two, recover from birth and learn how to properly latch, feed and understand your baby’s hunger cues.

On days three and four, relieve breast engorgement from increased milk production by breastfeeding frequently. If the milk production is delayed, or if the other notices baby has increased jaundice or is losing weight, she should call you

On day five, expect changes in her breasts and infant’s bowel movements.

On days six through 10, observe her baby’s growth, diaper output and eat-sleep-wake patterns.

On days 11 through 14, prepare for an increase in breastfeeding due to the baby’s upcoming growth spurt.

Tell the mother to prioritize her own sleep and nourishment.

Above all, be flexible. All mothers and babies are different, so being able to modify your breastfeeding plan while keeping everyone healthy is more important than following a rigid set of rules.

TECHNIQUE OF BREAST FEEDING

The FWW should advise the mother as follows

1 Positioning herself comfortably

Sit or lie back so that her back is supported, and she feels comfortable. Her arms and shoulders need to be loose and free to move, but well-supported.

The mother may raise her feet or knees, if she needs to.

If she is sitting up, she could use a pillow to take the weight of baby at first, so her forearms aren't doing all the work.

The first position is sitting up. In the early days it is particularly important that the mother's back is upright and at a right angle to her lap. This is not possible if she is sitting in bed with her legs stretched out in front of her (though she might be able to achieve it by sitting cross-legged) or if she is sitting in a chair with a deep backward- sloping seat and a sloping back.

Once she is comfortable, place the baby, tummy-down, on your chest and abdomen, and bring her knees up, so that the baby has a surface to push on with his feet. A laid-back position helps the baby to make the most of his reflex to root for the breast. Mother's body will support the baby and allow him instinctively to adjust his position, bob his head, and find the breast.

The second common position is lying on her side and this may be appropriate at different times during her lactation. If she has had a caesarean section, or if her perineum is very painful, this may be the only position she can tolerate in the first few days after birth. She will need assistance in placing the baby at the breast because it will be difficult for her to manipulate him skillfully. When feeding from the lower breast it may be helpful to raise her body slightly by tucking the end of a pillow under her ribs. Later she may choose to feed lying down after she and her baby have learned how to breast feed, either during the day because she finds it more comfortable and restful or at night because it is more convenient.

Both lying on her side and sitting correctly in a chair (with her back and feet supported) enhance the shape of the breast and allow ample room in which to accommodate the baby.

If the mother is lying on side, place pillows under her head. Lay the baby alongside her, with his tummy towards hers. She could bend your knees so the baby can feel them with his feet.

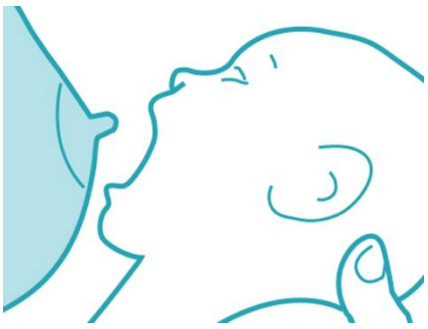
Other positions for breastfeeding include:

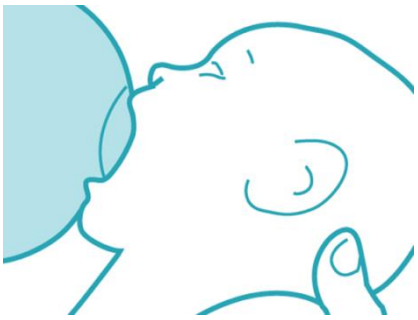
- the cradle hold, with the baby's head in the crook of mother’s arm
- the rugby ball hold, with the baby’s body under her arm
- the koala hold, where baby straddles the knees to nurse

LATCHING

This is one of the most important factors in breast feeding and the mothers need to taught well how to do it properly. The mother should hold the baby close to her body. Encourage him to latch on himself, rather than trying to slot her nipple into his mouth.

To help him latch on, the mother should hold him facing the nipple, with his ear, shoulder and hip lined up so his body is in a straight line. The baby’s neck should be supported gently. Tell the mother to put her palm behind the baby's shoulders and her index finger and thumb behind his ears.





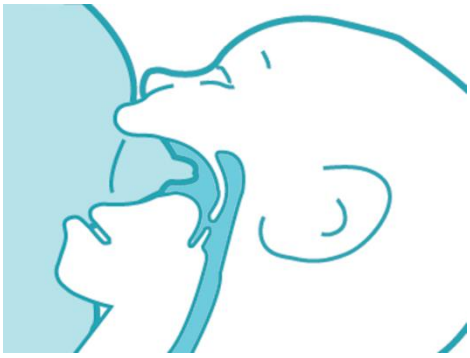
If she is in a sitting-up position and is supporting her breast with her hand to start with, she should keep her hand as far away from nipple as she can, preferably back on her ribcage. Once the breast is supported, keep it still, and only move the baby. The baby needs the freedom to tip his head back just before he latches on. He should be leading with his chin, and have an open mouth, like he's having a big yawn. Watch for his lower jaw to drop.

With his head tipped back, let his chin graze the breast below your areola, the dark circle that surrounds the nipple. The baby will find your breast by touch, not by sight or smell, though these senses probably also play a part. The baby needs to use his tongue to scoop in a big mouthful of the breast. Try to watch his bottom lip, rather than his top one. His bottom lip and tongue need to be on the outer ring of the areola, as far from the nipple as possible.

The mother should know that it is important that the baby takes a good mouthful of the areola, and not just the nipple. He needs to have more areola in his mouth on the bottom than the top of his mouth. His nose should be clear of breast so he can breathe easily while feeding.

When his bottom lip makes contact well away from the base of nipple, his chin should indent your breast. When the baby's chin indents your breast, the nipple will move downwards slightly, and be covered by his top lip. The mother may not see this happen, but she may be able to tell it's right by the way it feels and the way your baby behaves. If she wants reassurance, the FWW can help her by watching the breastfeeding process

How does latching on work?



Having a big, open mouth means the baby can scoop in a full mouthful of breast. He'll draw the breast deep into his mouth. The nipple will then be right at the back of his mouth, where the hard roof of his mouth gives way to the soft area.
With a mouthful like this, the baby will be able to use his tongue smoothly and rhythmically against the under-side of the breast. This action removes milk from the ducts. The baby's jaw will move up and down, following the action of his tongue, and he will swallow milk as it flows to the back of his mouth. This should be painless for the mother, because her nipple will be so far back in his mouth that it won't be squashed or pinched by his tongue.

With a good latch, the baby's lower gum will never touch the breast and the baby’s tongue will always be between his gumline and the breast, and his top jaw does not move.

Tips for mother to help baby latch on to the breast

Hold your baby close to you with their nose level with the nipple.

Let your baby's head tip back a little so that their top lip can brush against your nipple. This should help your baby to make a wide, open mouth.

When your baby's mouth is open wide enough their chin should be able to touch your breast first, with their head tipped back so that their tongue can reach as much of your breast as possible.

With your baby's chin firmly touching your breast and their nose clear, their mouth should be wide open. When they attach you should see much more of the darker nipple skin above your baby's top lip than below their bottom lip. Your baby's cheeks will look full and rounded as they feed.

How to tell if the baby is getting enough milk

The baby starts feeding with a few rapid sucks followed by longer sucks.

Their cheeks stay rounded out, not sucked in, and the mother can hear them swallowing.

The baby seems calm during feeding and comes off the breast himself when he has had enough.

Babies appear content and satisfied after most feeds.

They should be healthy and gaining weight (although it's normal for babies to lose a little weight in the first week after birth).

After the first few days, baby should have at least 6 wet nappies a day.

After about 5 to 6 days, baby's stools should stop looking black and thick and they should also have at least 2 soft or runny yellow motions.

The FWW must advise the mother to inform her if she is concerned about the baby not gaining weight and/ or is unsettled during or after breast feeds.

Tips to make breastfeeding more comfortable if mother has strains, or carpal tunnel syndrome:

- Try not to curve your hand or bend your wrist around your baby to support and cuddle him. Instead, use your bed pillows, a breastfeeding pillow, or rolled or folded towels to support your baby.
- Use a footstool to help you hold your baby on your lap.
- Breastfeed lying down.
- Use a wrist brace to keep your wrist in a neutral position while breastfeeding. Sleeping with the brace on may also help.
- Try to vary positions. If you have to use the cradle hold for comfort and convenience when you're out and about, try to feed laid-back, or lying down when you're at home.
- If you find it difficult to feed because your baby's arms are waving around, try the laid-back breastfeeding position. That way, he'll use his arms to push himself nearer your breast instead

HUNGER CUES

The baby may first display some hunger cues, signaling that he/she is ready to feed.

He might suck on his lip, tongue, finger, or fist.

Fidgeting and fussing at this time are also indicators that your baby is hungry.

Crying is a late hunger cue and may make it more difficult to begin breastfeeding.Try to pay attention and learn those earlier hunger cues.

Keep in mind that swaddling, pacifiers, and mittens can inhibit the hunger cues, as the baby's mouth and hands are restricted

PROMOTING OPTIMAL BREAST-FEEDING PRACTICE

Time to Start Breast Feeding:

A mother should begin breast-feeding as soon as her baby is born, within thirty minutes to one hour

Method of Feeding the Baby:

A baby should be fed from both breasts at each feed and be allowed to suck for as long as he wants. Both breasts should be offered at each feed. Sucking at each breast should be for at least ten to fifteen minutes.

Putting the Baby to the Breast:

A mother normally knows this. Only teach her if she is having difficulty. The mother should be comfortable after delivery, sitting up may be painful. The mother or baby can be supported by pillows, or she may feed the baby while lying down on her side with the baby beside her.

If she touches the baby's cheek 'with' her nipple, the baby will automatically turn his head and open his mouth. Not only the nipple, but also the areola (the dark skin around the nipple) should be in the baby's mouth. The baby's chin should be pressed up against the breast. If the breast is very full, it may press against the baby's nose and make it difficult for him to breathe. To avoid the mother should lean towards the baby; she can also gently hold the breast away from the baby's nose with her fingers.

The baby should suck from both breasts at each feed. Feeding should start with the right breast on one occasion and the left breast another.

If the mother can relax the milk will flow easily and she and the baby will enjoy the closeness and satisfaction of breast-feeding.

Pre lacteal Feeds Should not be Given:

Pre lacteal Feeds should not be given. These not only decrease the mother's milk supply by decreasing demand but also can be a source of infection. (You cannot eliminate traditions all at once hence a traditional touch on the lips of the infant with pre lacteal feed or giving a very small amount of honey in a clean spoon by an important person of the family is harmless. After that it should not be continued.)

Frequency of Breast-feeding:

On-Demand breast feeding should be encouraged. " more often the baby sucks, the more breast milk will be produced by the mother". Allow the baby to breast-feed whenever he wants if he wants. During the first few days the baby will cry when he wants milk; mother and baby usually settle into a rhythm. It is not a good thing to feed at a precise time according to a clock.

Length of Time for Feeding Each Time:

The baby should be fed at least seven or eight times during the day and night in the beginning. At first the time may be quite short, 5-10 minutes from each side. When the baby gets older and stronger, he will suck for a longer time because he needs more milk.

Feeding the Baby at Night:

If night feed is avoided the milk supply will diminish. Small babies need to be fed at night. In the first weeks of life most babies wake up with hunger in the night, they need extra feeding. Babies enjoy the warmth and closeness of the mother's body. Many babies feed in the night, sometimes without waking the mother.

Giving Water to a Breastfed Baby:

Water should not be given to a breast-fed baby. Water is the main component of breast milk. Giving water introduces a potential source

of contamination, and decreases the baby's urge to breast feed, which diminishes milk production.

Length of Time for Which a Baby is Breast-fed:

A baby should breast-feed for as long as possible. It is good to breastfeed for at least one year. Breast milk is still important for growth in the second year of life.

Assessing if the Baby is Getting Enough Breast Milk:

Most mothers produce enough milk for a baby to grow well for the first 4-6 months of life. Growth should be measured by weighing the baby regularly.

Supplementary Feeds of Animal Milk or Formula Milk:

Supplementary Feeds of Animal Milk or Formula should not be given. Many mothers complain of insufficient milk but fewer than 2% of mothers truly have in-sufficient milk. Any other supplementary feeding of milk will decrease the amount of sucking time on the breast and therefore decrease the milk supply. Diluting the supplementary milk feedings can result in contamination and produce diarrhea and malnutrition.

Quantity of Food Taken by Mothers during Lactation:

Mothers should eat more during Lactation. Lactating women need more energy and water during lactation, but often do not increase their intake.

Method of Stopping Breast-feeding:

If a mother wants to stop breast-feeding, she should do it gradually. Stopping breast-feeding should not be sudden. Other foods should first be introduced and increased over a period of 2-3 months. Then the baby will suck less, and less milk be produced.

Breast-feeding the Baby if Mother Becomes Pregnant:

It is not necessary to stop breast- feeding when a mother becomes pregnant. The quality of her milk will still be good, but the quantity may decrease. However, the general health of our women is such that it is usually advisable to stop feeding the child when he is a year old

Feeding the Baby when Mother is Away at Work:

If she is going to be away for a short time, she should feed the baby just before she leaves. If she has to be away for a long time, she should try and take the baby with her.

Taking Contraceptive Pills While Breast-Feeding:

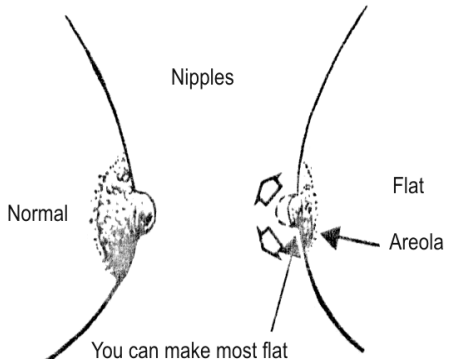
The contraceptive pills reduce the amount of breast milk. Breast-feeding mother should use pills which do not affect milk production (mini pills) or preferably use other methods of avoiding pregnancy during the period of breast-feeding. This is important because a baby should receive breast milk for as long as possible.

Breastfeeding premature and ill babies

If the baby is in a neonatal or special care unit after the birth, the mother should be be encouraged to use kangaroo care once the baby is well enough. Kangaroo care means holding your baby close to you, usually under your clothes with your baby dressed only in a nappy. This skin-to-skin contact helps you bond with your baby and increase your milk supply.

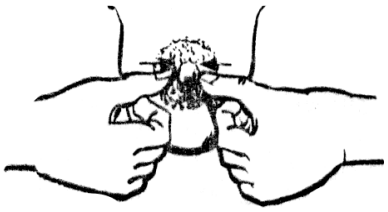
Even when the baby is in the NCU, the mother should express the breast milk and it can be used through the Naso gastric tube to feed the infant

A FLAT NIPPLE

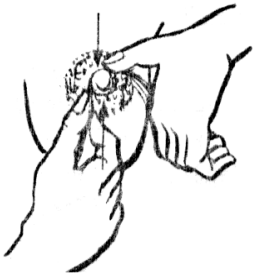


You can make most flat nipples protract. If they will protract a baby can suck normally

PREVENTING FLAT NIPPLES



If a mother squeezes her nipples like this several times each day during pregnancy, they will get longer and her baby can suck more easily



OVERCOMING PROBLEMS OF BREAST FEEDING

There are several common problems with breast-feeding, especially in the first one or two weeks. The most frequent are: a mother's anxieties about her performance, and the amount and quality of her milk. Others include flat nipples, sore nipples, and very swollen and tender breasts. Preparation for breast-feeding during pregnancy can avoid a number of these problems. The FWW should contact every mother during pregnancy and discuss breast-feeding. The mother should be taught to pull out the nipples, gently press out a few drops of fluid, and build up her confidence in the ability to feed successfully. The FWW should support and give comforting answers to the mother's problems.

Flat nipples

Some women have short, flat nipples. Flat nipples are most common in women who are having their first child. Most nipples are protractile (you can pull them out) and quite long. If a nipple is not protractile, the baby will have difficulty in feeding. If the nipples are flat, see if they will protract. Teach her to press her nipples and pull them gently. She should do this for several minutes every day.

After the baby is born, nipples can still be stretched further. The mother should squeeze the areola before putting the nipple in the baby's mouth. If the breast is very full, first express some milk before doing this.

Swollen (engorged) breasts:

Sometimes a mother's breasts make more milk than her baby needs. This is quite common in the first week after the baby is born. Sometimes the baby is too weak to suck the breast empty. If a breast is not emptied normally, it becomes painful and swollen with milk (it becomes engorged). The skin is tight, and the baby cannot put the whole areola in his mouth to suck. Sucking may be very painful to the mother. Prevent and treat engorged breasts by emptying them regularly.

Expressing breast milk:

Teach mother to express her milk when her breasts feel painfully full. She should wash her hands and find a clean cup or bowl. Using both hands squeeze gently from the base of the breasts towards the nipple. Then squeeze the breast and areola between fingers and thumb and let the milk squirt into the cup. Milk must be expressed from each part of the breast quickly.

empty breast should be soft without any lumps. If an engorged breast is not emptied, the amount of milk produced by it will decrease quickly. The expressed milk can be fed to the baby in a number of ways.

Sore nipples:

Nipples are very sensitive. If the skin is very soft and the baby sucks very hard, soreness develops. This happens more in women with engorged breasts and in women with small or flat nipples because the baby has to suck extra hard to hold the nipple in his mouth.

Sometimes the soreness develops into a crack which is very painful. A crack is not usually due to a baby biting the nipple. Infection can get into the breast through a crack in the skin.

To prevent sore nipples, keep the skin soft by rubbing the areola and nipple with some oil. Do not let the baby suck for too long at first. Change the position so that when the baby sucks the line of pressure will not always be at the same place. Make sure the breasts are emptied regularly by expressing them if necessary. Let the nipples dry in the air after feeds.

Treat sore nipples by keeping the breasts empty. Sucking is usually too painful, and it will be necessary to express the milk. Put some antiseptic ointment or antibiotic on the crack. Let the child feed from the other breast. If necessary, give the mother aspirin or paracetamol tablets to relieve the pain.

A tender lump in the first week of breast-feeding may be caused by a blocked milk duct in the breast. Empty the breast and then gently press and empty the lump. This will prevent serious problems later.

Painful tender breasts with fever:

Sometimes germs enter the breasts, perhaps through a crack in the nipple. This causes infections. A part of the breast becomes painful, swollen, red and warm. The woman may develop fever. Antibiotics are needed and the mother should be referred to the health centre or hospital. In this case also it is important to keep the breast empty of milk by feeding or expressing. The breast will be very painful, but the baby should go on sucking. Breast-feeding should be stopped only if there is pus coming out from the nipple. Give the mother aspirin or paracetamol tablets to relieve the pain and fever.

Fear that there is too little milk:

It is common fear for mothers that they do not have enough milk for their babies. Empty breasts on the first two or three days after birth are normal, encourage the mothers by telling them that:

- Milk usually starts to flow on the third to fifth day.
- A baby is born with plenty of water in his body and does not need to drink much in the first few days.
- The baby should be put to the breast regularly. He will get some colostrum which is good, and sucking helps the milk to come.
- Even if a mother has only a little breast milk, she must continue breast-feeding her child.
- Whatever breast milk she has is good, and she may have more later.

Fear that Mother’s Milk is of Poor Quality:

Mothers sometimes worry that their milk is not suiting the baby, or that it is of poor quality. Ignorant women and grandmothers sometimes say such things. Assure the mother that her milk is just right for her baby. It contains nourishment and substances that provide protection from infections. Strong reassurance should be given because if a woman loses confidence,

her milk supply may decrease.

The dangers of bottle-feeding and how to feed a baby if the mother has no milk:

If the mother of a small baby has NO breast milk, or if the mother has died in childbirth, efforts should be made to find someone else who can breast-feed the child. A friend or relation may act as a wet-nurse, Care should be taken as infections can be transmitted to babies as HIV/AIDs. A wet-nurse is some woman other than the mother who breast-feeds a baby. Even if a woman is not lactating and does not have a small baby, she may be able to breast-feed again. She must desire or feel it her duty to breast-feed the baby. The baby must be put to both her breasts frequently. She should also have extra food and drink. If there are local herbs believed to increase breast milk, she should use these. This process is called *re lactation.* Re lactation does not work with all women.

If the mother really cannot make her breast milk and a wet-nurse cannot be found, then it will be necessary to give the child artificial feeding, with milk from a cow or other animal or with powdered milk. But it is best not to feed the child from a bottle.

Here are reasons why bottle- feeding is dangerous:

- Milk is easily contaminated with germs from dirty bottles, rubber teats,

spoons, water, or hands. This danger is greatest in homes where there is no

running water supply and where there is little fuel or time for sterilizing the

feeding bottles and teats.

- Except for breast milk, no other milk has any agents that can protect the child from infections.
- Milk goes bad if it is not used quickly. This happens much more quickly in hot climates.
- Cow's milk and powder milks are often diluted too much. This is because they cost so much. If they are diluted the children do not get adequate nourishment and will not grow.
- The rubber teat of the bottle may have too small or too large a hole. If the hole is too small the child may struggle to get the milk and swallow a lot of air but not enough milk. Too large a hole may cause rapid feeding and sometimes vomiting.

Things that can be done to make artificial feeding less dangerous:

Mother Should:

- Wash hands with soap and water every time before preparing the feed.
- Use other methods of feeding rather than a bottle. Feed with a cup and spoon or a jug, or a special feeding spoon.
- Wash and then boil these utensils before use. They are all much easier to clean than a bottle

- If the milk has to be diluted or prepared (as in case of powder milk), use boiled water.
- Mix up only the amount needed for one feed. If too much is mixed and some of it is stored for a later feed, the danger of contamination is great.

The Family Welfare Worker Should:

- Find out if family can afford to buy the milk. If the family is poor and cannot get free milk from the health service, the baby will need milk and porridge to give him enough nourishment.
- Only teach about artificial feeding to mothers who have no chance of breast-feeding.
- Do not teach about artificial feeding to a group of mothers.
- Teach the mother that artificial feeds must not be used to supplement breast milk. It will only reduce the production of breast milk.

If cow's or goat's or camel's milk is used for artificial feeding:

- During the first 15 days of life: Give 1 part of boiled and cooled milk diluted with 1 equal part of boiled and cooled water.
- From 2 weeks to 4 months of age: Give 2 parts of boiled and cooled milk diluted with 1 part of boiled and cooled water.
- After 4 months of age: Give undiluted boiled and cooled milk.
- If buffalo's milk is used instead, the cream must be removed before the milk is boiled since buffalo's milk contains too much fat for babies. After the cream has been taken off, follow the same instructions as for

Quantity of Milk for Artificial Feeds:

An artificially fed baby needs about 150 milliliters of milk for each kilogram of his own weight each day. So, a very young baby weighing 3 kg will need 450 ml of milk a day. He needs feeding about 6-8 times a day; therefore, he will need about 55-75 ml of diluted milk at each feed. Feed older babies 5 times a day. A 5-month-old baby weighing 7 kg will need a little more than a litre of undiluted milk a day: about 210 ml at each feed.

Some important things to teach about artificial feeding:

- Breast-feeding is the best feeding until a child is 18-24 months old
- Additional foods should be given when the child reaches 4-6 months age.
- No preparation of cow's milk is as good as mother's milk.
- Mixing and preparing powdered milk is very complicated.
- Anyone who needs to use powdered milk should have a demonstration from a trained person.
- It is very expensive to feed a baby with the correct amounts of powdered milk.

30.6 CARING FOR THE LOW-BIRTH-WEIGHT BABIES

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30.6 CARING FOR THE LOW-BIRTH-WEIGHT BABIES

A Low Birth Weight (LBW) baby is one who weighs less than 2500 grams at birth. These babies are at a greater risk of neonatal health problems and mortality then babies who weigh over 2500 grams at birth. Low birth weight babies who survive have higher risks of illness and failure to develop normally.

LBW babies fall into 2 categories:

- The Preterm or Premature baby is born before the 37th week of pregnancy. The preterm baby is born prematurely. This baby is usually a normal baby who has not finished growing in the womb. The preterm baby's body is small and not ready to make the changes needed to live outside the womb.
- The Small for Gestational Age (SGA) baby does not grow enough in the womb for its age. The SGA baby can be full term or may also be preterm. This baby had poor growth in the womb and did not receive all that was needed in the womb to grow normally. The baby's body is small, but the baby is mature and ready to make the changes to live outside the womb.

Causes of Low Birth Weight in Babies:

The causes of LBW are complex and poorly understood. However, the proportion of LBW babies among healthy, well-nourished women is lower.

Low Birth Weight babies are born to mothers who:

- Had a LBW baby before
- Are young (less than 20) or older (over 35),
- Do physical work for many hours without rest,
- Have pregnancies that are closely spaced (less than 3 years between pregnancies) and
- Have problems of pregnancy and labour such as:
- Poor nutrition,
- Severe anaemia,
- Pre-eclampsia and eclampsia,
- Infections during pregnancy (STI, HIV / AIDS, bladder and kidney infection, hepatitis),
- Malaria and
- Multiple pregnancies.

Prevention of Low Birth Weight:

Low Birth Weight in babies can be prevented by:

- Providing health care services to detect and treat common problems before pregnancy

- Delaying childbearing until the woman is near 20 years of age
- Advising mothers to space children at least 3 years apart (Use contraceptive methods to delay and space pregnancies)
- Advising Pregnant mothers to:
- Eat enough food and the right kinds of food,
- Distribute hard work and take adequate rest
- Get proper antenatal care
- Recognize the signs of problems during pregnancy and seek treatment for problems during pregnancy

APPEARANCE OF A PRETERM BABY

Appearance and behaviour differ according to the baby's gestational age in weeks. Typically, this baby is long and thin with an apparently disproportionately large head. The head is apt to be round or ovoid, presumably because there is little moulding during the birth process.

The features are sharp and angular due to little fat under the skin in contrast to those of the full- term baby who are soft and rounded. The muscle tone is poor. The skin lacks subcutaneous fat, lies in folds and is bright red lanugo or soft downy hair is plentiful. This group of babies demonstrates an asymmetrical growth pattern. While weight is low for gestational age, length is less affected and occipital frontal head circumference may be within the normal range for a term infant.

The organs are immature and not ready to support life outside the womb. Respiration may be weak, often irregular. Many of the smaller babies are unable to suck or to swallow. Physiological jaundice is common and apt to persist for a long time-sometimes up to 6 weeks. The blood vessels are frail, and haemorrhage into the brain is not infrequent. Temperature regulation is poor. The temperature is often low, but hyperthermia readily follows the use of external heat unless the heat is applied carefully.

The skin is often dry and peeling, and there are abundant palmar and plantar skin creases. These babies are sometimes described as looking like worried old men. It has been suggested that having been starved in utero they are 'worried' that this pattern is going to continue. In behaviour they are active and indicate from an early age they are hungry.

The visible features of the preterm baby are listed below:

Weight:

Less than 2500 grams

Skin:

- Red due to lack of fat under the skin
- May be covered at birth with white greasy substance, vernix.
- Covered with fine, soft hair –lanugo

Head:

- Large when compared with size of body
- Sutures and soft spot (fontanelle) are wide
- Ear has no cartilage before 25 weeks, the ear can be folded and does not return immediately to the normal place

Chest:

- Small and narrow
- No breast tissue before 34 weeks of pregnancy

Sucking Reflex:

- May be poor or absent

Legs / Arms:

- Thin, poorly flexed or floppy

Feet

- Skin creases on the soles of feet are only on the front 1/3

Genitals

- Small
- Girls: labia majora does not cover the labia minora
- Boys: testes may not have descended into the scrotum

IMMEDIATE CARE OF LOW-BIRTH-WEIGHT BABIES

Gentleness in all manipulations of premature infant is required as they are susceptible to injury and bleeding.

- Maintain body temperature
- Protect against infection
- Maintain airways by gravity and suction.

At birth, as soon as the head is delivered, mucus is removed by inverting the baby and using gentle suction. After birth the baby is placed with the head dependent to allow escape of mucus and secretions which may have collected in the mouth and respiratory passages.

If the condition of the baby permits, delay tying the cord until pulsation ceases in order that the baby may get extra blood from the placenta. Protect the baby from exposure during the procedure. The cord should not be tied close to the skin to permit space for a second ligature should there be any bleeding from the stump of umbilical cord if need arises.

Immediately after the cord is cut the baby is wrapped in a warm blanket and placed in a warmed crib but avoid (over warming). An incubator is preferred for this purpose.

The genital region and anus are protected by a piece of cotton or gauze. The head of the bed should be lowered 4 to 6 inches to allow of mucus and secretions to flow.

Weighing of the baby may be deferred for 24 hours if condition is very poor. Throughout the first 48 hours the baby should be watched closely for cyanotic attacks, because they may appear without warning. Very small babies should not be oiled or bathed during the first 24 hours except for gentle removal of vernix from the skin folds with sterile water or antiseptic solution.

PROBLEMS OF PRETERM BABIES

A preterm baby is at great risk of dying or developing serious health problems. The baby's size predicts the risk, which is greatest for the smallest preterm babies. The following are problems seen in preterm babies:

- **Low** body temperature: Kangaroo Mother Care (KMC) with the baby in skin-to-skin contact effective for keeping the baby warm
- Feeding problems: The moderately premature babies can usually breastfeed well with help. The baby needs frequent small feeds.
- Infections: If preterm birth was due to premature breaking of the bag of water the baby will need antibiotics.
- Jaundice: Preterm babies become yellow earlier and it lasts longer than in term babies. If the yellow colour affects the hands and feet or if the baby has other danger signs, refer to a higher-level facility
- Bleeding problems**:** Give Vitamin K according to country specific guidelines

CARE OF THE LOW-BIRTH-WEIGHT NEONATES (< 2500 G)

History: Ask what date the baby was expected or how many months the pregnancy lasted

Examination: Birth weight less than 2500 grams

Problems / Needs: Preterm, decide if the baby is:

- Very low birth weight: less than 1500 grams or less than 32 weeks
- Moderately preterm baby: between 1500 grams and 2500 grams or 33-37 weeks.

THE CARE PLAN Involves four important components

- Kangaroo mother care
- Thermoregulation
- Feeding
- Monitoring

Low birth weight indicates prematurity (less than 37 weeks) or intrauterine growth restriction or a combination of the two.

Low birth weight neonates, whether preterm or not, are at significant short-term risk of

hypothermia, hypoglycaemia, apnoea, respiratory distress, jaundice, infection, anaemia, dehydration and feeding problems, and at significant long-term risk of poor psychomotor development.

- Neonates who are sick or who weigh less than 1500 g should be referred to a neonatal care unit whenever possible. Neonates who weigh 1500 to 2500 gm, regardless of the term, are managed in the maternity hospital if they are not sick, according to the recommendations below.

KANGAROO MOTHER CARE (KMC)

Kangaroo Mother Care (KMC) helps to maintain body temperature of a newborn and prevents hypothermia during cold conditions.

It has 3 parts:

- ***Skin-***to-skin contact: between the baby's front and the mother's chest
- For the preterm baby, KMC skin-to-skin contact starts at birth and continues. The baby's head is covered with a cap or cloth to prevent cooling. (Loss of heat)
- Skin-to-skin contact is a way to keep babies warm and avoid undue exposure.
- Exclusive breastfeeding: The preterm baby should be breastfed soon after birth and frequently.
- Support the mother and baby:This means whatever the mother or baby needs is supplied without separating them i.e. the mother has not to do different errands. At home the family will support the mother and baby.

KMC HELP THE PRETERM BABY AND MOTHER

Benefits for Baby:

- Breathing becomes regular and stable
- Temperature is maintained.
- Immunity is improved
- Chances of Infection are reduced

Better breastfeeding and weight gain

Benefits for Mother:

- Promotes bonding between mother and baby.
- Gives the mother a feeling of competence.

Tips for the FWW to help the mother and family do KMC

- Explain to the mother and family the reasons for KMC for the preterm baby.
- KMC replaces the warmth of the womb
- The baby is near the breasts for frequent small feeds

- KMC promotes the letdown reflex and helps breastfeeding succeed.
- The baby is protected from injury and infection from the outside world
- Position the baby to the mother's chest with cloth or wrapper.
- The baby's front should be against the mother's chest
- Baby is put in an upright position
- He is fastened tight enough to the mother to maintain skin-to-skin contact.
- Encourage the mother to:
- Maintain an upright position of baby with the head raised.
- Breast feed the baby on demand.

Continue KMC until the time the baby would be expected to be born normally

Thermoregulation

- Cover the neonate's head to reduce heat loss.
- Make sure that the room temperature is between 23-25 °C.
- Use the Kangaroo care

Feeding

- Exclusive breastfeeding is the best choice
- –If sucking is ineffective but the swallowing reflex is present, express the milk manually or using a breast pump and feed the neonate using a up/spoon
- –If sucking is ineffective and the swallowing reflex is poor or absent, express the milk and feed the neonate using a gastric tube – If the mother does not have enough milk:
- • In the first 72 hours of life, make up the required amounts with 10% glucose PO.
- • After 72 hours of life, make up the amount with infant formula (or if not available, use diluted F 100 milk).
- At the same time, continue to stimulate the mother's milk production
- In all cases, try putting the neonate to the breast periodically to test if breastfeeding is effective or not.
- In the event of regurgitation:
- • Administer each meal very slowly.
- • Hold the neonate tilted slightly head-up.
- In the event of vomiting, abdominal distension, blood in the stool or greenish, foul-smelling stool, stop feeding and call the doctor immediately.
- – Very low birth weight neonates (< 1500 g) have a high risk of developing acute necrotizing enterocolitis with early oral feeding. For the first 48 hours, give a 10% glucose IV continuous infusion

If the neonate is clinically stable, very small amounts of breast milk of 10 ml/kg per day can

be started on D1 while awaiting transfer to a neonatal care unit.

If it is not possible to administer an IV infusion or to transfer to a neonatal care unit, give expressed breast milk and 10% glucose together orally

Monitoring

Same monitoring as for a neonate > 2500 g, plus:

- Daily weighing
- Temperature every 4 hours
- Blood glucose test before every meal or every 3 hours until there are 3 consecutive normal results. In the event of hypoglycaemia

SUMMARY OF CARE PLAN FOR PRETERM BABY

Low birth weight babies have special needs. All small babies have a much better chance to survive and thrive if they get the correct care.

FWW have an important role in helping low birth weight babies survive and can teach mothers and families learn to care for their LBW babies.

PLAN OF CARE FOR MODERATELY PRETERM BABY

If the baby has no breathing problems and remains warm while in skin-to-skin, contact with the mother:

- Keep the baby in skin-to-skin contact with the mother.
- Start breastfeeding within the first hour after birth
- Give care and teach the mother to care for the baby.
- If the baby is blue (cyanotic) or having problems in breathing: stimulate, give oxygen, and refer to a higher-level health facility.
- If the temperature drops below 35 °C:
- Keep the baby in skin-to-skin contact with the mother for warming
- Give Vitamin K according to country specific guidelines or give Vitamin K, 1 mg I/M

CARE PLAN FOR A VERY LOW BIRTH WEIGHT BABY

Refer immediately to a higher-level health care facility where care for very small babies is available

- Keep the baby warm during transport
- If the mother had fever or the bag of water was broken over 18 hours before birth the baby will need antibiotics to be given by the doctor only
- If the baby is blue or having difficulty in breathing, give oxygen during transport. Give Vitamin K according to country specific guidelines or give Vitamin K, 1 mg I/M.

SMALL FOR GESTATIONAL AGE (SGA) BABY

APPEARANCE OF SMALL FOR GASTATIONAL AGE (SGA) BABY

A second group of babies is apparently small for Gestational Age but growth retardation is symmetrical. Multiple gestation pregnancies not infrequently produce babies who are symmetrically growth retarded.

SGA BABY APPEARANCE

- Weight: Less than 2500 grams
- Skin: Red due to lack of fat under the skin Dry and cracked
- Head: Large when compared with size of body
- Ear has cartilage and returns to normal when folded
- Chest: Breast tissue present
- Sucking Reflex:
- Usually vigorous
- Legs / Arms: Thin, usually flexed
- Feet: Skin creases cover the soles of feet
- Activity: Active, alert

PROBLEMS OF SGA BABIES

SGA babies experience poor growth in the womb. They are at increased risk of death and serious health problems. These babies are at increased risk of problems at birth such as asphyxia or postnatal complications such as hypoglycaemia (low blood sugar), hypothermia (low body temperature), breathing problems and infections.

Birth Asphyxia:

The SGA baby may not have received enough oxygen in the womb during labour. The distressed baby in the womb often passes stool (meconium). When the baby is stressed during labour it may gasp and cause pieces of stool to enter the air passages. Anything breathed in can block the air passages and prevent normal breathing at birth.

It is important to recognize the risk of asphyxia at birth in both premature births and small foetuses and appropriate referrals should be done in time

Low Body Temperature:

The SGA baby is thin, has little body fat and needs help keeping warm. The SGA baby is usually more mature than the preterm baby and will quickly learn to maintain the body's temperature. Dry, wrap and warm the baby immediately after birth

Low Blood Sugar:

Poor growth in the womb means the baby has little stored energy. The SGA has an extra need for prompt and continued feeding to quickly make up for lost energy. Early and exclusive breast feeding is essential. If baby is too small to suckle, express milk and feed by spoon. These babies should be fed hourly or earlier if the baby demands

Infections:

Wash hands with soap and water before handling the baby. Take care to clean the cord properly.

Immediately refer to the nearest health facility if the baby has breathing difficulty or turns blue.

SGA BABY CARE PLAN

History: Ask what date the baby was expected or how many months the pregnancy lasted.

Exam: Birth weight less than 2500 grams

Problems Low birth weight:

CARE PLAN FOR SGA BABY:

If the baby has breathing problems, immediately refer.

If the baby has no breathing problems and remains warm while in skin-to-skin, contact with the mother:

Keep the baby in skin –to- skin contact with mother (KMC)

- Start breastfeeding immediately after birth
- Breastfeed on demand, unlimited

If the temperature drops below 35° C

Keep the baby in skin-to-skin contact with the mother

Warm the baby by warming the room, providing heat source, and warm covering for baby and mother

Give care and teach the mother to care for the baby SGA baby has the same needs as the normal baby

- Teach the mother the danger signs and what to do.
- Continue KMC until the baby starts to gain weight and has no problems

Follow Up:

See baby weekly until it reaches 2500 grams to assess for any problems

30.6 NEONATAL PROBLEMS

30.6 NEONATAL PROBLEMS

HYPOTHERMIA

Hypothermia is defined as an axillary temperature below 36.5˚C. When the body temperature is below 36.5 °C, the infant is at risk from cold stress. This can cause complications such as increased oxygen consumption, lactic acid production, apnea, decrease in blood coagulability and most commonly hypoglycemia. Hypothermia may occur soon after birth unless the baby is protected.

Causes of Hypothermia / Low Temperature:

- The room is too cold
- The baby is wet
- The baby is uncovered, even for a short time
- The baby is placed on a cold surface or near a cold wall or window
- The baby has any infection
- The baby with birth asphyxia.

Examination during Hypothermia:

If mother reports that the baby is lethargic and not feeding then

- Take history
- Conduct Physical examination, the findings are as under:
- Skin on abdomen or back feels cold
- Axillary temperature is below 36.5˚C
- Limp or floppy (hypotonic)
- Does not suck well
- Has a weak cry
- Breathing is slow and shallow
- Heart rate is slow (below 100 beats per minute)

Prevention of Hypothermia:

- Keep the delivery room warm and free from drafts (door, window, fan, etc.)
- Dry and wrap the baby immediately at birth
- Do not leave baby uncovered, even for a short time
- Keep baby on skin to skin contact with mother
- Begin breast feeding immediately

Management of Hypothermia:

Re-warm the baby quickly:

- Remove cold or wet clothes and place the baby in skin-to-skin contact with the mother
- Cover baby's head
- Cover the mother and baby with the mother's warm clothes and a warm blanket
- Make sure room is warm and free of drafts (sharp currents of air)
- Encourage breastfeeding
- If the baby is too weak to suck at the breast, encourage and assist mother to give expressed breast milk
- Check the temperature hourly

After Care / Follow-up

- Baby is well settled with the mother and is feeding well.
- Continue to keep baby warm.
- If after one hour of treatment baby is not responding, then refer to the nearest health facility.
- Transport baby to the health facility wrapped in skin-to-skin contact with the mother.

HYPERTHERMIA

Hyperthermia is defined as an axillary temperature above 37.5˚C. The usual cause of hyperthermia is overheated environment, but it can also be a clinical sign of sepsis, brain injury or drug therapy. Hyperthermia has a similar effect on the body to that of hypothermia and is equally detrimental. If an infant is too warm, he / she, becomes restless and may have bright red cheeks. Sweating may occur especially over the forehead, although the neonate's ability to sweat is limited. An unstable temperature may indicate infection.

BREATHING DIFFICULTY

A newborn baby may encounter breathing difficulty due to immaturity of lungs. This is however rare and when suspected should be referred to a nearby health facility.

Some important points to be excluded in such infants with breathing difficulty consist of the possibility of meconium aspiration which such babies may inhale at the time of birth. Maternal infection may also contribute to the development of early onset of pneumonia. Such situations require referral to the nearest health facility for X-ray chest.

DANGER SIGNS & COMMON PROBLEMS IN THE IMMEDIATE NEONATAL PERIOD

During the first 28 days of life, a newborn is adjusting to life outside the mother's body. The

newborn's infection fighting system is immature. It is easy for the baby to get infections. Some other common problems (hypothermia, jaundice) happen because the newborn's body is still learning to keep warm and to get rid of waste products.

Danger signs in newborns are signs that may mean serious illness. Serious illness in a newborn often leads rapidly to death. Death may be prevented if:

- The mother and family recognize danger signs and quickly seek health care.
- The health worker immediately stabilizes and refers the newborn to the appropriate health facility.
- The baby receives appropriate medical care in the hospital.

DANGER SIGNS

Danger signs may present at delivery or develop within hours or days after birth. All neonates should be examined for danger signs at birth, during their stay in maternity or at the first post-natal visit if born at home. If any of the following signs are present, treat immediately) and transfer to a neonatal care unit.

Anger signs	
Temperature	• Hyperthermia (axillary temperature > 38 °C) • Hypothermia (axillary temperature < 35.5 °C)
Neurological signs	• Bulging fontanelle • Hypotonia • Lethargy or coma • Unable to breastfeed • Seizures including subtle or abnormal movements: – deviation of the eyes with or without spasms, eyelid blinking – sucking, smacking or other mouth movements – swimming or pedalling movements
Respiration	• Apnoea or bradypnea (RR < 30/minute)

	• Tachypnoea (RR > 60/minute) • Severe chest indrawing • Grunting
Heart	• Tachycardia (HR > 180/minute) • Prolonged capillary refill time (> 2 seconds)
Abdomen	Severe abdominal distension
Skin color	• Generalized cyanosis (blue coloring) • Extreme pallor • Extensive jaundice (yellow coloring)
Skin	• Umbilicus red or oozing blood or pus • Numerous or large pustules
Joints	Swollen, painful joint (irritability when moved) with reduced joint movement
Blood glucose	Recurrent hypo glycaemia (blood glucose level < 2.5 mmol/litre or < 45 mg/dl on more than 2 episodes)

General management

Stabilize the neonate before transfer to the neonatal unit:

- Position the head to open the airway.
- Administer oxygen with an appropriate nasal cannula, at a maximum flow rate of 2 liters/minute (aim for SpO2 90-95%).
- n the case of apnoea or if RR < 20/minute: perform bag and mask ventilation
- Check blood glucose and/or treat for hypoglycemia
- While awaiting transfer:
- Keep neonate warm in a room at 23-25 °C wrapped in a blanket or under an infant warmer and cover the head with a cap.
- Closely monitor temperature, respiratory rate and SpO2.

- Start treatment for neonatal infection
- Ensure routine neonatal care
- Start or continue feeding

Only, if necessary, compliment feeds with a nasogastric tube and/or IV fluids

In the case of severe respiratory distress, abdominal distension, or coma, do not feed the neonate by mouth. Start IV fluids if possible

COMMON PROBLEMS INCLUDE:

Feeding difficulties or not sucking:

- Unable to suck.
- Does not stay awake to suck long enough to empty the breast.

Lethargy:

- Difficult to wake up, unresponsive

Breathing problems:

- Breathing is faster than 60 or less than 30 breaths in a minute.
- There is in-drawing of the chest with breathing, flaring of the nostrils
- Skin color is blue

Convulsions / Fits:

- Fits are more than the tremor or jittery movements of normal babies. The baby may become rigid or shake

Fever:

- Body (abdomen or back) feels hot compared to a well person.
- Axillary temperature above 37 ° C

Feels cold:

- Body (abdomen or back) feels cold or cooler compared to a well person
- Axillary temperature below 36 ° C

Bleeding from the cord:

- Babies do not have much blood, so the loss of a small amount is harmful.

Jaundice:

- Yellow skin and eye color, which begins before day 2 or lasts more than 10 days is serious
- Yellow skin color that extends to the hands and feet is serious

Repeated vomiting with distended abdomen: Most babies spit up small amounts of milk. Vomiting is dangerous when large amounts of fluid are lost or when the vomiting is forceful with distended abdomen.

Severe infections of the umbilicus, eyes, or skin: (swelling, discharge, redness, pustules). These infections can spread through the baby's body and cause death.

STABILIZATION AND EMERGENCY REFERRAL OF NEWBORNS

As a Family Welfare Worker, you will refer newborns to a higher level health facility when needed without wasting valuable time. Stabilize the baby before transport to enable the baby to tolerate the trip. Remember that the mother and family will be worried about the baby's illness and need for referral. Treat the mother gently and answer her questions satisfactorily.

Stabilize the Newborn

- Give immediate newborn care (dry and keep the newborn warm, resuscitate if the baby is asphyxiated, give eye and cord care, help the mother to start breastfeeding
- Keep the baby dry and warm, skin-to-skin with the mother
- Make sure to continue breastfeeding or cup feeding the baby every 2-3 hours

Protocols for referring newborn to higher-level facility

- Explain the reason for referral to the mother and family
- Arrange transport without delay
- Notify the referral centre (if possible) about the baby's condition and the estimated time of arrival
- Keep the baby warm during transport. Keep the baby in skin-to-skin contact with the mother and cover both of them together with warm clothes. If the climate is very hot, fewer coverings are needed. Protect the baby from direct sun.
- Encourage mother to breastfeed during transport
- Send details of pregnancy, labour, delivery, and newborn if available.
- Send a family member or friend with the mother and baby. If the newborn is seriously ill then the health worker should also go with them.
- Monitor and record breathing, color, temperature during transport.

POOR FEEDING / VOMITING

Slight difficulty in feeding may arise in premature babies. However, persistent difficulty in feeding or vomiting in babies should always be taken seriously as it may be an early indication of serious infection or other problems as these should be referred to the doctor. Some newborn babies bring up a little milk after each feed. This is entirely normal and if the baby is gaining weight, does not require any special treatment. Burping and keeping the baby's head-up after feeds helps.

Important points to look for in a baby with poor feeding and vomiting are:

- Cold or febrile
- Jaundiced
- Vomit yellow tinged
- Abdomen distended
- Stiffness of the jaw / face muscles (may be suggestive of early neonatal tetanus)
- Any problem with the mouth (check the palate and for the presence of thr ush)
- Associated problems e.g. respiratory difficulty, fits, color change If the answer to any of the above mentioned is in affirmation, refer the baby immediately to the health facility.

JAUNDICE

Jaundice is characterized by yellow discoloration of skin, tongue and the white portion of the eye (sclera). Neonatal jaundice is generally harmless, but severe jaundice can cause acute encephalopathy, potentially leading to neurological sequelae and death.

Diagnosis

– Yellow coloring of the skin and sclerae due to increased levels of bilirubin in the blood. It appears first on the face, and then moves to the chest and then the extremities.

– The examination should be done in day light. It is done by pressing the neonate's skin and looking to see if it is yellow immediately after the pressure is removed.

– Assess criteria for transfer to a neonatal care unit:

Criteria for transferring neonates with severe jaundice to neonatal unit

Age	**Criteria for transfer**
Day 1	Any visible jaundice
Day 2	< 1500 g or risk factors*: any visible jaundice> 1500 g: moderate jaundice (head, chest, lower body, thighs)
Day 3 or later	< 1500 g or risk factors*: extensive jaundice (head, chest, lower body, arms, thighs, lower leg) > 1500 g: very extensive jaundice (head, chest, lower body, arms, thighs, lower leg, hands and feet)

Risk factors include:

- ABO or Rh factor incompatibility between mother and neonate.
- Inadequate milk intake (dehydration, weight loss).

- G6PD deficiency: consider if severe jaundice in family history or in prevalent regions (sub-Saharan Africa, Arabic peninsula and parts of Asia/Mediterranean).
- Neonatal infectioni
- Cephalohematoma/bruising
- Effect of Jaundice on the Newborn
- Physiological Jaundice:

The health of the newborn is not affected by physiologic jaundice. More than 50% of full-term infants and 80% of preterm infants will have some physiological jaundice in the first week of life.

In a full-term well baby physiological jaundice *never* appears before 24 hours of age (first two days), and usually fades by 1 week of age.

When the red blood cells break down, they release a substance called bilirubin which causes the yellow color. The baby's liver usually gets rid of the extra bilirubin and then passes it out of the body in the urine and stool. The newborn baby is not able to get rid of extra bilirubin very fast because the liver is immature, and this makes the skin yellow.

Recognizing Physiological Jaundice:

History taking: Ask the mother

- When did she first see the yellow color?

Physiologic jaundice is seen after the first 48 hours and is gone by one week.

- Does the baby have any other danger signs?
- How is the baby feeding and behaving?

If behaviour and feeds are normal, the baby probably has physiological jaundice

- Is the baby passing urine and stool?

Physical examination:

- Examine the baby's body: The Skin and the lining of the eyes are yellow
- Take the axillary temperature
- Check for dehydration (persistent skin fold).

Management of Physiological Jaundice:

No treatment or referral is needed for physiological jaundice

Counsel the mother to

- Keep the baby warm.
- Expose the baby to sunlight / white light
- Keep breastfeeding often and exclusively (Drinking lots of breast milk will help the

baby get rid of the bilirubin through the urine)

- Watch the baby for any danger signs
- Reassure the mother that the baby is normal and that
- the yellow color will slowly disappear.

After Care / Follow-up

- See the baby again within 2-3 days to make sure the jaundice is going away
- Refer to a higher-level health facility if signs of serious jaundice are present

PATHOLOGICAL JAUNDICE

If the baby has a problem that causes very high bilirubin in the blood, then pathological jaundice will occur. This type of jaundice is noticed within the first two days or appears to be increasing rapidly or persists for 7-10 days in full term infants or 2 weeks in preterm babies. The baby who is not sucking well, or not passing stool, cannot get rid of the bilirubin. In pathological jaundice the extra bilirubin may affect the baby's brain and cause brain damage. Causes of Pathological Jaundice:

- Low birth weight (less than 2.5 kg)
- Prematurity
- Blood disease
- Infection

Recognizing Pathological Jaundice

- The yellow color starts during the first 48 hours of life
- It lasts longer than 2 weeks
- It is present anytime on the palms of the hands and soles of the feet.

Prevention of brain damage in Pathological Jaundice

Refer babies with pathological jaundice immediately to a health facility

Management: On part of FWW, the most important thing is to refer urgently, without wasting any time

RED EYES

Some babies have red eyes with swollen eyelids and discharge pus. The eyes must be wiped with a clean moist cloth as soon as the baby is born if the eyes are inflamed. Refer baby with inflamed eyes to a health facility because of the possibility of Ophthalmia Neonatorum or other serious infections.

DIAPER / NAPY RASH

Irritation of the buttocks, after the newborn period, is most caused by urine. Faeces may

produce irritation when there is diarrhea` or when the feed contains much protein as in the case of skimmed milk. In such instances, the irritation is most intense around the anal opening, spreading from there at times to the neighbouring regions.

Urine itself is not irritating when first passed. However, when it remains in the diaper for any length of time the urea may be changed to ammonia, and this is very irritating. The irritated skin may itch and be painful and in this way lead to irritability and sleeplessness.

Management of Nappy Rash:

- Teach the mother to keep the baby clean.
- Baby Napkins / Diapers should be changed frequently.
- Wash every time urine or stool is passed.
- Keep the baby's bottom open to the air for a few hours, making sure that the baby does not become cold.
- Apply a rash cream or Petroleum Jelly twice or thrice a day.
- If the rash persists, refer to a doctor.

MAJOR PROBLEMS OF NEWBORN

Major problems for which baby should be urgently referred to the hospital:

- Abnormal breathing.
- Yellowness, the baby is yellow at birth and remains yellow, or starts to go yellow after the first 10 days of life.
- The baby has high-grade fever.
- The baby has a fit or goes stiff and cannot open his / her mouth.
- Infections are one of the major causes of newborn death. They can be prevented and treated. It is important to remember that small, localized infections can spread and become serious life- threatening infections.

Important indicators suggestive of infection in a newborn infant include

- Umbilical discharge
- Skin eruptions with pus
- Low body temperature or fever
- Respiratory difficulty
- Abdominal distension and / or vomiting
- Diarrhea (distinguish from normal soft breastfed stools)
- Difficulty in waking up the baby, lethargy
- Poor feeding
- Limp or rigid at times or history of fits
- Jaundice within the first few days or rapidly increasing jaundice

NEWBORN SEPSIS (GENERALIZED INFECTION IN THE NEWBORN)

- Sepsis is an infection affecting the whole baby. The infection may be in the blood (septicemia) or in one or more organs of the body.
- Germs that cause sepsis may enter the baby during pregnancy, during labour and birth or after birth. They can spread through the body from an infection of the skin or cord.

Effect of Newborn Sepsis on the Baby:

This is a serious illness and can cause death

Prevention of Newborn Sepsis:

- Use infection prevention steps during labour, birth and postnatal care.
- Wash your hands before and after handling each newborn.
- Teach the mother and family to use infection prevention steps, especially hand washing.
- Treat a mother's infections during pregnancy.
- Treat a mother with antibiotics during labour if she has signs of infection.
- Treat a newborn with antibiotics after birth if the mother had fever during labour.
- Ensure exclusive breastfeeding.
- Do not bring the baby into contact with sick people. Isolate a sick newborn from healthy ones.

LOCALIZED INFECTIONS

Localized Infections are infections that can be seen in a certain part of the baby's body (cord, skin, eye, or mouth). They are important because they can spread quickly through the newborn's body and cause newborn sepsis. Quick and correct treatment of localized infections may prevent sepsis and possible death.

UBLICAL CORD INFECTION

It is an infection around the umbilical cord or the umbilicus

Effect of Umbilical Cord Infection on the Newborn:

Infection can easily pass through the cord into the rest of the baby's body. It can lead to sepsis and death if treatment is delayed or not correct. If anything unclean is put on the cord, there is a danger of tetanus, which often leads to death.

Prevention

- Use infection prevention steps during birth and newborn care
- Cut the cord with sterile scissors or a new razor blade
- Keep the umbilical cord uncovered, clean and dry

- Do not apply anything on the cord

Recognizing the problem

- Take history:
- Did mother receive tetanus immunization during pregnancy?
- When and where was the baby born?
- What was used to cut the cord?
- Was anything put on the cord?
- Does the umbilicus have a bad smell?
- Has the newborn had any of the following danger signs?
- Conduct physical examination for

Localized Umbilical Infection:

- The umbilicus has pus discharge
- But the skin around it looks normal
- Delay of cord separation or healing

Serious Umbilical Infection:

- Pus discharge from the umbilicus
- Delayed cord separation or healing
- Redness and swelling around the stump
- Distended abdomen.

Treatment of Localized Umbilical Infection

- Prepare boiled water that has been allowed to cool and is lukewarm, clean cloths, soap, and gentian violet 0.5% solution
- Wash your hands with clean soap and water and dry them on a clean towel
- Wash the cord stump and umbilical area gently with lukewarm boiled water
- Remove all pus, including any dry crusts
- Dry the cord stump and umbilical area with a clean cloth
- Apply gentian violet 0.5% to the cord stump and umbilicus

After Care / Follow up of Localized Umbilical Infection

- Check the newborn within 2 days
- No signs of serious Umbilical Infection then advise the mother to continue the Gentian Violet treatment for a total of 3 days
- In case of serious umbilical infection, Refer the baby

SKIN INFECTION IN NEWBORN

Infection of the newborn's skin causes small pustules (pus filled blisters) on the skin and if not treated may spread and develop into a life-threatening infection.

Prevention

- Always use infection prevention steps when caring for the baby
- Regular bathing of the baby and changing and cleaning soiled clothes

Recognizing

Take history:

- Mother reports that baby has rash
- No danger signs are present

Conduct Physical examination:

Examine baby's skin including the diaper area, separate the skin folds to look inside creases of the neck, arms, and legs

- Skin pustules are present
- There is redness around the pustule
- Take the newborn's temperature
- Look for danger signs

Treatment of Localized skin infection:

- Wash hands
- Prepare boiled water which has been allowed to cool, clean cloths, soap, and gentian violet 0.5% solution
- Wash the skin gently with cool, boiled water, and soap to remove all pus, including any dry crusts
- Dry the skin with a clean cloth
- Apply gentian violet 0.5% to the affected skin
- Continue treatment for three times a day.

Management of a serious skin infection:

- Stabilize the newborn by making sure the baby is warm and has breastfed
- Refer to the nearest health facility.

ORAL THRUSH

Thrush is an infection of the mouth caused by a fungus or yeast. The thrush fungus lives in wet, warm places. It is normal to have a little of this fungus in our mouths. At certain times it can grow so much that it causes an infection. Babies can get this infection easily in the first few

months of life since their immune system is not well developed.

- **Thrush** in the mouth: Thrush covers the newborn's mucous membranes and tongue with a white coating. It makes the mouth painful so the baby may not be able to feed.
- Thrush on the buttocks: The infection can also go through the baby's stomach and intestines in the stool. This causes the stool to be loose (diarrhea) and bad smelling. When this happens the infection spreads to the baby's buttocks, causing a painful red rash.

Effect of Thrush on the Mother:

The fungus infection can pass to the mother's nipples. The mother will notice that her nipples are sore and red. She will feel breast pain when the baby breastfeeds.

Prevention of Oral Thrush:

- Breastfeed exclusively from birth.
- Wash hands before and after caring for the baby.

Treatment of Thrush for Baby's Mouth:

- Wash hands and dry with a clean towel or air dry
- Wrap a clean; soft cloth around your forefinger
- Pour gentian violet on finger
- Wipe inside the baby's mouth using clean cloth of each wipe
- Take clean cloth and apply Gentian violet on baby's buttocks if rash is present
- Discard the used cloth
- Wash your hands

Advise mother to:

- To treat baby's mouth 2 times a day with gentian violet 0.5% solution
- Use clean cloths for each treatment
- Boil anything that goes into the baby's mouth

Mother's Nipples:

- Apply gentian violet to the areolas and nipples
- Advice mother to keep her nipples dry when not breastfeeding. Loose clothing will allow air to dry the nipples

SEIZURES / CONVULSIONS (FITS)

Though rare these are important to recognize and treat in a newborn infant. It may be difficult to differentiate seizures from tetanus in the newborn. In such cases with seizures, it is important to refer these infants to a health facility immediately.

TETANUS

Tetanus, or lock jaw, is occasionally seen in newborns. Infection takes place through the umbilicus / navel. Symptoms are convulsions and generalized rigidity, especially of the jaw-generally appear in the second week of life. The baby should be referred immediately to the hospital. Tetanus can be prevented by T. T vaccination of the mother and by preventing the infection of the umbilical cord.

DIARRHEA

- The colour of normal stool is brown/yellow (after initial meconium).
- Breastfed baby may pass ten to twelve soft stools per day, which is normal
- In infection, the stools are green
- It is not the number but the type of stools that matter. If the stools are loose a baby has diarrhea
- Give Oral Rehydration Salt (ORS) to the baby
- Do not stop breastfeeding

SPECIFIC CARE WHEN MOTHER HAS A TRANSMISSIBLE INFECTION

- Syphilis
- Look for signs of syphilis in all neonates of mothers in case of positive syphilis test and/or suspected maternal syphilis infection:
- Mucocutaneous rash, grey patches, papules and bullae followed by desquamation of the skin on the palms and soles of the feet;
- Sepsis, jaundice, anaemia, enlarged lymph nodes and abdominal distension with hepatosplenomegaly.
- Verify that the mother received an adequate treatment for syphilis at least one month before delivery Based on the findings, administer one of the following treatments:

Criteria	**Treatment**
Neonate has clinical signs of syphilis	benzylpenicillin IV:
or	D1 to D7: 50 000 IU/kg (= 30 mg/kg) every 12 hours
Mother did not receive adequate treatment during pregnancy	D8 to D10: 50 000 IU/kg (= 30 mg/kg) every 8 hours
	or
	benzylpenicillin procaine IM:

	D1 to D10: 50 000 IU/kg (= 50 mg/kg) every 24 hours
Neonate has no clinical signs of syphilis	benzathine benzylpenicillin IM:
and	50 000 IU/kg (= 37.5 mg/kg) single dose
Mother received adequate treatment during pregnancy	

- In addition to “standard” precautions, use “contact” precautions (gloves and protective gown) at each contact with the neonate during the first 24 hours after starting the treatment.

Genital gonococcal and/or chlamydial infection

Neonates of mothers with purulent cervical discharge at the time of delivery may be asymptomatic or may present with symptomatic conjunctivitis.

- For neonates with symptomatic conjunctivitis (whether the mother is symptomatic or not) or born to mothers who were symptomatic at the time of delivery (even if they are asymptomatic):
- Clean each eye with 0.9% sodium chloride at least 4 times daily until discharge disappears.
- Administer at birth a single dose of ceftriaxone IM: 50 mg/kg; max. 125 mg (or cefotaxime IM: 100 mg/kg if ceftriaxone is contraindicated).
- If the conjunctivitis persists 48 hours after the ceftriaxone injection, administer:
- azithromycin PO: 20 mg/kg once daily for 3 days (or, if azithromycin is not available, erythromycin PO: 12.5 mg/kg 4 times daily for 14 days)
- If the symptoms appear after 7 days of life, administer simultaneously ceftriaxone IM + azithromycin or erythromycin PO, as above.

Genital herpes

Neonates of mothers who have active genital herpes lesions at the time of delivery may present with neonatal herpes.

The neonate is usually asymptomatic at birth. The symptoms appear sometime within the first 4 weeks of life (usually between 7 and 14 days of life).

- Look for signs of neonatal herpes:
- • Vesicular lesions on skin, mouth and/or eyes (only in 45% of neonates).• Cerebral involvement: encephalitis and seizures.• Non-specific signs of disseminated infection (irritability, lethargy, fever, poor feeding).
- Management depends on the neonate’s risk at birth:

Criteria for risk of herpes infection	Treatment4
High Neonate with signs of herpes OR Mother has primary genital herpes lesions at the moment of delivery OR Mother has genital herpes lesions at the moment of delivery and it is unknown whether it is a primary or recurrent infection OR Mother with recurrent genital herpes lesions at the moment of delivery WITH at least one of the following risk factors: • rupture of membranes ≥ 6 hours before delivery (even if caesarean section) • birth weight < 2000 g or preterm ≤ 37 weeks • neonatal skin laceration or maternal HIV infection	Immediately apply one dose of 3% acyclovir eye ointment in each eye at birth.* Refer to neonatal care unit for IV acyclovir treatment.
Low Neonate is asymptomatic AND Mother has recurrent genital herpes lesions at the time of delivery AND Absence of risk factors in previous column.	Immediately apply one dose of **3% acyclovir** eye ointment in each eye at birth.* Observe for 5 days: • If the neonate becomes symptomatic: refer to neonatal care unit for IV acyclovir treatment. • If the neonate remains asymptomatic: discharge; ask parents to seek urgent attention if symptoms appear.

*In this case, wait 12 hours before applying tetracycline eye ointment

In addition to “standard” precautions, use “contact” precautions (gloves and protective gown) at each contact with the neonate for 24 hours after the start of treatment.

Hepatitis B infection

The neonate is asymptomatic. Hepatitis B vaccine should be given to the neonate at birth, regardless of the mother’s serological status

HIV infection

The neonate is asymptomatic. Antiretroviral prophylaxis should be started immediately after birth: refer to the PMTCT guides.

Active tuberculosis

For all neonates born to mothers with active tuberculosis at birth:

- Do not administer BCG.
- Administer preventive therapy with isoniazid PO: 10 mg/kg once daily for 6 months.
- Administer the BCG vaccine after completion of isoniazid therapy.
- Do not separate the mother from the neonate (breastfeeding, etc.), but observe the rules for transmission prevention.

NEONATAL INFECTION

Neonates suspected to have severe neonatal infection

Danger signs may indicate an underlying severe infection which requires transfer to a neonatal unit and antibiotic therapy.

While awaiting transfer to a neonatal unit, start antibiotic therapy:

The first line treatment is the combination of **ampicillin** IV + **gentamicin** IM. Ampicillin is preferably used IV; the IM route is an option if the context does not permit proper IV administration. To avoid multiple IM injections, however, it may be better to use **procaine benzylpenicillin** IM + **gentamicin** IM.

- If meningitis is suspected, do not use procaine benzylpenicillin.
- If the infection is cutaneous in origin, replace the ampicillin with **cloxacillin** IV.[1]
- Total treatment duration is 7 to 10 days according to clinical response.

Gentamicin should be stopped after 5 days of treatment.

- Antibiotic dosages

Antibacterial	**Birth weight**	
	≤ 2000 g	**> 2000 g**
ampicillinIV/ IM injection	50 mg/kg every 12 hours If meningitis100 mg/kg every 12 hours	50 mg/kg every 8 hours If meningitis:100 mg/kg every 8 hours
Gentamicin IM injection	3 mg/kg every 24 hours	5 mg/kg every 24 hours
procaine benzylpenicillin[2]	50 000 IU/kg every 24 hours If meningitis: do not administer.	

IM injection		
cloxacillin IV infusion	25 mg/kg every 12 hours	25 mg/kg every 8 hours

Prophylactic treatment for asymptomatic neonates with risk factors for infection

In asymptomatic neonates (absence of danger signs) in whom the assessment for risk factors for neonatal infection at birth was positive

- Administer antibiotics for 48 hours **ampicillin** IV + **gentamicin** IM or **procaine benzylpenicillin** IM + **gentamicin** IM.
- Monitor for danger signs If the neonate presents at least one danger sign, treat as suspected severe infection as below.
- If the neonate has not presented any of the danger signs during the first 48 hours, stop the antibiotics and keep under observation for 24 to 48 hours.
- If the neonate has not presented any of the danger signs during the observation period or during clinical examination for discharge: send home. In this case, tell the parents which signs require immediate consultation.

Note: neonates born at home, seen for the first time after 72 hours of age and present no signs of infection, do not need prophylactic antibiotics even if a maternal risk factor is identified.

HYPOGLYCEMIA

Hypoglycemia is common in neonates but often asymptomatic or presents with non-specific signs. Recurrent or persistent hypoglycemia can lead to neurological sequelae.

Diagnosis

- Blood glucose < 2.5 mmol/l or < 45 mg/dl.
- Blood glucose is measured on a sample of capillary blood taken from the lateral aspect of the heel using a lancet or 24G needle.

Always check blood glucose:

- In neonates at risk of hypoglycemia)
- In neonates presenting with one of these signs:
- Hypothermia
- Irritability or tremors
- Bradypnoea or apnoea or cyanosis
- Hypotonia or poor response to stimulation or impaired consciousness
- Seizures

Management

Moderate hypoglycemia (2 to 2.4 mmol/litre or 35 to 44 mg/dl) and asymptomatic

- Feed neonate immediately (preferably breast milk).
- If no milk is available, give 5 ml/kg of 10% glucose PO over 5 to 10 minutes.
- Check blood glucose after 30 minutes:• If it is normal (≥ 2.5 mmol/litre or ≥ 45 mg/dl), ensure the neonate feeds regularly and check blood glucose again before each feed until there are 3 consecutive normal results.If it remains < 2.5 mmol/litre or < 45 mg/dl), treat as recurrent hypoglycaemia.

Severe hypoglycaemia (< 2 mmol/litre or < 35 mg/dl) or symptomatic or recurrent

- Give 5 ml/kg of 10% glucose PO or via gastric tube over 5 to 10 minutes, or if IV line already in place, give 2 ml/kg of 10% glucose slow IV (2 to 3 minutes).
- Check blood glucose after 30 minutes:
- • If it is normal (≥ 2.5 mmol/litre or ≥ 45 mg/dl), ensure the neonate feeds regularly, recheck blood glucose after 30 minutes and then before each feed until there are 3 consecutive normal results.
- • If it is < 2.5 mmol/litre or < 45 mg/dl, or the neonate is still symptomatic, give a second dose of 10% glucose (5 ml/kg PO or 2 ml/kg IV) and transfer to a neonatal unit. While awaiting transfer, start a continuous infusion of **10% glucose** (80 ml/kg/24 hours) if possible and continue to monitor blood glucose.

Note: only if it is impossible to give an infusion or place a gastric tube, 1 ml/kg of 50% glucose can be administered sublingually.

SECTION
THIRTY ONE

THE CHILD

31.1 DEVELOPMENTAL MILESTONES IN CHILDREN

31.1 DEVELOPMENTAL MILESTONES IN CHILDREN

What is neurodevelopment?

Neurodevelopment is the progressive, orderly change of behavior and activities which are seen as a child becomes older. Their physical ability and understanding of the world around them increases and matures with age. A healthy neurological system and a safe, stimulating environment is needed for normal neurodevelopment, as is normal hearing and vision.

How is neurodevelopment monitored?

Developmental milestones are used to monitor neurodevelopment in childhood. These are easily observable developmental achievements such as smiling, sitting and walking. Milestones are assessed by both history and examination. The neurodevelopmental monitoring of milestones must be part of the routine growth and developmental screening of all children.

Milestones are used to assess neurodevelopment in childhood.

The formal assessment of neurodevelopment is often divided into:

- Gross motor development (locomotion)
- Fine motor development (manipulation of objects)
- Vision
- Language, hearing and communication (using sounds and words)
- Personal and social development (relating to family and society)

What are normal milestones?

Neurodevelopmental milestones are largely predictable as children get older although there is a range between different normal children. Delayed milestones are warning signs that neurodevelopment may be abnormal. Children with delayed milestones should be referred for formal neurodevelopmental assessment.

The following milestones should be achieved:

- Smile at mother: 8 weeks
- Good head control: 6 months
- Sit unsupported: 9 months
- Crawl well: 12 months
- Make babbling noises (‘baby sounds’): 12 months
- Stand without help: 15 months
- Walk without help: 18 months
- Understand simple commands: 24 months
- Use 1 or 2 words: 36 months

- Normally developing children should reach these milestones before (often long before) these cut-off ages.

Milestones of Development:

Development, or the increase of skills, mainly depends on the brain and the nervous system. The growth and development of the brain requires adequate nutrition, just like other parts of the body. When a baby is born it can do very little for itself. Gradually he develops and is able to move his body in the way he wants and can-do simple things.

Special skills like talking develop later. It is useful to know the ages when most children can do some simple things (various developments and skills). These are used as markers of development and are sometimes called “milestones of development”.

The development of a child can be assessed from different points of view:

- what can he do in the way of moving around (mental development)?
- how he talks and makes his / her wants known (language)?
- how he fits into his family and community (social behaviour)?
- Although development is continuous and does not jump from one step to the next, it is usual to assess a child at different ages for milestones. In watching development, we notice at what age the child learns to do certain things, such as smiling at his / her mother, sitting without support, grasping objects, walking and talking. We may record at what age the child has reached these various milestones.

Summary of Normal Development Milestones

Average age	Motor development	Language and Social Behaviour
1) 1 month 2) 3-6 months 3) 6-9 months 4) 9-12 months 5) 12-18	1) Can lift head when prone 2) Achieves head control 3) Can sit unsupported 4) Able to stand 5) Able to	1) Can fix eyes, often smiles 2) Can follow an object with eyes, play with hands 3) Grasp actively, makes loud noises

months 6) 2 years 7) 3 years	walk 6) Able to run around as much as he wants to 7) Actively playing, is clever in climbing and jumping	4) Understand a few words, tries to use them 5) Grasp small objects with thumb and fingers 6) Can say several words, or even some sentences. 7) Starts talking much, is curious and inquisitive.

All children are different. Some walk early, others late. The average age at which children reach various milestones is given below. The individual child often differs, widely from the average but is still quite normal.

Developmental milestones record - 4 months

PHYSICAL AND MOTOR SKILLS

The typical 4-month-old baby should:

- Slow in weight gain to about 20 grams (almost two thirds of an ounce) per day
- Weigh 2 times more than their birth weight
- Have almost no head droop while in a sitting position
- Be able to sit straight if propped up
- Raise head 90 degrees when placed on stomach
- Be able to roll from front to back

- Hold and let go of an object
- Play with a rattle when it's placed in their hands, but won't be able to pick it up if dropped
- Be able to grasp a rattle with both hands
- Be able to place objects in the mouth
- Sleep 9 to 10 hours at night with 2 naps during the day (total of 14 to 16 hours per day)

SENSORY AND COGNITIVE SKILLS

A 4-month-old baby is expected to:

- Have well-established close vision
- Increase eye contact with parents and others
- Have beginning hand-eye coordination
- Be able to coo
- Be able to laugh out loud
- Anticipate feeding when able to see a bottle (if bottle-fed)
- Begin to show memory
- Demand attention by fussing
- Recognize parent's voice or touch

PLAY

You can encourage development through play:

- Place the baby in front of a mirror.
- Provide bright-colored toys to hold.
- Repeat sounds the infant makes.
- Help the infant roll over.
- Use an infant swing at the park if the baby has head control.
- Play on the stomach (tummy time).

Developmental milestones record - 9 months

At 9 months, a typical infant will have certain skills and reach growth markers called milestones.

PHYSICAL CHARACTERISTICS AND MOTOR SKILLS

A 9-month-old has most often reached the following milestones:

- Gains weight at a slower rate, about 15 grams (half an ounce) per day, 1 pound (450

grams) per month

- Increases in length by 1.5 centimetres (a little over one-half inch) per month
- Bowel and bladder become more regular
- Puts hands forward when the head is pointed to the ground (parachute reflex) to protect self from falling
- Is able to crawl
- Sits for long periods
- Pulls self to standing position
- Reaches for objects while sitting
- Bangs objects together
- Can grasp objects between the tip of the thumb and index finger
- Feeds self with fingers
- Throws or shakes objects

SENSORY AND COGNITIVE SKILLS

The 9-month-old typically:

- Babbles
- Has separation anxiety and may cling to parents
- Is developing depth perception
- Understands that objects continue to exist, even when they are not seen (object constancy)
- Responds to simple commands
- Responds to name
- Understands the meaning of "no"
- Imitates speech sounds
- May be afraid of being left alone
- Plays interactive games, such as peek-a-boo and pat-a-cake
- Waves goodbye

PLAY

To help the 9-month-old develop:

- Provide picture books.
- Provide different stimuli by going to the mall to see people, or to the zoo to see animals.
- Build vocabulary by reading and naming people and objects in the environment.

- Teach hot and cold through play.
- Provide large toys that can be pushed to encourage walking.
- Sing songs together.
- Avoid television time until age 2.
- Try using a transition object to help decrease separation anxiety.

Developmental milestones record - 12 months

The typical 12-month-old child will demonstrate certain physical and mental skills.

PHYSICAL AND MOTOR SKILLS

A 12-month-old child is expected to:

- Be 3 times their birth weight
- Grow to a height of 50% over birth length
- Have a head circumference equal to that of their chest
- Have 1 to 8 teeth
- Stand without holding on to anything
- Walk alone or when holding one hand
- Sit down without help
- Bang 2 blocks together
- Turn through the pages of a book by flipping many pages at a time
- Pick up a small object using the tip of their thumb and index finger
- Sleep 8 to 10 hours a night and take 1 to 2 naps during the day

SENSORY AND COGNITIVE DEVELOPMENT

The typical 12-month-old:

- Begins pretending play (such as pretending to drink from a cup)
- Follows a fast-moving object
- Responds to their name
- Can say momma, papa, and at least 1 or 2 other words
- Understands simple commands
- Tries to imitate animal sounds
- Connects names with objects
- Understands that objects continue to exist, even when they can't be seen
- Participates in getting dressed (raises arms)
- Plays simple back and forth games (ball game)

- Points to objects with the index finger
- Waves goodbye
- May develop an attachment to a toy or object
- Experiences separation anxiety and may cling to parents
- May make brief journeys away from parents to explore in familiar settings

PLAY

You can help your 12-month-old develop skills through play:

- Provide picture books.
- Provide different stimuli, such as going to the mall or zoo.
- Play ball.
- Build vocabulary by reading and naming people and objects in the environment.
- Teach hot and cold through play.
- Provide large toys that can be pushed to encourage walking.
- Sing songs.
- Have a play date with a child of a similar age.
- Avoid television and other screen time until age 2.
- Try using a transitional object to help with separation anxiety.

Developmental milestones record - 18 months

The typical 18-month-old child will demonstrate certain physical and mental skills. These skills are called developmental milestones.

PHYSICAL AND MOTOR SKILL MARKERS

The typical 18-month-old:

- Has a closed soft spot on the front of the head
- Is growing at a slower rate and has less of an appetite compared to the months before
- Can control the muscles used to urinate and have bowel movements, but may not be ready to use the toilet
- Runs stiffly and falls often
- Can get onto small chairs without help
- Walks upstairs while holding on with one hand
- Can build a tower of 2 to 4 blocks
- Can use a spoon and cup with help to feed self
- Imitates scribbling

- Can turn 2 or 3 pages of a book at a time

SENSORY AND COGNITIVE MARKERS

The typical 18-month-old:

- Shows affection
- Has separation anxiety
- Listens to a story or looks at pictures
- Can say 10 or more words when asked
- Kisses parents with lips puckered
- Identifies one or more parts of the body
- Understands and is able to point to and identify common objects
- Often imitates
- Is able to take off some clothing items, such as gloves, hats, and socks
- Begins to feel a sense of ownership, identifying people and objects by saying "my"

PLAY RECOMMENDATIONS

- Encourage and provide the necessary space for physical activity.
- Provide safe copies of adult tools and equipment for the child to play with.
- Allow the child to help around the house and participate in the family's daily responsibilities.
- Encourage play that involves building and creativity.
- Read to the child.
- Encourage play dates with children of the same age.
- Avoid television and other screen time before age 2.
- Play simple games together, such as puzzles and shape sorting.
- Use a transitional object to help with separation anxiety.

Developmental milestones record - 2 years

Physical and motor skill markers:

- Able to turn a doorknob.
- Can look through a book turning one page at a time.
- Can build a tower of 6 to 7 cubes.
- Can kick a ball without losing balance.
- Can pick up objects while standing, without losing balance. (This often occurs by 15 months. It is a cause for concern if not seen by 2 years.)
- Can run with better coordination. (May still have a wide stance.)

- May be ready for toilet training.
- Should have the first 16 teeth, but the actual number of teeth can vary widely.
- At 24 months, will reach about half final adult height.

Sensory and cognitive markers:

- Able to put on simple clothes without help. (The child is often better at removing clothes than putting them on.)
- Able to communicate needs such as thirst, hunger, need to go to the bathroom.
- Can organize phrases of 2 to 3 words.
- Can understand 2-step command such as, "Give me the ball and then get your shoes."
- Has increased attention span
- Vision is fully developed.
- Vocabulary has increased to about 50 to 300 words, but healthy children's vocabulary can vary widely.

Play recommendations:

- Allow the child to help around the house and take part in the daily family chores.
- Encourage active play and provide enough space for healthy physical activity.
- Encourage play that involves building and creativity.
- Provide safe copies of adult tools and equipment. Many children like to mimic activities such as cutting the grass or sweeping the floor.
- Read to the child.
- Try to avoid television watching at this age (recommendation of the American Academy of Pediatrics).
- Control both the content and quantity of television viewing. Limit screen time to less than 3 hours per day. One hour or less is better. Avoid programming with violent content. Redirect the child to reading or play activities.
- Control the type of games the child plays.

Developmental milestones record - 3 years

Physical and motor milestones

- Gains about 4 to 5 pounds (1.8 to 2.25 kilograms)
- Grows about 2 to 3 inches (5 to 7.5 centimeters)
- Reaches about half of his or her adult height
- Has improved balance
- Has improved vision (20/30)
- Has all 20 primary teeth

- Needs 11 to 13 hours of sleep a day
- May have daytime control over bowel and bladder functions (may have nighttime control as well)
- Can briefly balance and hop on one foot
- May walk upstairs with alternating feet (without holding the rail)
- Can build a block tower of more than 9 cubes
- Can easily place small objects in a small opening
- Can copy a circle
- Can pedal a tricycle

Sensory, mental, and social milestones include:

- Has a vocabulary of several hundred words
- Speaks in sentences of 3 words
- Counts 3 objects
- Uses plurals and pronouns (he/she)
- Often asks questions
- Can dress self, only needing help with shoelaces, buttons, and other fasteners in awkward places
- Can stay focused for a longer period of time
- Has a longer attention span
- Feeds self easily
- Acts out social encounters through play activities
- Becomes less afraid when separated from mother or caregiver for short periods of time
- Fears imaginary things
- Knows own name, age, and sex (boy/girl)
- Starts to share
- Has some cooperative play (building tower of blocks together)
- At age 3, almost all of a child's speech should be understandable.
- Temper tantrums are common at this age. Children who have tantrums that often last for more than 15 minutes or that occur more than 3 times a day should be seen by a provider.

Ways to encourage a 3-year-old's development include:

- Provide a safe play area and constant supervision.
- Provide the necessary space for physical activity.
- Help your child take part in -- and learn the rules of -- sports and games.

- Limit both the time and content of television and computer viewing.
- Visit local areas of interest.
- Encourage your child to help with small household chores, such as helping set the table or picking up toys.
- Encourage play with other children to help develop social skills.
- Encourage creative play.
- Read together.
- Encourage your child to learn by answering their questions.
- Provide activities related to your child's interests.
- Encourage your child to use words to express feelings (rather than acting out).

Developmental milestones record - 4 years

The typical 4-year-old child will demonstrate the following physical and mental skills.

PHYSICAL AND MOTOR

During the fourth year, a child typically:

- Gains weight at the rate of about 6 grams (less than one quarter of an ounce) per day
- Weighs 40 pounds (18.14 kilograms) and is 40 inches (101.6 centimeters) tall
- Has 20/20 vision
- Sleeps 11 to 13 hours at night, most often without a daytime nap
- Grows to a height that is double the birth length
- Shows improved balance
- Hops on one foot without losing balance
- Throws a ball overhand with coordination
- Can cut out a picture using scissors
- May still wet the bed

SENSORY AND COGNITIVE

The typical 4-year-old:

- Has a vocabulary of more than 1,000 words
- Easily puts together sentences of 4 or 5 words
- Can use the past tense
- Can count to 4
- Will be curious and ask a lot of questions
- May use words they do not fully understand

- May begin using vulgar words
- Learns and sings simple songs
- Tries to be very independent
- May show increased aggressive behavior
- Talks about personal family matters to others
- Commonly has imaginary playmates
- Has an increased understanding of time
- Can tell the difference between two objects, based on things like size and weight
- Lacks moral concepts of right and wrong
- Rebels if too much is expected of them

PLAY

Advise the parents of a 4-year-old to:

- Encourage and provide space for physical activity.
- Show your child how to participate in and follow the rules of sporting activities.
- Encourage play and sharing with other children.
- Encourage creative play.
- Teach your child to do small chores, such as setting the table.
- Read together.
- Limit screen time (television and other media) to 2 hours a day of quality programs.
- Expose your child to different stimuli by visiting local areas of interest.

Developmental milestones record - 5 years

Physical and motor skill milestones:

- Gains about 4 to 5 pounds (1.8 to 2.25 kilograms)
- Grows about 2 to 3 inches (5 to 7.5 centimeters)
- Vision reaches 20/20
- First adult teeth start breaking through the gum (most children do not get their first adult teeth until age 6)
- Has better coordination (getting the arms, legs, and body to work together)
- Skips, jumps, and hops with good balance
- Stays balanced while standing on one foot with eyes closed
- Shows more skill with simple tools and writing utensils
- Can copy a triangle
- Can use a knife to spread soft foods

Sensory and mental milestones:

- Has a vocabulary of more than 2,000 words
- Speaks in sentences of 5 or more words, and with all parts of speech
- Can identify different coins
- Can count to 10
- Knows telephone number
- Can properly name the primary colors, and possibly many more colors
- Asks deeper questions that address meaning and purpose
- Can answer "why" questions
- Is more responsible and says "I'm sorry" when they make mistakes
- Shows less aggressive behaviour
- Outgrows earlier childhood fears
- Accepts other points of view (but may not understand them)
- Has improved math skills
- Questions others, including parents
- Strongly identifies with the parent of the same sex
- Has a group of friends
- Likes to imagine and pretend while playing (for example, pretends to take a trip to the moon)

Ways to encourage a 5-year-old's development include:

- Reading together
- Providing enough space for the child to be physically active
- Teaching the child how to take part in -- and learn the rules of -- sports and games
- Encouraging the child to play with other children, which helps develop social skills
- Playing creatively with the child
- Limiting both the time and content of television and computer viewing
- Visiting local areas of interest
- Encouraging the child to perform small household chores, such as helping to set the table or picking up toys after playing

31.2 MONITORING GROWTH AND DEVELOPMENT

GROWTH

Growth is the increase in body size over a period of time. In order to assess growth, some measure of body size has to be accurately measured on two or more occasions.

Growth in a child is a gradual increase in size of body and is a quantitative change which can be measured. For routine purposes measurement of weight, height & head circumference are practical. The body can grow only if it gets enough food. The food must contain enough calories, proteins & other nutrients. If the body does not grow properly, it cannot resist diseases.

- Height is considered to be the best index for long-term growth of a child as it is a sum total of body and limb length and is a measure of single tissue i.e., bone.
- Weight on the other hand is a mixture of all tissues and is a less useful but more convenient parameter.
- Head circumference its increment is at peak during the first year and thereafter it lessens.

Factors Affecting Growth:

The rate of growth at any age is influenced by the interaction of genetics & environmental factors. Hereditary factors are very important in the control of growth. The fundamental plan of growth is laid down very early.

Genetics:

The final limits of the biological potential are thought to be established by genetic factors. It is well known that there are variations in growth in different racial groups.

Intellectual development and diet

Poor nutrition can cause problems with a child's intellectual development. A child with a poor diet may be tired and unable to learn at school. Also, poor nutrition can make the child more likely to get sick and miss school. Breakfast is very important. Children may feel tired and unmotivated if they do not eat a good breakfast. The relationship between breakfast and improved learning has been clearly shown.

Nutrition:

Malnutrition causes delay in growth. If the period of under nourishment is short, catch-up growth is more likely than in conditions with chronic malnutrition. In population where chronic under nourishment is prevalent most of the adults have short stature.

Disease:

In most well-nourished children, minor illness of short duration does not cause a discernable retardation of growth rate. When the condition is cured, catch-up growth follows. In deprived communities, children suffering from minor illnesses are smaller, this may be because of inadequate quantity as well as quality of food.

Socioeconomic class:

Children belonging to the upper socioeconomic class are shown to be taller than those belonging to the lower socioeconomic group. The reasons for this difference are multiple, difference in nutrition being the most important followed by poor home environment.

Psychological stress:

Emotionally stressed children do not grow well. It may be due to depressed appetite, disorganized meals as well as the effect of hormonal control on growth. They are further influenced by socioeconomic conditions that often exist together with nutritional & feeding problems. Removal of stress leads to significant effects on growth.

Endocrine Factors:

Growth is regulated by interaction of several hormones, which are as follow:

Growth hormone is produced by the anterior pituitary & is influenced by a number of stimuli, physiological such as exercise, deep sleep, food, anxiety etc. It promotes growth.

Thyroxine: It is produced by thyroid gland. It is also essential for normal growth from foetal life to childhood.

Sex hormones: Androgens, testosterone and oestrogen have also a role in skeletal maturation and development of secondary sexual characters at puberty.

ASSESSMENT OF GROWTH

How is body size determined in children?

The following 5 measurements of body size are commonly used in children:

Growth is assessed by various anthropometrical measurements. These are weight, length / height, and head circumference.

Weight:

Weight is the most frequently used measure of growth in infancy. It is easily done, but in the absence of accurate scales, errors are common. Weight measurements are more useful in periods of rapid growth i.e., early infancy & after illness. Weight is one of the most important parameters that can reflect state of nutrition and health. Weight increases rapidly during the first 5 years of life. Average weights of different groups of children may vary, but they can be compared with “NORMAL” anywhere in the world. Children, who have been fed adequate food including breast milk, protected from infections and given much love and stimulation, will show little, if any, difference in growth rate during the first few years. Hence, it is possible to use the same references.

Body weight is the simplest measurement of growth and in children change in weight is the most reliable indicator of growth. When a baby is born, he weighs about 3 kg. If he grows well, he will weigh about 6 kg by 5 months of age and about 9 kg by one year of age. This means

that healthy babies double their birthweight in 5 months and triples their birthweight by 12 months. After that the increase in weight is not so fast, during the second year it increases by about 2.5 to 3.0 kg and after that, 2.0 to 2.5 kg each year.

Length / height:

Height (or length in the case of infants) is another measure of growth. *Length* is the distance between the two flat surfaces applied to the top of the head and the sole of the feet. Supine length is measured in children below two years of age & in children who are unable to stand.

Height is the head-to-toe measurement in a standing child. At birth a baby is about 50 cm long. By 1 year of age, he should be about 72 cm long. Height is a particularly useful indicator of growth among older children. If a child is quite long or tall, but his weight is low, he is thin or wasted. A malnourished child may also be short or stunted.

How are height and length measured?

Height must be measured with the child standing barefoot. Keep both heels on the floor with the child's back pressed against a wall. The child should stretch as tall as possible with the arms kept at the side while looking straight ahead. Ideally, a special measuring device should be used, with a fixed tape or ruler on the wall and a sliding headboard. Otherwise move a square block of wood or a book down against the wall until it touches the top of the child's head. Then measure the distance from the floor to the block of wood, to the nearest 1 mm, to get the correct height.

Under 2 years: It is difficult to measure an infant's standing height. Therefore, the lying length is often measured. If possible, a measuring board should be used. The infant is laid down on their back with legs fully extended. One person holds the infant's head against the top board while another person gently stretches the infant's legs, keeping the knees flat and pressing the heels of the infant's feet against the bottom board. Measuring the distance, to the nearest 1 mm, between the boards gives the length of the infant. It is inaccurate to simply measure length with a tape measure.

Head circumference:

The infant has a relatively large head than an adult. At birth, the head is a quarter of the whole-body length but in an adult, it is only one eighth. A baby's head grows very quickly, especially in the first year of life. This is because the brain is growing very rapidly.

The head grows 12 cm in circumference in the first 12 months but 6 cm of this is in the first 3 months. During the next three months it grows 3 more cm & in the rest of the year another 3 cm. If the head circumference at birth is 34 cm it will be 46 cm at the age of 12 months. The head circumference is measured by taking the greatest distance around the forehead & the back of the head above the ears (maximal fronto-occipital circumference).

How should head circumference be measured?

It can be difficult to the measure head circumference accurately. Use a measuring tape and record to the nearest 1 mm. Measure the largest circumference of the head (occipito-frontal

circumference) with the tape across the forehead and then around to the back of the head (occiput).

Mid-upper arm circumference (MUAC): This is a quick and simple method that can be used in the home or clinic. However, it is more useful as a screen for malnutrition than as a measure of growth.

How is mid-upper arm circumference measured?

This is measured at the midpoint between the tip of the shoulder and the tip of the elbow of the left upper arm with a common tape measure or a special measuring tape. Allow the arm to hang and relax at the side while taking the measurement to the nearest 1 mm. Do not pull the tape too tight.

Growth is the increase of body size over a period of time.

Growth is best assessed by determining the child's:

- Body size compared to that of other children of the same age
- Growth curve
- Growth pattern

Age, Weight, Length & Head circumference

Age	Weight	Length	Head circumference
Birth	3.2 kg	50 cm	35.5 cm
½ year	6 kg	68 cm	44 cm
1 year	10 kg	75 cm	47 cm
2 year	12 kg	85 cm	49 cm
3 year	14 kg	95 cm	50 cm
4 year	16 kg	100 cm	50.4 cm
7 year	22 kg	115 cm	52 cm

Tooth eruption:

Children start teething at about six months of age & have 20 milk teeth at the age of 24 – 30 months. A new tooth appears approximately every month. This makes the number of teeth roughly equal to the age in months minus six.

No of teeth = Age in months – 6

At the age of 6 years the permanent teeth start to appear.

GROWTH MONITORING

As the child travels through life, it is important that he follows the 'right road'. He is most vulnerable during his first five years, and therefore his progress must be monitored carefully at this time. A healthy child will gain weight steadily as he grows, & therefore, by weighing the child regularly one can easily monitor his progress.

A special growth chart has been developed to give a continuous picture of child's progress during his / her first five years. Every child should have his own "Road to Health" or "Growth" chart so that one can check that the child is on the right road. Weight of every child under 3 years should be recorded according to the following schedule.

Schedule

- 6, 10, 14 weeks
- 6, 9, 12, 18 months
- 24, 30, 36 months.

Note: children who are not growing well need to be monitored every month.

THE WHO GROWTH CHARTS:

The Growth chart is a record of important facts about the

- child's name,
- date of birth,
- weight at birth,
- monthly weight measurements,
- immunization record,
- reasons for special care, feeding guidelines,
- child spacing record, and important health events.

It is divided into 3 panels – one panel for each year of life. Each panel is divided into 12 columns to show the 12 months of each year. There is a rectangular box at the base of each column in which the name of each month is recorded. The month when the baby was born, is recorded in the first box of the panel, and repeated in first box of each panel. The following month should be filled in at birth to avoid mistakes. Weights in kilograms are recorded up the side of the chart

GROWTH CHARTS

What is a growth chart?

A growth chart is a size for age chart that is used to decide whether the size of a child falls within the normal (average) range or whether the child is larger or smaller than normal. The size of a healthy child will increase normally with age. Without knowing a child's age, one cannot decide whether the size is normal or not. Therefore, accurate ages are needed when using a growth chart.

A growth chart is based on the size measurements of thousands of healthy children recorded at different ages. A growth chart is made up of several growth lines. These are also called z lines.

The growth of healthy children usually follows the growth lines.

NOTE

With increasing age, the growth lines move further and further apart, as some normal children grow faster and others slower than the average. As a result, the normal range becomes wider with age. Boys are slightly larger than girls. Therefore, gender specific charts are used for both boys and girls when routinely plotting size-for-age.

What are the important growth lines on a growth chart?

The growth charts in the Road-to-Health Booklets and most international growth charts for children each have 5 growth lines drawn on them, i.e. the 0, +2, +3, -2 and -3 lines (z lines). Some charts may also include +1 and -1 lines. The 0 line is green, +2- and -2-lines orange (warning), and +3 and -3 lines red (danger).

50% of healthy children will fall above and 50% below the 0 line (average) while 3% will fall above the +2 line and 3% below the -2 line. This method enables one to compare the size of any child with the expected size of other children of the same age.

Some growth charts use centile lines rather than z lines. Each centile line indicates the percentage of children expected to fall below that line. In this book z lines rather than centile lines are used.

NOTE

A z score indicates the number of standard deviations (z) above or below the mean. A z line (or z score line) joins up the z scores at different ages. For example, the +1 z line indicates one standard deviation above the mean. The 0 line indicated the median.

A comparison between z lines and centiles:

z lines	Centiles
3	99th
2	97th

1	85th
0	50th
-1	15th
-2	3rd
-3	1st

NOTE

The -3, -2, -1, 0, +1, +2 and +3 z lines (z scores) are similar but not the same as the 1st, 3rd, 25th, 50th, 85th 97th and 99th centiles which can be confusing. Previous growth charts sometimes used different centiles e.g., the 10th and 90th centiles.

What is the normal size range for children of a given age?

The body size measurements of 60% of children fall between the +1 and -1 lines. A further 34% of children have body size measurements that fall between the +1 and +2 lines or between the -1 and -2 lines. Therefore 95% of children fall between the +2 and -2 lines and are regarded as having a normal (average or appropriate) body size for their age. The remaining 6% of children fall above the +2 line or below the -2 line and are considered as having an abnormal body size.

The range of body size between the +2 and -2 lines is regarded as normal and 95% of children should fall in this range.

NOTE

In newborn infants the 10th and 90th centiles are still used to define appropriate body size for gestational age at birth. This is a useful assessment of risk for morbidity or mortality.

What size measurements are usually plotted on a growth chart?

Weight, height or length and head circumference are usually plotted on a growth chart. In the Road-to-Health Booklet weight, height or length, and weight-for-height or weight-for-length are plotted. Weight is the measurement most commonly used.

There are separate Road-to-Health Booklets for boys and girls and they have different growth charts.

When is a child larger than normal?

When the infant's size measurements fall above the +2 line. These children are heavier than normal if their weight falls above the +2 line. Similarly, they are taller (longer) than normal if their height or length falls above the +2 line. They have bigger heads than normal if their head

circumference falls above the +2 line.

A weight, height or length, or head circumference that falls above the +2 line is larger than normal.

When is a child smaller than normal?

When the child's size measurement of weight, height or length, or head circumference falls below the -2 line. A child is called underweight-for-age if the weight falls below the -2 line. Similarly, children are shorter than normal if their height or length falls below the -2 line. They have smaller heads than normal if their head circumference falls below the -2 line.

A weight, height or length, or head circumference that falls below the -2 line is smaller than normal.

NOTE

'Normal' refers to the average range of size for age. Therefore, some perfectly healthy children might fall outside the +2 and -2 lines.

How should you plot a child's weight on a growth chart?

1. Make a mark along the bottom of the chart opposite the age of the child. Now draw an imaginary vertical line up from the mark.
2. Similarly, make a mark opposite the child's weight along the left- or right-hand side of the chart. Now draw an imaginary horizontal line from that mark.
3. Make a dot at the point on the chart where the two imaginary lines meet. This is called plotting the weight. It will give the child's weight for its age.

The same method is used to plot the infant's height (or length) for age and head circumference for age on growth charts.

At the first visit it is helpful to fill in the calendar months along the bottom of the growth chart, starting with the month in which the child was born. This is done so that further growth is easily plotted.

Can length and height both be plotted on the same chart?

Yes. As a child gets older height can be plotted on the chart used before to plot length. For practical purposes, the measurement of lying length is the same as standing height.

What is the value of knowing a child's weight-for-height?

The weight-for-height gives an idea of how fat or thin a young child is. Thin children have a low weight for their height while fat children have a high weight-for-height. Note that weight-for-height is not plotted against age in the Road-to-Health Booklet as the normal range remains about the same for all ages until 5. It is therefore a measure of fatness or thinness rather than a measure of growth. In children older than 5 years the body mass index (BMI) for age is used to determine fatness or thinness. The BMI is the child's weight in kg divided by

height in meters squared (weight/height^2). From the age of 5 years the BMI slowly increases.

What is the value of knowing a child's mid-upper arm circumference?

The mid-upper arm circumference (MUAC) can be used to screen children between the ages of 6 months and 5 years for malnutrition. It is simple, easy and accurate and avoids the need for a scale. When screening for malnutrition a measurement above 13.5 cm is regarded as normal and less than 12.5 cm as abnormal. Age is not needed when assessing MUAC in young children as it is not really a measure of growth.

If the MUAC is abnormal it is best to measure and plot weight, height or length, and head circumference on a growth chart if possible to fully assess growth. Weight-for-height or weight-for-length is also important to assess thinness.

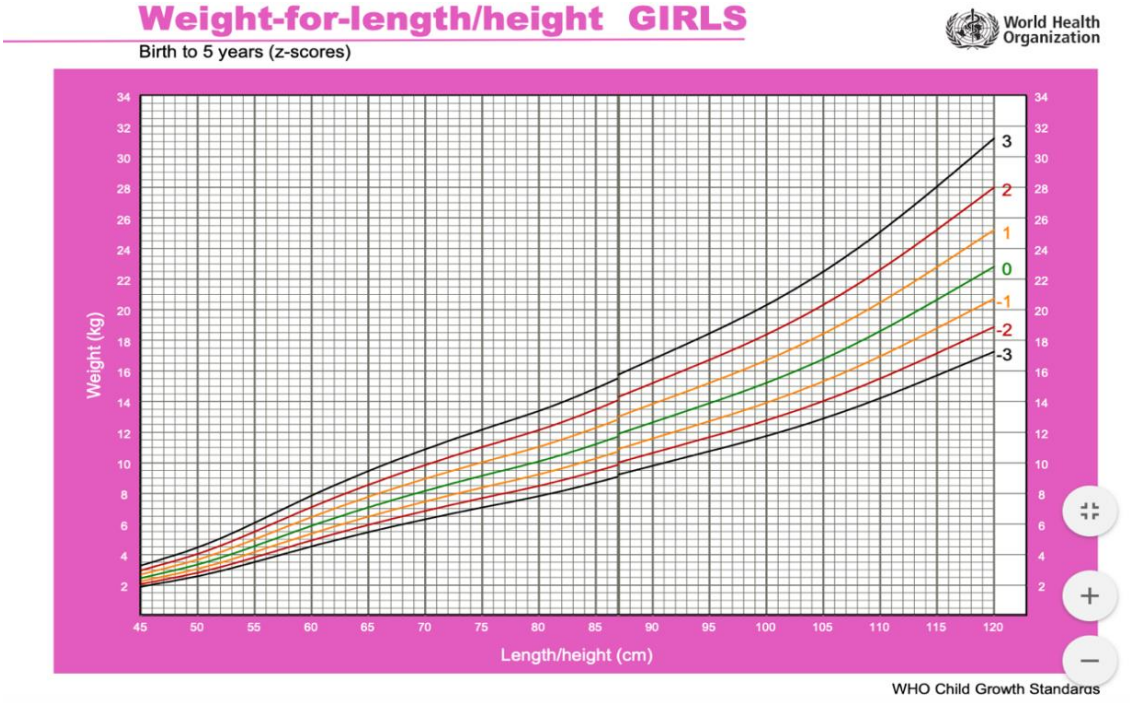
NOTE

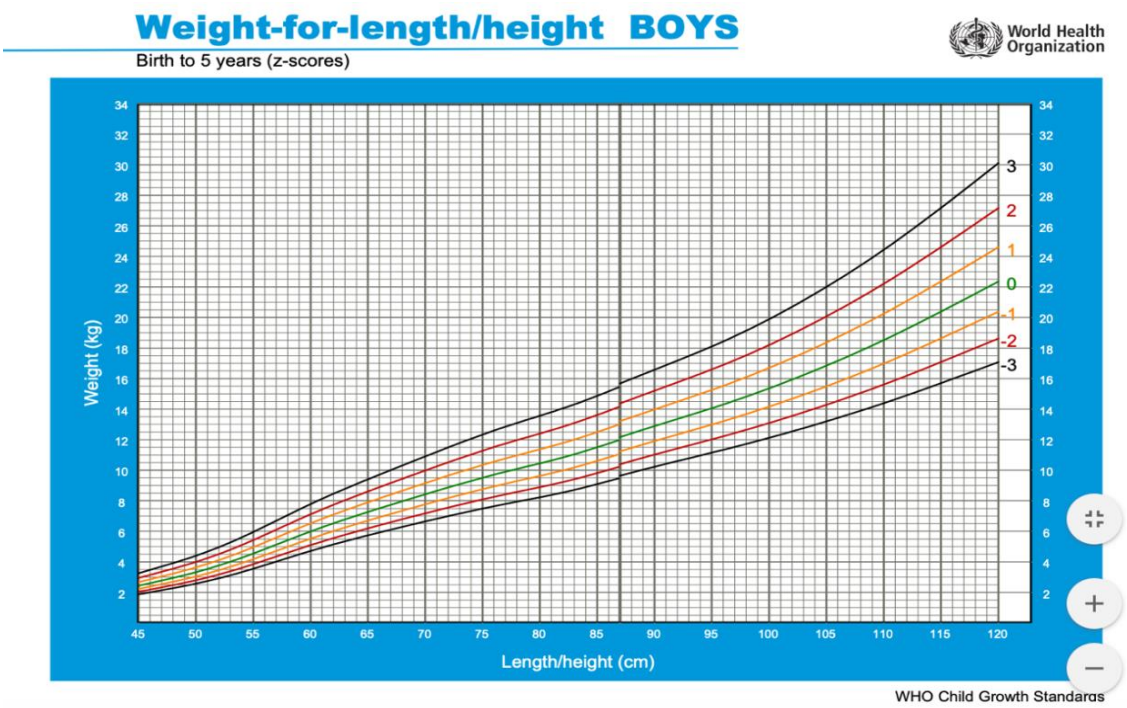
In some countries a special-colored tape is used to assess MUAC. If the measurement falls into the red zone severe acute malnutrition is diagnosed, if the orange zone moderate acute malnutrition is diagnosed, if the green zone nutrition is normal. In older children triceps skinfold thickness is sometimes used to measure fatness or thinness

Here are the links to use and practice WHO growth charts

https://www.who.int/tools/child-growth-standards/standards/weight-for-length-height

https://www.who.int/childgrowth/training/module_c_interpreting_indicators.pdf





APPOINTMENTS

GROWTH CHART

Health centre	Child's No.
Child's name	
Date first seen	Birthday
Mother's name	Registration No.
Father's name	Registration No.
Where the family lives (address)	

BROTHERS AND SISTERS

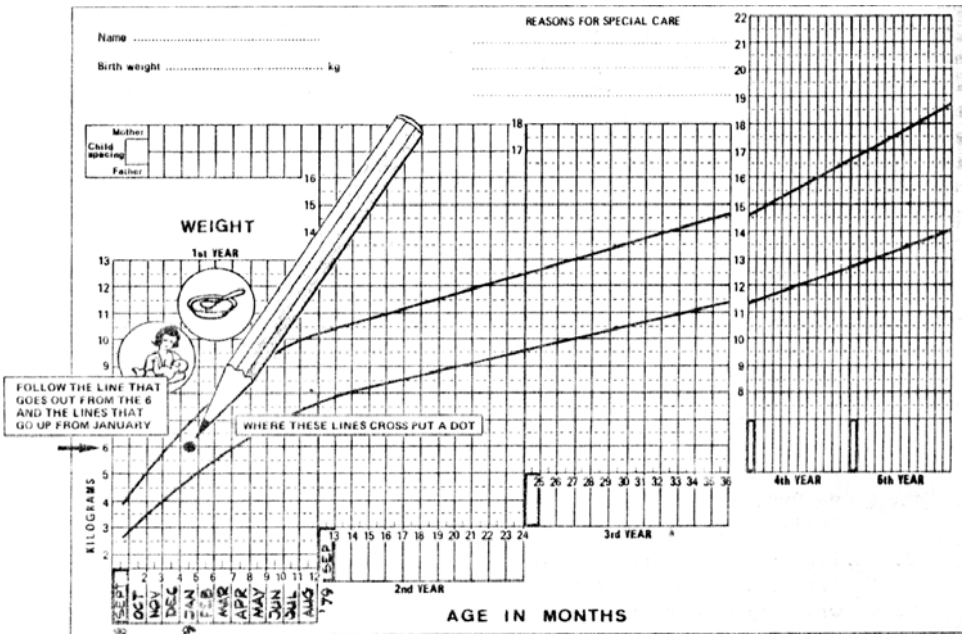
Name born Boy/Girl	Remarks	Name born Boy/Girl	Remarks

IMMUNIZATIONS

ANTI TUBERCULOSIS (BCG) Date of immunization	SMALLPOX Date of immunization Date of skin inspection Date of revaccination
WHOOPING COUGH, TETANUS AND DIPHTHERIA Date of first injection Date of second injection Date of third injection	POLIOMYELITIS Date of first immunization Date of second immunization Date of third immunization
MEASLES Date of immunization	

BACK OF A GROWTH CHART

RECORDING THE WEIGHT ON A GROWTH CHART



For the Collection of Information on the Child and the Family the chart is used/ Interpreted

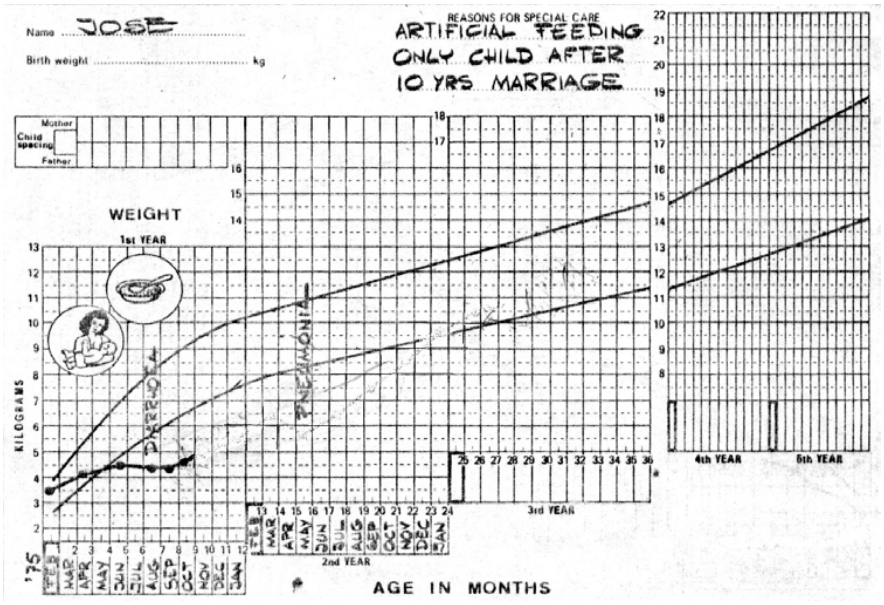
When the child is born, birth weight is recorded by making a dot in the first column, in line with his weight on the side of the panel. According to the schedule, record weight on his chart. The dots are then joined to form his growth curve. Two thick lines are shown on the chart, and the space between these lines shows the ‘Road to health’.

When the dots move up – his weight is increasing, and in almost all cases this is an indication that the child is healthy.

If the dots stay on the same level – his weight has stayed the same, and this is an important early alarm system that warns that the child needs careful attention. It may be, that there is an explanation as to why he has not gained weight, such as a recent illness, or a feeding problem. But if the child’s weight is not

increasing, the family welfare worker should check him. One must take extra care

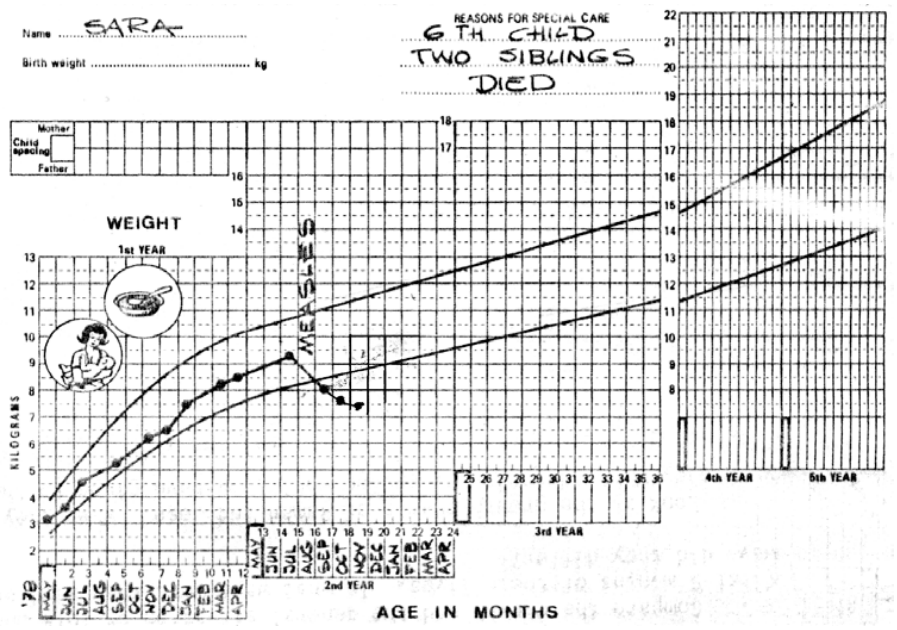
to make sure that the child weight increases next month.



GRAPH WITH STABLE WEIGHT FOR A FEW MONTHS

If the dots go down – the child has lost weight and should be checked if this happens. There is a reason why this has occurred, and it is very important to discover what this is, and to take steps to correct it. If the cause is not found, and the correct measures not taken, baby will continue to lose weight and will be at risk of becoming malnourished, and will be more likely to suffer from infections.

GRAPH SHOWING WEIGHT LOSS FOR A FEW MONTHS

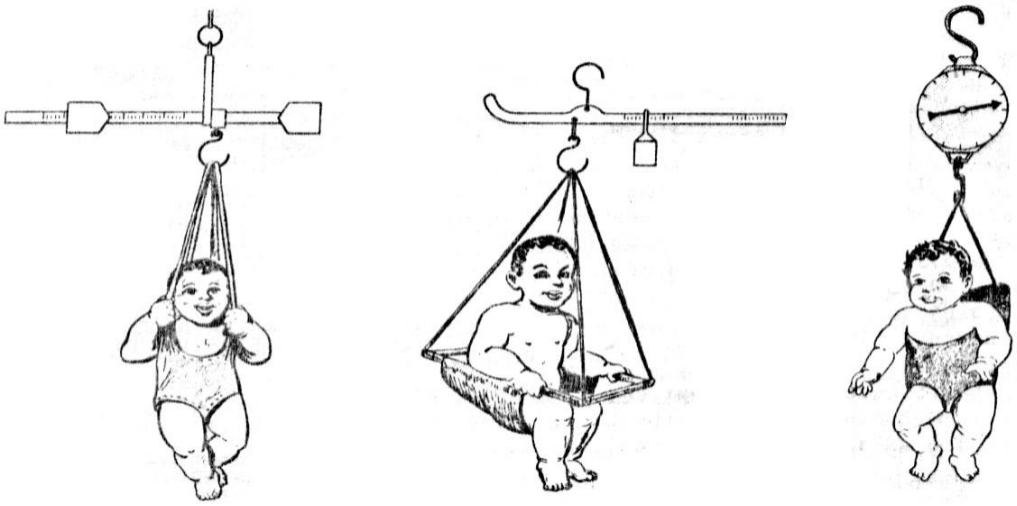


It should be remembered that it is the gain in weight that is important, rather than the actual weight. Babies who are born early (premature), who are one of twins, are likely to have a lower birth weight, and the growth curve may not reach between the thick lines for some time. As long as their weight is increasing steadily, it should not cause any worry. However, these facts should be recorded on the place marked ‘Reasons for Special Care’, so that the doctor is aware of them. The chart also gives a record of the child’s immunization. If the child has suffered from any illnesses, these should be recorded on his chart, and these may explain any periods of no weight gain, or weight loss. The child’s brothers and sisters are also recorded on the chart, to show the size of the family, and indicate this child’s position in the family.

Weighing a Child:

The weight of the child is important for assessing his health and nutrition. It is an easy, cheap and repeatable measurement, but you must have reliable equipment and method. There are generally two types of weighing scales.

- Beam Balance scales: These are reliable and accurate, but usually heavy and expensive.
- Spring scales
- Hanging spring balance scales are quite cheap, fairly reliable, light weight and can easily be carried. This scale has one hook above to hang it from the beam or three branches, and one hook below which will take the weight of the child. You can suspend the child in a sling, basket, chair or a pair of plastic pants. The child should be secure while suspended. One of the popular models – Salter Spring Scales” with a face or dial looking like a clock is used very often.



How is weight measured?

Young children are weighed when lying on a scale. Wait until the child lies still before recording the weight to the nearest 10 g. Always weigh the child undressed or wearing only a vest. It is best to remove the nappy before weighing. Always remove a wet nappy.

Older children are weighed standing up. Record the weight to the nearest 100 g (0.1 kg). Remove all the child's clothes, except the underpants, before weighing. Before weighing a child, always check that the scale reads zero. Scales should be calibrated weekly.

NOTE

When weighing an infant on a spring scale, or an older child on a bathroom scale, you are measuring weight. A balance scale measures mass. Both are equal and expressed in kilograms.

Method of weighing:

Accurate weighing is important for assessing the weight of a child. Follow these steps

- Hang up the scale securely. The clock should be at the eye level so that it can be easily read.
- Adjust the "pointer" so that before the child is being weighed, the pointer is over the "0" mark. You can make adjustment with a small knob. Do check the scale at least once a week for accuracy by weighing a known weight.
- Explain to the mother what you are going to do and let her help you in this procedure.
- Take off extra clothes of the baby and put on the plastic pants.
- Suspend the child by placing it on the sling with the help of the mother. Do not hold the child, but do talk to him to give him confidence & comfort.
- Read the weight on the scale when the child is hanging but not moving. Look at the

pointer and read the nearest number and any divisions from the number. If the child is struggling, wait until he stops moving and then read the scale quickly.

- Write down the weight in figures i.e. 7.5 kg in case you forget.
- Later record it on the growth chart.

How often should the size of children be measured?

- Weight should be measured and recorded every month for the first year of life, every 2 months for the second year and then every 6 months thereafter to the age of 5 years. However, it is often measured routinely at every visit to a clinic, hospital or general practitioner.
- Length or height should be measured every 6 months to 5 years of age. It is often measured thereafter if growth is assessed.
- Head circumference should be routinely measured at birth, 14 weeks and 12 months. There is little increase in head circumference after 36 months. Head circumference is not measured at every clinic visit unless there is a good reason.
- Mid-upper arm circumference as a screen for malnutrition should be measured every 3 months to 5 years of age. Thereafter it remains a useful screen for malnutrition, especially wasting.

How is a child's size used to assess growth?

The best method to assess growth is to measure the child's size (e.g. weight) and then to repeat the measurements a few months later. The increase in size is due to growth. The greater the increase, the faster the child is growing. If there is no increase, the child is not growing. For this reason it is important to record a child's size and plot the measurements on a growth chart at clinic visits.

The importance of growth monitoring

What is growth monitoring?

Growth monitoring is the regular measurement of a child's size (weight, height or length and head circumference) in order to document growth. The child's size measurements must then be plotted on a growth chart. This is extremely important as it can detect early changes in a child's growth. Both growing too slowly or too fast may indicate a nutritional or other health problem. Therefore, growth monitoring is an essential part of primary health care in children. Measuring a child's size is of very little value unless it is used for growth monitoring.

What is the value of weight in growth monitoring?

Weight-for-age is usually used to monitor growth. It is particularly useful in small infants who normally gain weight fast. Normal weight gain suggests that the infant is healthy and growing normally. Failure to gain weight normally or losing weight is often the earliest sign of illness or malnutrition. Therefore, a child's weight should be measured at a clinic visit in order to monitor growth should be measured and plotted on a growth chart at a clinic visit.

What is the value of measuring height and head circumference?

These are also important measurements of growth. Height or length is the best method of measuring linear growth (stature) as it reflects growth over a longer period than does weight. Measuring height is therefore particularly important in older children.

Head circumference can be used to assess brain growth in children under 36 months of age. During this period brain growth is fast and, therefore, head circumference increases rapidly. A small head (microcephaly) suggests a small brain, while a large head suggests hydrocephaly. Head circumference is less accurate in assessing brain growth over 36 months as there is little increase in head circumference in older children.

Therefore, measuring head circumference is most useful in young children, and height in older children.

If a child's weight gain is normal, the height and head circumference is usually also normal. However, it is particularly important to measure height and head circumference in children who are not gaining weight normally.

Height is an important measure of growth, especially in older children.

Can an infant's growth be determined at a single clinic visit?

No, as the definition of growth is a change in body size over a period of time. Therefore, some other form of assessment of growth is needed when you cannot wait a few weeks or months to decide whether the child is growing normally or not. However, an assessment of growth can be made if the size of a child is compared to the size of other children of the same age. In order to do this, the normal (i.e., average size) range of children of that age is needed. If the child's size is the same as most other children of the same age, then the child is probably growing normally.

An assessment of growth can be made by comparing a child's size to that.

Growth curves

What is a growth curve?

A growth curve illustrates the way a child is growing over a period of time. A growth curve can be determined when a child's size measurements have been made on two or more visits and have been plotted as dots on a growth chart. If these dots are now joined together with a line, you will have a growth curve. Therefore, the best way to assess growth is to look at the growth curve over the past few months.

A growth curve is a line linking size measurements recorded over time.

What is the value of a growth curve?

A growth curve shows whether the child is growing normally, faster or slower than expected. It is also very useful in identifying sudden weight loss. Therefore, a growth curve is a far better method of assessing growth than using size measurements taken on one occasion only as it

reflects the child's growth rate.

A growth curve indicates the child's growth rate.

What is the normal growth rate?

If the child's growth rate is normal, the growth curve will closely follow along (be parallel to) the growth lines and not cross more than one growth line.

NOTE

Special growth rate charts can be used to determine accurately whether a child's growth rate is normal or not. These charts are useful during the growth spurt of puberty.

How fast should most children grow?

Most children double their weight from birth to 6 months and treble (increase by three times) their birth weight by one year. The increase in weight and height or length is fastest in the first year of life and then slows down until puberty when growth is again fast for a short while. Growth in head size is almost complete by 2 years.

NOTE

Only when a child reaches 4 years is the birth length doubled. Thereafter the normal increase in height during childhood is approximately 4 cm per year.

Is weight or height the better measure of growth?

In younger children, weight is the most sensitive index of growth and poor weight gain is usually the first sign of malnutrition. In older children, height is the better index of growth.

Height is the best index of growth in older children.

Is it important if a child is heavier than normal?

Some children who are heavier than normal are perfectly healthy. They are simply bigger for their age than most children. Other children are heavier than normal because they are obese (too fat).

Is it important if a child is lighter than normal?

This is a very important observation. Some children who weigh less than normal are healthy and simply smaller for their age than most children. However, in a poor community, most children who weigh less than normal are malnourished (i.e., undernourished) or have an illness.

What should you do if a child is heavier or lighter than normal?

Determine the child's growth pattern.

Growth patterns

What is a growth pattern?

The growth curves of the child's weight, height or length and head circumference on the growth chart determines the child's growth pattern. Therefore, more than one measurement of size (e.g. weight and height) is needed to establish the growth pattern.

Most normal healthy children have a weight, height or length, and head circumference within the normal range and the growth curves for all these measurements are normal. Therefore, all measurements of size fall between the +2 and -2 lines and the growth curves have followed and not crossed more than one line. This is the most common growth pattern.

What other growth patterns are common?

- Large-for-age
- Wasted
- Growth faltering
- Stunting
- Overweight

These growth patterns indicate that the child may have a medical, nutritional or social problem. It is, therefore, very important that all children who do not have a normal growth pattern are identified as soon as possible in order that they can be carefully examined. Some of these children will be healthy even if their growth pattern differs from the average.

It is important to identify children who have a growth pattern that differs from the average growth pattern.

How can you recognize a large-for-age child?

These children appear healthy but are symmetrically large. Their weight, height and head circumference are all equally above the +2 line. Their growth curves run parallel above the lines. Most of these children have tall parents and are genetically large. Some may have been large at birth with a high birth weight. They are normal on general examination and can be managed as normal children. They often have an earlier puberty than most children. It is important that they are not labelled overweight on their weight measurement alone. Therefore, not all children with a weight above the +2 line are "overweight".

NOTE

Some children grow faster than normal and their size measurements cross growth lines. This growth pattern is seen normally at puberty and in some children when they recover after an illness or period of malnutrition (catch up growth).

Is large-for-age the same as are overweight-for-age?

No. Children who are overweight-for-age can often be recognised by simple inspection. They look too fat and their weight is higher than their height on growth charts. This is unlike large-for-age children who simply are larger than other children of their age.

What is a wasted child?

Wasting is a danger sign and suggests malnutrition or illness. Signs of wasting are:

- These children usually look very thin.
- Children under 5 years have a weight-for-height or weight-for-length that falls below the -2 line.
- The mid-upper arm circumference of children under 5 years of age falls below 11.5 cm.
- Older children have a BMI below the -2 line.

Children under 5 years with an MUAC below 11.5 cm are severely wasted.

What is growth faltering?

Infants with growth faltering (failure to thrive or slow growth) have not been gaining weight normally. Their weight may be static (remaining the same) or may even be dropping. Their height and head circumference may also not be increasing normally. This is a very important growth pattern to recognise as most of these children have a medical, nutritional or social problem, which needs to be urgently diagnosed and managed. Faltering weight gain must be detected as soon as possible so that the cause can be corrected. Growth faltering may be the first sign of HIV infection.

It is important to look at the growth pattern. The following suggests growth faltering:

- Weight is static (has not increased since last visit) or has fallen since last visit.
- Weight falls between the -1 and -2 lines.
- Upper mid-arm circumference is between 11.5 and 12.5 cm in children under 5 years of age.

Growth faltering is an important sign that the child may be ill or not getting enough food.

How can you recognize stunting?

Stunted children are shorter than normal for their age. As they are often symmetrically small and do not look thin, their stunting may be missed. Usually their weight, height or length, and head circumference all fall below the -2 line. Stunting usually occurs before 3 years of life.

It is very important to identify all children with a height or length below the -2 line.

NOTE

Children who are symmetrically small (stunted) may have a normal growth rate. They are simply growing parallel to, but below the -2 line.

The most common cause of stunting is chronic malnutrition during the first years of life. However, some healthy short children are genetically small, and look like their parents. Being born very preterm or growth-restricted can also result in stunting. Some important medical disorders, such as foetal alcohol syndrome, can cause stunting.

What is the long-term effect of stunting?

The most common cause of stunting is chronic malnutrition. Short children usually become short adults as catch-up growth is difficult to achieve. Severe stunting due to malnutrition before 2 years of age is associated with schooling difficulties later.

What is the common growth pattern in poor communities?

A very common pattern of growth in poor communities throughout the world is normal weight gain for the first 6 months while the infant is being breastfed. Then, between 6 months and a year, there is faltering of both weight and length as the child receives inadequate food, especially protein. By a year the child is stunted, with a weight and length below the -2 line. After a year, the weight may slowly increase to slightly above the -2 line but height remains below the -2 line. This pattern of low weight and height often continues into adulthood and reflects chronic malnutrition.

When does the puberty growth spurt occur?

Puberty is a time of rapid growth. It occurs earlier in girls than in boys. Puberty also occurs earlier in well-nourished children than in malnourished children. The puberty growth spurt usually lasts 2 years, starting at about 11 years in girls and 13 years in boys.

What is the effect of emotion on growth?

Love and emotional security are needed for normal growth. Stressed and emotionally deprived children grow slower that normal and may become stunted.

NOTE

Growth hormone is not secreted normally in emotionally deprived children. This has been well-documented in some children in orphanages.

OVERWEIGHT AND OBESITY

How do you decide whether a child is overweight?

It is better not to use weight alone to decide whether a child is overweight as some children are heavy because they are simply large while others are heavy because they are fat. Usually weight-for-height or length is used in children under the age of 5 years and the body mass index (weight in kg/height in m^2) in older children to decide whether a child is overweight due to excess fat. Their growth curve for weight often shows a weight gain, but not length, gain faster than normal indicating that they are too fat.

NOTE

Even body mass index cannot always differentiate between obesity and a high lean mass.

When is a child overweight?

A young child with a weight-for-height or weight-for-length between the +1 and +2 lines or an

older child with a body mass index (BMI) between the +1 and +2 lines is called overweight. These children look fat. They are at an increased risk of becoming obese. A child is not considered overweight if the weight-for-age is above the +2 line but the weight-for-length, weight-for-height or body mass index is normal. These children are simply large for their age.

NOTE

The definition of overweight remains controversial, and a number of different definitions are used. Overweight (which refers to the weight-for-length or BMI) must not be confused with overweight-for-age.

What is obesity?

There is still no internationally accepted method of defining obesity in childhood. However, the clinical diagnosis can usually be made on simple inspection of the child as these children appear very fat. A body mass index for age above the +2 line is regarded as obesity in older children and adolescents.

The diagnosis of obesity can usually be made by simple inspection.

NOTE

A high skin-fold thickness can also be used to define obesity. Waist circumference may also be useful. Short, fat children with a weight above the +2 line with a height below the 0 line need investigation for endocrine abnormalities. Rapid gain in weight only is also seen with generalized oedema.

Obesity is a common childhood problem in affluent countries and over the past 20 years has reached epidemic proportions in some communities, especially with girls. Obese children have excessive fat stores due to a high energy intake and inadequate exercise. The cause is almost always due to the child's lifestyle. Fast foods, soft (fizzy) drinks and hours of watching TV each day are associated with obesity, as is rapid weight gain in infancy. Genetic factors are not as important as diet. However, many obese children have obese parents. Obese children have difficulty with sports and often have emotional problems due to a poor body image and lack of self-confidence. They may be miserable and unhappy with their weight and shape. Obese children, and especially obese adolescents, are at increased risk of growing up to be obese adults with a high risk of chronic illnesses in adulthood (hypertension, type II diabetes and heart disease).

How do you manage childhood obesity?

This is very difficult and often not successful. Management consists of a low-calorie diet, increased exercise and family therapy. The whole family needs to be educated about healthy eating and lifestyle behaviour. The goal is to lose weight and then maintain a healthy weight. A motivated child and parents are essential if the management is to be successful. The help of a dietician is valuable in drawing up a balanced diet that is practical, affordable and not too high in energy. Bad eating habits of the whole community should be addressed. Soft drinks and refined foods should be avoided and time watching TV limited. Emotional support and psychological counselling are often needed. Good eating habits for the family should prevent

obesity.

What is the importance of the growth chart?

The growth charts are an essential part. It is important that the infant's weight remains between the +2 and -2 lines. If the infant's weight keeps within this normal weight-for-age range, Normal growth suggests good nutrition.

Monitoring weight gain or loss on the Road-to-Health Booklet is one of the most important methods of identifying children at risk of malnutrition. This is a major part of primary health care.

What is growth promotion?

Once the child's growth has been assessed, advice and counselling should be given to the mother to promote normal growth and nutrition. It is of little value to assess growth without taking active steps to promote good growth.

When and where should children with growth problems be referred?

If failure to gain weight adequately does not respond to management at a primary care clinic, the child must be referred for further assessment and management. This is particularly important in children with a weight that falls or crosses growth lines.

Usually, these children are referred to a special nutritional clinic where the following steps should be followed:

- Exclude any chronic illness such as tuberculosis or HIV infection.
- A dietician or nutritional counsellor should educate the mother or caregiver.
- A social worker should interview the parent/s or caregiver and assist where help is needed.
- If the child is still not improving, refer to a paediatrician.

NOTE

Important medical problems such as malabsorption, hypothyroidism, diabetes, urinary tract infection and chronic heart disease must be excluded.

Weight is the most common way of assessing body size in children.

SEXUAL DEVELOPMENT

What is puberty?

Puberty is the time when the physical signs of sexual maturity (secondary sexual characteristics) appear due to the secretion of sex hormones in older children. Puberty is earlier in girls (8 to 13 years) than boys (10 to 15 years). The timing of puberty has become progressively earlier over the past 100 years. A marked growth spurt occurs during puberty. There are also many emotional and social changes.

Puberty may occur too early (precocious puberty) or too late (delayed puberty). Both may be due to endocrine disorders. Therefore, these children must be referred for a specialist opinion. Precocious puberty is more common in girls.

What are the physical changes during puberty?

These can be formally graded into 5 stages (from pre-puberty to full sexual development). Genital development (appearance of penis, testes and scrotum) and pubic hair are scored in boys while breast development and pubic hair are scored in girls. Menstruation in girls starts towards the end of puberty when the growth spurt is almost complete.

THE FIRST 1000 DAYS PROJECT

The first 1000 days is the period from conception to the age of 2 years. As 80% of the child's brain growth takes place during this period, good nutrition has a big impact on the child's ability to develop and learn. Good nutrition during the first 1000 days also helps to achieve optimal increase in weight and height which results in good growth to adulthood and also reduces the risk of chronic adult illnesses such as diabetes, hypertension, heart disease and stroke. Finally optimal support and stimulation during this critical period promotes emotional wellbeing in childhood, adolescence and adulthood.

The first 1000 days of life are vitally important to achieve optimal physical, mental and emotional growth and development.

What is the first 1000 days project?

This is an international project which addresses the needs of the mother and child for the first 1000 days. An emphasis is placed on foetal wellbeing followed by care, nutrition and stimulation of the infant after birth so that the child can thrive and survive.

Care of the mother and support for early childhood development helps her child have the best start in life. Attention to growth, love and play for all children makes sure that no one is left behind and improves the health and wellbeing of the whole community. This contributes to society's long-term health, stability and prosperity.

Important factors in the first 1000-day project in South Africa includes:

- Good antenatal care and nutritional support during pregnancy
- A skilled birth attendant at all deliveries
- Exclusive breastfeeding for the first 6 months
- Adequate complementary feeds after 6 months
- Routine immunization
- Growth monitoring
- Play, love and stimulation to ensure good early childhood development
- Social, financial and emotional support for mothers
- Good, accessible, and affordable primary health care

- Community education on the dangers of alcohol and drug misuse
- Steps to reduce violence and abuse
- Support and educate fathers in their role of good parenting

31.3 IMMUNIZATION

31.3 IMMUNIZATION

Immunization can be defined as the process of protecting a person from a specific disease.

Advantages:

Immunization saves many lives i.e.

- It stops children from getting sick (morbidity rate is reduced)
- It saves a lot of money and expenses incurred on sickness of these diseases.
- It saves children from disability.
- It saves children from getting malnourished.
- It is an inexpensive way of saving loss of lives (mortality rate is reduced)
- It is a good way to improve health status in a poor country.

Immunity is the defence mechanism of the body or in other words the reaction of the body towards any foreign substance or non-self.

The microorganisms causing infection to stimulate the body to produce antibodies. Any foreign substance or invader whether it is visible or microscopic (bacteria or viruses) that stimulates antibody production is called an antigen. Each kind of antibody that is produced specifically matches a particular kind of antigen, just as a key matches one particular lock only. This is why antibodies against one disease, such as measles, do not protect a person from other diseases such as smallpox or pneumonia. (For details review “Immunity” in chapter on “Infection Prevention”)

Advantages of Active Immunization:

In Active immunization an antigen is entered into the body, which stimulates the antibody production. The advantage of active immunization is that because these antibodies are the person’s own, they tend to remain in the body for a long time- usually many years. And even after the antibodies seem to be gone, the body still “remembers” how each particular antibody was made. If a person is then again exposed to an infection he has already had or been vaccinated for, the body will very quickly make more antibodies to fight out the micro-organism, usually before they even start growing in the body.

Advantages of Passive Immunization:

In Passive immunization ready-made antibodies are given to a person. As the person receiving these antibodies is not making them himself therefore it is called passive immunization. “Passive” means “inactive” and indicates that the body receiving the antibodies does not have any work to do in this kind of immunization.

The baby or person receiving the antibodies does not have to wait for his own body to produce them. This is of help in situations such as snakebite or preventing tetanus infection when we need to help the person quickly and without waiting for him to make his own antibodies. It also helps the newborn who is suddenly exposed at birth to many different microorganisms trying

to infect his body.

Disadvantages of Passive Immunization:

As the body does not make the antibody so there is no memory of the infection. These antibodies are gone in a few weeks or months and the protection is then lost. In case of re-infection the body will have to start right from the beginning. Another disadvantage is that reaction occurs after repeated administration. For this reason, careful history should be taken before giving a passive immunization, and the injection should not be given if the person has received that kind of foreign antibody before.

Expanded Program on Immunization (EPI):

The Global Expanded Programme on Immunization (EPI) was launched following a resolution of World Health Assembly in May 1974.The Expanded Programme on Immunization (EPI) was started in Pakistan in the same year with the help of WHO and UNICEF. Vaccination Coverage programme has improved coverage for the 7 common childhood diseases, when full coverage will be attained in the country the diseases will be eradicated and will no longer be a problem. The seven target diseases which can be prevented by immunization are as follows:

Polio:

Often children die because of polio, but those children who recover may have a paralyzed arm or leg which causes severe disability

Diphtheria:

In this disease a membrane forms in the patient’s throat, which causes difficulty in breathing, and results in death.

Pertussis – Whooping Cough:

This common disease is particularly serious in young children. The severe coughing attacks cause difficulty in breathing and may cause death.

Tetanus:

Neonatal tetanus is a very serious illness in newborn babies. Within the first 2-weeks of life, the baby first has difficulty in sucking, and then becomes stiff. Difficulty in breathing occurs, and often results in death.

Measles:

This is a very dangerous infection, which is extremely contagious. The mortality rate is high, especially in undernourished children due to complications mainly diarrhea and infection in the respiratory tract.

Tuberculosis:

Tuberculosis is very common in Pakistan, and the slow course of the disease impedes the normal development of the child and may cause serious disabilities and even death. The vaccination against TB does not protect the child against all forms of Tuberculosis. However, it does prevent the most severe types, which are frequently fatal in small children, and it prevents complications occurring from other types. This vaccine is therefore very important in Pakistan.

Hepatitis B:

This is a disease caused by Hepatitis B virus. It may lead to long-term complications like cancer and cirrhosis of liver leading to death. It has no effective treatment and the only way to prevent it is through active immunization.

Immunization Schedule (Birth to 5 Years):

Every country has its own schedule according to the disease pattern and resources available. It may be modified as the time passes i.e., we used to immunize our children against smallpox but since small pox has been eradicated, vaccination is no longer necessary.

Hepatitis-B vaccination has been recently added due to its increasing occurrence. The following schedule is now a day used for immunizing children from birth to 5 years of age.

Name of Vaccine	BCG	OPV	DPT	Hepatitis B	Measles
	I/dermal	Oral Polio Drops	I/muscular injection	I/muscular injection	
Route	injection				S/C
					Injection
Age					
At birth	Soon after birth	0 dose			
06 Weeks		1st dose	1st dose	1st dose	
10 Weeks		2nd dose	2nd dose	2nd dose	
14 Weeks		3rd dose	3rd dose	3rd dose	
09 Months					1st dose
02 Years		Booster-I	Booster		
05 Years		Booster-2	DT Booster	Booster	

DESCRIPTION OF VACCINES:

BCG Vaccine (Bacille Calmette Guerin):

This protects against Tuberculosis. It is in the form of a dry power which is dissolved in a

specific liquid. We vaccinate the children against TB, as soon as possible, after birth.

Triple Vaccine (D.P.T):

This is a combined vaccine which protects against Diphtheria, Tetanus and Whooping cough. It comes in the form of a cloudy liquid. This vaccine leaves no mark. It is given by intra-muscular injections

Poliomyelitis Vaccine:

There are two types of polio vaccine:

One killed and injectable (SALK)

The other live and oral (SABIN)

In our country the later one is commonly used. Generally, vaccination is done at the same time as the DPT except that an additional “O” dose is given at birth. Color of vaccine is normally pink and any change of color means that it may have lost its potency.

Measles Vaccine:

This vaccine comes in the form of a dry power and has to be mixed with special liquid. It is a very heat sensitive vaccine and should be kept in the coldest part of the Refrigerator. The diluents must also be kept refrigerated as a warm liquid can also damage the vaccine as well.

Color: Generally pink in color and a change in color must be looked at with suspicion.

Contraindications to Routine Vaccination:

There are very few contraindications to routine vaccination. These may be general, those related to groups of vaccines, and individual vaccines.

General Contraindications:

Any acute illness

Severe malnutrition

In known cases of immune deficiency.

During pregnancy there is a rare risk of mild to fatal damage to the foetus.

Individual Vaccines:

BCG is contraindicated in extensive dermatosis.

Whooping cough: If there is history of allergy, a preliminary test dose must be given. The appearance of any neurological symptoms after the first or second dose is an absolute contraindication.

Toxoids: No contraindications for T.T; in diphtheria toxoid a reduced dosage is necessary for older children.

For Polio vaccine: Do not give it in Diarrhea, & no polio vaccine is to be administered within three weeks of tonsillectomy.

Measles: History of febrile-convulsions and active tuberculosis.

Abnormal Reactions and Complications:

These include the reactions and complications to preventive vaccinations. Most of the complications assume merely academic significance, when we consider the immense benefit to humanity by vaccines.

B.C.G Vaccine Complications:

Local reaction at the site of vaccination lasts long.

Suppurative adenitis in about 0.5% in children under 2 years.

Lupus or osteitis rarely.

Generalized B.C.G infection rarely occurs.

Whooping Cough Vaccine Complications:

Neurological complications such as convulsions or encephalitis.

Cyst formation at site of injection; and

Local and systemic reaction with a rise in temperature to 104°-105°F.

Tetanus Toxoid Reactions:

It is free from side effects and the level of immunity is high.

Diphtheria Toxoid Reactions:

Allergic reactions may occur. It is preferable to perform a test dose and depending on any local reaction, preventive steps be taken to any adverse general reaction.

Polio Vaccine Complications:

Killed vaccine is harmless. Live attenuated virus, type III strain of Sabin vaccine may undergo spontaneous mutation causing paralysis in the vaccinated persons.

Measles Vaccine Reactions:

Moderate fever (101°-105°F) with or without rash. Rash is minimal, fever is less with hyper-attenuated Schwarz vaccine.

Local reaction marked by redness may occur in children who previously received killed measles vaccine.

Care of Vaccines:

Vaccines must stay cold all the way from the manufacturer to the child. The equipment and the people that keep vaccines cold from the manufacturer to the childcare together called the cold chain.

Before vaccines reach the Health Centre / Hospital:

They must be collected quickly from Airport.

They must be stored at the correct cold temperature, 0° to 8° C.

They must be kept cold during transport from one store to another by using a vaccine carrier

Storage of vaccines at the Health Outlet / Hospital:

Store all the vaccines between 2° C and 10° C and do not freeze them solid. D.P.T and Tetanus is made from killed germs. This vaccine is not destroyed by light or moderate change in temperature.

Measles, BCG and Polio vaccines contain live germs. Live vaccine must be protected from changes in temperature and sunlight or any anti-septic i.e., Savlon or Alcohol.

The cold chain at the Health Outlet / Hospital is composed of 2 complimentary parts.

Fixed unit or refrigerator

Insulated container or an icebox.

Refrigerator:

For all vaccines the temperature must be maintained between 4° C to 8° C and therefore they are kept in a refrigerator.

پہلی بار	پیدائش کے فوری بعد	پولیو کے قطرے + بی سی جی سے بچاؤ کا ٹیکہ + ہیپاٹائٹس بی سے بچاؤ کا ٹیکہ
دوسری بار	ڈیڑھ ماہ کی عمر میں	پولیو کے قطرے + نمونیا سے بچاؤ کا ٹیکہ + دست اور اسہال سے بچاؤ کی روٹا ویکسین + خناق، کالی کھانسی، تشنج، گردن توڑ بخار اور ہیپاٹائٹس بی سے بچاؤ کا مجموعی ٹیکہ
تیسری بار	اڑھائی ماہ کی عمر میں	پولیو کے قطرے + نمونیا سے بچاؤ کا ٹیکہ + دست اور اسہال سے بچاؤ کی روٹا ویکسین + خناق، کالی کھانسی، تشنج، گردن توڑ بخار اور ہیپاٹائٹس بی سے بچاؤ کا مجموعی ٹیکہ
چوتھی بار	ساڑھے تین ماہ کی عمر میں	پولیو کے قطرے + نمونیا سے بچاؤ کا ٹیکہ + پولیو سے بچاؤ کا ٹیکہ + خناق، کالی کھانسی، تشنج، گردن توڑ بخار اور ہیپاٹائٹس بی سے بچاؤ کا مجموعی ٹیکہ
پانچویں بار	نو ماہ کی عمر میں	خسرہ سے بچاؤ کا پہلا ٹیکہ + پولیو سے بچاؤ کا ٹیکہ + ٹائیفائیڈ سے بچاؤ کا ٹیکہ
چھٹی بار	پندرہ ماہ کی عمر میں	خسرہ سے بچاؤ کا دوسرا ٹیکہ
ساتویں بار	اٹھارہ ماہ کی عمر میں	کالی کھانسی، خناق، تشنج سے بچاؤ کیلئے قوت مدافعت بڑھانے کا ٹیکہ (ڈی پی ٹی بوسٹر)

A newspaper advertisement in Punjab

Arrangement of Vaccines in the Refrigerator:

BCG Near the freezer but they must not freeze Polio

DPT Far from the freezer

Tetanus

Transportation of Vaccines from Health Outlet to mobile camps

Insulated container:

These are used to transport vaccine from one station to another to keep it cold once they are removed from the refrigerator. They are kept cold in ice box. These boxes are made of wooden crate and polyester.

Ice Bags:

These plastic boxes contain material to freeze. They must be put in the refrigerator's ice

compartment for 12 hours and when they are placed in the insulated container with the vaccine, they will maintain a low temperature for six hours. When they melt, they should be put in the freezer again.

Thermos bottles are useful for carrying small quantity of vaccine, which has just been removed from refrigerator.

31.4 INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS

31.4 INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS

What is IMCI?

IMCI is an integrated approach to child health that focuses on the wellbeing of the whole child. IMCI aims to reduce death, illness and disability, and to promote improved growth and development among children under five years of age. IMCI includes both preventive and curative elements that are implemented by families and communities as well as by health facilities. Integrated management of childhood illnesses (IMCI) strategy has been proven to improve health outcomes in children under 5 years of age. Pakistan, despite being in the late implementation phase of the strategy, continues to report high under-five mortality due to pneumonia, diarrhea, measles, and malnutrition - the main targets of the strategy.

The value and need for IMCI:

Every year some 12 million children die before they reach their fifth birthday, many of them during the first year of life. Seven in every 10 of these child deaths are due to diarrhea, pneumonia, measles, malaria or malnutrition and often to a combination of these. Every day, millions of parents seek health care for their children, taking them to hospitals, health centres, pharmacists, community health care providers and traditional healers. At least three out of four of these children are suffering from one of these five conditions. The rationale for implementation of IMCI in Pakistan is high childhood mortality and morbidity.

Nearly half (43%) of the population of Pakistan comprises of children 15 years of age which account 60% of national morbidity and one of the highest infant mortalities in the region, 84/1000 live birth.

Components

The implementation of the IMCI strategy has three components:

- Improving the performance of health workers when tending to children under five and their families (health-worker component).
- Improving the organization and overall functioning of health-care services so that they offer efficient, good-quality care (health-service component).
- Improving knowledge on best practices for the care of boys and girls at home and in the community (community component).

About *improving the performance of health workers*, IMCI offers a number of practical tools, including

- Modules for the evaluation, classification, and treatment of children under five, and training materials on these modules.
- Guides for health-care workers to provide support in effective IMCI application.
- Training materials on how to improve communications with parents during their child's evaluation, diagnosis and treatment, telling them how to deal with problems and promoting practices for healthy growth and development.

About improving the organization and overall functioning of health services, IMCI also has made available practical toolkit including

- Guidelines for evaluating the care provided to children under five in primary health-care services and in hospitals.
- Training materials on how to develop local plans for IMCI implementation, follow-up and evaluation.
- Training courses to improve the availability of attention and medications needed for IMCI application.
- Protocols for operational and epidemiological research related to IMCI.
- Guidelines to evaluation the results of applying IMCI.

About improving knowledge and practices on the part of parents and others who care for children under five, IMCI has made various practical tools available, including

- Sixteen key family practices for healthy growth and development.
- Guide for developing community IMCI projects.
- Guide on evaluating the care of children under five in primary health-care facilities and hospitals.

IMCI implementation involves the participation of the community, the health-service sector and the family. This is carried out in three ways:

- Improving the performance of health workers for the prevention and treatment of childhood diseases.
- Improving the organization and operation of health services so they provide quality care.
- Improving family and community care practices.

IMCI is a strategy that integrates all available measures for disease prevention and health problems during childhood, for their early detection and effective treatment, and for promoting healthy habits within the family and community. IMCI can be applied by both health workers and other people responsible for the care of boys and girls under five years of age, i.e. their parents and those who care for them.

IMCI offers the knowledge and abilities to sequentially evaluate and integrate the status of child health and, in this way, detect the diseases or problems frequently affecting it according to the epidemiological patterns of the respective location. Based on this evaluation, IMCI gives clear instructions on disease classification and problems, establishing the treatment that should be administered for each one. The strategy also provides instructions on how to control the progress of disease, in order to identify the need for applying prevention measures as well as how to inform and educate parents on disease prevention and child health promotion.

On this basis, IMCI is currently regarded as the most efficient strategy for reducing the burden of disease and disability among the population in this age group. Its main goal is to contribute to healthy growth and development during the first five years of life.

Limited supplies and equipment, combined with an irregular flow of patients, leave health workers at this level with few opportunities to practice complicated clinical procedures. Instead, they often rely on history and signs and symptoms to determine a course of management that makes the best use of the available resources.

In Pakistan decentralization provides opportunity to improve health care system of the country. The IMCI approach can be an important component of this reform and there is dire need to pay attention on implementation guidelines so that the quality of child health care can be improved at lower cost by involving family and communities.

These diseases are also the reasons for seeking care for at least three out of four children who come to health facilities. As children usually present with more than one of these conditions, it was recognized that there was a need for an integrated approach in order to manage the child in a holistic manner (taking into account all of the child's problems including the major childhood illnesses in the assessment and treatment of illness). This led to the development of the Integrated Management of Newborn and Childhood Illness (IMNCI) strategy.

Integrated Management of Childhood Illness (IMCI) was formulated by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), presented in 1996 as the principal strategy to improve child health. It focuses on the care of children under five, not only in terms of their overall health status but also on the diseases that may occasionally affect them. Thus, it reduces missed opportunities for early detection and treatment of diseases that can escape the notice of both parents and health workers, with the consequent risk of the illness becoming worse and complications arising.

In addition, IMCI incorporates a strong component of prevention and health promotion as an integral part of care. Thus, among other benefits, it helps increase vaccination coverage and improve knowledge and home-care practices for children under five, subsequently contributing to growth and healthy development.

In summary, the IMNCI strategy includes three main components:

- Improving case management skills of healthcare staff.
- Improving the health systems.
- Improving family and community health practices.

In health facilities, the IMCI strategy:

- promotes the accurate identification of childhood illnesses in out-patient settings
- ensures appropriate combined treatment of all major illnesses
- strengthens the counselling of caregivers
- speeds up the referral of severely ill children.

In the home setting, IMCI:

- promotes appropriate care-seeking behaviours
- helps to improve nutrition and preventative care, and
- supports the correct implementation of prescribed care.

Why is IMCI better than single-condition approaches?

Children brought for medical treatment in the developing world are often suffering from more than one condition, making a single diagnosis impossible. IMCI is an integrated strategy, which considers the variety of factors that put children at serious risk. It ensures the combined treatment of the major childhood illnesses, emphasizing prevention of disease through immunization and improved nutrition.

How is IMCI implemented?

Introducing and implementing the IMCI strategy in a country is a phased process that requires a great deal of coordination among existing health programmes and services. It involves working closely with local governments and ministries of health to plan and adapt the principles of the approach to local circumstances. The main steps are:

- Adopting an integrated approach to child health and development in the national health policy.
- Adapting the standard IMCI clinical guidelines to the country's needs, available drugs, policies, and to the local foods and language used by the population.
- Upgrading care in local clinics by training health workers in new methods to examine and treat children, and to effectively counsel parents.
- Making upgraded care possible by ensuring that enough of the right low-cost medicines and simple equipment are available.
- Strengthening care in hospitals for those children too sick to be treated in an outpatient clinic.
- Developing support mechanisms within communities for preventing disease, for helping families to care for sick children, and for getting children to clinics or hospitals when needed.

IMCI has already been introduced in more than 75 countries around the world.

Thus, IMNCI includes the following:

2 months to 4 years	1 week to 2 months
Non-specific signs of serious illness. Cough or difficulty in breathing. Diarrhea: Dehydration. Persistent diarrhea. Dysentery. Fever: Malaria. Measles. Malnutrition and anemia. Vaccination status.	Nonspecific Signs of serious disease. Diarrhea: Dehydration. Persistent diarrhea. Dysentery. Feeding problems or low weight. Vaccination status.

The following constitute additional areas of relevance during different implementation phases:

- Perinatal/neonatal.
- Asma and broncho-obstructive syndrome.
- Child development.
- Oral health.
- Neglect, child abuse, and accidents.
- Diabetes and obesity

The IMNCI strategy

The IMCI strategy clearly focuses on the child rather than single disease. The core of efforts of this strategy is to reduce childhood mortality and morbidity and significantly improve children's health in the developing world. It focuses on five most important causes of childhood deaths: Acute respiratory infections (ARI), diarrhea, measles, malaria and malnutrition.

IMNCI is a strategy that integrates all available measures for health promotion, prevention and integrated management of childhood diseases through their early detection and effective treatment, and promotion of healthy habits within the family and community.

Importance and objectives of the IMNCI strategy

The importance of having an Integrated Management of Newborn and Childhood Illness

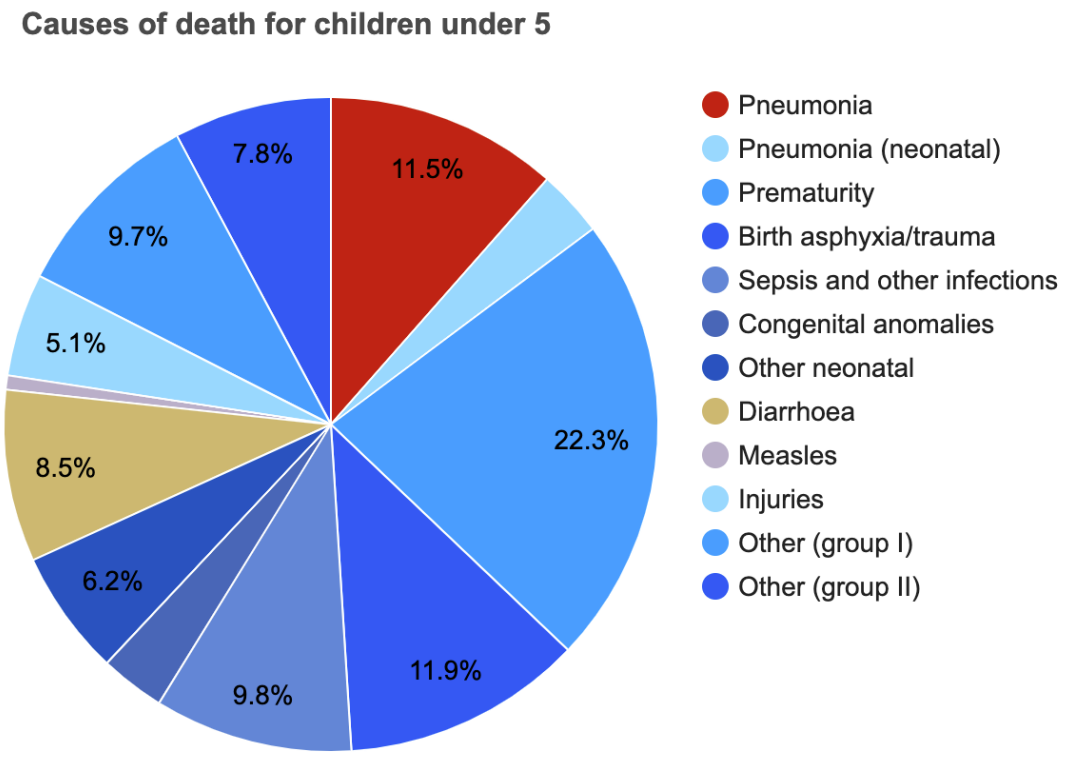
strategy is that it enables a consistent and standardized approach that addresses the major causes of under-five morbidity and mortality which are responsible for more than 90% of the mortality in this age group.

OBJECTIVES AND ADVANTAGES OF IMNCI

The objectives of the IMNCI strategy are:

- to reduce mortality and morbidity associated with the major causes of disease in children less than five years of age, and
- to contribute to the healthy growth and development of children.

The IMNCI guidelines are designed for the management of sick children from birth up to five years old.



WHO data for causes of under 5 mortality in Pakistan

The core of the IMNCI strategy is integrated case management of the most common childhood problems, with a focus on the most important causes of death. The clinical guidelines are designed for the management of sick children aged from birth up to five years. They include methods for assessing signs that indicate severe disease; assessing a child's nutrition, immunization and feeding; teaching parents how to care for a child at home; counselling parents to solve feeding problems; and advising parents about when to return to a health facility. The guidelines also include recommendations for checking the parents' understanding of the advice given and for showing them how to administer the first dose of treatment.

When correctly applied, IMNCI has the following advantages:

- Promotes the accurate identification of childhood illnesses in out-patient settings
- Ensures appropriate combined treatment of all major childhood illnesses
- Strengthens the counselling of mothers or caregivers
- Strengthens the provision of preventive services
- Speeds up the referral of severely ill children
- Aims to improve the quality of care of sick children at the referral level.

Effective IMCI requires action at different levels of the health service at home and community, through improving the coordination and quality of services provided by current child health programs. The IMCI strategy will increase the effectiveness of care and at the same time reduce costs. IMCI has potential to make a major contribution to health system reform. For Pakistan to make this new approach workable demands a degree of innovation and flexibility throughout the existing child health services.

Implementation of the IMCI strategy involves three components:

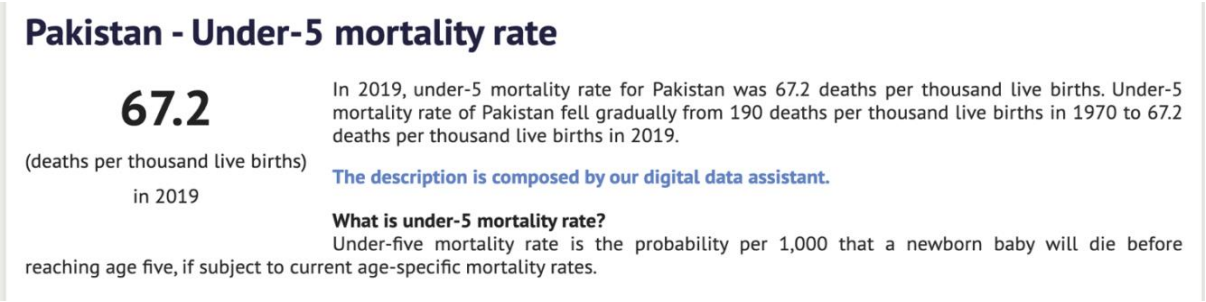
improvements in the case management skills of health staff,

- improvements in the health system needed to allow effective management of childhood illness,
- Improvement of family and community practices.

These components will be supported by the proper planning of program, selection of indicators, setting of targets and by evaluation. The approach gives attention to prevention of childhood disease as well as to treatment. It emphasizes the importance of immunization, vitamin A supplementation if necessary, and improved infant feeding, including exclusive breast-feeding. Wastage of resources is reduced because children are treated with the most cost-effective intervention for the childhood illnesses. The approach avoids the duplication of effort that may occur in a series of separate disease control programs.

IMCI and Pakistan

According to the World Bank's World Development Report 1993, management of the sick child is the intervention likely to have the greatest impact in reducing the global burden of disease. This approach alone is calculated to be able to prevent 14% of that burden in low-income countries and is among the most cost-effective health interventions in both low-income and middle- income countries. In many developing countries some type of reform of the health system is underway, and Pakistan is among one of them. It includes decentralization of management, including responsibilities for training and drug supplies.



The emphasis in IMCI implementation on capacity building at district level is compatible with, and can contribute to, this aspect of health system reform. Another aspect of health system reform 5 being promoted in some countries is “essential services” or a minimum package of activities. There is a strong rationale for including IMCI in such an approach. Pakistan is in introductory phase of the program incorporating IMCI as early as possible in the planning for health sector reforms, using potential entry points such as quality assurance, capacity building, decentralization, and effective health information systems. There are constraints to implementation and expansion, but they are inherent in the system and are not specific to IMCI.

The challenge for us now is to use IMCI to overcome these chronic problems measuring the cost and effectiveness of IMCI. Discussion The World Health Organization ranked Pakistan 122 out of 191 countries on “ overall health system performance.” It clearly indicates the needs for improvement in health system, which can be achieved through health system reform. An important focus of IMCI is health system reform and objective of this reform is to improve efficiency of health care system.

The emphasis of IMCI on the importance of the peripheral levels of the health system, on the quality of care and on strengthening of district management makes it a natural component of health sector reform, by stimulating and providing a focus for essential change. The emphasis on quality of care and the role of the community is well matched with the stimulus that IMCI gives to the development of the district health system. The response from Africa and some other developing countries have been quite encouraging about 6 IMCI and development of district health system. The IMCI initiative has been jointly launched by the WHO/ UNICEF in close liaison with the Ministry of Health Pakistan and aims to improve childcare at primary care facilities and the community level.

Pakistan is one of the three countries in the world where the IMCI has been modified to include the neonatal period. This initiative was largely indigenous and based on perceived needs. The Government of Pakistan is currently pilot testing the IMCI in two districts and the AKHS has also adopted the IMCI model for its primary care activities. Pakistan may also be a site for the evaluation of the recent Integrated Management of Pregnancy and Childbirth (IMPAC) package. In Pakistan non-governmental organizations and private organizations are actively involved in IMCI masters training program.

31.5 IMCI CASE MANAGEMENT PROCESS

31.5 IMCI CASE MANAGEMENT PROCESS

IMCI IMPLEMENTATAION:

IMCI implementation involves the participation of the community, the health-service sector and the family. This is carried out in three ways:

1) Improving the performance of health workers for the prevention and treatment of childhood diseases.
2) Improving the organization and operation of health services so they provide quality care.
3) Improving family and community care practices.

IMCI is a strategy that integrates all available measures for disease prevention and health problems during childhood, for their early detection and effective treatment, and for promoting healthy habits within the family and community. IMCI can be applied by both health workers and other people responsible for the care of boys and girls under five years of age, i.e. their parents and those who care for them.

IMCI offers the knowledge and abilities to sequentially evaluate and integrate the status of child health and, in this way, detect the diseases or problems frequently affecting it according to the epidemiological patterns of the respective location. Based on this evaluation, IMCI gives clear instructions on disease classification and problems, establishing the treatment that should be administered for each one. The strategy also provides instructions on how to control the progress of treatment, in order to identify the need for applying prevention measures as well as how to inform and educate parents on disease prevention and child health promotion.

On this basis, IMCI is currently regarded as the most efficient strategy for reducing the burden of disease and disability among the population in this age group. Its main goal is to contribute to healthy growth and development during the first five years of life.

The integrated case management process

Integrated case management relies on case detection using simple clinical signs and empirical treatment. As few clinical signs as possible are used. The signs are based on expert clinical opinion and research results and strike a careful balance between *sensitivity* and *specificity.* The treatments are developed according to action-oriented classifications rather than exact diagnosis. They cover the most likely diseases represented by each classification.

The IMCI process can be used by doctors, FWWs, nurses and other health professionals who see sick infants and children aged from 1 week up to five years. It is a case management process for a first-level facility such as a clinic, a health centre or an outpatient department of a hospital.

The IMCI guidelines describe how to care for a child who is brought to a clinic with an illness, or for a scheduled follow-up visit to check the child’s progress. The guidelines give instructions for how to routinely assess a child for general danger signs (or possible bacterial infection in a young infant), common illnesses, malnutrition and anaemia, and to look for other problems.

In addition to treatment, the guidelines incorporate basic activities for illness prevention.

IMNCI case management

Case management can only be effective to the extent that families bring their sick children to a trained health worker such as you for care in a timely way. If a family waits to bring a child to a health facility until the child is extremely sick, or takes the child to an untrained provider, the child is more likely to die from the illness. Therefore, teaching families when to seek care for a sick child is an important part of the case management process and is a crucial part of your role as a Health Extension Practitioner.

The complete IMNCI case management process involves the elements

Assessment

- **A**ssess a child by checking first for general danger signs (or possible bacterial infection in a young infant), asking questions about common conditions, examining the child, and checking nutrition and immunization status. Assessment includes checking the child for other health problems.

Classification

- Classify a child's illnesses using a colour-coded classification system. Because many children have more than one condition, each illness is classified according to whether it requires:
- urgent pre-referral treatment and referral (pink), or
- specific medical treatment and advice (yellow), or
- simple advice on home management (green).

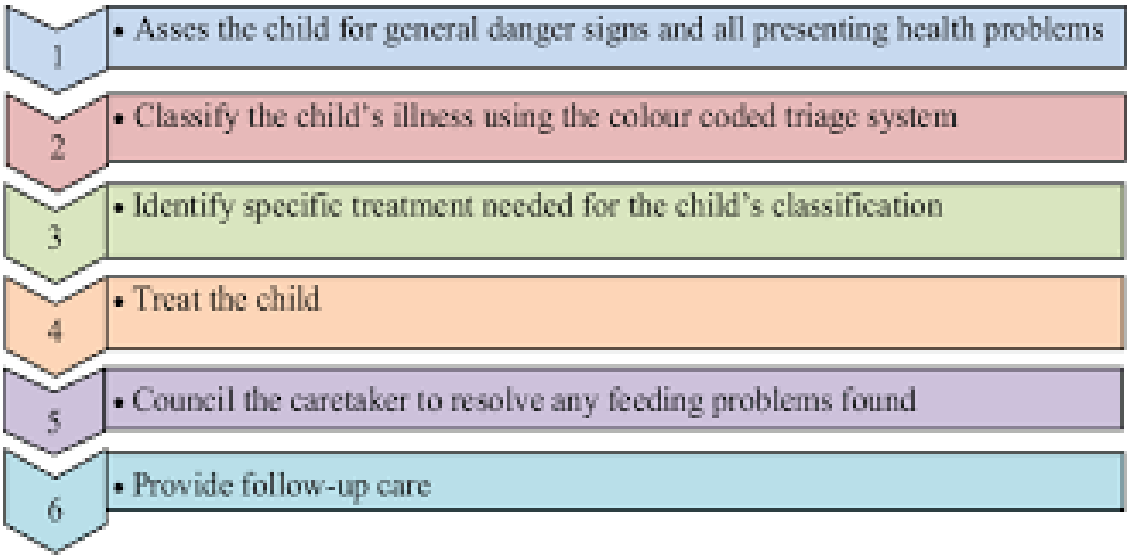
Identify treatment and treat

- After classifying all conditions, identify specific treatments for the child. If a child requires urgent referral, give essential treatment before the patient is transferred. If a child needs treatment at home, develop an integrated treatment plan for the child and give the first dose of drugs in the clinic. If a child should be immunized, give immunizations.
- Provide practical treatment instructions, including teaching the caregiver how to give oral drugs, how to feed and give fluids during illness, and how to treat local infections at home. Ask the caregiver to return for follow-up on a specific date and teach her how to recognize signs that indicate the child should return immediately to the health post.
- Assess feeding, including assessment of breastfeeding practices, and counsel to solve any feeding problems found. Then counsel the mother about her own health.

Follow-up care

- When a child is brought back to the health post as requested, give follow-up care and, if necessary, reassess the child for new problems.

Whenever a sick baby or child under five comes to your FWC you should use the IMNCI chart booklet to help you know how to assess, classify and treat the child.



IMCI integrated case management process

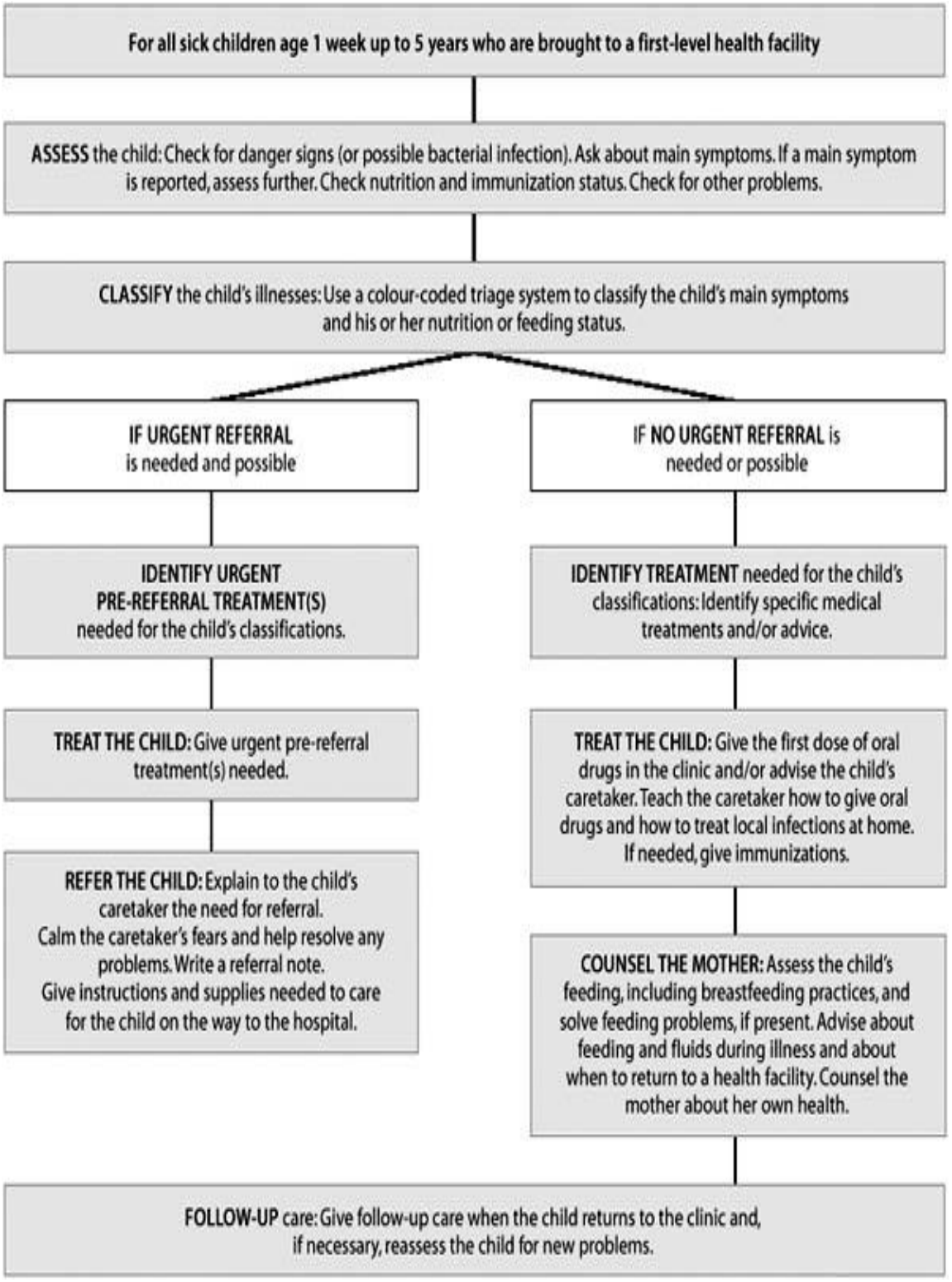
The IMNCI guidelines address most, but not all, of the major reasons a sick child is brought to a health facility. A child returning with chronic problems or less common illnesses may require special care which is not described in this Module. For example, the guidelines do not describe the management of trauma or other acute emergencies due to accidents or injuries.

The IMCI guidelines address most, but not all, of the major reasons a sick child is brought to a clinic. A child returning with chronic problems or less common illnesses may require special care which is not described in this handbook.

The guidelines do not describe the management of trauma or other acute emergencies due to accidents or injuries. Although AIDS is not addressed specifically, the case management guidelines address the most common reasons children with HIV seek care: diarrhea and respiratory infections. When a child, who is believed to have HIV, presents with any of these common illnesses, he or she can be treated the same as any child presenting with an illness. If a child's illness does not respond to the standard treatments described in this handbook, or if a child becomes severely malnourished, or returns to the clinic repeatedly, the child is referred to a hospital for special care.

Case management can only be effective to the extent that families bring their sick children to a trained health worker for care in a timely way Therefore, teaching families when to seek care for a sick child is an important part of the case management process.

The case management process is presented on two different sets of charts: one for children aged 2 months up to five years, and one for children aged 1 week up to 2 months.



Summary of the integrated case management process

The IMNCI assessment

When you are assessing a sick child, a combination of individual signs leads to one or more classifications, rather than to a diagnosis. IMNCI classifications are action-oriented illness categories which enable a healthcare provider to determine if a child should be urgently referred to a health centre, if the child can be treated at the health post (e.g. with oral antibiotic, antimalarial, ORS, etc.), or if the child can be safely managed at home.

The IMNCI guidelines describe how you should care for a child who is brought to your health post with an illness, or for a scheduled follow-up visit to check the child's progress. The guidelines give instructions for how to routinely assess a child for general danger signs (or possible bacterial infection in a young infant), common illnesses, malnutrition and anaemia, and to look for other problems. In addition to treatment, the guidelines incorporate basic activities for illness prevention.

This module will help you learn to use the IMNCI guidelines in order to interview caregivers, accurately recognise clinical signs, choose appropriate treatments, and provide counselling and preventive care.

The IMNCI case management process

You need to know the age of the child in order to select the appropriate chart and begin the assessment process. The IMNCI case management process is presented on two different sets of charts: one for managing sick young infants aged from birth up to two months and a separate one for managing sick children aged from two months up to five years. First decide which chart to use depending on the age of the child. Up to five years means the child has not yet had his or her fifth birthday. If the child is *not yet* two months of age, the child is considered a young infant. A child who is two months old would be in the group two months up to five years, not in the group birth up to two months. When you look the IMNCI chart booklet you will see the different charts for the two age groups.

Since management of the young infant aged from birth up to two months is somewhat different from the management of older infants and children, it is described on a different chart:

- Assess, classify and treat the sick young infant.

The case management process for sick children aged two months up to five years is presented on three charts:

- Assess and classify the sick child
- Treat the child
- Counsel the mother.

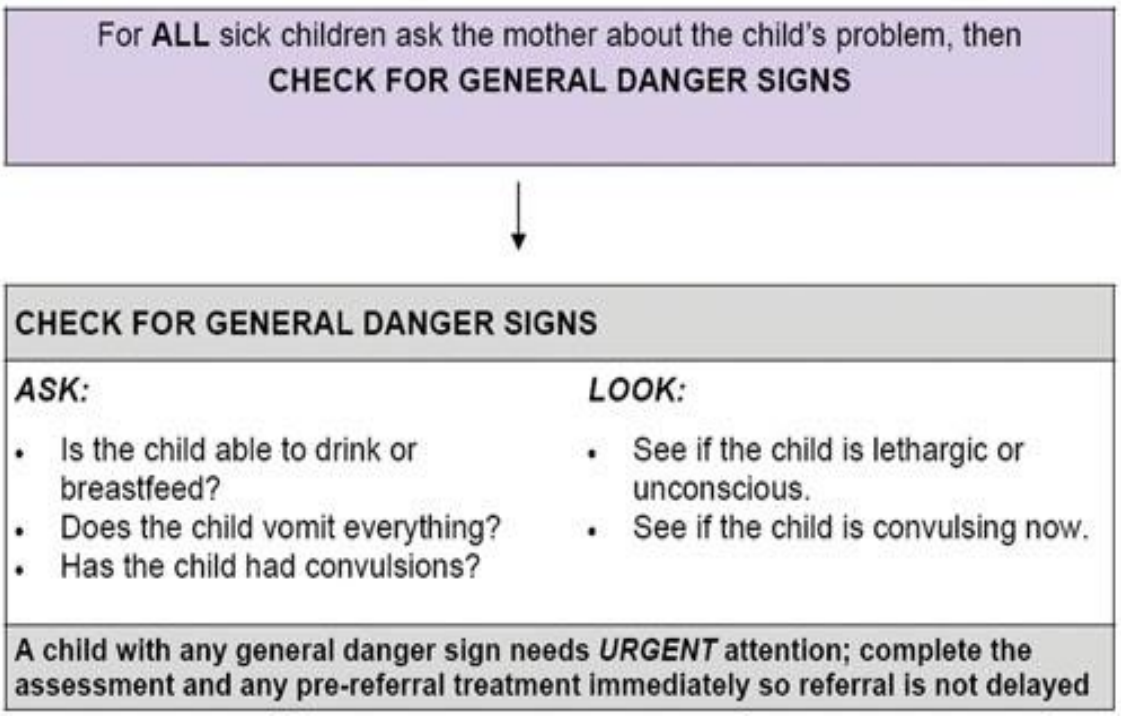
If this is the child's first visit for this episode of an illness or problem, then this is an initial visit. If the child was seen a few days before for the same illness, this **is a follow-up visit**. A follow-up visit has a different purpose from an initial visit. You will learn more about follow-up visits in all the study sessions in this Module. Whether it is an initial or follow-up visit, the mother may well be feeling anxious and it is important that you put her at her ease. This will increase the likelihood of you being able to obtain important information about her child.

For each visit, when you see the mother, or the child's caregiver, with the sick child:

- Greet the mother appropriately and ask about the child
- Take the child's weight and temperature and record the measurements
- Ask the mother what the child's problems are
- Determine if this is an initial or follow-up visit for this problem.

General danger signs (GDS)

Since IMNCI takes a holistic approach to assessing, classifying and treating childhood illnesses it is important to look for general danger signs as well as symptoms and signs of specific childhood illnesses.The general danger signs are signs of serious illness that are seen in children aged two months up to five years and will need immediate action to save the life of the child. A child with a general danger sign has a serious problem. Most children with a general danger sign need *urgent referral* to hospital. They may need lifesaving treatment with injectable antibiotics, oxygen or other treatments that may not be available in the health post. You should complete the rest of the assessment immediately and give urgent pre-referral treatments before sending the patient to the next facility.



You should assess all sick children who come to your health post for general danger signs. Most children with a general danger sign need urgent referral to hospital. You are first going to look in more detail how you check for general danger signs.

ASK: Is the child able to drink or breastfeed?

A child has the sign 'not able to drink or breastfeed' if the child is not able to suck or swallow when offered a drink or breastmilk.

When you ask the mother if the child can drink, make sure that she understands the question. If the mother replies that the child is not able to drink or breastfeed, ask her to describe what happens when she offers the child something to drink. For example, is the child able to take fluid into his mouth and swallow it?

If you are not sure about the mother's answer, ask her to offer the child breast milk or a drink of clean water. Look to see if the child is swallowing the breast milk or water. A child who is breastfed may have difficulty in sucking when his nose is blocked. If the child's nose is blocked, clear it. If the child can breastfeed after the nose is cleared, the child does not have the danger sign, 'not able to drink or breastfeed'.

ASK: Does the child vomit everything?

A child who is not able to hold anything down at all has the sign 'vomits everything'. A child who vomits everything will not be able to hold down food, fluids or oral drugs. A child who vomits several times but can hold down some fluids does not have this general danger sign.

When you ask the question, use words the mother understands. Give her time to answer. If the mother is not sure if the child is vomiting everything, help her to make her answer clear. For example, ask the mother how often the child vomits. Also ask if each time the child swallows food or fluids, does the child vomit? If you are not sure of the mother's answers, ask her to offer the child a drink. See if the child vomits.

ASK: Has the child had convulsions?

During a convulsion, the child's arms and legs stiffen because the muscles are contracting or if the child has repeated abnormal movements. The child may lose consciousness or not be able to respond to spoken directions. Ask the mother if the child has had convulsions during this current illness. Use words the mother understands. For example, the mother may know convulsions as 'fits' or 'spasms'. See also if the child is convulsing now.

LOOK to see if the child is lethargic or unconscious

A lethargic child is not awake and alert when he should be. The child is drowsy and does not show interest in what is happening around him. Often the lethargic child does not look at his mother or watch your face when you talk. The child may stare blankly and appear not to notice what is going on around him. An unconscious child cannot be wakened. He does not respond when he is touched, shaken or spoken to.

Ask the mother if the child seems unusually sleepy or if she cannot wake the child. Look to see if the child wakens when the mother talks or shakes the child or when you clap your hands. However, if the child is sleeping and has cough or signs of difficult breathing, you must count the number of breaths first before you try to wake the child because it is easier to count the exact breathing rate when the child is calm.

When you have completed the above steps, you should record what you have found on the sick child case recording form. You must circle any general danger signs that are found, and check (✓) against the appropriate answer (yes or no) in the classify column.

31.6 HISTORY TAKING AND EXAMINATION of A SICK CHILD

31.6 HISTORY AND EXAMINATION OF A SICK CHILD

Good history taking and a thorough physical examination is the key to right diagnosis.

History Taking:

History in children is usually taken from the accompanying adult (parents, grandparents, aunt, uncle etc.). The interviewing person should be received in a friendly manner and treated with courtesy, respect and kindness. The interview is started by asking the name, age (or date of birth), sex of the child, names and address of the parents etc.; and is recorded routinely as in adults.

History in children differs from adults especially in the field of Growth and development, Nutrition and Infectious diseases and vaccination.

It should include the following four additional headings.

- Birth history
- Feeding/nutrition history
- Vaccination history and
- Developmental history

After noting the child's name, father's name, age and address, you should record the history by following the steps given below.

Presenting Complaints:

Record the immediate main complaints that led the parents to seek medical advice. The chief complaints should be recorded in chronological order i.e., complaints with longest duration are mentioned first and complaints with shortest duration are mentioned last.

History of Present Illness:

It is the detailed description of the chief complaints with duration and their order of appearance. Inquire as to when the patient was entirely well; when did the problems start and the order of its progress; the sequence of appearance of new symptoms with duration and any aggravating or relieving factors. If symptoms point to a disturbance of a particular organ-system, then ask specific questions relating to that system.

History:

Inquire about the past illnesses, which could have relevance to the present one or present state of health of the child. Also inquire about the medicines taken previously and their untoward effect. Also inquire about the infectious diseases he has suffered from and any complications thereof. History of similar complaints in the past is also helpful.

Birth History:

It should be taken under following three headings.

Antenatal History or History of pregnancy: Inquire about the health and nutritional status of the mother during pregnancy. Whether she has taken iron, multivitamin tablets or any other drugs during pregnancy. Inquire if mother had suffered from any illness during pregnancy e.g., hypertension, diabetes mellitus, pre-eclampsia, ante partum haemorrhage, infections like rubella, urinary tract infection, syphilis, hepatitis, tuberculosis, etc. Enquire about history of exposure to irradiation (X-ray) during first trimester. In the past obstetric history, enquire about the problems with previous pregnancies, stillbirths or miscarriages, birth weight of previous children, pre-maturity and blood transfusions. Enquire about maternal vaccination against tetanus.

Natal History or History of delivery:

Whether the delivery was conducted at home or in the hospital, and was it conducted by a dai, trained health worker or a doctor, and technique of sterilization of instruments. What was the length of gestation, time of rupture of membranes, duration of labour- whether prolonged or precipitate; and presentation and type of delivery i.e., spontaneous, vaginal, forceps, vacuum extraction or caesarean section. Any history of sedation or analgesia given to the mother during labour and any abnormal bleeding should also be asked.

Postnatal History:

Ask whether the child cried immediately after birth or was cyanosed and apnoeic and needed resuscitation at birth; any other problem with respiration, sucking or swallowing. Ask for any history of convulsions, fever, jaundice or rash after birth or in the neonatal period. Any procedures such as exchange transfusion, umbilical artery catheterization undertaken, or drugs given during neonatal period.

Feeding History:

Ask about how many hours after birth the first feed was given to the child; whether the child is/was breast-fed or bottle-fed; duration of breasts feeding, age at weaning or artificial feeding; any vitamin or iron supplements given; when solids were introduced in the diet, their nature and amount.

History of Immunization:

Ask about the type of vaccinations given, age at which vaccination was started, the number of doses given and any untoward reaction observed.

Developmental History:

Inquire about the type, age at which various developmental milestones are achieved and these are compared with the normal for his/her age e.g., smiling, ability to hold the neck, sit, crawl, stand, walk, talk and control of bladder and bowel etc.

Family History:

Inquire about the age of parents, number of siblings and any illness in the family especially tuberculosis and whether parents are closely related or not.

Physical Examination:

The child should be examined either in the mother's lap or while held over the shoulder. Older children can be examined while lying in bed or sitting in the chair.

- Height
- Weight
- General appearance
- Temperature
- Pallor
- Lymph nodes
- Heart rate
- Jaundice
- Bruises
- Respiratory rate
- Cyanosis

Comparing the achievements of various milestones at various ages is used for developmental assessment. Pulse, respiratory rate and temperature should be recorded routinely. Temperature ranges between 36.5^{O} C to 37.5^{O} C: but up to 1 year of age, it is 1^{O} C higher.

	Pulse	**Blood Pressure**
• Newborn	• 120 – 140 min	• 35-36 mean pressure
• Up to 1 year	• 80 –120 min	• 80 / 55 mm Hg
• Up to 5 years	• 75 – 120 min	• 85 / 60 mm Hg
• 5 – 15 years	• 70 –110 min	• 100 -110 / 70

	Respiration
• Newborn • Up to 1 year • -1-3 years • 4-10 years • Over 10 years	• 30-60/min • 20-40/min • 20-30/min • 15-25/min • 15-20/min

Head and Neck:

Size and shape of the head, moulding, cephalhematoma, caput-succedaneum, and state of the anterior fontanelle is noted. Any abnormal swelling or growth in the neck is also noted.

Eyes:

Examine the eyes for any sign of infection or abnormality.

Ears:

Examine ears for any abnormality of shape, low-set ears, any wax or boils.

Nose:

Examine shape of the nose, depressed bridge, movement of the alae-nasi and any nasal discharge.

Face:

General appearance, color, facial palsy is noted.

Mouth:

Note any harelip or cleft palate. Examine the lips and tongue for pallor, cyanosis, thrush or ulceration. Also note the number and state of teeth and conditions of tonsils.

Skin:

Examine the skin for pallor, cyanosis, jaundice, bruising, edema, scaling or birthmarks.

Respiratory System

- Examine throat for signs of infection
- Count Respiratory rate
- Chest: look for the shape, in drawing, type of breathing (in children it is mainly abdominal)

- Alae nasi Flaring

Cardiovascular System

- Count Pulse
- Take BP

Gastrointestinal System

- Oral cavity (for Thrush etc.)
- Teeth (number, missing, carries)
- Abdomen: distension, tenderness

CNS (Central Nervous System)

Examine state of consciousness. Look for

- Irritability
- Paralysis
- Abnormal movements

Perineum and Genitalia

Patency of anus.

- Testis
- Ambiguous Genitalia

TAKING THE TEMPERATURE

Temperature refers to the amount of heat produced by the body. It is measured by placing a thermometer in the mouth, rectum, or under the arm. Normal body temperature may range between 98 ^{O}F, and 99 ^{O}F, for it often varies in different persons. Fever is the term used to denote an elevation of the body temperature. The thermometer is a glass tube containing a column of mercury. The body heat causes the mercury to expand, and it rises to the point on the thermometer indicating the degree of intensity of the heat produced. Because these thermometers are self-registering, they must be shaken down before each use.

Purpose:

To determine whether the child has a fever, this might indicate the presence of infection.

Equipment required:

- Tray
- Balls of cotton wool.
- Soap solution
- Container of clean water

- Dettol or other disinfectant
- Oral thermometer
- Container or water for used thermometer

Procedure:

- Wash your hands
- Take a thermometer from the container of Dettol solution, and wipe it with cotton wool
- Shake the mercury down to a point below 96 OF using quick, snapping motion of the wrist.
- Wet the thermometer with water in the container on the tray
- Place the bulb end of the thermometer in the axilla of the child
- Keep his arm close to the chest wall
- Allow the thermometer to remain in place for three minutes
- Note and record the temperature.

Clean the thermometer in the following manner

- Wet a piece of cotton wool in soap solution.
- Wipe the thermometer well, from the end of the tube toward the bulb, and discard the cotton.
- Take a clean piece of cotton and repeat these two steps
- Rinse the thermometer in the container of clean water, dry it with cotton wool, and place it in the Dettol solution.

Important points to Remember:

- Never put a thermometer in warm or hot water
- Always be sure you shake the mercury down before using the thermometer.
- Report high elevations above 99 oF to the doctor.

31.7 INFECTIOUS DISEASES IN NEONATE AND CHILDACUTE RESPIRATORY INFECTIONS (ARIs)

31.7 INFECTIOUS DISEASES IN NEONATE AND CHILD ACUTE RESPIRATORY INFECTIONS (ARIs)

Acute respiratory infections (ARIs) are classified **as upper respiratory tract infections (URIs) or lower respiratory tract infections** (LRIs). The upper respiratory tract consists of the airways from the nostrils to the vocal cords in the larynx, including the paranasal sinuses and the middle ear. The lower respiratory tract covers the continuation of the airways from the trachea and bronchi to the bronchioles and the alveoli. ARIs are not confined to the respiratory tract and have systemic effects because of possible extension of infection or microbial toxins, inflammation, and reduced lung function. Diphtheria, pertussis (whooping cough), and measles are vaccine-preventable diseases that may have a respiratory tract component but also affect other systems

Upper Respiratory Tract Infections

URIs are the most common infectious diseases. They include rhinitis (common cold), sinusitis, ear infections, acute pharyngitis or tonsillopharyngitis, epiglottitis, and laryngitis—of which ear infections and pharyngitis cause the more severe complications (deafness and acute rheumatic fever, respectively).

The vast majority of URIs have a viral aetiology. Because most URIs are self-limiting, their complications are more important than the infections.

Acute viral infections predispose children to bacterial infections of the sinuses and middle ear, and aspiration of infected secretions and cells can result in LRIs

Acute Pharyngitis.

Acute pharyngitis is caused by viruses in more than 70 percent of cases in young children. Mild pharyngeal redness and swelling and tonsil enlargement are typical.

Streptococcal infection is rare in children under five and more common in older children. In countries with crowded living conditions and populations that may have a genetic predisposition, poststreptococcal sequelae such as acute rheumatic fever and carditis is common in school-age children

DIPTHERIA

It is an acute infectious disease caused by Corynebacterium diphtheria. The patient has sore throat and a greyish membrane on the mucus membrane of throat, which if removed, produces a bleeding surface.

Epidemiology:

- More common in temperate climates and in crowded unhygienic conditions.
- Transmitted by carriers and primarily by direct contact or droplet infection, also by indirect contact with articles of clothing etc.
- Children under 14 years and in un- immunized communities under 5 years are commonly affected.

Incubation Period: 2 – 5 days.

Clinical Features:

Diphtheria usually begins with low-grade fever, malaise, headache, and general aches and pains. If sore throat is present, it is usually mild and subsequent local features will depend on the site of primary involvement. pharyngitis in conjunction

with the development of a membrane on the throat is nearly always caused by Corynebacterium diphtheriae in developing countries. However, with the almost universal vaccination of infants with the DTP (diphtheria-tetanus-pertussis) vaccine, diphtheria is rare.

Pharyngeal Diphtheria

- Greyish membrane may be unilateral or bilateral on tonsils, uvula.
- Difficulty in breathing.
- Difficulty in swallowing

Acute Ear Infection.

Acute ear infection occurs with up to 30 percent of URIs. In developing countries with inadequate medical care, it may lead to perforated eardrums and chronic ear discharge in later childhood and ultimately to hearing impairment or deafness (Berman 1995b). Chronic ear infection following repeated episodes of acute ear infection is common in developing countries, affecting 2 to 6 percent of school-age children.

The associated hearing loss may be disabling and may affect learning. Repeated ear infections may lead to mastoiditis, which in turn may spread infection to the meninges. Mastoiditis and other complications of URIs account for nearly 5 percent of all ARI deaths worldwide

LOWER RESPIRATORY TRACT INFECTIONS

The common LRIs in children are pneumonia and bronchiolitis. The respiratory rate is a valuable clinical sign for diagnosing acute LRI in children who are coughing and breathing rapidly. The presence of lower chest wall indrawing identifies more severe disease

Currently, the most common causes of viral LRIs are RSVs. They tend to be highly seasonal, unlike parainfluenza viruses, the next most common cause of viral LRIs. The epidemiology of influenza viruses in children in developing countries deserves urgent investigation because safe and effective vaccines are available. Before the effective use of measles vaccine, the measles virus was the most important viral cause of respiratory tract–related morbidity and mortality in children in developing countries.

Pneumonia.

In the early 1980s, the global burden of childhood mortality due to pneumonia led the World Health Organization (WHO) to develop a pneumonia control strategy suitable for countries with limited resources and constrained health systems According to an estimate made by the

World Bank collection of development indicators, the prevalence of ARTIs among Pakistani children was found to be 17.7% in 2013. However, only 60.3% of them could get access to treatment. Except during the neonatal period, ARIs are the most common causes of both illness and mortality in children under five, who average three to six episodes of ARIs annually regardless of where they live or what their economic situation is

Simple signs were identified to classify varying severities of pneumonia in settings with little or no access to diagnostic technology; the classifications determined the appropriate case management actions. Children with fast breathing were classified as having “pneumonia” and were given an oral antibiotic to take at home for five days. Children who had chest indrawing with or without fast breathing were classified as having “severe pneumonia” and were referred to the closest higher-level health facility for treatment with injectable penicillin. Children who had any general danger signs were classified as having “severe pneumonia or very severe disease”. These children received a first dose of oral antibiotic and were then urgently referred to a higher-level health facility for further evaluation and treatment with parenteral antibiotics.

The revisions include changing the recommendation for the first-line antibiotic and re-defining the classification of pneumonia severity. The data show that oral amoxicillin is preferable to oral cotrimoxazole for the treatment of “fast breathing pneumonia” and is equivalent to injectable penicillin/ampicillin in cases of “chest indrawing pneumonia”. Hence, in a programmatic context, the distinction between previously defined “pneumonia” (fast breathing) and “severe pneumonia” (chest indrawing) loses its significance. The new classification is therefore simplified to include only two categories of pneumonia; “pneumonia” with fast breathing and/or chest indrawing, which requires home therapy with oral amoxicillin, and “severe pneumonia”, pneumonia with any general danger sign, which requires referral and injectable therapy.

LATEST WHO RECOMMENDATIONS:

Recommendation 1

Children with fast breathing pneumonia with no chest indrawing or general danger sign should be treated with oral amoxicillin: at least 40mg/kg/dose twice daily (80mg/kg/day) for five days. In areas with low HIV prevalence, give amoxicillin for three days. Children with fast-breathing pneumonia who fail on first-line treatment with amoxicillin should have the option of referral to a facility where there is appropriate second-line treatment.

Recommendation 2

Children aged 2–59 months with chest indrawing pneumonia should be treated with oral amoxicillin: at least 40mg/kg/dose twice daily for five days.

Recommendation 3

Children aged 2–59 months with severe pneumonia should be treated with parenteral ampicillin (or penicillin) and gentamicin as a first-line treatment. — Ampicillin: 50 mg/kg, or benzyl penicillin: 50 000 units per kg IM/IV every 6 hours for at least five days — Gentamicin: 7.5 mg/kg IM/IV once a day for at least five days Ceftriaxone should be used as a second-line treatment in children with severe pneumonia having failed on the first-line treatment.

Recommendation 4

Ampicillin (or penicillin when ampicillin is not available) plus gentamicin or ceftriaxone are recommended as a first-line antibiotic regimen for HIV-infected and -exposed infants and for children under 5 years of age with chest indrawing pneumonia or severe pneumonia. For HIV-infected and -exposed infants and for children with chest indrawing pneumonia or severe pneumonia, who do not respond to treatment with ampicillin or penicillin plus gentamicin, ceftriaxone alone is recommended for use as second-line treatment.

Recommendation 5

Empiric cotrimoxazole treatment for suspected Pneumocystis jirovecii (previously Pneumocystis carinii) pneumonia (PCP) is recommended as an additional treatment for HIV-infected and -exposed infants aged from 2 months up to 1 year with chest indrawing or severe pneumonia. Empirical cotrimoxazole treatment for Pneumocystis jirovecii pneumonia (PCP) is not recommended for HIV-infected and -exposed children over 1 year of age with chest indrawing or severe pneumonia.

From the clinical point of view the aim is to:

- Differentiate upper respiratory tract infection (i.e. infection of the respiratory tract above the level of the larynx.) from the lower respiratory tract infections.
- Treat upper respiratory tract infection without resorting to unnecessary use of antibiotics.
- Recognize signs and symptoms of lower respiratory tract infections i.e., infection of the respiratory tract below the level of larynx (larynx, trachea, bronchial tubes and lung parenchyma) and treat in a standardized manner.

Both bacteria and viruses can cause pneumonia. Bacterial pneumonia is often caused by Streptococcus pneumoniae (pneumococcus) or Haemophilus influenzae, mostly type b (Hib), and occasionally by Staphylococcus aureus or other streptococci.

Just 8 to 12 of the many types of pneumococci cause most cases of bacterial pneumonia, although the specific types may vary between adults and children and between geographic locations. Other pathogens, such as Mycoplasma pneumoniae and Chlamydia pneumoniae, cause atypical pneumonias. Their role as a cause of severe disease in children under five in developing countries is unclear.

Management of the Child with Cough or Difficult Breathing:

To manage a case of child with cough or difficult breathing a chart is used which has three parts i.e., assess the child, Classify the illness as given in the table below and treat.

Less than 2 months	**60 breaths / min or more**
2-12 months	**50 breaths / min or more**
12 months - 5 years	**40 breaths / min or more**

Assess

Ask

- How old is the child?
- Is the child coughing? For how long?
- Is the child able to drink? (Age 2 months up to 5 years).
- Has the young infant (age less than two months) stopped feeding well?
- Has the child had fever? For how long?
- Has the child had convulsions?

Look, listen: (Child must be calm)

- Count the breaths in one minute.
- Look for chest in-drawing (especially sub-costal).
- Look and listen for stridor.
- Look and listen for wheeze. Is it recurrent?
- See if the child is abnormally sleepy, or difficult to wake.
- Feel for fever, or too cold (or measure temperature).
- Check for clinically severe under nutrition.

CLASSIFY THE ILLNESS:

The Young Infant (Age Less Than 2 Months)

Check if the child has following Danger Signs:

- Stopped feeding well.
- Convulsions
- Abnormally drowsy or difficult to wake.
- Grunting
- Wheezing
- Fever or feels too cold

- Cyanosis
- Stridor in calm child

Classify it as a Very Severe Disease:

Treatment / Management

- Refer URGENTLY to hospital for assessment and parenteral antibiotics
- Keep young infant warm.
- Fast breathing (60 per minute or more) or
- Severe chest in drawing.

Classify it as Severe Pneumonia:

Treatment / Management:

- Refer urgently to hospital for antibiotic by injection
- Keep young infant warm.
- Check if following Signs are Present:
- Fast breathing (more than 60 per minute) and
- No chest in-drawing

Check if following Signs are Present:

- Breathing rate is less than 60 per minute
- No chest in-drawing

Not Pneumonia:

Treatment / Management

- Advise mother to give home care.
- Keep baby comfortably warm.
- Breast-feed frequently.
- Clear nose if it interferes with feeding.
- Watch for signs of illness.
- Advise mother to return if:
- Breathing becomes difficult
- Breathing becomes fast.
- Feeding becomes a problem.
- The young infant becomes sicker
- High fever.

THE CHILD AGED 2 MONTHS UP TO 5 YEARS

Check if the Child has following **Danger Signs:**

- Not able to drink.
- Convulsion
- Abnormally sleepy or difficult to wake
- Stridor in calm child
- Clinically severe under nutrition.

Classify it as a very severe disease

Treatment / Management

- Refer urgently to hospital.
- Give first dose of antibiotic.
- Treat fever, if present

Check if the Child has following Signs:

- Fast Breathing
- Severe chest in-drawing (esp. Sub costal).

Classify it as Severe Pneumonia:

Treatment / Management

- Refer urgently to hospital
- Give first dose antibiotic.
- Treat fever, if present.

Check if the Child has following Signs:

- No chest in-drawing
- Fast breathing

(50 per min. or more if child 2 months up to 1year, 40 per min. or more if child 1 year to 5 years)

Classify it as Pneumonia:

Treatment / Management

- Advise mothers to give home care
- Give antibiotic.
- Treat fever, if present.
- Advise mother to return with child in 2 days for reassessment, or earlier if the child is getting worse.

Check if the Child has following Signs:

- No chest in-drawing and
- Fast breathing (more than 50 per minute if child 2 months upto 12 months. more than 40 per minutes if child 12 months upto 5 years)

Classify it as not Pneumonia: Cough or Cold

- No chest in-drawing and
- No fast breathing

Treatment/ Management:

- If coughing more than 30 days, refer for assessment.
- Assess and treat ear problem or sore throat, if present
- Advise mother to give home care.
- Treat fever, if present.
- Treat wheezing, if present.

Reassessment:

Reassess in 2 days a child who is taking an antibiotic for pneumonia:

- Signs are:
- Signs are Worse Treatment
- Not able to drink
- Has chest in drawing Refer URGENTLY to hospital.
- Has other danger signs
- Signs are the same
- Change Antibiotic or Refer to hospital
- Signs are improving
- Finish 5 days of antibiotic.
- Breathing slower.
- Less fever.
- Eating better.

TONSILLITIS

Definition: Acute or chronic infection of the tonsils accompanied by fever, general malaise, and sore throat with pain and swelling are common in children.

Causative organisms: Streptococcus, staphylococcus, and pneumococcus occasionally.

Reservoir and source of infection: Infected tonsils and secretion of the nose and throat.

Mode of transmission: Direct contact; Indirect, through droplet infection, and fomites.

Treatment:

- Gargles of antiseptic solution or saline water.
- Antibiotic – Erythromycin or Amoxycillin
- Plenty of fluids by mouth.
- Paracetamol syrup may be given to control temperature if it is high.

COMMON COLD

It is a common upper respiratory tract disease of children caused by a virus. Symptoms may include:

- Sneezing.
- Running of nose / thick discharge.
- Pain in throat.
- Cough
- Fever
- Difficulty in breathing due to nasal obstruction.

Complications:

- If not properly managed, the condition can get worse.
- Pneumonia can occur.

Treatment:

- The child should rest
- Take plenty of fluids.
- Keep the nose clean to avoid difficulty in breathing.

Prevention

- Vitamin C and Vitamin A should be given to improve resistance.
- Avoid contact with patients having common cold.
- Take good nutrition.

TYPHOID

Typhoid is a bacterial infection caused by the Salmonella Typhi (S. Typhi) bacteria, from the family Salmonella (causes food poisoning), which causes typhoid fever. The bacteria live in humans and is shed through a person's urine or faeces. When the bacteria enter the body, it multiplies quickly and spreads into the body's bloodstream. Typhoid fever in children can be caused due to negligent care and exposure to infected food and water. The symptoms seen are mild to severe and can disappear within 5 days after the treatment has begun. After recovery, the child could become a carrier of the bacteria, which means he can pass the

disease to other people.

Causative organisms:

Salmonella typhi

Source and reservoir of infection:

Faeces and urine of infected persons and carriers.

Mode of transmission:

Is through eating or drinking contaminated food or water. The child can get typhoid fever from drinking water or eating food that has been contaminated by the typhoid bacteria. This can happen if food or drink is handled by someone with typhoid fever or who is a carrier of the bacteria.

Contact with infected stool

Typhoid fever easily passes from one person to another if people don't wash their hands properly. One can get the bacteria from changing nappies of a baby with typhoid fever.

Symptoms of typhoid fever

Mild to severe infection characterized by constantly high temperature, headache, abdominal distension or discomfort, and may/may not be accompanied by fine rash on the abdomen and trunk. There may be diarrhea in some cases, and constipation in others. Children are more at risk of getting typhoid fever than adults

- Headache.
- Feeling sick.
- Not feeding / eating.
- Tiredness.
- A rash made up of small pink spots on your child's chest and tummy.
- Tummy pain.
- constipation (more common in adults)
- diarrhea.

Carriers

Some people who have typhoid fever do not get sick but they can still carry the bacteria and make others sick

- Indirect spread through water, milk, flies, fruits or vegetables.
- Flies are vectors in transmitting the infection from place to place.

- Carriers and contacts of the infected food.

Incubation period: 1 – 3 weeks.

Period of communicability: Till the stool cultures are negative.

Complications may include:

- internal bleeding
- a hole in your digestive system
- meningitis
- infection of other organs

ROLE OF FWW IN PREVENTIONAND TREATMENT OF TYPHOID:

1 MASS HEALTH EDUCATION

- Sanitary disposal of excreta
- Clean drinking water
- Boiling water before consumption
- Fly control
- Control of carriers especially those who handle food.
- Immunization: Active immunization of contacts.

2 ADVICE FOR PREVENTING THE SPREAD

- make sure the child always washes and dries their hands thoroughly after going to the toilet
- give the child their own hand towel or paper towels and face cloth so they don't share with others
- put paper hand towels in a bag and put the bag straight out with the rubbish
- if a baby has typhoid fever, advice the mother to clean and dry her hands thoroughly after changing their nappy
- wash hand towels regularly
- wash soiled clothing and linen separately in hot soapy water
- don't let the child touch or prepare food for other people

3 GOING BACK TO SCHOOL after TYPHOID FEVER

Your child will need to stay home until at least 48 hours after symptoms stop. Children who go to daycare will need to give extra poo samples to make sure the bacteria has gone before they go back to daycare. Older children may also need to provide poo samples before being allowed to go back to school.

Some children get sick again about a week after they finish their antibiotics. If your child starts to feel sick again, see your doctor as soon as possible.

4 WHEN SHOULD YOU REFER FOR IMMEDIATE CARE?

If your baby shows signs of high fever, uneasiness, persistent vomiting and diarrhea, you must consult a doctor. Even if the symptoms are mild, it is advisable see a doctor to nip any infection in the bud

5 SPECIFIC TREATMENT:

- Bed rest
- Good nursing care
- Refer to doctor
- Chloramphenicol, Amoxycillin, Ofloxacin and Cefixime are the drugs used to treat Typhoid.
- Only liquid diet to be given to the patient till patient is symptom free.

Refer to a doctor for proper management.

Advice the mother not to stop antibiotics when the child starts to feel well as they might get sick again.

DYSENTRY:

Refers to a sub-acute or chronic infection of the large Intestine. Dysentery is an infectious disease associated with severe diarrhea. Dysentery is an intestinal inflammation, primarily of the colon. It can lead to mild or severe stomach cramps and severe diarrhea with mucus or blood in the feces. Without adequate hydration, it can be fatal.

Amoebic dysentery, or amoebiasis

It is caused by *Entamoeba histolytica (E. histolytica)*, an amoeba.The amoebae group together to form a cyst, and these cysts emerge from the body in human feces. In areas of poor sanitation, the amoebae can contaminate food and water and infect other humans, as they can survive for long periods outside the body. They can also linger on people's hands after using the bathroom. Good hygiene practice reduces the risk of spreading infection

Bacillary dysentery, or shigellosis

This type produces the most severe symptoms. It is caused by the *Shigella* bacillus. Poor hygiene is the main source. Shigellosis can also spread because of tainted food

Other causes

Other causes include a parasitic worm infection, chemical irritation, or viral infection

Incubation period: 7 – 14 days.

Symptoms & Signs:

- Acute onset with frequent stools/day with mucous and blood.
- Diffuse abdominal pain.
- Temperature up to 100^{O} F.
- General weakness.
- Tender abdomen.
- Loss of appetite.
- Malaise.

Diagnosis:

- History
- Stool examination.

Complications

Complications of dysentery are few, but they can be severe.

1) **Dehydration**: Frequent diarrhea and vomiting can quickly lead to dehydration. In infants and young children, this can quickly become life-threatening.
2) **Liver abscess**: If amoebae spread to the liver, an abscess can form there.
3) **Postinfectious arthritis**: Joint pain may occur following the infection.
4) **Hemolytic uremic syndrome**: Shigella dysentery can cause the red blood cells to block the entrance to the kidneys, leading to anaemia, low platelet count, and kidney failure
5) Some patients have also experienced seizures after infection.

Prevention:

Dysentery mostly stems from poor hygiene. To reduce the risk of infection, people should wash their hands regularly with soap and water, especially before and after using the bathroom and preparing food. This can reduce the frequency of diarrhea by up to percent. Other main measures include.

- Protection of water from contamination
- Fly control.
- Hygienic handling of food.
- Ensure food is thoroughly cooked
- Boiled water to be used for drinking.
- Vegetables and fruits should be properly washed before use.

Treatment:

- ORS.
- Syrup Flagyl (Metronidazole): According to age

MEASLES

It is an acute viral infection transmitted by droplet spread, highly contagious with a worldwide distribution. It starts like a heavy cold, which is followed by a red, blotchy rash on the head and body.

Its incidence is high in winter months. It is a frequent cause of ill health and mortality in undernourished children below the age of 3 years.

Measles is caused by the measles virus. Measles is **very contagious**. The virus spreads from person-to-person via 'droplets' from coughing or sneezing It is uncommon below the age of 6 to 9 months due to the protection provided by maternal antibodies transmitted during foetal life.

Period of Infectivity:

The period of infectivity is 4 days before and 7 days after the appearance of rash. If a child gets measles, she's infectious from one week before until one week after the rash appears.

SYMPTOMS

The measles virus usually infects children 10-12 days before any symptoms appear.The earliest symptoms look like those of a heavy cold – runy nose, fever, conjunctivitis and dry cough. Early in the illness children can have tiny white marks on the insides of their mouths. These are called 'Koplik spots'.

The measles **rash** typically appears on the third or fourth day of the illness, starting behind the ears and along the hairline. It consists of small, red, irregularly shaped patches that spread over the face and neck during the first 24 hours, later spreading to the body, arms and legs. The patches might join to make the skin look blotchy. When this happens, children often get a high fever too.

Children usually start to feel better after 3-5 days. The rash starts to fade and the fever goes down. Some children have skin peeling at this time. It's unusual for a child to get a fever again after recovering from measles. But measles can weaken the immune system, which means your child is at risk of getting other infections including pneumonia. Encephalitis is another rare but very serious complication of measles.

Clinical Features:

History of contact is usually elicited. It is characterized by three stages:

- Incubation period.

- The Prodromal (catarrhal) stage
- Maculopapular stage.

Incubation Period:

10 –12 days with few signs and symptoms if present.

Prodromal Stage:

Usually lasting for 3–5 days. There is high fever, lassitude, cough, coryza and conjunctivitis. The cough is harsh and more at night. Koplik spots, which are greyish white speck on a red base on the buccal mucosa, are present; these appear by 2-3 days and rapidly disappear within 12 – 18 hours.

Maculopapular Stage:

At the onset of this stage, temperature rises abruptly and reaches 40-40.5 ^{o}C (104-105 ^{o}F). The rash starts as faint macules on the face behind the ears and along the hairline. As the rash spreads to the trunk and limbs, it becomes increasingly maculopapular. The general appearance (the measly look) is characteristic. It is red eyed, with puffy eyelids and thin nasal discharge. As it reaches the legs and feet on the second or third day, it is beginning to fade on the face. The rash fades in the same sequence as its appearance, from the face downward leavening desquamation and brownish discoloration. This also usually disappears within 7-10 days.

Hemorrhagic Measles or Black Measles:

It is a severe form in which rash is confluent; petechiae may be present or there may be intensive ecchymoses. Bleeding may occur from the mouth, nose or bowel and death may result even before the rash has appeared.

Treatment for measles

There’s no medication that can make measles go away, but there are things that can be done to ease the child’s symptoms:

- Give your child paracetamol in recommended doses to lower his fever and help him feel better.
- Encourage your child to drink plenty of water and get lots of rest.
- Try dimming the lights in your house if your child complains of sore eyes
- Bacterial super-infection should be treated with anti-microbial therapy when present
- Children with measles or children who’ve been in contact with someone who could have measles should avoid contact with other children and unimmunized adults until after they’ve seen a doctor

Prognosis:

It is a self-limited disease lasting 7 - 10 days often without sequelae in well- nourished, otherwise healthy children.

Prevention of measles

The best way to avoid measles is to have the child immunized. This gives the child 99% immunity against measles.

As part of the Pakistan Extended Program for Immunization (EPI) every child gets **two free measles immunizations.** The child needs both doses for the immunization to work. She'll get these immunizations at:

- 12 months, as part of the MMR vaccine, which protects your child from measles, mumps and rubella (German measles)
- 18 months, as part of the MMRV vaccine, which protects your child from measles, mumps, rubella and varicella (chickenpox).

Don't forget to wash your hands carefully when caring for a child with measles.

Some parents are worried that the MMR vaccine is associated with an increased risk of autism spectrum disorder (ASD). There's no scientific evidence that vaccines are linked to the development of ASD. Measles vaccine affords 95% protection. It should be administered at 9 months of age.

MUMPS

It is an acute viral infection, which is characterized by painful enlargement of the salivary glands and sometimes involvement of the gonads, meninges, pancreas and other organs. It is more common between the ages of 5 – 15 years. Since the risk of orchitis is much greater than the risk of oophoritis, it is a serious disease in adolescent males.

Epidemiology:

The virus spread from humans by direct contact, droplets, fomites contaminated by infectious saliva and possibly urine. Incubation period ranges from 14 – 24 days with peak at 17 – 18 days. Patient is infectious 24 hours prior to appearance of swelling and up to 3 days after the swelling has subsided.

A life- long immunity is produced by any type of clinical or sub clinical infection. Maternal antibodies are usually protective for the first 6 – 8 months of the infant.

Clinical Manifestations:

In children, the prodromal symptoms are rare, but may show as fever, muscular pain especially involving neck, headache and malaise. Many kids have no symptoms, or very mild symptoms that feel like a cold. Those who do get symptoms might:

- have a fever

- have a headache
- lose their appetite
- feel tired, achy, and generally unwell

Within a couple days, the parotid glands can swell and get painful. This makes the cheeks look puffy. The pain gets worse when the child swallows, talks, chews, or drinks acidic juices (like orange juice). One or both parotid glands can swell. Sometimes one swells a few days before the other.

Rarely, someone might get:

- encephalitis or meningitis
- orchitis (inflammation of the testicles)
- oophoritis (inflammation of the ovaries)
- pancreatitis (inflammation of the pancreas)
- hearing loss

Is Mumps Contagious?

Mumps is contagious. It spreads in tiny drops of fluid when someone with the virus sneezes, coughs, talks, or laughs. Contact with objects they use — like dirty tissues, straws, or drinking glasses — also can pass the virus. If they don't wash their hands, any surface they touch can spread mumps to others who touch it.

Someone with mumps is most contagious from 2 days before symptoms start to 5 days after they end. Anyone who is infected can pass the disease, even if they don't have symptoms.

Who Gets Mumps?

Mumps happens most often in school-age kids and college students. Outbreaks are rare but can happen. An outbreak is when many people from one area come down with the same disease. Experts are looking into why outbreaks still happen and ways to prevent them. Most people who get mumps never get it again.

How Is Mumps Diagnosed?

Call the doctor if your child has any mumps symptoms or has been around someone with mumps. The doctor might give you special instructions before you go to the office to protect other patients from the virus.

The doctor will do an exam, ask about symptoms, and check to see if your child got the mumps vaccine. Doctors sometimes send a saliva sample or blood sample for testing.

How Is Mumps Treated?

There's no specific medical treatment for mumps. To help manage symptoms:

- Give your child plenty of fluids and soft foods that are easy to chew. Don't give tart or acidic fruit juices (like orange juice, grapefruit juice, or lemonade) that can make parotid gland pain worse.
- Give medicine to bring down fever or ease pain, such as acetaminophen or ibuprofen, if your child is uncomfortable. Never give aspirin to a child who has a viral illness, as such use is linked to Reye’s syndrome.
- Soothe swollen parotid glands with either warm or cool compresses (whichever feels better).
- Help your child get plenty of rest.
- Kids with mumps should stay home for 5 days from the start of parotid gland swelling. Ask your doctor about when your child can return to school or childcare.

How Long Does Mumps Last?

Most children with mumps recover fully in about 2 weeks.

Can Mumps Be Prevented?

The best way to protect your kids is to make sure they're immunized against mumps.

For most kids, mumps protection is part of the measles-mumps-rubella vaccine (MMR) or measles-mumps-rubella-varicella vaccine (MMRV). They get these when they're 12–15 months old and again when they're 4–6 years old.

Sometimes people who have been vaccinated still get mumps. But their symptoms will be much milder than if they had not gotten the vaccine.

During a mumps outbreak, doctors may recommend more shots of the MMR vaccine for some people who are more likely to get mumps. Your doctor will have the most current information.

When Should I Call the Doctor?

Mumps can sometimes cause rare but severe problems. Call the doctor right away if your child has mumps and:

- gets a severe headache
- has a stiff neck
- has seizures
- is very drowsy
- has changes in consciousness (passes out)

Watch for belly pain. It can be a sign of problems with the pancreas in either boys or girls, or the ovaries in girls. In boys, watch for high fever with pain and swelling of the testicles. Rarely, a blockage in the parotid gland (from a salivary stone, which is like a kidney stone) can cause painful swelling.

Complications:

- Orchitis / Epididymitis: Generally unilateral, it usually occurs in older boys at or after puberty, often a week after the onset of parotid swelling. The testis may atrophy after recovery.
- Others: Meningoencephalitis, pancreatitis, nephritis, thyroiditis, myocarditis, mastitis etc.

Prevention:

Active immunization is achieved by giving vaccine after the age of 12 months either singly, or in combination with measles and rubella as MMR

MALARIA

Malaria is a widely prevalent disease in Pakistan. Four species of plasmodium cause malaria, which are as follows:

- Plasmodium vivax
- Plasmodium malariae
- Plasmodium ovale
- Plasmodium falciparum.

Transmission is by the bite of infected female Anopheles mosquito. Neonatal malaria can occur when during delivery infected maternal blood mixes with neonate's blood. Transmission of Plasmodium through placenta is rare. Infected blood transfusion also can cause malaria.

The Life Cycle of Malarial Parasite:

- Mosquito sucks gametocytes from infected human. In the mosquito these develop to sporozoites.
- Sporozoites are inoculated to the next person that the infected mosquito bites.
- In the host, the parasites develop in the liver and then escape into the blood stream and
- Invade the red cells where they multiply, rupture the red cells, come out as merozoites and infect more red cells again and again. This phase takes 48 hours (72 hours for falciparum). Some of these parasites change to gametocytes and the cycle is repeated.
- Plasmodium vivax and plasmodium ovale can remain dormant in liver for long period and can cause relapse years later. No such relapses occur in other types of malaria.

Incubation period:

- Plasmodium falciparum 10 – 13 days.
- Plasmodium vivax and ovale 12 – 16 days.
- Plasmodium malariae 27 – 37 days.

Clinical Features:

Recurrent episodes of intermittent fever, vomiting, irritability, poor feeding and rarely jaundice. Older children also complain of headache, body aches and tiredness. Fever, with or without chills, is periodic and occurs every 48 hours (72 hours in plasmodium malaria) and lasts for 6 – 8 hours but may be irregular or persistent if multiple parasite cycles are going on. Thus, the typical cyclical pattern of fever may not be seen in children.

- Plasmodium falciparum can cause serious complications such as:
- Intestinal bleeding
- Pneumonitis
- Oedema
- Visual disturbance
- Convulsions (cerebral malaria)
- Coma
- Retinal haemorrhages
- Hyperpyrexia
- Hemolytic anaemia
- Renal failure with dark urine (black water fever), etc.

Diagnosis: Blood is examined 8 hourly for 3 days during and between attacks. Thick and thin films are examined. The diagnosis of malaria relies on detecting one or more of the four human plasmodia in blood smears.

Prevention:

- Insect repellents, mosquito nets, sprays, repellent chemicals are useful.
- Water should not be allowed to stagnate e.g., potholes etc. Drain these whenever possible.

Treatment:

Chloroquine is given which is available as 150-mg chloroquine as sulphate or phosphate and 50 mg / ml syrup.

Dose

For adults:4 tablets stat;2 tablets after 6 hours;2 tablets daily for next 2 days Children: Syrup; Dose adjusted according to age

Key facts

- In 2019 an estimated 5.2 million children under 5 years died mostly from preventable and treatable causes. Children aged 1 to 11 months accounted for 1.5 million of these deaths while children aged 1 to 4 years accounted for 1.3 million deaths. Newborns (under 28 days) accounted for the remaining 2.4 million deaths.
- An additional 500,000 older children (5 to 9 years) died in 2019.
- Leading causes of death in children under-5 years are preterm birth complications, birth asphyxia/trauma, pneumonia, congenital anomalies, diarrhea and malaria, all of which can be prevented or treated with access to simple, affordable interventions including immunization, adequate nutrition, safe water and food and quality care by a trained health provider when needed.
- Older children (5-9 years) had one of the largest declines in mortality since 1990 (61%), due to a decline in infectious diseases. Injuries (including road traffic injuries and drowning) are the leading causes of death among older children.

Acute watery diarrhea is the most common health problem of children in Pakistan, and it claims more lives of children less than 5 years of age than any other disease. Infectious diarrhea caused by enteric pathogens is one of the major factors in morbidity and mortality worldwide particularly in Pakistan. It is mainly associated with three causative agents i.e. bacteria, viruses and parasites. Emerging or reemerging bacterial diarrhea is a global problem. In Pakistan one child dies every minute from diarrhea and acute respiratory infection therefore bio surveillance must be considered as an integral and continuous task at national level to save thousands of children

Prevalence of diarrhea (% of children under 5): Q3 in Pakistan was reported at 27.7 % in 2018, according to the World Bank

In 2015, Pakistan had the third highest mortality rate in neonates and children under 5 years and was among the ten countries with the highest under-5 mortality burden for both diarrhea and lower respiratory infection

Besides this, it leaves many more children undernourished, and therefore more at risk from other diseases. Diarrhea is more common in the hot season, and most deaths occur within the first 4 months of life.

ACUTE WATERY DIARRHEA

Definition:

Diarrhea can be defined as a change in frequency and consistency of the child's usual stool. At certain times child's stool may be more frequent due to other reasons. For example:

- When the baby is being breast fed, he / she may pass very soft, yellow stools after every feed. This is not diarrhea, but the normal pattern when the baby is breast-feeding.
- Similarly, when weaning foods are first introduced, the child may pass more frequent stools as a reaction to the change in diet.

It is important to understand that it is the change in the usual pattern and not necessarily the number of stools passed that determines if the child has diarrhea. Diarrhea is not a disease in itself – it is a symptom of a disease, and it is necessary to try to discover why this has developed, as well as how to manage it. Diarrhea is most common between 6 months and 3 years of age. It is also common in babies less than 6 months old who are drinking animal milk or infant feeding formulas.

Causes of Diarrhea:

There are many different causes of diarrhea, but the most common causes may be divided into two main groups.

Intestinal Causes such as infections, parasites etc. Diarrhea is caused by infection of the bowel by very small germs or organisms that cannot be seen by the eye.They enter the mouth and then the bowel through dirty hands, dirty food, dirty milk, dirty water, dirty feeding bottles, dirty cooking pots and feeding vessels, and so on. Some of them are also passed out in the stools and so may infect other people.

Associated infections such as malaria, respiratory tract and ear infections, and measles may also cause diarrhea. Diarrhea whether it is a due to associated infections or is a result of intestinal causes needs medical intervention.

Diarrhea can be dangerous:

Diarrhea requires immediate action, and it should never be neglected. The two main dangers of diarrhea are death and malnutrition.

Death from diarrhea is usually caused by losing large amounts of water and salts from the body in the frequent watery stools. This is called dehydration. Small children with severe diarrhea lose water and salts fast and can die quickly, sometimes in a few hours. Many children with diarrhea recover by themselves, but they become weaker.

Malnutrition can be caused by diarrhea, and makes it worse, because food passes too quickly through the body for it to be absorbed and because a person with diarrhea usually feels too ill to be hungry and so does not eat. In addition, diarrhea is more severe and more common in people who are already suffering from malnutrition.

In many communities it is a common practice to starve children when they have diarrhea. This is wrong because it causes malnutrition, which will make the child have diarrhea more frequently. To prevent children with diarrhea from becoming malnourished, it is important to give them correct treatment and proper nutrition.

DEHYDRATION:

This is a set of signs and symptoms caused by loss of large amounts of water and important salts from the body. The most useful individual signs for identifying dehydration in children are prolonged capillary refill time, abnormal skin turgor, and abnormal respiratory pattern. However, clinical dehydration scales based on a combination of physical examination findings are better predictors than individual signs. Oral rehydration therapy is the preferred treatment

of mild to moderate dehydration caused by diarrhea in children. Appropriate oral rehydration therapy is as effective as intravenous fluid in managing fluid and electrolyte losses and has many advantages. Goals of oral rehydration therapy are restoration of circulating blood volume, restoration of interstitial fluid volume, and maintenance of rehydration. When rehydration is achieved, a normal age-appropriate diet should be initiated.

Signs and Symptoms of Diarrhea:

The signs and symptoms are thirst, decreased urine, dry mouth, sunken eyes, sunken fontanelle (in babies), loss of elasticity of skin, body is listless/limp, child is restless and even may become unconscious.

Causes of Dehydration:

- Diarrhea
- Vomiting
- High fever
- Heat exhaustion and stroke
- Profuse sweating
- Low intake of water and salts

How Dehydration Occurs:

The body takes in water and salts from drinks and food. When the bowel is healthy, the water and salts pass from the bowel into the blood and are then carried to all parts of the body to be used. The water and salts that the body does not need, and what it has used up, it loses through the stools, urine and sweat; it may also lose some by vomiting.

When there is diarrhea, the intestine does not work normally and the water and salts pass into the blood more slowly, or not at all. Therefore, the body does not take up as much of them as it needs to replace what it is losing, and more than the normal amounts are passed in the stools. Thus, the body is drained of water and salts; this is dehydration.

The more diarrhea a person has, the more water and salts he loses and the more he is dehydrated. A lot of vomiting and sweating can also cause dehydration. Dehydration occurs faster in hot climates and, when there, is fever.

Management of Diarrhea:

Many types of diarrhea are caused by non-harmful micro-organisms and can be effectively treated in the home. All diarrheas are made more serious when not correctly managed, and most deaths from diarrhea can be prevented. If the child has diarrhea and fever lasting more than 24 hours, or when there is blood and mucus in his stool, you should refer the child to a hospital. Regardless of the cause of the diarrhea, there are certain actions that should be taken when the child gets diarrhea. By following these procedures, many children will recover with no further intervention.

Give extra fluids:

The main cause of death in children with diarrhea is “Dehydration”. When the child is passing frequent loose stools, he / she is losing valuable fluid and important salts from his / her body. If these are not replaced quickly, dehydration occurs. By replacing these fluids and salts right at the beginning, the child need not become dehydrated. Do not wait until this has already happened.

Remember, during the hot season the baby already needs extra fluid. He / she cannot afford to lose more because of diarrhea.

The signs of dehydration start with:

- Thirst
- Decreased passing of urine.

At this stage one can easily prevent the child from becoming more dehydrated and developing more severe symptoms such as:

- Dry mouth
- Sunken eyes
- Loss of elasticity of skin
- In small babies, the soft area at the top of head, the fontanelle becomes sunken.
- Body becomes limp, and child may be restless.

If two or more of the above signs appear, refer immediately to hospital

Deciding which Children Need Special Treatment:

There are three groups of children with diarrhea who need special treatment:

- Those with severe dehydration.
- Those with other diseases and complications of diarrhea.
- Those who have not improved by giving ORS solution.

The Family Welfare Worker should know that a child in any of these groups should be sent as soon as possible to a supervisor, health centre, or hospital.

1. Look at Condition of Eyes/ Tears Mouth & Tongue Thirst	Well, alert Normal Present Moist Normal	Restless, irritable Sunken Absent Dry Drinks eagerly	Lethargic, unconscious Very sunken, dry Absent Very dry Not able to drink
2.Feel	Goes back quickly	Goes back slowly	Goes back very

Skin pinch			slowly
3.Decide	The patient has No signs of Dehydration	There is Some Dehydration	There is Severe Dehydration
4.Treat	Use Plan A	Weigh the patient	Weigh the patient
		and Use Plan B	And Use Plan C

TREATMENT PLAN A

Use this plan to teach mothers to continue to treat at home Explain the three rules for treating diarrhea at home

GIVE THE CHILD MORE FLUIDS THAN USUAL TO PREVENT DEHYDRATION

- Use recommended home fluids such as rice water, cereal gruel, plain water or ORS
- Give as much fluids as the child will take
- Continue giving these liquids until diarrhea stops.

GIVE THE CHILD PLENTY OF FOOD TO PREVENT UNDER NUTRITION

- Continue to breast feed frequently
- If the child is not breast fed, give the usual milk. If the child is less than 6 months and not taking solid food, dilute milk with an equal amount of water
- If the child is 6 months or older, or already taking solid food
- Give cereal or another starchy food mixed with pulses, vegetables and meat or fish, if possible
- Give fruit juice or mashed banana to provide potassium
- Give freshly prepared food. Cook or mash or grind food well
- Encourage the child to eat; offer food at least 6 times a day
- Give the same food after diarrhea stops, and give an extra meal each day for two weeks

TAKE THE CHILD TO A HEALTH CENTRE IF DOES NOT GET BETTER IN THREE DAYS.

TREATMENT PLAN - B

• Less than 4 months	• Less than 5 kg	• 200-400

• 4-11 months	• 5-7.9 kg	• 400-600
• 12-23 months	• 8-10.9 kg	• 600-800
• 2-4 year	• 11-15.9 kg	• 800-1200
• 5-14 year	• 16-29.9 kg	• 1200-2200
• 15 year or over	• 30 kg or more	• 2200-4000

Give the child plenty of ORS according to the guidelines

- If the child wants ORS give more
- Encourage the mother to continue breast feeding
- For infants under 6 months who are not breast fed, also give 100-200 ml clear water during this period
- Observe the child carefully and help the mother give ORS solution, If the situation does not improve refer to the health centre immediately
- If the condition improves, then move to plan A
- If the condition does not get netter or worsens, refer to the hospital immediately

TREATMENT PLAN – C

The child needs medical help immediately refer to the health centre

REHYDRATION

Rehydration is the replacement of the lost water and salt by giving a standard oral rehydration salt solution.

Oral Rehydration Salts (ORS):

The most important treatment for diarrhea is fluids. Any fluid such as water, tea, and juice are good; as this will replace the fluid the child is losing. However, in order to replace the important salts, a special preparation is necessary. This salt is readily available at the medical store called Oral Rehydration Salt (ORS).

One ORS packet is dissolved in one litre of water; however, be careful, as ½ litre packets are also available in some areas. Always check the instructions on the packet. If the solution is too weak – it will not be effective. If it is too strong it may increase the child's diarrhea.

Preparing Oral Rehydration Solution from a Packet:

First, wash thoroughly a large pot or jug or other container in which the ORS solution can be kept. Wash the cup or other small vessel from which the child can drink the solution, and a

mixing spoon. Pour one liter of clean drinking water (boiled and cooled water is the safest) into the pot.

Open the packet of Oral Rehydration Salts and put the powder inside it into one liter of drinking-water. With the clean spoon, mix the powder until it has completely dissolved in the water. To make sure the mixture is correct, taste it; it should taste less salty than tears. If it is saltier, add a little clean water or throw it away and mix another amount according to the instructions. Every community health worker should have a regular supply of packets of Oral Rehydration Salts and a liter measure.

If there are no Oral Rehydration Salts Packets:

If there are no packets of Oral Rehydration Salts available, a very young child should continue to be breast-fed. The slightly older child may be given weak tea, green-coconut water, barley water, juice, rice water diluted with clean drinking water, thin vegetable soup (made with carrots or peas) or even plain water.

Family Welfare Workers should not only learn how to prepare Oral Rehydration Solution, but they should also teach community women to prepare it on their own at home. This is not always simple, because it is important that the amount of sugar, salt and water are correct.

Preparation of Sugar-Salt-Solution at home:

At first hands and all utensils for preparing this solution should be washed. Clean water should be used for the solution. Sugar and salt in the quantities below are then added.

• **Water**	• **Sugar**	• **Salt**
• **1 Litre**	• **8Level Teaspoons.**	• **1Level Teaspoon**

When the solution is made correctly it should taste like a “tear”. The juice of a fresh lemon may be added for providing potassium along with flavour. Always keep this solution covered and make it up fresh every day.

Protecting the Rehydration solution:

Protection of the prepared solution is important. Use the fluid on the day it is prepared. Keep the container in a cool place preferably in a fridge and keep it covered at all times so that flies and dust cannot get in. Throw away any fluid that was prepared the day before.

Quantity of Fluid to be Given:

The amount of fluid the child needs depends on child’s age and weight. However, he/she should be given as much fluid as will be tolerated. Do not force the child to take large quantities at once, because the child may vomit. Small amounts given frequently are easily absorbed, and the child will take them readily. When giving the fluid, always use a cup and spoon or just a cup. Do NOT use a bottle. Even newborn babies very quickly learn to take fluid from a spoon, and this is the safest method. Bottle-feeding is a common cause of diarrhea, as it is very difficult

to clean the bottle properly.

Give small amounts of the solution to the child every few minutes. The best way is to give 2-3 small spoonful from a cup, wait 2-3 minutes, then give again. In this way, the child is less likely to vomit. If he does vomit, wait 5-10 minutes, then give again. Vomiting is not a reason to stop treatment with Oral Rehydration Salts solution, unless it is severe and frequent. In that case the child should be taken to the nearest health centre / hospital. Patience and persistence are very important in feeding a sick child with fluids. When the child improves, he may drink from a cup.

Keep Feeding:

Diarrhea can lead the child to become malnourished. Therefore, it is very important to continue feeding the child when he has diarrhea. Breast milk is the best food for small babies and mother should always continue to breast feed the baby when he has diarrhea. If the child is older and taking solid foods, these also should be continued. Foods such as yogurt, banana, eggs and rice are easily digested and stimulate the baby to eat his usual diet. Try to encourage him to continue eating by preparing small amounts of “tasty” food frequently. Do not give him large amounts of coarse fruits and vegetables, which are not easily digested. After his diarrhea has stopped, continue to give him one extra feed a day for every day that he has been sick to regain the weight he may have lost.

Remember: Always continue to feed the child when he has diarrhea.

Prevention:

One can protect the child from getting diarrheal disease by following certain practices.

Do’s

- Breast-feed the baby.
- Wash hands before preparing food, eating / feeding, and after using the latrine.
- Cover food to protect it from dirt and flies.
- All cooking utensils must be kept clean, and food protected from dirt and flies.
- Dispose of all rubbish properly by burning or burying.
- Make sure water supply is clean.
- Give the child a varied diet of animal foods, fresh fruit and vegetables.
- Immunize the child against the preventable diseases.

Do Not

- Bottle-feed the baby – always use a cup and spoon.
- Give him a soother –it is impossible to keep it clean & is a big source of infection.

Remember that: Inadequate personal and domestic hygiene is the main reason behind

diarrheal diseases.

PREPARING ORS SOLUTION FROM PACKET

	YES	NO
Collects the utensils required	_____	_____
Pot or Degchi	_____	_____
Jug	_____	_____
Glass	_____	_____
Table spoon	_____	_____
Collects the Ingredients	_____	_____
Drinking water	_____	_____
Packet of ORS	_____	_____
Ensures that all the utensils are clean	_____	_____
Puts 6 glasses water in the pot	_____	_____
Lets water boil for 20 minutes	_____	_____
Allows the water to cool	_____	_____
Measures 4 glasses of cooled water	_____	_____
Measures 4 glasses of cooled water	_____	_____
and pours them in the jug.	_____	_____
Adds all the contents of the	_____	_____
ORS packet in the water	_____	_____
Stirs it with the tablespoon till all	_____	_____

the contents are dissolved completely.	_____	_____
Tastes the solution to confirm	_____	_____
that it has the proper taste.	_____	_____
Advises the mother to feed	_____	_____
the child after every stool.	_____	_____
Advises the mother to cover the jug	_____	_____
and keep it in a cool place.	_____	_____
Informs the mother that the ORS solution can be used for 12 hours only (if in fridge for 24 hours)	_____	_____

Asks the mother to repeat the demonstration, to confirm that she has understood the procedure.

PREPARING ORS SOLUTION AT HOME

	Yes	No
Greets the mother	----------	---------
Asks mother if she knows about ORS	----------	---------
Asks mother if she has ever used ORS	----------	---------
Explains about preparation of ORS	----------	---------
Asks mother to boil six glasses of water	----------	---------
Asks mother to cleaning the jug	----------	---------
Asks mother to clean the glass	----------	---------

Allows the water to cool	---	---
Asks mother to watch her while preparing ORS	---	---
Washes hands	---	---
Puts 4 glasses of boiled and cooled water in jug	---	---
Adds eight tea spoonsful of sugar	---	---
Adds one teaspoonful of salt	---	---
Adds juice of one lemon / half orange (if available)	---	---
Asks the mother to taste it.	---	---
Covers the jug with a lid.	---	---
Tells mother to keep ORS in a cool place	---	---
Tells the mother that this can be used for 12 hours	---	---
Tells the mother that if ORS is kept in a fridge, It can be used for 24 hours	---	---
Asks mother for return demonstration	---	---

ANAEMIA

Iron deficiency anemia in young children is recognized as a major public health issue and the most prevalent form of micronutrient deficiency worldwide. In Pakistan the reported prevalence of IDA in children under five is between 40–70%. In Pakistani children IDA has been associated with growth retardation, impaired cognition, reduced physical activity and postulated as a contributor to the high national infant mortality rate. Widespread micronutrient deficiencies along with other clinical and social factors are believed to be the leading cause of IDA in Pakistan

Identifying a child with Anaemia:

An anaemic child is weak and pale. Technically speaking the haemoglobin level of blood is low. Many children in our country are anaemic. A child with anaemia, is less active than a normal child. He may be pale, and if the condition is severe, he or she will be breathless and have some swelling of the face, body, and limbs. The best way to detect anaemia is to examine the inside of the lips and the inside of the lower eyelids. They will be pale, light pink, or whitish instead of red. A good time to gently pull down a child's eyelids and look at the colour is when the child is feeding at the breast. Anaemia is a very common disease among poor children. The above test is very simple, and every sick child should be examined for anaemia.

Causes of Anaemia in Children:

The most common cause of anaemia is a diet deficient in food that contains iron. The body cannot make enough blood if it does not have enough iron. A growing child needs a lot of iron. He needs iron to make blood, but his main food is milk, which contains very little iron. Unfortunately, many children do not like the foods which are rich in iron, for example, leafy green vegetables.

A child may become anaemic because of loss of blood. Often the blood loss is not seen. For instance, a child may lose much blood because he has worms in his intestines which suck the blood.

Anaemia may result from red blood cells being damaged in several ways; malaria parasites are one serious cause of damage to blood cells.

Anaemia may also occur in babies if they start life with too small store of iron. If a mother is healthy, in the last weeks of pregnancy she will pass on to the baby a store of iron. If the mother is anaemic, she will not have much iron to pass on to the baby. If the baby is born prematurely, he will not receive the store of iron.

Children at Risk of Anaemia:

From the causes of anaemia it is possible to identify the groups of children at risk of this disease. They include children who are premature (born early), those with anaemic mothers, those who have been fed too long only on milk, and those who have not been given a mixed diet including iron containing foods. Children who are not protected from parasites, particularly malaria and hookworm, will develop anaemia.

TREATMENT OF ANAEMIA:

- A diet which is rich in iron-containing foods like leafy vegetables is a good start, but it is unlikely to provide a high enough dose of iron for severe anaemia.
- Iron tablets easily increase the intake of iron. If the community health worker has a supply of iron syrup or tablets for children, she should give 1 tablet, 2 or 3 times a day according to the severity of anaemia.
- Occasionally iron tablets upset digestion. This effect is less if the iron tablets are taken at the same time as food, but it should be avoided with calcium containing products. Warn mothers that their children's stools will be black while they are taking iron tablets. Iron tablets can cause harm if many tablets are taken at once. Always keep iron tablets out of reach of children. It is best to keep iron and other medicines

locked in a cupboard.

- In severe cases of anaemia the patient is swollen, breathless, and very pale. These children or adults should be referred to a hospital. They need special care, and possibly blood transfusion.
- Treatment of any cause of blood loss or damage is essential. Obviously, it is a waste only to increase blood production. Malaria and hookworms should be treated. The possibility of these infestations should be thought of in any case of anaemia. It will be necessary to take or send patients to a health centre or hospital for diagnosis and treatment of such infections.

Prevention of Anaemia:

As FWW suggest the following to mothers and families to help reduce anemia:

1) A good diet during pregnancy is the foundation for prevention of anaemia. This will build up the mother's iron supply so that she can pass on a full amount to her child in late pregnancy. It will enhance full development of the fetus and decrease the chance of a premature birth.

2) Encourage the diet rich in iron-containing foods-leafy green vegetables, legumes, whole grain cereals, and crude sugar. If animal products are acceptable and can be afforded, eggs, meat, and liver can be given. Pregnant women frequently need supplements of iron tablets in addition to the good diet.
3) Premature babies have inadequate iron stores and should be given small doses of iron in the first 3 months of life. You may consider prescribing Iron syrup.
4) Infants should have a mixed diet containing iron-rich foods from about 6 months of age.
5) Hookworm infestations can be prevented by improved hygiene, use of latrines, and wearing some form of footwear.
6) Malaria control measures are being undertaken in many countries. Some services use anti-malarial tablets to prevent malarial infections. If this is being done in the community, issue anti-malarial tablets to children and record it on the individual growth charts

INTESTINAL WORMS

Intestinal worms are a major cause of ill health and constitute a big public health problem. Intestinal worms are an indication of poor sanitation and personal hygiene. Some of the common worms in Pakistan are;

- Ancylostoma duodenale (hookworm)
- Enterobius vermicularis (pin worm or threadworm)
- Ascaris lumbricoides (roundworm).

Ancylostoma duodenale (Hookworm)

Hookworm is a common infecting parasite in Pakistan. Eggs are passed in the stool and hatch into larvae in warm damp soil. They penetrate the skin of the legs of children who walk barefooted on infested soil. The larvae penetrate skin and migrate to venous circulation and are carried to the lungs where they break into alveolar spaces, ascend to the bronchial tree and trachea and are swallowed to the upper small intestine. Here they attach to the mucus membrane and develop into mature adult worm in 2- 4 weeks. The worm attaches itself to the intestinal mucosa by pointed clawed teeth and sucks blood. In 4 – 9 weeks the worm reaches sexual maturity and start passing eggs in the feces. Mean life span of adult hookworm is 1- 3 years.

Clinical Manifestations:

Anaemia is the usual manifestation, and its severity depends on the number of worms and iron balance of the host. During the intestinal phase the following symptoms may occur.

- Abdominal pain
- Loss of appetite
- Distension after meals or sense of fullness
- Indigestion or diarrhea

Diagnosis:

Stool examination: eggs and usually occult blood is present: low Hb and eosinophilia may be present in pulmonary migratory phase.

Treatment:

- Iron should be given 6 mg / kg
- Pyrantel Pamoate

Single dose 10 mg / kg (5 ml = 250 mg) or

- Mebendazole

100 mg BD for three days (but not recommended for children under 2 yrs) (5 ml = 100 mg)

- Albendazole

200 – 400 mg single dose (5 ml=100 mg)

Enterobius Vermicularis (Pin Worm or Thread Worm)

Threadworms infect individuals of all ages but are especially common in children. Infection is by ingestion of eggs usually present on fingernails, bedding or house dust. The eggs hatch in the stomach after infestation. The larvae reach the caecal region and mature into adult worms. Threadworms are small, 1 cm in size white worms. The female worm migrates to perennial region at night and deposits millions of eggs. The maturation period is 6 hours. These remain viable for 20 days. After scratching the perennial area or from clothing the larvae are carried

on the fingers and re-swallowed with eating foods.

Clinical Features:

- Irritation and itching around the anus.
- Disturbed sleep and crying are common symptoms in toddlers

Diagnosis:

- Microscopic examination of eggs stuck to scotch tape pressed against perennial region clinches the diagnosis.
- Adult worms may be seen at night in the perennial area.

Treatment:

- Personal cleanliness and washing hands after defecation and before eating.
- Fingernails should be trimmed.
- Scratching of perennial area should be avoided. Night and bedclothes should be washed daily.
- Pyrantel pamoate 10 mg/kg single dose (5 ml = 250 mg)
- Mebendazole 100 mg (5 ml = 100 mg)

Ascaris lumbricoides (Round worm)

It is one of the commonest infestations in childhood. Infection is through faeco-oral route. Eggs are passed in the feces of infected individuals. In the soil with favourable environmental conditions, they mature and become infective in 2-3 weeks. These are ingested by man through contaminated food and drinks. Larvae hatch from the eggs after ingestion and penetrate the intestinal wall gaining access to venous circulation and thus reaching the lungs. The larvae pass through the pulmonary tissues and ascend the bronchial tree and trachea. From trachea the larvae are re-swallowed and finally arrive in small intestine where they develop into mature worms.

Roundworms measure 15 –25 cm x 3mm. Life span of female worm is 1 –2 years and it may produce 200,000 eggs per day.

Clinical Features:

- Vague abdominal pain and distension
- Intestinal obstruction due to impaction of a mass of worms.
- May pass into appendix and can cause appendicitis.
- Occasionally the worm may be vomited or coughed out through the mouth and nose.

Diagnosis:

- Stool examination: ova may be seen
- Blood count: Eosinophilia is usually marked.

Treatment:

- Pyrantel pamoate (10 mg/kg single dose (5 ml = 250 mg) or
- Mebendazole 100 mg BD for 3 days (5 ml = 100 mg) or
- Albendazole 200 – 400 mg single dose (5 ml = 100 mg)

WHOOPING COUGH (Pertussis)

It is an acute respiratory infection caused by bacteria called Bordetella pertussis.

Epidemiology:

It occurs worldwide, but it is common in cold climates and in condition of over- crowding. Infection is transmitted through respiratory droplets or contaminated articles e.g., clothing. Infants and females are affected more frequently.

The Incubation Period is 7 –17 days.

Clinical Features:

Typically, the disease lasts 6 – 8 weeks, wit h 3 well recognized stages.

1 Catarrhal Phase: (7 – 10 days)

Symptoms are like those of common cold with sneezing, anorexia and a dry cough mostly at night. The cough gradually increases.

2 Spasmodic or Paroxysmal phase: This lasts several weeks The characteristic bouts of short, strangling cough develop during which the child may expectorate tenacious white sputum and become red-faced or deeply cyanosed, with bulging tear-filled eyes. As the spasm ends there is a relieving inspiratory whoop. Vomiting after the bout is common. The infant lies back exhausted after severe spasms, which may occur as often as every few minutes, or as infrequently as twice a day. Because of repeated coughing and vomiting, the infant is often too weak to feed and loses weight. In between the attacks, there are usually no respiratory signs unless there is secondary infection.

3 Convalescent phase: During this phase, whoop and vomiting diminish, paroxysms decrease in intensity and frequency, and the child improves usually by 8 – 10 weeks of illness.

Complications:

Convulsions, hemiplegia, bronchopneumonia, sub conjunctival haemorrhages, petechiae on the face, neck and upper trunk, rectal prolapse, hernial protrusion, coma and even death.

Treatment:

Isolation in well-ventilated room is preferable. Erythromycin orally 40 –50 mg / kg / day (maximum 2g / 24 hours) in divided doses for 14 days.

- Anti-tussive and sedatives. Salbutamol and small doses of phenobarbitone or

diazepam may help.

- Oxygen may be required for pneumonia.
- Good nursing and frequent small feeds are essential
- Refer to hospital, in case any complication arises.

Prevention: Active immunization with DPT is an effective means of prevention.

PULMONARY TUBERCULOSIS

It is caused by the bacteria Mycobacterium tuberculosis. Children under 3 years of age are most susceptible and infected by an adult member of the household. According to a Tuberculosis, one of the oldest and deadliest infectious diseases had a dramatic comeback in the last quarter of the century. WHO declared Tuberculosis (TB) as a global emergency in 1993.

Though no nation was immune from the disease, the main brunt of the disease was found in the developing countries. The escalating incidence of tuberculosis in Pakistan is due to persistence of poor socio-political conditions, inadequate health care infrastructure, undernutrition, overcrowded living conditions, influx of refugees, rising incidence of HIV/AIDS, and a general apathy towards health and related problems.

WHO report, a continuous rise has been seen in case detection rate of childhood TB worldwide with a parallel increase in the death toll of children with TB.

However, concern about childhood TB has increased significantly and in 2012, an annual WHO report included an estimation of childhood TB was included for the first time. Childhood TB is rampant and an important cause of morbidity and mortality in developing countries owing to poor socio-economic conditions, starvation, overcapacity,

According to WHO, Pakistan stands among the eleven high TB burden countries and was one of the six countries that stands out as having the largest number of cases in 2014 In 2016, of the total estimated incidence, 518,000 TB cases were notified in Pakistan, of which 51,000 were cases of children aged ≤14 years.

Mode of transmission: The usual modes of infection consist of inhalation or droplets of sputum and viable tubercle bacilli.

Clinical Features:

- Fever
- Anorexia
- Irritability
- Malaise

- Easy fatigability
- Weight loss
- Night sweats

Some children may show signs and symptoms of an upper respiratory tract infection.

Diagnosis

- **History of Contact**
- **Clinical history: low-grade fever, loss of weight, irritability etc.**
- **Physical examination: lymphadenopathy, hepato-splenomegaly etc.**
- **Laboratory investigation**

- Blood count and ESR.
- Sputum smear and culture.
- Mantoux test

- **X-ray chest**

Treatment:

Refer to hospital.

PROBLEMS PAKISTAN IS FACING WITH TB IN CHILDREN

Moreover, strategies are needed to further improve the diagnosis and treatment of TB among children and improve the recording system.

The adherence to policies of National TB Control Programme (NTP) to manage a case of tuberculosis (TB) is a fundamental step to have a successful programme in any country. Childhood TB services faces an unmet challenge of case management due to difficulty with diagnosis and relatively new policies.

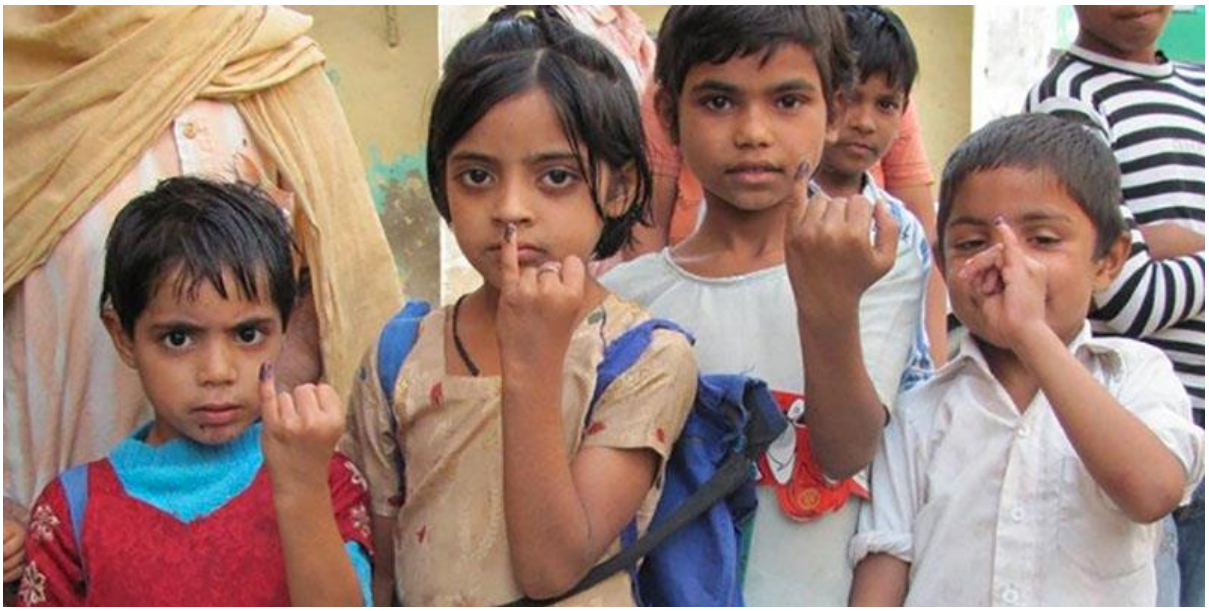
POLIOMYELITIS

Polio, or poliomyelitis, is a disabling and life-threatening disease caused by the poliovirus. Note that “poliomyelitis” (or “polio” for short) is defined as the paralytic disease. So only people with the paralytic infection are considered to have the disease.

Pakistan has been struggling with Polio eradication for years but unfortunately, we have not

been able to eliminate Polio yet. Campaigns for oral Polio vaccine administration are on-going.

Humans are the only natural reservoir. Transmission is mainly by Oro- pharyngeal route. The virus spreads from person to person and can infect a person's spinal cord, causing paralysis and death**.** After ingestion, virus multiplies in the alimentary tract and its related lymph nodes. If virus particles are neutralized, no clinical illness occurs but otherwise the virus proliferates and invades into the CNS particularly spinal cord and may lead to damage or destruction of neurons. Clinical picture depends upon the site of involvement.



Transmission

- Poliovirus is very contagious and spreads through person-to-person contact.
- It lives in an infected person's throat and intestines.
- Virus is usually present in the throat and feces in late incubation period, and first few days of acute illness. The virus persists in the feces for a much longer period.
- Incubation Period: 7 – 21 days, commonly 12 days

Poliovirus only infects people. It enters the body through the mouth and spreads through:

- Contact with the faces (poop) of an infected person.
- Droplets from a sneeze or cough of an infected person (less common).

You can get infected with poliovirus if:

- You have faeces on your hands, and you touch your mouth.
- You put in your mouth objects like toys that are contaminated with faeces.

An infected person may spread the virus to others immediately before and up to 2 weeks after symptoms appear.

- The virus can live in an infected person's faeces for many weeks. It can contaminate

food and water in unsanitary conditions.

Clinical Features:

The disease may present as following;

Asymptomatic Infection:

- There may be no clinical signs or symptoms.
- People who don't have symptoms can still pass the virus to others and make them sick.

Symptomatic Infection:

- Abortive poliomyelitis.
- Non – paralytic poliomyelitis
- Paralytic poliomyelitis.

Abortive Poliomyelitis:

There is invasion of alimentary tract with viremia, but nervous system is spared. A brief nonspecific febrile illness occurs with malaise, anorexia, nausea, vomiting, headache, sore throat, constipation and abdominal pain. Definite diagnosis is impossible without viral isolation but it can be suspected during poliomyelitis outbreaks.

Nonparalytic polio

Some people who develop symptoms from the poliovirus contract a type of polio that doesn't lead to paralysis (abortive polio). This usually causes the same mild, flu-like signs and symptoms typical of other viral illnesses.

Signs and symptoms, which can last up to 10 days, include:

- Fever
- Sore throat
- Headache
- Vomiting
- Fatigue
- Back pain or stiffness
- Neck pain or stiffness
- Pain or stiffness in the arms or legs
- Muscle weakness or tenderness

The poliovirus enters the nervous system without destroying the neurons. The febrile illness is followed by headache, pain and stiffness in the neck and back muscles. Transient bladder paralysis and constipation may occur.

Paralytic syndrome

This most serious form of the disease is rare. Initial signs and symptoms of paralytic polio, such as fever and headache, often mimic those of nonparalytic polio. Within a week, however, other signs and symptoms appear, including:

- Loss of reflexes
- Severe muscle aches or weakness
- Loose and floppy limbs (flaccid paralysis)

In addition to symptoms of non-paralytic poliomyelitis, weakness of one or more muscle groups occurs. Bladder paralysis of 1 – 3 days duration may occur or bowel atony may result.

Clinical paralysis generally extends during the first few days and stops as the fever subsides. Initially there is hypotonia and hyporeflexia but later on wasting and contractures develop. Involvement of the respiratory mechanism may lead to respiratory failure, which is the usual cause of death in this disease.

Post-polio syndrome

Post-polio syndrome is a cluster of disabling signs and symptoms that affect some people years after having polio. Common signs and symptoms include:

- Progressive muscle or joint weakness and pain
- Fatigue
- Muscle wasting (atrophy)
- Breathing or swallowing problems
- Sleep-related breathing disorders, such as sleep apnea
- Decreased tolerance of cold temperatures

Post-polio syndrome (PPS) is a condition that can affect polio survivors decades after they recover from their initial poliovirus infection.

Most people who get infected with poliovirus (about 72 out of 100) **will not have any visible**

symptoms.

About **1 out of 4 people** with poliovirus infection **will have flu-like symptoms** that may include:

- Sore throat
- Fever
- Tiredness
- Nausea
- Headache
- Stomach pain

These symptoms usually last 2 to 5 days, then go away on their own.

A smaller proportion of people with poliovirus infection **will develop other, more serious symptoms** that affect the brain and spinal cord:

- **Paresthesia** (feeling of pins and needles in the legs)
- **Meningitis** (infection of the covering of the spinal cord and/or brain) occurs in about 1 out of 25 people with poliovirus infection
- **Paralysis** (or weakness in the arms, legs, or both, occurs in about 1 out of 200 people with poliovirus infection

Paralysis is the most severe symptom associated with polio, because it can lead to permanent disability and death. Between 2 and 10 out of 100 people who have paralysis from poliovirus infection die, because the virus affects the muscles that help them breathe.

PREVENTION & TREATMENT

There are two types of vaccine that can prevent polio:

- Inactivated poliovirus vaccine (IPV) given as an injection in the leg or arm, depending on the patient's age. Only IPV has been used in the United States since 2000.
- Oral poliovirus vaccine (OPV) is still used throughout much of the world.

Polio vaccine protects children by preparing their bodies to fight the poliovirus. Almost all children (99 children out of 100) who get all the recommended doses of the inactivated polio vaccine will be protected from polio.

Treatment of Polio:

- Hospitalization of all patients with paralytic poliomyelitis.
- Bed rest to prevent muscle fatigue. Fatigue predisposes and aggravates paralysis of the affected muscles.
- Minimal handling of the affected parts. Maintain limbs in neutral position i.e. Knee is slightly flexed, hips straight and feet at right angle to the legs with the support of foot

boards / sand bags. Muscles should not be fatigued by repeated clinical examination and trauma to the muscles by intramuscular injections should be avoided.

- Analgesics and mild sedation for the relief of pain and restlessness.
- Maintenance of nutrition and hydration.
- Avoidance of constipation
- Respiratory support may be required.
- After acute state is over, physiotherapy should be started. Some children may require splints, braces and other orthopedic and rehabilitative interventions.

Prevention of Polio:

Polio vaccine offers a high degree of protection. Vaccine is available in the form of drops and injectable. In Pakistan, only drops are used.

TETANUS

Tetanus is a serious bacterial infection that affects the nervous system and causes muscles throughout the body to tighten. It's also called lockjaw because the infection often causes muscle contractions in the jaw and neck. However, it can eventually spread to other parts of the body. Tetanus infection can be life-threatening without treatment. Approximately 10 to 20 percent of tetanus infections are fatal, Tetanus is a medical emergency that requires immediate treatment in a hospital. Fortunately, tetanus is preventable using a vaccine. However, this vaccine does not last forever. Tetanus booster shots are needed every 10 years to ensure immunity.

Causative agent:

Tetanus bacillus (Clostridium tetani) spore, which enters and multiplies at the local site (of injury) and produces a toxin that interferes with neuromuscular transmission.

Route of Entrance:

- Wounds
- Burns
- Animal bites
- Unsterilized cutting of umbilical cord
- Chronic skin ulcer

Spores of the bacteria can be found in dust, dirt, and animal droppings. Spores are small reproductive bodies produced by certain organisms. They're often resistant to harsh environmental conditions, such as high heat. Although these bacteria are especially common in the soil and manure of farms, they can be found almost anywhere. They live in the dirt of suburban gardens and in the dirty waters of floods. They also contaminate dust in cities.

A person can become infected when these spores enter the bloodstream through a cut or deep wound. The bacteria spores then spread to the central nervous system

and produce a toxin called tetanospasmin. This toxin is a poison that blocks the nerve signals from your spinal cord to your muscles. This can lead to severe muscle spasms.

Tetanus infection has been associated with:

- crush injuries
- injuries with dead tissue
- burns
- puncture wounds from piercings, tattoos, injection drug use, or injury (such as stepping on a nail)
- wounds contaminated with dirt, feces, or saliva

Less commonly, it's been associated with:

- animal bites
- dental infections
- insect bites
- chronic sores and infections

Tetanus is not contagious from person to person.

Incubation Period:

The incubation period — the time between exposure to the bacteria and the onset of illness — is between 3 and 21 days. Symptoms typically appear in 14 days Infections that occur faster after exposure are typically more severe and have a worse prognosis.

Clinical features:

On average, symptoms of tetanus begin seven to eight days after tetanus bacteria enter the body. These symptoms may include:

- Spasms in the jaw muscles (lockjaw)
- Painful muscle stiffness all over the body, especially in the neck, shoulder and back
- Difficulty swallowing
- Prolonged contraction of the facial muscles, which may produce what looks like a sneer or grimace
- An arched back resulting from contraction of the back muscles
- Muscle spasms and muscle rigidity in the chest, abdomen and extremities
- Fever and profuse sweating
- High blood pressure
- Rapid or irregular heartbeat

- Jerking or staring (seizures
- Difficulty breathing
- Fractured bones and ruptured muscles caused by severe muscle spasms

Diagnosis:

There is no test to diagnose Tetanus, the history is of prime importance in reaching a correct diagnosis complemented by clinical examination

Possible complications

Severe muscle spasms as a result of tetanus can also cause serious health complications, such as:

- breathing problems due to spasms of the vocal cords (laryngospasm) and spasms of the muscles that control breathing
- pneumonia (an infection of the lungs)
- brain damage due to lack of oxygen
- abnormal heart rhythm
- bone fractures and fractures of the spine due to muscle spasms and convulsions
- secondary infections due to prolonged hospital stays

Prevention:

There is evidence that the tetanus immunization remains highly effective for much longer than 10 years.

3 injections of DTaP -- diphtheria, tetanus, and acellular pertussis (whooping cough) – vaccine DPT, starting at 6 weeks of age, given 4 weeks apart. 4th dose is booster, which is given at 2 years active immunization of infants and children at the ages of 2 months, 4 months, 6 months, 15 to 18 months, and again between the ages of 4 and 6. Children should next get a tetanus vaccine using the Tdap vaccine at age 11 or 12. Any adult who has not had a tetanus immunization within 10 years should get a single dose of Tdap. After Tdap, the Td vaccine is recommended every 10 years.

Role of FWW:

1) If someone has a wound, as long as it breaks the skin, it is possible to develop tetanus.
2) If such a person must receive the primary (active) immunization in the past and the wound is clean and has not had a tetanus booster in the last 10 years, it is recommended that you should give him or her a booster shot
3) If the wound is dirty or tetanus-prone, then your doctor would likely recommend a tetanus booster if you have not had a tetanus booster shot within the last five years.

Tetanus-prone wounds are those that are deeper or are contaminated with dirt or soil. If you are unsure about when you received your last tetanus shot, it is better to be safe and receive another booster than sorry. You may experience increased redness and soreness at the injection site if it has been a shorter period since your last booster.

4) If someone has never received a primary immunization as a child and has an open wound, give the first vaccine dose at the time of wound care as well as a single dose of a special immunoglobulin with high activity against tetanus.

Ask him or her to see a doctor in four weeks and again in six months to complete the primary vaccination series.

The second important method of preventing tetanus is cleaning out the wound as thoroughly as possible. The wound can be washed with clean water, and soap can be used to clean the area around the wound. Trying to get any obvious dirt and particulate matter out of the wound are important -- not only to prevent tetanus, but also to prevent other bacterial infections of the wound

Role of FWW in suspected case of Tetanus:

Immediate referral to hospital should be arranged, if possible, inform the receiving unit of the patient

31.8 CHILD CARE

31.8 ROLE OF FWW IN CHILD CARE FOR 2-5 YEAR OLDS

How does a child grow and develop between the ages of 2 and 5?

There are many things that you as FWW can teach the mothers and families. The ages between 2 and 5 are often called the preschool years. During these years, children change from clumsy toddlers into lively explorers of their world. A child develops in these main areas:

- Physical development. In these years, a child becomes stronger and starts to look longer and leaner.
- Cognitive development. A child of this age makes great strides in being able to think and reason. In these years, children learn their letters, counting, and colors.
- Emotional and social development. Between the ages of 2 and 5, children gradually learn how to manage their feelings. By age 5, friends become important.
- Language. By age 2, most children can say at least 50 words. By age 5, a child may know thousands of words and be able to carry on conversations and tell stories.
- Sensory and motor development. By age 2, most children can walk up stairs one at a time, kick a ball, and draw simple strokes with a pencil. By age 5, most can dress and undress themselves and write some lowercase and capital letters.

Each child grows and gains skills at his or her own pace. It is common for a child to be ahead in one area, such as language, but a little behind in another.

Learning what is normal for children at this age can help you spot problems early or feel better about how your child is doing.

Why are routine medical visits needed?

Routine checkups usually are scheduled several times during ages 2 to 5. In some areas, the child may only see you for routine checkups and immunizations.

During these visits, FWW should:

- Give your child a physical examination.
- Give your child any needed shots.
- Weigh and measure your child to see how he or she compares to other children of the same age.
- Ask questions about your child's behaviour and your family.
- Ask about your child's favourite activities or friends.

Routine checkups are a good time to talk about any concerns the mother may have about the child's health, growth, or behaviour.

When should a mother seek help?

Be sure to call if the child:

- Is not reaching developmental milestones as expected.

- Is not growing at a steady pace.
- Has lost skills he or she used to have, such as talking or running.
- Is overly aggressive, violent, or abusive.
- Doesn't seem to be doing well, even though you can't pinpoint what makes you uneasy.

How can you as FWW help the mothers to look after their children better

Tell and guide the mothers about

It's important to learn about some of the behaviours you can expect during these years of rapid change. Temper tantrums, thumb-sucking, and nightmares are common issues in children at this age. Knowing what to expect can help you to be patient and get through the stressful moments.

The best thing you can do for your child is to show your love and affection. But there are also many other ways you can help your preschooler grow and learn.

- Offer your child healthy foods. Keep lots of fruits, vegetables, and healthy snacks in the house.
- Make time for your child to be active. Limit TV and computer time to less than 1 hour a day for children 2 to 4 years old and 2 hours or less a day for children older than 4.
- Read and talk to your child. This helps children learn language and opens them up to new ideas.
- Help your child get enough rest. Between the ages of 2 and 5, children need about 11 to 13 hours of sleep each day.
- Help your child play with other children. Preschool or play groups can be a great way for children to learn to interact.
- Teach skills, such as how to get dressed and how to use the toilet.
- Set limits that help your child feel safe and secure but that also allow your child to explore.

SECTION THIRTY THREE

FAMILY WELFARE SKIN

33.1 LEADERSHIP

33.1 LEADERSHIP

Leadership is leading the people towards a goal. It is the art of motivating the actions of others or is setting clear direction in the face of uncertainty.

It considers not only the leader him/herself, his/her abilities, personality, approach to responsibilities but also the people whom he/she has to lead. These two factors are coupled with the dynamics of the situation at the time the leadership is required.

At first it appears easy to list the theoretical virtues necessary for successful leadership, but in practice a person who is a leader in one situation, might not be in another. Established leaders in one field can fail as leaders when transferred to another situation

The seven primary leadership styles are:

1. Autocratic Style

The phrase most illustrative of an autocratic leadership style is "Do as I say." Generally, an autocratic leader believes that he or she is the smartest person at the table and knows more than others. They make all the decisions with little input from team members. This command-and-control approach is typical of leadership styles of the past, but it does not hold much with today's talent.

This style may be appropriate in certain situations. For example, when crucial decisions need to be taken on the spot, and one has the most knowledge about the situation, or when dealing with inexperienced and new team members and there is no time to wait for team members to gain familiarity with their role.

2. Authoritative Style

The phrase most indicative of this style of leadership (also known as "visionary") is "Follow me." The authoritative leadership style is the mark of confident leaders who map the way and set expectations, while engaging and energizing followers along the way. In a climate of uncertainty, these leaders help them see where the company is going and what is going to happen when they get there.

Unlike autocratic leaders, authoritative leaders take the time to explain their thinking and not just issue orders. Most of all, they allow people choice and latitude on how to achieve common goals.

3. Pacesetting Style

"Do as I do!" is the phrase most indicative of leaders who utilize the pacesetting style. This style describes a very driven leader who sets the pace as in racing. Pacesetters set the bar high and push their team members to run hard and fast to the finish line.

While the pacesetter style of leadership is effective in getting things done and driving for results, it is a style that can hurt team members. Even the most driven employees may become stressed working under this style of leadership in the long run.

An agile leadership style may be the ultimate leadership style required for leading today's talent.

4. Democratic Style

Democratic leaders are more likely to ask "What do you think?" They share information with employees about anything that affects their work responsibilities. They also seek others' opinion before approving a final decision.

There are numerous benefits to this participative leadership style. It can engender trust, promote team spirit and cooperation from employees. It allows for creativity and helps employees grow and develop. A democratic leadership style gets people to do what is required to be done but in a way that they *want* to do it.

5. Coaching Style

When you are having a coaching leadership style, you tend to have a "Consider this" approach. A leader who coaches views people as a reservoir of talent to be developed. The leader who uses a coach approach seeks to unlock people's potential.

Leaders who use a coaching style believe that everyone has power within themselves. A coaching leader gives people a little direction to help them tap into their ability to achieve all that they can do.

6. Affiliative Style

A phrase often used to describe this type of leadership is "People come first." Of all the leadership styles, the affiliative leadership approach is one where the leader gets close and includes the people in the process. A leader practicing this style pays attention to and supports the emotional needs of team members. The leader strives to open a line that connects him / her to the team.

Ultimately, this style is all about encouraging harmony and forming collaborative relationships within teams. It is particularly useful, in smoothing conflicts among team members or reassuring people during times of stress.

7. Laissez-Faire Style

The laissez-faire leadership style is at the opposite end of the autocratic style. Of all the leadership styles, this involves the least amount of oversight. The autocratic style leader has a firm stance on issues, while the laissez-faire leader lets people move with the current. To be most effective with this style, monitor team performance and provide regular feedback.

FWW as a leader:

How well a person integrates, blends, balances, and adjusts to the components of leadership and will prove to apply his/her impact as a leader.

The FWW should provide leadership in the F.W.C where she should be concerned with the quality of care provided to the clients / patients. As a community leader she should organize

and mobilize the community and ensure its participation in the activities of Family Welfare Centre.

TEAM BUILDING

The team leader inspires the feeling of working together with cooperation and coordination to achieve the goal, remembering the acronym: TEAM

T	– Together
E	– Each one
A	– Achieves
M	– More

As a team-builder the FWW

- Solves problems effectively
- Is Friendly
- Gives freedom to work
- Praises and encourages good working.
- Is a good Role Model
- Has trust and faith in staff and workers.

Leaders shape nations, communities, and organizations. Good leaders are needed to guide us and make the essential strategic decisions that keep the world moving.

FOLLOWING ARE A FEW CORE LEADERSHIP ATTRIBUTES:

- Integrity.
- Humility
- Ability to delegate.
- Communication.
- Self-awareness.
- Gratitude.
- Resilience
- Positivity
- Learning agility
- Influence.
- Respect
- Empathy
- Vision.

- Courage
- Commitment
- Passion
- Inspire others

In the endeavour to become better communicators, do not neglect the other half of the battle i.e., *listening*. This is much more than just *hearing*. Listening is an active process and demands a conscious effort. Although effective listening leads to an improvement in most aspects of human interaction, it is vital in the workplace.

Being a good communicator means being a good listener. Most of the good communicators listen more then they speak. The reason for this fact is simple.

- When you are a good listener, you understand the people around you better
- You reduce the amount of communication errors and therefor save a lot of time fixing these error
- You will achieve a stronger relationship with whom you are listening to, since (nobody wants to feel unheard)
- Listening is essential for effective communication.

Dominating every conversation is an unattractive quality and it devalues your credibility, even if you are an expert on a given topic. People like to feel lthey are in a reciprocal conversation, so talk with people, not at them.

Tips to get you started on the right track:

- Pay attention
- Keep your body language in tune. ...
- Empathize. ...
- Don't interrupt. ...
- Don't try to impress or influence the speaker. ...
- Clarify. ...
- Provide helpful feedback. ...
- Paraphrase the speaker's message

1. Pay Attention

Effective communication can make you an effective leader and success can come much easier. Communication is significant to build resilience and it also maintains balance in different aspects of life. Communication is the base of almost everything in life. To make others understand you, it is very important to be confident and efficient communicator. There will be fewer chances of misunderstanding if there is a clear communication. However, in order to become an effective communicator, one needs to be a good listener.

No matter how irrelevant the topic may feel, do not permit any distractions. It’s important to

focus directly on the person speaking and leave other work that will divide your attention. For example, reading e-mails, texting on phone, the person speaking to you will have the impression of being ignored.

Letting your mind wander, getting distracted by buzzwords, or forming rebuttals in your head are huge no-nos in active listening. Not only is giving the speaker your undivided attention polite, it is also an acknowledgment of their message. This may provide them with greater confidence, allowing them to relay their ideas in a more effective way.

2. Keep your body language in tune

Our actions prepare us and keep us in check during the listening process. Fidgeting, picking at your nails or shaking your legs can be distracting both to you and the speaker. Maintaining eye contact without staring and nodding appropriately are some ways to ensure that we are listening attentively. Face the person and make sure good eye contact. (if culturally appropriate).

Keeping direct eye contact shows you are paying attention

Have an open posture and use gestures like nodding your head to signalize interest.

Never hide behind the desk or a negative use of hands and arms (folded arms), which make people not to want to talk.

3. Listen without judging / be empathetic

When listening to someone we often tend to judge the person talking before they finish their statement. We believe we know what will be said and start thinking about what we want to answer, therefore we tend to miss essentials of what was actually said. When listening, push all your assumptions and judgment aside and start judging what was said after you've gathered all facts in the end.

We all have different life experiences and preconceived notions, it is very easy to lose sight of the message, especially if it carries emotional weight. Although the style of delivery is important, do not drift away from the message conceived. Be aware of your own biases and do not allow them to interfere with the process speaker.

4. Do not interrupt

Interrupting or finishing the speaker's sentences provides more harm than good, since it can distract other listeners. Let the speaker finish what he or she has to say before asking questions or rebutting them. This lets you get the whole picture, which may entail a completely different message than if you only paid attention to a few specific points.

5. Do not try to impress or influence the speaker

In the haste of communication, many people forget that it is not a competition. You do not earn points for trying to push your own agenda. Doing all these not only interferes with what the speaker is trying to say, it also prevents from potentially learning a new point of view.

6. Clarify

As an active listener, ask for clarification, but this should be done in the least interruptive way. It is more helpful to ask open-ended exemplary questions, instead of close-ended ones, as speakers may interpret a close-ended question as voicing a view. For instance, ask “may I have an example of that?” instead of “is *this* an example of that? Clarification is particularly useful when the topic may be of an emotional or cultural nature.

7. Provide helpful feedback

Again, being an active listener does not mean you have to stay quiet. It is appropriate and supportive to give candid and constructive comments. There is nothing gained from putting down the speaker, except a reputation for being disruptive and perhaps even rude.

8. Paraphrase the speaker’s message

This is an extremely useful tip and is usually done when providing feedback. It forces us to really pay attention to what the speaker is saying. The easiest way to do this would be to jot down what the speaker has said in your own words.

Effective communication is a two-way process that requires the synchronization of the speaker and listener. The speaker may have the most powerful ideas and views, yet these are ultimately useless when there is no attention given to them.

MOTIVATION:

Is also essential to realize that **leadership is a social process.** If you demonstrate several of the characteristics of a good leader but fail to grasp this, chances are you will not get very far on your own. You may be well liked and respected, but it will be challenging to accomplish team or organizational goals. Also, leadership is not a destination — it is something that you’ll have to work at throughout your career, regardless of what level you reach in your organization.

DEMOTIVATION:

Demotivation is a noun and refers to the condition of being without motivation.

The effects of poor motivation in the workplace are well tested: higher employee turnover, lower levels of engagement, poor communication, and diminished productivity are just a few of the issues that may proliferate and lead to the workplace become a toxic environment

It is also worth assessing whether the following common causes of discontent could be having a negative effect on the work

- No career vision. ...
- A lack of security. ...
- Not feeling valued or appreciated. ...

- A lack of development opportunities. ...
- A lack of good leadership. ...
- Conflict stress. ...
- Over-work
- Lack of flexibility

33.2 MANAGEMENT OF FAMILY WELFARE CENTRE

33.2 MANAGEMENT OF FAMILY WELFARE CENTRE

At the end of your training, you as FWW are equipped with the appropriate knowledge and required skills to provide reproductive health services. Before graduation as FWW and leaving R.T.I to work independently in a Family Welfare Centre (FWC), you have clinical attachment to an urban / semi-urban (FWC) of the district in which R.T.I is located. That is your opportunity to put into practice the knowledge and skills you had learnt in a supervised environment.

The facilitative supervision is provided by the R.T.I Trainers designated for this purpose who rectify their wrong practices and reinforce their weak areas and thus prepare them for providing quality reproductive health services and for solving health problems in the community in an independent capacity. At the Family Welfare Centre (FWC), you as FWW are responsible for managing the work of a small team of people as well as providing services. Therefore, you have a dual role, of managing and supervision.

The concept of management adopted in this chapter is that “managers" (F.W. Ws) should keep things running smoothly (Keep records correctly, maintain accounts, correspondence with district level), and they should also solve problems, improve the quality of services, supervise the work done by others and provide on-the-job training.

FWW should therefore have a clear concept about Management, Supervision, Monitoring and Evaluation. She should be aware of the Leadership styles and her role as a leader of the Family Welfare Centre staff in managing the Human Relations. You are also responsible for Team building of your staff.

MANAGEMENT

Management is derived from a French word “*management” “the* directing" and from Latin “*manu agere* "which means to “lead by the hand". Management is both the art and science of getting things done in the proper way through people. It is the art of making people more effective and it is the science regarding how to do that.

Some experts review management as a process to achieve organizational goals. A process is a set of activities that are ongoing and interrelated. Ongoing means that the activities are not done in a linear, step-by-step fashion where responsibility is passed from one activity to the next. Instead, the activities are continued as new activities are started Interrelated means that the results of each activity influence the other activities and tasks. It is the responsibility of management to see that essential activities are done efficiently (in the best possible way) and effectively (doing the right thing)

ELEMENTS OF MANAGEMENT:

As the level of management rises, the functions of the manager become increasingly complex. *Effective management is the key to achieving performance* objectives. At the FWC, you are responsible for proper functioning of the Centre through good management.

The four basic elements which seem to form a simple sequence of operation:

PLAN ORGANIZE DIRECT CONTROL

These elements are briefly described below:

1 Planning

Planning is the first step in management. Planning means defining performance goals for the organization and determining what actions and resources are needed to achieve the goals. Through planning, management defines what the future of the organization should be and how to get there.

Proper prior planning prevents failure in achievement of objectives and involve:

- Identifying the goal
- Defining the objectives to accomplish this goal
- Gathering and analyzing information.
- Setting targets.
- Designing the activities i.e., what to do and when and how to do it.
- Determining operations to achieve maximum effectiveness.
- Developing alternatives.
- Preparing the communication plans and decisions.

2 Organizing

Once plans are made, decisions must be made about how to best **implement** the plans. It is to implement or make the plan happen. To achieve this purpose, make sure everything needed to execute the plan is ready, or will be ready when it is needed and ensure that everyone understands their role and its importance for the overall success.

This involves:

- Obtaining necessary facilities, equipment and staff to establish an efficient framework for carrying out plans through determining suitable process required to accomplish plans.
- Grouping component jobs into an orderly organizational structure.
- Establishing the structure of authority and coordinating machinery

3 Leading

Nearly everything that is accomplished in an organization is done by people. The best planning and organizing will not be effective if the people in the organization are not willing to support the plan**. Leaders** use knowledge, character, and charisma to generate enthusiasm and inspire effort to achieve goals. Give directions or tell the people what they need to do. It is like conducting an orchestra, or coordinating an activity. You must also lead by communicating goals throughout the organization, by building commitment to a common vision, by creating shared values and culture, and by encouraging high performance. As the manager you may use the power of reward and punishment to make people support plans and goals. Leaders inspire people to support plans, creating belief and commitment. Leadership and management skills are not the same, but they can and do appear in the most effective people.

Directing:

- Setting detailed time and cost framework.
- Initiating and providing leadership in carrying out plans by making decisions.
- Issuing specific Instructions.
- Guiding, motivating and supervising.

4 Controlling

Although planning is necessary for preparing, but when it's time to implement the plan, everything will not go as planned. Unexpected things will happen. Observing and responding to what happens is called controlling. **Controlling** is the process of monitoring activities, measuring performance, comparing results to objectives, and making modifications and corrections when needed. This is often described as a **feedback loop**, as shown in the illustration of a product design feedback loop

Controlling may be the most important of the four management functions. It provides the information that keeps the corporate goal on track. By controlling their organizations, managers keep informed of what is happening; what is working and what isn't; and what needs to be continued, improved, or changed.

LEVELS OF MANAGEMENT

High Level Management:

The high-level managers spend most of their time on managerial tasks like policy making,

project designing, personnel management and budgeting etc. They have full authority and power for high level decision making administration and financial management. Examples are the officers in the Departments of Population Welfare.

Middle Level Management:

The mid-level managers spend almost equal time on managerial and non-managerial (professional) tasks and constitute the Departmental District Heads (the District Population Welfare Officers) & Supervisors (Deputy District Population Welfare Officer, Technical) who have some executive authority delegated from the top levels and make routine decisions.

Low Level Management:

The low-level managers are the real implementers of work. They spend little time on managerial tasks (such as correspondence with the D.P.W.O) but most of their time is utilized in professional tasks like providing reproductive health care and problem solving of health issues of the people.

Examples are the Tehsil Population Welfare Officer, In charge Mobile Service Unit/ Family Health Mobile Unit, In charge, F.W.C or in charge of Basic Health Unit / Rural Health Centre of Health Department.

MANAGEMENT BY THE F.W CENTRE INCHARGE

The Family Welfare Worker as in charge of the Family Welfare Centre is posted mostly in remote rural areas. She has to work in an independent capacity, without any immediate supervision around and should therefore be well equipped with the requisite knowledge (information) and professional skills besides decision making, problem solving and communication skills. She should plan, organize, direct and control the activities in the F.W.C and in the community. The FWW is expected to carry out correspondence, financial and human relations management of some degree and maintenance of equipment, stocks / supplies (medicines, contraceptives etc), furniture and records for proper functioning of the F.W.C.

PREPARE WORK PLANS & WORK SCHEDULES

A proper planning for long and short terms is required before work is implemented in an organized manner i.e. it is decided WHO shall do WHAT, WHEN & HOW.

Importance of Preparing Work Schedule

- Help plan work of F.W.C
- Improve the effectiveness of the F.W.C
- Help to supervise F.W.C staff especially in the community.
- Help in best utilization of time.
- Help to work with the community.
- Help in evaluation of performance i.e.

Help to find the difference between work done & work planned (Work schedule) by drawing

comparison.

To ensure that as many as possible of these things are done, it is important for the FWW to prepare a Work Schedule.

Making Long Term Plans (Work Plans):

The FWW does not generally need to make long term plans because much of the planning is done at a higher level. Her main task is to implement these plans.

However, there are some aspects of the work which are local and where she should have some plan of where she is trying to get to over a period of six months or a year.

Examples of areas where she should make long term plans are:

- How many couples should be registered?
- Which parts of the community should receive most attention?
- At what times of the year should different health education items be stressed?
- What regular pattern of service provision should be established? (i.e. when should antenatal clinics be held, which time in the week should she reserve for herself to work in the community, when should regular staff meetings take place).
- Which influential people should be contacted during the six months or a year?
- How many community volunteers are needed and what should they do?

Making Short Term Plans (Work Schedules):

Each week will be a combination of routine regular work and specific work which will be done only that week. Routine work will include regular staff meetings, antenatal clinics, and attending clients who come to the F.W. Centre. Specific work will include such things as visiting Mrs. A who has not come for her next supply of oral pills, holding an FP camp in village B, visiting doctor C to ask him to tell his patients about the services of the FW Centre, etc. (Format – Annexure 23.2)

The Work Schedule should be prepared every week. Every week will be different from the previous week. The schedule will include:

Regular Activities

- Staff meeting
- Antenatal clinics
- Meetings at District Office (some weeks)
- General services (i.e.: Clinic open to accept clients)
- Making a list of all FP clients who should be followed-up and visiting them.
- Making a list of all clients who have not returned for continuation of pills or injectable contraceptives and contacting them.
- Where and when any health education activities will take-place, and the theme?

- Where and when any camps / satellite clinics are to take place?
- Which houses should be visited for registration?
- Which Traditional Birth Attendants (TBAs) will be contacted?
- Which Community Volunteers (CVs) will be met, what training they will receive, what work they will be asked to do?
- Which influential people will be invited, what support they will be asked to give? The aim of the work schedule is to make clear WHO will do WHAT and WHEN.

Planning the work together with the FW Centre staff:

If the work for the week is planned by the FWW with help of other members of the F.W Centre staff, the FWW will be able to discuss any problems that the workers might be likely to face. When the FWW supervises the work during the week she will be able to follow-up problems / solutions that have been discussed at the planning stage.

It is important for the FWW to decide which activities are most important for her to supervise in the following week. She has limited time each week for carrying out direct supervision in the field. She should plan to supervise different aspects of the work of her staff gradually over a period of time.

Planning the Supervision of the F.W.C Staff and Workers:

The work schedule will tell the FWW what tasks are going to be done during the week, and where they will be done. She will therefore be able to plan how she will supervise different tasks. For example, she might plan to accompany the FWA (f) on her antenatal visits to Village X on Saturday, to supervise her directly. If the FWA (m) is distributing contraceptives to various CD points throughout the week, she might supervise this by:

- Discussing this task at the end of the week with the FWA (m)
- Checking the contraceptive stock register
- Going to visit one or two CD points to find out if they are getting enough contraceptives.

It might be planned that both the FWA (m) and FWA (f) should be working with some community volunteers on several days during the week. The FWW might plan to discuss their progress at the weekly staff meeting as a form of supervision of this activity. Thus, supervision can be planned, and the work schedule will be helpful for this process.

33.3 FAMILY WELFARE CENTRE STAFF

33.3 FAMILY WELFARE CENTRE STAFF

The Family Welfare Worker as in charge of the Family Welfare Centre is posted mostly in remote rural areas. She has to work in an independent capacity, without any immediate supervision around and should therefore be well equipped with the requisite knowledge (information) and professional skills besides decision making, problem solving and communication skills. She should plan, organize, direct and control the activities in the F.W.C and in the community. The FWW is expected to carry out correspondence, financial and human relations management of some degree and maintenance of equipment, stocks / supplies (medicines, contraceptives etc), furniture and records for proper functioning of the F.W.C.

FAMILY WELFARE CENTRES

The Family Welfare Centre (FWC) is the corner stone of Pakistan's Population welfare Programme pursued by Population Welfare Department; FWCs constitute an extensive institutional network in the country to promote and deliver FP services in the urban and rural areas. The FWC operates in a rented building and serves as a static facility for about 7,000 people; furthermore, through its satellite clinics and outreach facilities, it covers an additional population of around 20,000–25,000. The FWC's scope of work includes provision of FP, maternal and child health (MCH) services, and treatment of minor ailments. Post-ICPD, the scope of the FWC was expanded to include RH components like safe motherhood, infant health care, management of reproductive tract infections/sexually transmitted infections (RTIs/STIs), HIV/AIDS, and hepatitis.

Each Family Welfare Centre has following staff members:

- FWC / FWW
- FWA (Female)
- FWA (Male)
- Aya
- Chowkidar

THE SERVICES PROVIDED AT FAMILY WELFARE CENTRE ARE:

Provision of Comprehensive Family Planning services and referral for contraceptive surgery. Services are also provided to the eligible couples through home visits by FWA (F).

Mother and Child Health Care including advice on nutrition and breast feeding.

Treatment of common ailments such as respiratory tract infections, diarrhea / dysentery, worm infestation, malaria, anaemia, etc.

Health education and personal hygiene.

Reproductive Health Care which includes safe motherhood, cancer detection, infertility, awareness/ treatment & referral for STIs and AIDS and education on reproductive health issues relating to adolescents & elderly.

Satellite camps activity – Satellite camps are arranged in far flung and remote areas twice a week.

Staff Allocation

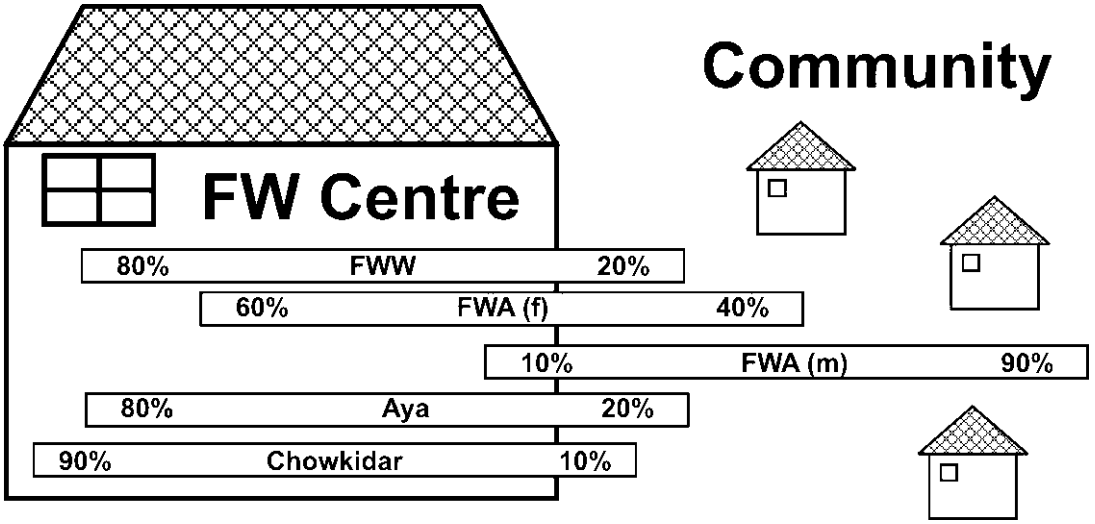
Designation	BPS	Number
• Family Welfare Worker / FW Counsellor / FWW / FWC	9 / 11	1
• Family Welfare Assistant (Female) FWA (F)	5	1
• Family Welfare Assistant (Male) FWA (M)	5	1
• Female Attendant (Aya)	1	1
• Chowkidar	1	1
• Total:	-	5

All Members of F. W.C Staff should:

- Be punctual and regular in attendance
- Be well groomed and properly dressed according to the culture
- Be polite, caring, empathetic and helpful to clients / patients
- Be competent, fit and communicative.
- Know and speak the language of the locals
- Possess and understand their job descriptions individually
- Perform tasks according to their job description
- Spend time in executing duties in the centre and in the community as specified in the work schedule / plan
- Work with honesty, zeal and commitment

TASKS FOR EACH STAFF MEMBER

The staff of the F.W. Centre should work as a team. There will, therefore, often be some overlap in the allocation of tasks to different members of staff.



Time spent working outside the Centre per week:

FWW 20% or 8 hrs

FWA (F) 40% or 16 hrs

FWA (M) 90% or 36 hrs

Aya 20% or 8 hrs

Chowkidar 10% or 4 hrs

An outline of the work normally done by each category of staff along with detailed job description (JD) of some is given below.

FWW / FW COUNSELLOR

She will provide family planning services, maternal and childcare at the Centre and at "camps" satellite clinics or home visits organized in the community. She will give health education and organize programs of health education activities for other staff. She will provide treatment of minor ailments, supervise the community welfare activities and maintain links with the AMC (Advisory Management Committee) where it exists. She will be responsible for the management, administration and supervision of the Centre and will report to the District Office at monthly meetings.

Supervising the work of her staff:

The FWW is responsible for the work done by the FWA (f) and the Aya. Therefore, this work must be supervised. From time to time, the FWW should make a point of observing how they carry out tasks and decide whether the tasks are done correctly. Supervision does not only involve finding things which are wrong and need correction, it also involves praising and encouraging the Aya or FWA when tasks are timely and successfully done.

Training:

She will also train her staff routinely to enhance their knowledge and skills till they meet the

desired standards of quality of care. Where any deficiency is noticed, the fault should be pointed out and, if necessary, training provided.

Leading:

Using the Democratic style of leadership, she leads her staff to the goal set by the FWC.

Team Building:

The FWW inspires the feeling of working together in co-ordination to achieve the goal of having an impact (reducing) on mortality, morbidity, disability and malnutrition in the population served by FWC.

FAMILY WELFARE ASSISTANT (Female):

She assists the FWW with family planning cases, maternal and childcare

and treatment of minor ailments. She will spend 60% of her time in F.W.C and 40% of her time in the community motivating and counselling clients to make use of the different services at the F.W Centre. FWA registers eligible couples for RH and FP services, follows up contraceptive acceptors, especially those who do not come to the centre for supplies. She works with the female Community Volunteers and the Dais in the community. She may accompany clients who have been referred for contraceptive surgery. She maintains links with the satisfied clients and encourages them to refer other clients to the F.W.C. Job description of FWA(F) is given at Annex23.1(b)s

FAMILY WELFARE ASSISTANT (Male):

He is responsible for the distribution of contraceptives to Community Distributors. He motivates males to accept family planning, maintains links with the community, particularly with the AMC, works with informal groups (such as farmers) and may coordinate the work of male community volunteers. He may assist the FWW with the maintenance of records.

Job Description of the F.W.A (M) is provided at Annex23.1(c)

Note: Fixed travel allowance is paid to FWA (M) and FWA (F) for undertaking field work.

AYA:

She is responsible for the cleanliness and tidiness of the Centre and assists the FWW in the Centre by helping with urine tests or in taking care of the patient. She may accompany the FWW when she goes to the field and may also accompany clients who have been referred for contraceptive surgery. Aya also helps in instrument processing.

CHOWKIDAR:

His main job is to look after the Centre. He may also run errands and spend some of his time helping the FWA (m) to supply contraceptives to Community Distributors. He should inform eligible males about the family planning services available from the Centre.

Some of this work will be carried out within the FW Centre; other aspects will be done in the community. The approximate proportions of time spent in each location are given above.

FWC ACTIVITIES & PROPER FUNCTIONING

The FWW trainee should review especially both chapters on "Working with the Community" and "Quality of Care" at this stage in addition to others to update her knowledge and skills before she starts the attachment with the FWC in the district where she is involved in "learning by observation" as well as "learning by doing".

The FWW should: Provide Quality Services Regarding:

1) Technical quality of care meeting set standards of excellence
2) Offering a range of safe and effective services.
3) Satisfying client's needs and requirements.
4) Non-technical aspects- of service delivery.
    a. Respecting client's rights
    b. Minimizing clients waiting time
    c. Improving staff's attitudes.
    d. Obtaining feedback from clients.
    e. Using feedback for improvement of her services and facilities at FWC

Programmatic elements like policies, infrastructure and management.

Ensure Proper Coverage of Family Welfare Centre:

FWCs, are expected to cover a certain population around them. This may vary with each five-year plan, but it is important to find out what proportion of that population the FWCs are providing services.

To estimate coverage of the FW Centre the FWW should use the formulae given below:

Name of FW Centre _____

- Catchment Area Population (in thousands)
- MWRA (married women of reproductive age) (15 % of (a)
- Woman wanting some sort of birth control (50% of (b).
- Children under 5 (15% of (a).
- Episodes of diarrhea per month (average) ((d) x 3 /12)
- Deliveries per month (a) /100 x CBR x 3 / 12) (e.g.CBR= 42)
- Antenatal cases per month (a) /100 x 42 x 3 / 12)
- Days of sickness among children under 1 per month./ 100 x 42 / 12 x 10)
- Children under 1 to be weighed. (a)/ 100 x42 / 12 x 10)

- Men receptive to P.P. (. 15 % of (a) / 2)

Look at the records of this particular F.W.C and see how many of each of the above groups are actually being provided services. Calculate what % coverage is being provided.

EXAMPLE NO.1

Let us take an example of a FWC with a catchment area population of 25,000. Here are some examples of the coverage required.

- Of the 25,000 probably 15 percent will be married women aged 15-45; i.e. 3750 (this number will probably grow each year of course; that is part of the population problem of Pakistan.)
- These are the women who should be registered with the FWC. Of these women not wanting more children (probably 50 percent of them, i.e. approx: 1900 women) or wanting to control birth spacing will require family planning services: The other women should also know of the services offered and be encouraged to support adoption of small family size.

If only 500 married women are coming to the FWC for family planning services, coverage is too low. (A couple may get family planning service elsewhere of-course but the evidence of the birth rate suggests that they do not!)

These women are likely to have about 1000 babies each year, and rather more pregnancies. (This is estimated from the annual crude birth rate of 42 per 1000, and in a population of 25,000: 42 x 25 = 1050)

- The 1000 or more women should be receiving antenatal care and post-natal attention as well as family planning counseling.
- These 1000 pregnancies mean roughly the same number of deliveries. Each delivery should receive some help from the FWW or from a Dai trained at the centre. The infants should be weighed regularly and immunized as required.

If only 100 mothers and infants receive regular service from FWW staff (at FWC or in their homes), again coverage is too low.

- Out of the 25000 population (taken as an example) probably 15% will be children under the age of 5 years, i.e. 3750. Each child is likely to have 3 or 4 attacks of diarrhea per year during the first five years of his / her life. Of course, poor children living in bad condition will have many more. Furthermore, 1 in 25 children under 5 are likely to die of diarrhea. So there are likely to be about 13,000 attacks of diarrhea among the children in the area every year. If the FWC is only attending 600 children a year (as the evaluation survey suggests) the coverage of children is too low.
- We can look at these 1000 infants born each year a little more closely.
- During the first year, each child needs:
- BCG Immunization.

DPT Immunization.

Polio Drops.

Measles Immunization.

This is total of 8000 immunizations. We also know that young children are likely to be sick about 10 days in a month. These days of sickness may not be serious in themselves, but they can have a cumulative effect, leading to malnutrition and death. Indeed, we know that 100 of these babies will die before their first birthday! 1000 children born a year means about 80 born a month. 80 x 10 days of illness means 800 days of illness per month when mothers may need the help of the FWC for childcare.

We should not regard these figures as being totally accurate. They are very much average figures based on many assumptions. But they do suggest the order of magnitude of targets and coverage for F.W.Cs. Evidently the Family Planning Services are by no means reaching all the interested potential clients. Very low coverage of children's health is being achieved. Coverage of delivery and antenatal care, bearing in mind the high maternal mortality rate in Pakistan, is also very low.

As mentioned earlier, however, FWCs are not the only places that services are available. It may be that many children are being seen at health outlets, or by private doctors. What these figures do give, however, is an indication to suggest that the coverage by the FWCs should be greatly increased. They also emphasize the need for FWCs, helped by their district officers, to make more accurate calculations of their own, real coverage.

EXAMPLE No 2

The Scale of Work to be done by Family Welfare Centre covering a population of five thousand around it.

In a population of 5000 people:

- No. of married women (15-45) years (MWRA) would be 750= 800 (nearly)

No. of women pregnant at one time = 500 (a)/100 x CBR x 3/ 12)

- (CBR = 42 e.g.)

No. of Eligible women (or couples requiring = 400 Family planning services) 50% of MWRA

Hence the target of the F.W Centre should be to:

1. To provide antenatal care to = 500 women

2. To provide family planning services to couples = 400

Suppose the F.W. Centre plans to reach those 1000 women in one year, the scale of work to be done by the F.W. Centre and its staff would be:

1 A.N (Antenatal) Care for 500 pregnant women:

- All these women do not come to the centre for A.N. Care.
- They should be visited at home and informed about the advantages of A.N. Care
- Each pregnant woman should have 3-4 antenatal examinations during her pregnancy.

2 Family Planning Care for 400 eligible couples.

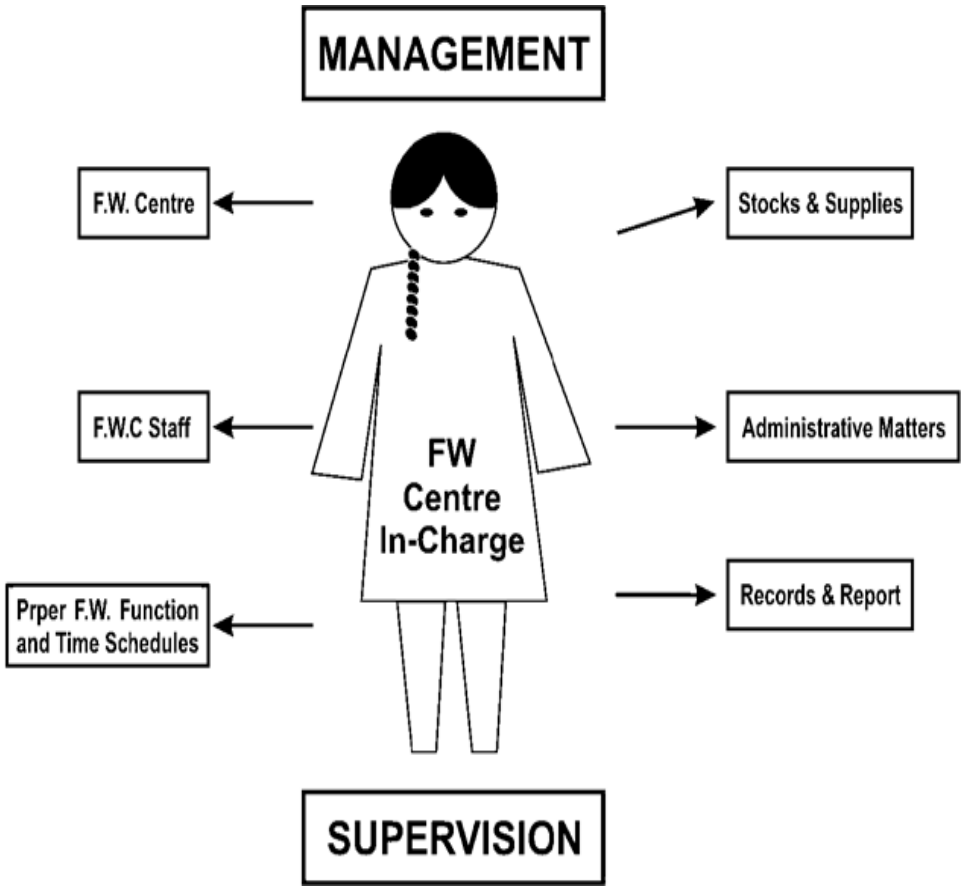
- All eligible couples should be registered by FWA on home visits.
- Provide information to all about family planning and those willing should be provided with contraceptives.
- Approximately 33 eligible couples should be provided family planning information each month.
- Prepare and implement Work Plans (long term) and Work Schedule (short term plans) for activities in and outside the F.W Centre.

33.4 ROLE OF FWW AS MANAGER OF THE FWC

33.4 ROLE OF FWW AS MANAGER OF THE FWC

• Know the role of FWW as a manager	• Describe management resources • Management of work equipment • List of Expandable or consumable items • List of nonexpendable • Inventory management and best Storage Practices.

This is a glimpse of the complex nature of your job.



The F.W.W should therefore exhibit keen interest, commitment, and seriousness in mastering this art and science of management. You should be able to manage the F.W. Centre regarding the following 7 components and to have practice in all these is essential during the "clinical attachment" phase of her training.

1) FWC Building
2) FWC Staff
3) FWC Functions

4) FWC Administration
5) FWC Stocks & Supplies
6) FWC Records & Reports
7) FWC Supervision Protocol

F.W.C building

The building should be well ventilated and sufficient for rendering reproductive health services and holding small group meetings. It should be located in a well populated area and be easily accessible.

Accommodation:

The Family Welfare Centre building should have at least three rooms with a large veranda. These will serve as i) a clinic ii) Insertion / Examination room and iii) room for community welfare activities iv) a waiting area for clients. An additional room facing outside (preferably) may be used for activities of F.W.A (male).

Each center should have electric supply, running water, sanitary facilities with water storage capacity.

Maintenance of F.W.C:

The FWW is responsible for ensuring that the building is well maintained and client friendly. The building premises and surroundings should be kept clean and tidy. The waiting area should have comfortable seats, drinking water arrangement and posters with maternal and child health slogans and family planning messages promoting small family norms; these should be upgraded time to time. It is essential to ensure that high standards of hygiene are maintained and particularly the waste products are disposed of in a hygienic way.

The FWC should have direction boards in its close vicinity and an obvious sign board outside the building (which also indicates the services provided). Another small board should display the working days and office hours during which the FWC is kept open for providing services accordingly. The F.W.W should publicize the location of the F.W.C and the services provided. To invite more and more people, she should distribute address cards and services through different sources e.g., Dais, Satisfied Clients, Health Outlets, NGOs/CBOs, Shopkeepers and Imams.

Organizing

Obtaining necessary facilities, equipment and staff to establish an efficient framework for carrying out plans through determining suitable process required to accomplish plans.

Grouping component jobs into an orderly organizational structure.

Establishing the structure of authority and coordinating machinery.

Direct:

Give directions or tell the people what they need to do. It is like conducting an orchestra, or co-ordinating an activity.

Directing:

Setting detailed time and cost framework.

Initiating and providing leadership in carrying out plans by making decisions.

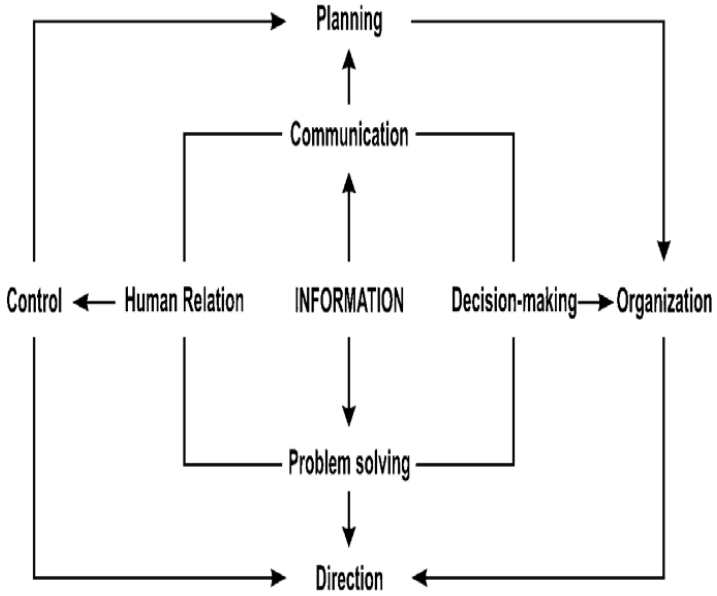
Issuing specific Instructions.

Guiding, motivating and supervising.

Control / Evaluate:

It is controlling through supervision of workers, monitoring of work / activities (if they are according to the plan) and evaluating the objectives / results. *Controlling / Evaluating*

- Evaluation of performance is done by comparing it to planned activity.
- Reporting deviations in time for corrective action by establishing standards and goals.
- Appraising performance and correcting deviations



33.5 SUPERVISION

33.5 SUPERVISION

Supervision is measuring the performance of workers (performers). Every human activity which involves a number of workers, needs inspection or supervision for maintaining performance, achieving objectives, coordinating efforts and evaluating outcomes.

"Good supervision stimulates the personnel to the highest endeavour. It coordinates their efforts and facilitates their work". Supervision is a dynamic process of facilitating workers, collecting information and giving feedback in order to maintain optimum human relationship so as to improve the workers performance and ultimately achieve the objectives. It must not be rigid in system and operation. Its framework must be structured so that change, growth and innovations are ensured if called for by the changed economic and socio-cultural needs.

The tool of measurement required for supervision is the job description, which states the tasks of the performer in detail and with all specifications.

At F.W.C the performance of the staff and their teamwork will be supervised in the light of their job descriptions. The FWW should have the job descriptions of all the F.W.C staff including her own. Moreover, each staff member should possess and know her / his own job description to carry out the assigned duties well. The supervisory visit should also be used to provide on-the-job training to F.W.C staff.

COMPONENTS OF SUPERVISORY SYSTEM:

There are four basic components of any Supervisory System.

1 Inputs

- Manpower (District and Tehsil Managers)
- Tools: Job Descriptions (JDs) of F.W.C Staff & Supervisory Visit Format / FWC Supervision Protocol

2 Process

How to use the inputs. During supervisory visit District and Tehsil Manager has to observe the performance of workers if it is according to their job description and set standards, encourage their further strengths, identify their weak areas & give them required feedback and reinforce by training. Collect information on supervisory visit format.

3 Output

Improved or decreased performance of her staff or subordinates.

4 Impact

Increased Family Planning and Primary Health Care coverage of the community around the centre.

SUPERVISOR:

Supervisor Is the management representative, who supervises measures, assesses, and facilitates the operating employees / workers to work efficiently.

It has now been proved that behaviour is the key to supervision, not traits and those supervisors can be taught, and they can learn the supervisory behaviour. Now there are training programs for supervisors, in which supervisors learn more and more about their roles. This along with field experience results in better supervisory development.

QUALITIES OF A GOOD SUPERVISOR

Some important qualities of the supervisor are described below:

Leadership

- Dynamic & diplomatic
- Inspires confidence
- Well informed, experienced and knowledgeable
- Innovative
- Sincere and trustworthy.
- Quick decision maker
- Impartial and Unbiased.
- Makes best in worst situations.

Problem Solving

- Discusses problems with staff and her supervisors.
- Solve problems promptly and effectively.
- Is supportive and encouraging.
- Has faith and trust in the supervisor

Power Delegation

- Assigns the right jobs / tasks to the right person.
- Provides freedom to decide how to work.

Counselling

- Good Listener: Listens to concerns of supervisees.
- Appreciates good work.
- Sensitive to feelings of others.
- Treats any information confidentially.
- Provides facilitative atmosphere.
- Guides them to make sound decisions.

Training

- Guides and provides training to subordinates during on-the-job training.
- Observes and assesses Knowledge, Attitude & Practice of staff.
- Provides feedback.
- Gives on the spot guidance.
- Strengthens the weak areas.

Role of a Supervisor:

Essentially supervisors should play a supportive role and provide psychological, technical and economic support to the employees. This supportive behaviour helps in developing cooperation and teamwork in the organization and leads to making the job of the worker easier, satisfying and more effective.

THE F.W.W AS SUPERVISOR

1) Discusses problems with her staff empathetically.
2) Guides, leads, directs, co-ordinates and facilitates her subordinates so that they produce the desired quantity and quality of work with-in the desired time.
3) Appreciates good work.
4) Facilitates the needs of the workers.
5) Ensures that her staff achieves their objectives. She is expected to resolve problems arising during the course of work and to anticipate any future problems.
6) Understands the needs and requirements of both the organization and the workers. On one hand, she must accept the rules, specifications, and policies which are passed down to her from higher authorities; while she ensures that they are carried out by the workers by inducing an attitude of co-operation and compliance. She also assists in maintaining a high mo rale of workers in getting the work done correctly and timely.
7) The FWW consults and gets support of her own immediate supervisor if she is experiencing any problems with the staff in the Centre.

TECHNICAL SUPERVISION:

Technical supervision of the FW Centres is provided by the Director (Technical) of the Provincial Office, with assistance from his / her staff. The visits will be according to the number of FW centres in the country. The Deputy District Population Welfare Officer Technical {D.D.P.W.O (Tech)) of the district office is directly responsible for supervising the technical aspects of F.W.C staff and reporting them onwards. However, it is possible for the 'non-technical' staff from the District Office to supervise all the organizational aspects related to technical tasks. It is also possible for them to supervise the quality of all outreach work, training, health education and community welfare activities. They can also refer technical problems to the Medical Officer at the Reproductive Health Centres.

Supervisee:

Is the person who is being supervised and is entitled to perform best under supervision when he or she feels that:

“I know what I am supposed to do.

I am well trained for the job.

I am provided facilities to do the job.

My problems are solved.

My good work is appreciated and recognized.”

MONITORING

Monitoring is measuring the work / activities being performed or keeping vigilance on the process, if things are moving according to the plan (Action plan / Work plan) of the program *(The tool of measurement of monitoring will be the work plan (The work Schedule).*

At F.W.C, the different activities for providing quality reproductive health services are monitored in the light of weekly / monthly schedule or the yearly plan. The FWW will monitor the clinical and community activities whether they are being conducted according to the weekly or monthly schedules e.g., antenatal clinics, satellite clinics, Sukhi Ghar mehfils and home visiting etc. Similarly, the FWW will in turn be monitored by her supervisor for these activities being conducted according to the scheduled plans. Her supervisor will also assess if the training activities (if any) are being conducted according to the relevant curricula e.g., community volunteer and Dai trainings

EVALUATION

Evaluation is measuring the outcome or the results i.e., a process of determining the extent to which the objectives (performance / educational) are achieved. The *tool of measurement* for evaluation is the objectives.

At the F.W.C level it will be assessed whether the objectives / targets have been achieved or not and to what extent; whether the target population in the catchment area of F.W.C is being covered sufficiently.

33.6 PREPARATION OF WORK PLANS & WORK SCHEDULES

33.6 PREPARE WORK PLANS & WORK SCHEDULES

A proper planning for long and short terms is required before work is implemented in an organized manner i.e., it is decided WHO shall do WHAT, WHEN & HOW.

Importance of Preparing Work Schedule

- Help plan work of F.W.C
- Improve the effectiveness of the F.W.C
- Help to supervise F.W.C staff especially in the community.
- Help in best utilization of time.
- Help to work with the community.
- Help in evaluation of performance i.e.

Help to find the difference between work done & work planned (Work schedule) by drawing comparison.

To ensure that as many as possible of these things are done, it is important for the FWW to prepare a Work Schedule.

Making Long Term Plans (Work Plans):

The FWW does not generally need to make long term plans because much of the planning is done at a higher level. Her main task is to implement these plans.

However, there are some aspects of the work which are local and where she should have some plan of where she is trying to get to over a period of six months or a year.

Examples of areas where she should make long term plans are:

- How many couples should be registered?
- Which parts of the community should receive most attention?
- At what times of the year should different health education items be stressed?
- What regular pattern of service provision should be established? (i.e. when should antenatal clinics be held, which time in the week should she reserve for herself to work in the community, when should regular staff meetings take place).
- Which influential people should be contacted during the six months or a year?
- How many community volunteers are needed and what should they do?

Making Short Term Plans (Work Schedules):

Each week will be a combination of routine regular work and specific work which will be done only that week. Routine work will include regular staff meetings, antenatal clinics, and attending clients who come to the F.W. Centre. Specific work will include such things as visiting Mrs. A who has not come for her next supply of oral pills, holding an FP camp in village B, visiting doctor C to ask him to tell his patients about the services of the FW Centre, etc.

The Work Schedule should be prepared every week. Every week will be different from the previous week. The schedule will include:

Regular Activities

- Staff meeting
- Antenatal clinics
- Meetings at District Office (some weeks)
- General services (i.e.: Clinic open to accept clients)
- Making a list of all FP clients who should be followed-up and visiting them.
- Making a list of all clients who have not returned for continuation of pills or injectable contraceptives and contacting them.
- Where and when any health education activities will take-place, and the theme?
- Where and when any camps / satellite clinics are to take place?
- Which houses should be visited for registration?
- Which Traditional Birth Attendants (TBAs) will be contacted?
- Where contraceptives will be distributed?
- Which Community Volunteers (CVs) will be met, what training they will receive, what work they will be asked to do?
- Which influential people will be invited, what support they will be asked to give? The aim of the work schedule is to make clear WHO will do WHAT and WHEN.

Planning the work together with the FW Centre staff:

If the work for the week is planned by the FWW with help of other members of the F.W Centre staff, the FWW will be able to discuss any problems that the workers might be likely to face. When the FWW supervises the work during the week she will be able to follow-up problems / solutions that have been discussed at the planning stage.

It is important for the FWW to decide which activities are most important for her to supervise in the following week. She has limited time each week for carrying out direct supervision in the field. She should plan to supervise different aspects of the work of her staff gradually over a period of time.

Planning the Supervision of the F.W.C Staff and Workers:

The work schedule will tell the FWW what tasks are going to be done during the week, and where they will be done. She will therefore be able to plan how she will supervise different tasks. For example, she might plan to accompany the FWA (f) on her antenatal visits to Village X on Saturday, to supervise her directly. If the FWA (m) is distributing contraceptives to various CD points throughout the week, she might supervise this by:

- Discussing this task at the end of the week with the FWA (m)
- Checking the contraceptive stock register

- Going to visit one or two CD points to find out if they are getting enough contraceptives.

It might be planned that both the FWA (m) and FWA (f) should be working with some community volunteers on several days during the week. The FWW might plan to discuss their progress at the weekly staff meeting as a form of supervision of this activity. Thus, supervision can be planned, and the work schedule will be helpful for this process.

STAFF ATTENDANCE REGISTER FOR THE MONTH OF_____20___

Annex 23.4

Sr. No	Name	Designation	1	2	..	30	31	Total no of Days	Remarks

WORK SCHEDULE

F.W. Centre:_____ Week Beginning: _____

F.W.W / F.W Counsellor_____ F.W.A (F)_____F.W.A (M)_____

	TIME	ACTIVITY	PLACE	TIME	ACTIVITY	PLACE	TIME	ACTIVITY	PLACE
Monday									
Tuesday									
Wednesday									

Thursday									
Friday									
Saturday									
Sunday									

COMMUNITY SURVEY around F.W.C_____

NAMES OF TRAINEES: _____

(1) _____

(2) _____

Household Reg # With Address	Head Of Family	Name Of Client	KNOWS		MCH											FAMILY PLANNING				SANITATION		
					Mother Health						Child Health											
			F.W Centre	Services Provided	Pregnant		Ante Natal	Post Natal	Total No Of Children	Age Of Last Born	Nourishment Stat		Chronic Illness	Immunization		Knowledge	Current User	Method In Use	Side—Effects Complications	Personal Hygiene	Domestic Sanitation	Environmental Sanitation
					Normal	High Risk					Well- Nourish	Mal- Nourish		Complete	Incomplete							

MOVEMENT REGISTER OF F.W.C

Date	S. No.	Name & Designation	Purpose & Destination	Time of Departure	Signature	Time of Return	Signature

TRAVELLING ALLOWANCE BILL (TA / DA Bill) Annex 23.8

Name _____

Designation _____

Basic Pay _____

Head Quarter _____

Particulars of Journey and Halts					**Kinds of Journey by Rail**				**Journey by Road**			**Daily Allowance**			**Actual Expenses**	
Departur	Date	Arrival	Date	Hours	Journey	Class	Noof	Amount	Noof	Rate	Amount	Noof	Rate	Amount	Part	Amount

Payment of Rs._____ (Rupees)_____

Signature of Travelling Officer_____

Signature of Sanctioning Authority_____ Counter Signed by_____

LOGBOOK OF VEHICLE No_____

Annex 23.6

Date	Timing	Name of Requisitioning Officer	Detail of Journey before Journey	Meter Reading	Meter Reading after Journey	Total K.M Covered	Signature of Requisitioned Officer	Remarks

33.7 ADMINISTRATION & ACCOUNTS

33.7 ADMINISTRATION & ACCOUNTS

Components:

- Regular attendance
- Record all movements of staff
- Know & implement leave rules
- Know how to write logbook
- Disburse salary
- Incur petty expenditure
- Maintain petty cashbook
- Prepare T.A/ D.A bills
- Carry out correspondence with DPWO

Attendance

- Inspire all staff to be punctual and regular in execution of their duties.
- Maintain the Attendance register of staff.

This register contains the names of staff members of the centre. Each literate staff member signs the relevant column of the register in the morning when she or he attends the centre, for an illiterate official the F.W.W will mark present (P) / absent (A). If a staff member is not present, and does not submit an application, the F.W.W should mark him or her absent. A report of staff attendance during the month should be made to the D.P.W.O.

MOVEMENT OF FWC STAFF

The FWW should:

- Inculcate in her staff the habit of informing about their movement during duty.
- Maintain the Movement Register for their movement in the community during duty hours.
- Maintain the logbook on using the official vehicle for transportation.
- Develop in Staff the habit of going on leave with information and prior permission of the concerned authority.

The movement of every staff member of FWC shall be recorded in the Movement Register when she / he is on an official duty (Format is attached as Annex –23.5).

The movement of different staff members is as follows: -

The FWW:

- Has to leave her F.W Center to attend the monthly meeting at the district office.
- Has to go to for conducting camps or satellite clinic in a remote target area

- Supervises the work of her staff in the community.
- Holds meeting / Sukhi-Ghar mehfil with local women.
- Mobilizes community to participate actively in F.W.C activities.
- Surveys the locality for health needs assessment.
- Recruits volunteers, friends of F.W.C / Dais.

The F.W.A (F):

- Goes for home visiting
- Follows up F.P clients
- Retrieves dropouts from FP clients.
- Supplies contraceptives.
- Registers eligible couples.
- Disseminates information.
- Distributes address cards of F.W.C and the services rendered.
- Motivates / Counsels women to attend F.W.C
- Gives health talks in the community.
- Accompanies the contraceptive surgery cases to RHSC

The F.W.A (M)

- Does similar job as F.W.A (F) for male involvement in Reproductive Health activities.
- Collects sale proceeds from various distribution points.
- Addresses community gatherings.
- Meets influential, community & religious leaders
- Arranges satellite clinics.
- Is sent on an official duty by the FWW

Aya / Chowkidar

- Is sent on an official errand by the FWW
- Accompany FWW / F.W.A (F) for official work.

When the official leaves the F.W.C, she / he enters the date name with designation, purpose of movement, destination, and time of departure from F.W.C and puts her / his signature. On return she / he enters the time and again signs.

LEAVE RULES

Include all leaves entitled by employees of Punjab government

Leave is earned by government servant by the period of duty only. The leave cannot be claimed as a matter of right. In the exigencies of public service, a competent authority has every right

to refuse or revoke the leave of any kind. This discretion, however, does not entitle an authority to alter the nature of leave applied for. The grant of leave can be refused but the nature of leave, applied for, cannot be altered under any circumstances.

Types of Leave:

- **Casual leave**: 25 days in one calendar year. It does not carry over to next year. This leave cannot be claimed as right but is privilege. 25 days casual leave is admissible during a calendar year, and the maximum amount that can be allowed at a time is 10 days and up to 15 days in special cases. Casual leave cannot be claimed as a matter of right but it should be granted invariably unless the presence of an officer is absolutely necessary and in emergency. Casual leave may be prefixed or suffixed to a closed or optional holiday. It can be sandwiched in between two closed or optional holidays. However, if a closed or optional holiday falls between two casual leaves it will be counted as a casual leave.
- **Earned Leave with full pay:** If due It is calculated at the rate of four days for every calendar month (30 days) of the period of duty rendered and is credited to the leave account "leave on full pay." Duty period of 15 days or less in a calendar month being ignored and those of more than 15 days being treated as a full calendar month for the purpose. There is no maximum limit on the accumulation of such leave.
- **Leave on Medical grounds**: Maximum 180 days and 365 days in entire service
- **Medical Leave on Full Pay:** The maximum period of leave on full pay that may be granted at one time shall be as follows:
- Without medical certificate (earned leave) 120 days. With medical certificate (medical leave) 180 days.
- On medical certificate from leave account in entire service 365 days.
- **Medical Leave on Half Pay:** Leave on full pay may be converted into leave on half pay, at the option of civil servant; the debit of the leave account will be at the rate of 1 day for every two days of the latter. There is no limit on grant of half pay so long as it is available by conversion in the leave account.
- **Maternity Leave:** Maximum 3 times. This is granted to female civil servant for confinement not more than 3 times in her entire service. Beyond the third one, the civil servant will have to take leave from her normal leave account. Pregnancy is certified by a gynaecologist, leave for six weeks before and six weeks after the expected date of delivery is granted.
- **Special Leave:** For female government servants. Max: 130 days on the death of her husband. Not to be debited from her Leave Account. A female civil servant, on the death of her husband, may be granted special leave on full pay, when applied for not exceeding 130 days. This leave shall not be debited to her leave account.
- **Extra-ordinary Leave (Leave without pay**): It may be granted on any ground up to the maximum period of 5 years at a time provided the civil servant to whom such leave is granted has been in continuous service for a period of not less than 10 years, In case the civil servant has not completed 10 years of continuous service, extra ordinary leave without pay can be granted for maximum period of two years at the discretion of head of office.

- **LEAVE not due**: (Only for permanent govt. servant) Max: 35 days. Debit in future leave subject to the condition that during the 1st five years it shall not exceed 90 days in all. It may be granted on full pay, to be adjusted against leave to be earned in future for a maximum period of 365 days in the entire period of service subject to the condition that during the first five-year service, it shall not exceed 90 days in all.
- **Disability Leave**: (Max: 24 months) added by other leave for more 24 months. Not debited from leave.180 days with full pay, rest 1/2 pay. A civil servant unable to perform duty due to disease or disability can avail leave. During disability, leave shall be equal to full pay for the first 180 days and half pay for the balance period.
- **In service death :** 180 days with full pay, to his family. (As defined in pension rule). In case a civil servant dies while in service, lump sum payment equal to full pay up to 180 days out of the leave at his credit shall be made to his family.
- **Leave Preparatory to Retirement (LPR):** 365 days, if leave due A civil servant shall be allowed leave in accordance with the leave rules applicable to him, provided that the grant of leave will depend on exigencies of service and be at the discretion of the competent authority. This is a leave which a civil servant can avail before retirement. The maximum period up to which it may be granted is 365 days. It may be taken, subject to availability, either on full pay, or partly on full pay and partly on partial.

Logbook

When an official vehicle is required for a specific purpose the requisition is submitted on the prescribed format to the D.P.W.O. After undertaking the journey, the FWW makes the entries for the mileage covered and signs the entry. The logbook remains in the custody of the driver of the official vehicle.

The FWW has to sign the logbook kept in the custody of the official vehicle's driver. She should therefore be aware of the particulars (columns) of the logbook and the entries to be made. The date of using the Vehicle, the name of the user and the purpose of journey are entered. The FWW should specifically note the mileage at the start of the journey and then at the end of the

journey from the mileage meter of the vehicle and preferably enter these in the relevant columns herself or if the driver enters these, she should verify that they are correct and then sign in the column marked "signature", for every official journey.

Disburse Salary:

The FWW should be capable of disbursing salary according to the policy. Currently the employees are required to maintain bank accounts and their salary is transferred directly through cheques marked "payees account only" issued by the D.P.W.O.

Petty Expenditure / Accounts:

The maintenance of proper accounts is very essential for almost every concern which deals with finance, stores and stocks etc; e.g. a house, a health facility, an office, a bank and a

country cannot be prosperous if the accounts of incoming and outgoing are not kept properly.

In the absence of proper accounts, it is not possible to assess true picture of the financial position, stores and thus steps cannot be taken to accelerate the ways and means.

The FWW has to incur small expenditures on day-to-day requirement, as allowed by the

D.P.W.O. She should know the current correct market rates. Whenever she has to purchase an item / article she is required to obtain quotations from three different shops / sources, make a comparison statement and should buy it from the shop quoting the lowest rate. She obtains a proper printed cash memo for the payment made for the particular item and keeps this bill as a record in a separate file and submits it to the D.P.W.O if and when required.

Petty Cash Book:

The Cash Book is the most vital initial record of monetary transaction.

Importance of Cash Book: The importance of cash book cannot be over emphasized. It has got an important role in the maintenance of accounts. It has got receipt and payment sides on each page. If these sides are properly filled on regular basis, then the chances of misappropriation or fraud can be minimized.

The FWW is required to maintain a petty cash book for the expenditure incurred by her. The amount (money) received is entered in the Receipt portion of the cash book with date and signature of the FWW and the expenses are entered in the Expenditure portion, daily with date and signature of the FWW Format at23.7(b)

The Cash Book has to be closed on the very day a transaction takes place and invariably at the close of the month, when the cash balance is to be physically checked and certified.

If closing of Cash Book is done correctly. Then both sides should show the same amount of total as illustrated below: -

Check on the money transactions:

The Government money whether drawn from the Government treasury or received through other way if not regularly and promptly taken into account, there is likelihood of its being mis-used and mis-appropriated. In order to guard against such unpleasant happening the maintenance of cash book is essential. From this register one should know at a glance what amount has been drawn from the Govt or received from other sources and what has been disbursed and what is left in balance.

A mis concept prevails that amount received through bills or cheques are to be recorded on actual receipt of the cash. This is an erroneous concept. Passed bills and cheques are just like cash. The Drawing and Disbursing Officer must make sure that they are entered at once and signed, otherwise cases of embezzlement of Government money can happen by not entering passed bills and cheques in the Cash Book promptly.

TA / DA Bills:

After completion of the official journey / tour the claim for the expenditure is submitted on the Travelling Allowance (T.A) / Daily Allowance (D.A) bill, the prescribed format can be obtained from the cashier of the D.P.W. Office. (Annex23.8) A certificate in this respect duly signed by the FWW has to be submitted with the claim. The sample of the certificate is given below:

Certificate of Travel Regarding

- That journey was performed in the interest of Government.
- The claim has been prepared for the first time and has not been drawn previously at any time.
- The amount claimed in this bill is not more than the amount spent by the person at the TA Claimed.
- I am not in receipt of Motor Car or Motorcycle.
- I was actually not merely restricted in the camp during the period in which TA / DA has been claimed.
- No casual Leave was availed by me during these days.
- The particulars given in this bill are correct to the best of my knowledge and belief.
- The distance travelled is more than 5 miles.

Inventory Register of Area:

FWC Area Data Sheet

This sheet is completed by the FWW under the supervision of the DPWO. It is updated no less than annually. This sheet should be completed once and updated only as the information changes. An annual review of the data should be sufficient.

It should have:

1. Demographic data of the area

1. List of trained Dais in the area
2. List of area commission agents
3. List of medical facilities
4. Rough map of the area

Demographic Data of the Area

Purpose: It serves two functions. First, it displays the extent of the responsibility of the FWC Staff. Second, it displays the parameters of the service area for visitors to the FWC.

The number of eligible couples is particularly important. It is the denominator used to calculate contraceptive prevalence rate.

Column

a) Serial Number

b) Name of Village/Ward

c) Approximate area in square kms

d) Population:

- Males
- Females
- Total

e). Number of households

f). Number of Eligible Couples

g). Data and comments (be sure and pencil in the data of the last entry for this line).

Source of Data:

Area, population and number of households should be available from the municipal committee / Town Committee Office in urban areas and from Union Council Office in rural areas. A rough estimate of the approximate area is sufficient. If a contraceptive survey has been completed for this service area, it will include the number of eligible couples, alternatively FWW may (recall the portion of your training that discussed how to do) a baseline survey. A third alternative is to multiply the population of each village / ward by 20% (or divide by five) to roughly estimate the number of Married Women in Fertility Age. This will approximately be the number of eligible couples.

Under remarks, note which of these alternatives has been used.

List of Dais in the Area:

Dais are an important asset in promoting FP acceptors and assisting the FWC in meeting FP targets. Many FWWs meet with the Dais, periodically, to solicit their support in motivating new Family Planning acceptors.

Column

- Serial Number
- Name of Dai
- Residential Address of Dai
- List private job she may be doing or self-employed. If she is employed, what is the name of organization for which she works
- In what year was she trained?
- What was the duration of her training?
- Write the date of the last update of this line of information.

Source:

A list of Dais who have participated in the training may be available. Information about Dais, both trained and untrained, may be provided by patients at clinics. Add these to the list but be sure to mark the untrained Dais as in need of training. Enter this in column 5.

The list includes not only those Dais who received training from FWCs but all those who received some formal training through the Health Department, UNICEF, or under the TBA programme and who reside in the catchment area of the FWC.

List of Commission Agents in the Area

This includes all types of agents, volunteers or otherwise.

Purpose: Commission agents are an integral part of the contraceptive delivery system. The list of agents will support supervision of the performance of FWAs (M) and is a useful management tool for the FWW.

Column

- Serial Number
- Name of Agent
- Profession or occupation of the agent
- Address of Agent
- Date of Appointment.
- Write "Yes" if he is actively participating.
- Write "no" if he is not actively participating. Delete from the list any commission agents who are inactive for more than six months.
- Write here the date of recording, addition and deletion of the information.

The Contraceptive Stock and Sales Ledger CLR -14 (a) provides this information.

List of Medical Facilities:

This includes all the health facilities, doctors, homeopaths, and hakims in the area. If the facility is listed, do not list the staff separately.

Purpose:

Staff at medical facilities are potential motivators. This list also supports referral activities.

Column

- Serial Number
- Name of Practitioner or Facility
- Addresses

Rough Map of the Area

Purpose: A map of the service area displayed on the wall of the FWC will help you to organize your work. Clients appreciate it. It will be useful in discussing the work with visitors, and supervisors.

The map may be hung separately on the wall rather than be included on the data sheet.

Source: DPWO staff can help in preparing the map. Include landmarks such as health facilities and schools. It can also be obtained from the local Union Council or Municipal Committee OfficeSPR30s

Performance Evaluation Index (PEI) Calculation Sheet Annex 23.15 (a) recording

1. Recording Responsibility: FWW

2. Frequency: Monthly

Purpose:

The purpose of this calculation sheet is to use the contraceptive performance data for the month to calculate Performance Evaluation Index (PEI) of FWC for the month.

Source of Information:

The quantities of contraceptives dispensed will be obtained from the FWC Monthly Performance Report. SPR -31.

Recording Instructions:

Trace the contraceptive quantities dispensed during the month from the SPR -31 and record the data in column -2 against the respective items.

Divide each quantity of contraceptives by the corresponding constant printed in column -4 and record the resulting quotient in column -5. This is PEI for individual items. Use a calculator for calculations.

Add all entries in column and record the resulting total at the bottom of column -5 against overall PEI

PEI Display Sheet for F. W. C

Recording Responsibility FWW

Frequency Monthly

Purpose

The purpose of this display sheet is to help FWW in making comparison of her center’s performance in the previous month and with that in the same month last year.

Source of Information: The source data is obtained from SPR -32 for the current month.
Recording Instructions

The PEI value for individual contraceptives as well as the overall PEI value are taken from the PEI calculation sheet SPR -32 and recorded in the respective column against the current month / year in the row.

Cash Memo Annex 23.7 (a)

MARVI GENERAL STORE

Cantonment Saddar Hyderabad.

Date: _____ No. 000708

Qty	Particulars	Rate	Amount	
			Rs.	Ps.
				•
		Total:		

Original Bill

TUFAIL PHOTO STATE CENTRE

Court Road, Gari Khata, Hyderabad

No. 3343 Date: 09-07-1999

Qty	Particulars	Rate	Amount	
			Rs.	Ps.
	Photo Stat Copy Plastic Cover			
		Total:		

Annex 23.7 (b)

PETTY CASH ACCOUNT OF _____

for the month of_____20_____

Receipt Amount		Month & Date	Payment Particulars	V. No.	G.Total Amount		Postage		Petty		Sundry		Cartage		Travelling		Stationary	
Rs.	Ps.				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.

Annex 23.8

TRAVELLING ALLOWANCE BILL (TA / DA Bill)

Name _____

Designation _____

Basic Pay _____

Head Quarter _____

Particulars of Journey and Halts					**Kinds of Journey by Rail**				**Journey by Road**			**Daily Allowance**			**Actual Expenses**	
Departur	Date	Arrival	Date	Hours	Journey	Class	Noof	Amount	Noof	Rate	Amount	Noof	Rate	Amount	Part	Amount

Payment of Rs._____ (Rupees)_____

Signature of Travelling Officer_____

Signature of Sanctioning Authority_____ Counter Signed by_____

33.8 OFFICIAL CORRESPONDENCE

33.8 OFFICIAL CORRESPONDENCE

Official Correspondence:

The FWW has to carry out correspondence with the D.P.W.O office and maintain its records in files. There is a separate file for the letters received from the D.P.W.O office and a separate file for the letters issued from the F.W. Centre.

Forms of Communication / Correspondence:

The different types of official correspondence carried out are as follows:

- Official Letter.
- Memorandum / Office Memorandum.
- Demi Official Letter - D.O.
- Un-Official Note -UO Note.
- Endorsement.
- Notification.
- Office Order
- Resolution.
- Press Note / Press C2ommunique
- Fax Message.
- Express Letter.

Official Letter:

An official letter form should normally be used for correspondence with the Central Government, Other Provincial Governments. It may also be used for communicating formal sanction of Government to Attached Departments and subordinate offices but not for correspondence between different departments of the Secretariat. An official letter purports to convey the views or orders of Government, as opposed to departmental or personal views or instructions under the directions of Government. Thus letters / demi-official letters, purporting to issue under directions from Government, should begin with the words. "I am directed to.....……..... I am desired to. " In other cases, the letter may

begin with the words "I am to."

An official letter should be composed of the following parts:

- Letter head bearing the name of the department
- File Number, place of issue and date.
- Name (with titles, if any) and designation of the sender.
- Designation and address of the addressee.

- Subject.
- Salutation.
- Text.
- Subscription.
- Signature and designation of the sender; and
- Telephone number of the sender in the top left corner.

A memorandum may be used where a reference can conveniently be made in a brief form without observing the formalities to an official letter. The memorandum is normally employed for corresponding with subordinate office or offices of equal status within the same Government. The memorandum should be composed of the following:

- Letter head bearing the name of the Department.
- File number, place of issue and date.
- Designation and address of the addressee.
- Subject.
- Text.
- Signature and designation of the sender; and
- Telephone number of the sender shown in the top left-hand corner.

Demi-Official (DO) letter should be used between Government officers when it is desired that a matter should receive the personal attention of the individual addressed. It should, therefore, be answered demi-officially by the officer to whom the communication under reply is addressed or by his successor in office. The first and commonest use of demi-official correspondence is to supplement or explain any matter which has already been referred officially, or which it is secrecy where it is necessary to run no risks, in certain cases relating to matters of personal nature; and occasionally in case of great urgency to save time. A Demi-Official communication should be addressed to an officer by name. It should be written in the first person singular with the salutation "My dear. or "Dear Mr. "

The salutation "My Dear" should normally be used for an officer of equal status or for officer one step higher in the status. The D.O letter should confirm to the following particulars:

- The name and designation of the sender; with titles, if any, should be typed under the crest on the first page. The Telephone number of the officer sending the communication should invariably be indicated on the top left corner
- The name, with title, if any and address of the persons addressed should be written at the bottom of the letter, beginning from the left margin, a space or two below the writer's signature
- The cover of D.O correspondence should be addressed by name.

Demi-Official correspondence should be filed with other official correspondence on the subject. Demi-Official correspondence should be avoided when an official letter will serve the purpose. Subordinate officers usually are not required to address Government either direct or

Demi- officially on matters of public importance. In no case should officer adopt the Demi-Official form of correspondence to make direct representations on the matters such as promotions, postings, pay and the like. In all such cases, regular representations should be made through normal channels.

Un-Official Note / Reference (UO Note):

An un-official reference is normally used for making interdepartmental reference between secretariat Departments particularly when files are sent to other Department for information or advice. This form should be used when:

- A copy of a communique is to be forwarded to others in addition to the original addressee e.g., "a copy is forwarded to for information / for compliance."
- Copies of orders, etc. received in or issued from a department are sent to other Departments or offices for information and / or action. If any action is required, brief instructions regarding the action to be taken should be given.
- Copies of Government sanction to expenditure or approval for schemes are to be endorsed to the Audit Officer concerned by way of authorization of expenditure/ financial commitment.

Endorsement

It should normally be addressed by designation. It should be written to the third person and should bear no salutation or subscription except the signature and designation of the officer signing it. When the endorsees are more than one in number, the signature and designation of the officer signing the endorsement should appear at the end of the last endorsement and not after every individual endorsement.

Office order should be used for conveying instructions to be followed in the Department / Office and for making appointments, promotions leave etc. of non-gazetted staff. A draft of the communication, proposed to be issued on a case submitted to a Higher Officer, may be prepared at any stage, if it appears that this will facilitate its disposal. In routine cases the officer should invariably put up an anticipatory draft when submitting a case for orders. A higher officer may himself prepare a draft and authorize its issue or submit it to the next Higher Officer for approval. A draft communication should convey the exact intention of the order passed both in letter and in spirit. The language used should be clear and simple.

Notification:

Used for notifying in Gazette of Pakistan Ordinance, Rule, Order / Appointment / Leave / Transfer of Gazettes of decisions of Government on important matters.

Notification shall be used for making Gazetted appointments, postings, transfers, and also for publishing rules, orders bills, ordinances, etc. in the Official Gazette Press Communique or Press. Note form is used when it is sought to give wide publicity to a government decision or policy through the press.

File Keeping:

MODULE V

Maintain all files required

File: Means a collection of official papers / documents related to one particular subject or aspect of a subject.

File Register:

Means a register which contains classified list of subject heads in the action according to which files are numbered.

Recording: Closing of a file after action on all aspects / issues has been completed.

Weeding: Means sorting-out and destroying those records which have outlived their utility.

Parts of File:

- Note Portion.
- Correspondence Portion.
- Summary Portion.

Separate folder / Cover being used for each portion. Each paper in the cover should be punched and not perforated by pushing the tag through.

Making the Note Portion:

Comments regarding the information and facts on the letters received are recorded and forwarded to the higher authority for necessary action.

Making the Correspondence Portion:

All issue / Receipt to particular subject.

Making the Summary:

Of complicated cases - summary

Number & Subject of file:

Each file bears a Distinct No and a subject.

Both these are written on notes & Correspondence portion (Covers). Volume of File - should contain not more than 300 pages. A new volume should be opened after every 300 pages. But numbering should be continuous.

Allotment of Numbers: Categorize different section in your office e.g.

Allotment of Numbers: Categorize different section in your office e.g.

Administration - Admin; Training - Trg; Contraception - Cont

Using the Head Administration there can be many sections e.g.;

I. **Posting & Transfer.**

II. Purchase of Equipment.

III. Recruitment of Staff.

Again under head of I. Posting & Transfer may be sub-heads e.g.

I. FWW

II. FWA

III. Chowkidar

Purchase of Equipment, may have sub-heads like: e.g.

Theatre Equipment.

Clinic's Equipment etc.

Files are numbered according to year in which they are opened & it starts from January to December 2 / 0 6 .....

Maintenance of File: Page numbers to be done consecutively on all pages of correspondence in black or red ink near enough to the corner of the page so that one can read without turning the page.

33.9 FWC STOCKS & SUPPLIES

33.9 FWC STOCKS & SUPPLIES

This is a glimpse of the complex nature of FWW job. The F.W.W should therefore exhibit keen interest, commitment, and seriousness in mastering this art and science of management.

She should be able to manage the F.W. Centre regarding the following 7 components and to have practice in all these is essential during the "clinical attachment" phase of her training.

- FWC Building
- FWC Staff
- FWC Functions
- FWC Administration
- FWC Stocks & Supplies
- FWC Records & Reports
- FWC Supervision Protocol

STOCKS & SUPPLIES

The FWW is responsible for maintaining furniture, equipment, adequate supplies of medicines, contraceptives and record cards etc at the Centre. She should check the stocks (with the FWA(m) in the case of contraceptive stocks) before the monthly meeting at the District Office. There should be enough supplies in stock to last for three months. If any items falls below this level, the FWW should make the necessary indents immediately if possible or at the monthly meeting. If supplies do not arrive on time, the FWW should inform the Supervising Officer from the District Office on his / her next visit.

Likewise, she should check the supplies of medicines (with the FWA (f)) and tally the balances in the medicine register with that available in the stock before the monthly meeting. She should enter the balances of medicines & contraceptives in the Monthly Performance Report, make an indent for medicines also and submit it to the D.P.W. Office and get the supplies.

It is essential to find out whether there are shortages of contraceptives, medicines, equipment or other supplies. If there are shortages, then the F.W. Centre cannot function and provide a high-quality service. This is an absolute priority for the supervisor / FWW.

It is also worth checking whether the centre is over-stocked, particularly with perishable items like medicines, and contraceptives. Any medicines which are past the date of expiry should be noted and deposited in the District Office.

Physical Verification of all the stock items in the store should be carried out

every year by the D.P.W. Office to find out whether the stock is intact and workable or not. The F.W.W should make preparation for this beforehand. She should arrange for repairs of the repairable items and prepare a list of irreparable stores and submit it to the D.P.W.O so that it can be verified during the annual verification and necessary procedure can be adopted

to dispose of the unserviceable / irreparable items through public auction.

The mass scale acceptance of Family Planning depends on the greater use of contraceptives. Distribution of contraceptives precedes the motivational or the educational program. Emphasis has therefore, been placed on the distribution of contraceptives to the eligible couples through various channels. Of these, Family Welfare Centres have been assigned significant role, with their wide range of activities they will be required to dispense contraceptives not only in the Centres but also through other outlets in the community. As such, F.W. Centres play a pivotal role in the promotion of the program. The Centres have therefore to devise an efficient network of distribution of contraceptives in the community.

Logistic System:

Logistics consist of planning and programming of the commodity, its receipt, storage, issue, maintenance, accounting, and evaluation to determine effectiveness of the system. In a nutshell, the objectives of the logistic system are to ensure that the particular commodity is available at the proper place, in the proper amount at a proper time to support the program.

Requirement:

1) The requirements for contraceptives are initially determined on quarterly basis.

2) The quarterly requirements of contraceptives are worked-out by the D.P.W.O, on the performance of the Centre in proportion to the targets assigned to the Centre for the quarter.

3) The actual consumption is carefully noted by months and then the quota is reviewed and revised after every six months if considered necessary.

Reserve Stock:

In view of the unforeseen circumstances viz. breakdown of transport or unavoidable delay on the part of District Office or Central Warehouse, there is every possibility that the consignment may not reach the Centre on the schedule date. As such, the Centre should keep reserve stock of at least two months' supply to guard against the contingencies.

Supply:

Steps should be taken by the D.P.W.O to ensure that stocks for two months are always available at the F.W. Centre while one month's stock is under consumption at the consuming outlets. On receipt of monthly report of consumption from the F.W.C; District office should replenish the stock on monthly basis.

Receipt:

On receipt of the stocks the FWW should personally verify the accuracy of the consignment in the presence of the representative of D.P.W.O who brings the consignment. After verification, she should sign the receipt voucher and hand-over the same to the representative retaining a copy of the voucher at the centre.

The FWW should enter the quantity received in the prescribed stock register. In case the consignment is received at a time when the FWW is away from her Headquarter, such formalities should be fulfilled by the Family Welfare Assistant.

Storage:

Certain rules and regulations should be followed for storage.

- Contraceptives are to be stored in a room having proper ventilation.
- Contraceptives should in no case be kept on the floor.
- Contraceptives should preferably be kept in almirahs or on racks. In case of non-availability of almirahs and racks, the contraceptives should be kept on wooden pallet raised at least 8 inches above the floor.
- To save from deterioration and to keep it fit for use, the contraceptives should be protected from direct sun light, heat, humidity and dust.
- The issue of contraceptives should be used on “first in -first out” principle. However, all the commodities should be used / utilized within the prescribed shelf life.

GENERAL STOCK REGISTER:

Stock is of two types; one is non-perishable or durable stock and other is perishable or non-durable stock. The non-perishable stock is like furniture, tools and equipment and the perishable/ non-durable stock is that which can exhaust or break easily in daily use such as stationary articles etc. The stock registers for consumable items like medicines and contraceptives are maintained separately.

Again, stock contains different kinds of articles / goods i.e., furniture, equipment instruments, Library books, and stationary. Every kind of stocks as enumerated above should have separate Stock Register and also separate Stock In charge. This is necessary to guard against the losses and deficiencies.

It helps the In charge as well as the Head of Office in physical verification of the store which is required to be carried out each year to find out whether the stock is intact and workable or not. This also enables the Head of Office to assess his further requirements and arrange repairs of the repairable stores and dispose of the unserviceable and irreparable stores through public auction, after observing all necessary formalities.

The register is a prescribed one and has got the following columns on each page. One page for one kind of store article should be reserved i.e. for desks, benches, tables, and chairs etc. separately:

- Date of purchase
- Balance brought forward.
- Quantity of new purchase.
- Rate / cost.
- Total (Column No. 2 & 3).

- Date of disposal
- No. Disposed of.
- Amount received.
- Balance (Col: 5-7).
- Initial of D & DO / Head of Office

If these columns are properly and promptly filled in and the stock is regularly physically checked/ verified, the losses can be avoided. Here one thing is necessary to be taken in view that on each occasion when there is no fresh purchase or no disposal is required the relevant columns 3 and 4 or 7 and 8 should be crossed as the case may be. These should not be left blank otherwise tempering or deficiency can take place. This depends upon the honesty of the stock in charge. Moreover, the prompt maintenance of each stock register facilitates the process of handling and taking over charge and if there is shortage the same can be made good at the same time either by replacing the articles or depositing its cost into the Government treasury.

All stores / supplies received should be examined, counted, measured or weighed as the case may be at the time of delivery. It should also be seen that quantities are correct, and quality is good and record a certificate to this effect on the invoice / bill / cash memo. The stores / articles should immediately be then entered in the respective stock register. Two separate registers should be started for permanent Stock Articles and Consumable articles. At the time of issue, entries should be made in the register and acknowledgement obtained.

The stores should be examined physically at least once a year by the responsible officer other than the stores incharge and a certificate to this effect recorded in the Register, Shortages etc.

Furniture, fixture, and equipment available in the FWC is to be recorded in the Register, separate pages will be used for each item. Name of the item will be written at the top of the page.

Column

- Enter date.
- Record the opening balance.
- Mention the quantity / number of items received.
- Sum of the column 2 & 3 is to be written
- Quantity/number issued
- Write the closing balance by subtracting column 4 from column 5.
- Write the source Whom the items have been received / issued.
- This column is provided to give remarks like broken / unusable / out of order.
- Recipient will sign.

MEDICINES STOCK REGISTER

The instructions for maintaining the Stock Register for General Medicines are exactly the same as that for maintaining Contraceptive Stock Register except counting unit of each medicine. As there are various medicines supplied / dispensed by the Family Welfare Centre therefore, it is not possible to enlist here each counting unit. However, the best clue to tackle this situation is to use the same counting unit for each medicine as used in the voucher.

CONTRACEPTIVE STOCK REGISTER)

This register is to be maintained by the FWW. Name of the F.W. Centre will be written only on the cover page of the register. An index will be given at the beginning of the register indicating page number for various contraceptives. Separate page will be used for each contraceptive and a sufficient number of pages will be reserved for each contraceptive. Entries of receipts, issues and balance will be made immediately after the receipt / issue of the contraceptives takes place.

Column:

Write name of contraceptive at the top of the page. Counting units will be:

- Number of pieces for condom & IUD
- Monthly cycles for Oral Pills
- Vials for injectable
- Enter date on which any quantity is received in or issued from the Warehouse / Store.
- This column is meant to identify the source from whom any quantity is received and the consignees to whom any quantity has been issued from the Warehouse / Store. Different ink colours may be used for quantities received and issued.

3-4 Enter number and Date of the Issue and Receipt Voucher against which the quantity shown in column 5 & 6 has been received or issued from the Store.

5-7 Quantities received, issued / dispatched and balance will be shown in these columns respectively. Since the counting unit has already been indicated on top of the page, it should not be repeated in these Columns, e.g., for showing issues of 1200 monthly cycles of oral pill, write 1200 in column 6. To start with the register, first entry would make in Column 7 showing the balance brought forward from the previous register in the first line and the regular entries would be made according to the instructions above.

- This column will be signed by the person responsible for the issuance of commodities from the Store / Warehouse.
- This Column "Remarks" will be used for elaborating upon any entries, if necessary, and will also be used for indicating the results of physical inventories of the Store / Warehouse.

Monthly Performance Report of FWC:

Recording Responsibility: FWW

Frequency: Monthly

MODULE V

Deadline for Submission: Third day of the following month.

Number of copies to be prepared: Three Copies.

Purpose:

The monthly report transmits to the DPWO a monthly summary of recorded information. It reflects the overall activities and achievements of the centre.

Source of Information:

Since this report reflects the overall activities of the centre therefore information recorded in this form comes from various sources.

The figures for contraceptive performance are obtained from the Daily Attendance Register for Clients & Patients. The performance of Satellite Camps conducted during the month is entered separately.

The report should be ready in all respects by the end of each month, so that it can be submitted in the D.P.W Office at the monthly meeting.

F.W.C SUPERVISION PROTOCOL

A protocol is another name for a procedure or a set of steps to be followed. So, the "Supervision Protocol" is simply a set of steps to be followed during the supervision visit. This is simply a form which should be used to record what happened during the visit -it is NOT a record of the performance of the F.W. Centre, since this data is collected in the monthly returns.

There is a Supervision Visit Protocol for use by the district office {DDPWO (Tech) & DPWO} but this one will be used by the FWW for self-assessment and by the trainees and R.T.I trainer during clinical attachment.

If the monthly returns show the performance of a Centre to be poor, analyze the reasons for this. Is it because of lack of awareness in the community about services offered by the Centre, or shortage of supplies, or poor organization of time by the staff of the Centre, etc.? Does the

F.W.W need to contact the DPWO, the Health officials or the influential in the community? Having found out the reasons (guided by the chart in the Protocol) then decide what action will be taken to solve the problem. Progress on this will be checked next month.

The trainees along with the R.T.I Trainer may discuss the weaknesses / lapses / deficiencies with the FWW and offer help and facilitate her in overcoming the difficulties and improving the conditions. They will keep the filled protocol for making entries / improvements at the end of their term of clinical attachment since they have to present this before a panel of R.T.I trainers on their return.

The FWW after her own evaluation / assessment of the F.W.C will go through the same procedure, analyze the cause, discuss with her staff and take necessary action for improving the performance of F.W.C.

Two specimens of Supervision Visit Protocol are given. Either or a combination of the two may be used.

33.10 RECORDS & REPORTS

33.10 RECORDS & REPORTS

Each F.W. Centre is required to maintain proper records of its activities, as well as of its furniture, equipment, medicines and contraceptive supplies. F.W. Centres are also required to send regular reports of progress made in service delivery. A list of registers, cards and reports required to be maintained is given below. The FWW should ensure that all records are correctly maintained, are up to date and that monthly reports are prepared and sent to the District Office. It is essential that records are true and accurate. Sufficient details of client's addresses must be recorded, so that they can be traced in case of finding or sending a message to the client.

Importance of Maintaining Correct & Up to Date Records:

The records are used to:

- Know the current work load of the centre
- Verify the validity of information e.g., if addresses are correct, IUCD cases could be verified; medicines, equipment and accounts could be checked:
- Interpret the data correctly (increasing and decreasing trends) for planning future activities.
- Calculate the prevalence and continuation rates of contraceptive use.
- Assess whether the targets of F.W Centre are being achieved.
- Conduct prospective and retrospective research studies e.g. acceptability of contraceptive, their side effects etc.
- Evaluate the programme with regard to its long- and short-term goals. And in light of its results make necessary changes and improvements.
- Assess contraceptive stock position
- Evaluate community development activities

Record Cards: Different kinds of cards used are described below:

Client Record Card 1 (CRC) (FP)

This card will be completed by the FWW / FWC for each new client, during her initial visit. It will be updated at each revisit of client. This format is proposed as a standardized client card for all FP service delivery points.

Description: The FP Client Record Card is to be filled for FP acceptors. The main purposes of the CRC are to record the details of clients accepting contraceptives namely oral pills, IUD and injectable, and facilitate their follow up. The CRC is also a record of the client's past relevant medical history and findings of clinical examination. The CRC should be completed after the client has been examined and the contraceptives dispensed.

The date on which the CRC is filled in, the registration number of the client, is entered at the top of the card in the allocated spaces. The information to be entered on the front side of the CRC is given below. The card is signed by the FWW giving her designation also. It is important that the CRC is properly maintained and follow up information is complete and

up to date. The CRCs should be filled or kept in the F.W. Centre in such a manner that the correct card can be easily retrieved when a previous acceptor or client visits.

Purpose: The client card holds clinical information required to assure the best quality care for each patient. It will assist in choosing the most appropriate form of contraceptive for each FP acceptor.

Row:

Write the following particulars:

- Address of the centre with district.
- Name of the client.
- Husband's name.
- Occupation / caste.
- Complete address to allow centre staff to locate the residence.
- Client-number. Be sure to enter the same number into the Daily Attendance Register. The client number will consist of 5 digits. The first two digits are for the current year. The last three digits are for the serial number of the new client. The serial number starts from 001 each year. For example, the first number as "06/001" and 56th client in the year 2006 will have the client number as "06/056."
- Date of the first visit
- Age of the client in years.
- Number of living children.
- Number of living sons.
- Age of the youngest child (in months).
- Previous Contraceptive Used. Tick all those methods previously used.
- CLINICAL INFORMATION

LMP: approximate date of client’s last menstrual period

History of jaundice: note occurrences of Jaundice

History of Thrombo-Phlebitis: note occurrences of this.

Weight: note and record

Blood Pressure: note results

Anaemia: note signs

Urine Analysis: note results

- METHOD ACCEPTED NOW: Tick the method determined during this first visit. If more than one method is chosen, tick both. If "other" is ticked, specify the method.

Any change in method at follow-up visit will be recorded on the reverse side of this card.

- FOLLOW-UP INFORMATION (reverse side of client card).

Use this side of the card for subsequent visits. Do not change the information on the front side resulting from the first visit

Column

Write down

- Serial number.
- Date of visit.
- Purpose of the visit.
- Advice or treatment given.
- Type and quantity of contraceptive given.
- If there is a change of method, write the reason.
- Date of next visit if one is required.
- Signature of in-charge.

Family Planning Card / Client Identification Card (CIC)

Recording Responsibilities: FWW

Purpose: This is the identification card which is kept by the client and produced at the follow-up visits. It helps the FWW in locating the client record card-I at the centre. see at Annex23.10. Description: The Identification Card should be completed for every FP client of the F.W. Centre and given to the client. It has on it the registration number of the client and date, her name and that of her husband, with complete address.

The date on which the client is to return to the F.W. Centre is entered on the card every time the client visits. Thus, dates of all scheduled revisits will be on the card. The client can, of course, visit the centre on any other day also if there is a need for it, for example, if she has any side effects. The client should be told to keep her card in a safe place so that it is not lost, and to bring it with her whenever she visits the centre, whether it is on the date given on the card or on any other day.

Source of Information: Client Record Card is the source of information.

Recording Instructions:

Row:

1-3 Are self-explanatory.

- Write here the Registration Number of the Client as it appears in the Client Record

Card.

- Enter here the date client was registered with the centre.

On the back side of the Card follow-up information is recorded. It has 5 columns which are to be recorded as follows: =

Column:

- Serial number
- Date of visit
- Contraceptive method adopted
- Date of next visit
- Family Welfare Worker's signatures

CLIENT RECORD CARD II:

This is to be filled for maternal health cases. Details in chapter on Pregnancy.

Format attached at23.13

CLIENT RECORD CARD III:

This is to be filled for child health cases. Details in chapter on "Child Care"

NORIGEST DIARY

Record of every client getting injection Norigest is kept in this dairy. The detailed procedure of filling the Norigest dairy is described in the chapter on "Contraceptive Technology."

REFERRAL SLIP

Purpose:

The referral slip is used to refer contraceptive surgery clients from the FWC to the RHSA. The slip is completed by the FWW. The main referral slip is given to the client who is accompanied by the FWA (F) to the RHS-A. The counterfoil is retained at the centre.

- Serial number is pre stamped Record date of issuance.
- Name of centre and address
- Client's name.
- Name of client's husband.
- Complete address.
- Purpose of referral.
- Facility to which referred.

- Reference signature and designation.

The referral slip is to be stamped by the RHS-A and returned to the FWC after the surgery has been completed. The FWW should note the successful completion of surgery on the counterfoil and ink out the C.S referral number earlier noted in pencil in the daily attendance register and write "C. S Performed" in the remarks column. Attach the returned slip with the respective counterfoil. If the surgery is refused record the reason in the remsarks column of the daily attendance register.

REEGISTERS

Different kinds of registers used in FWC are described:

Staff Attendance Register:

The name & designation of all five staff members of F.W.C is entered at the start of the month. All staff members need to put initials in the column of the attendance register on relevant date, when they report in the morning for duty.

Movement Register of F.W.C Staff:

Each time a member of F.W.C Staff is permitted to go on a visit to the community or on an official errand, she / he should enter her movement in the movement register as explained earlier. This entry not only records the movement but also enables the F.W.W or any other supervisor to monitor that activity.

Daily Attendance Register for Clients / Patients:

This register records clients / patient's visits, medicines & F.P methods prescribed and the quantities dispensed. The particulars of Family Planning, Clients, MCH cases, and general ailments patients are recorded along with the treatment and advice given. There is a column for special remarks also.

Purpose: The register allows the FWC Staff to calculate items required for the FWC and to prepare the Monthly Performance Report. This records the first contact point for the clients with the FWC. Much of the preliminary information on living children, method adopted, quantity of contraceptives dispensed etc. are recorded here.

Column

1.Serial Number:

NOTE: 1: Use this column to enter the date for each new day that service is provided. Leave the remainder of the line blank so you can easily identify the end of one day.

NOTE: 2: Record entry with red ball point for new client and with black or blue ball point for the old client. Use either blue or black colors for other patients. This pattern is adopted to enable the FWW to differentiate between new and old clients. No client number is given to general patients; therefore, general patients can also be counted easily.

2-4 Name of the client with complete address. Please record full address to ensure one can find the client's residence. Record age of the client and number of living children

5. Tick( )with red ballpoint for new FP client and blue or black ballpoint for old FP client
6. **Write the client number from the Client Record Card**. For new acceptors, write the year followed by a slash and a sequential number, for example, the forty second new client in 2006 would be "06/042." Client number will be entered only for FP clients and not for MCH or a general patient. At the end of the month count the number of red entries in the column. This is the number of new acceptors. Then count the entries in black or blue column. This is the number of old clients

7-11 Enter the quantity of the contraceptives dispensed. Count each condom, each cycle of oral pills, each insertion of IUCD and each dose of injectable. In a few cases, the client may require a check under more than one method column. For example, a new acceptor of oral pills may be given a small supply of condoms in addition to the cycle of oral pills.

12 Write the serial number of the contraceptive surgery referral slip. On the newly printed referral slips, this number will have been pre-printed. Enter the referral slip number when the client is referred for contraceptive surgery. After surgery has been performed, enter this number and write: “Contraceptive Surgery (CS)” performed" in the remarks column of client’s attendance register. If CS is refused, against the CS referral number put the reasons for refusal of contraceptive surgery in the remarks column.

13-15 In case of a MCH client (i.e. ante-natal, post-natal, or child care) put a Tick s. Remember that a client can be both an MCH client and a FP client during the same visit.

- Write in a brief phrase indicating ailment / complaint.
- Write down the name and quantity of each medicine given to the patient and brief record of special advice or treatment.
- This column is to be used for general remarks, if any. Draw a horizontal line at the end of the month. Add the columns vertically, taking care to differentiate between new and old acceptors for each family method.

Management Tool: You may want to list each month the total on a separate line at the end of the register so that you can easily see progress.

FAMILY PLANNING CLIENT RECORD CARD

Name & Address of the Centre _____

Name of Client_____ Date_____

Name of Husband_____

Occupation / Caste_____

Address_____

CLINICAL INFORMATION

Age of Client (Years)_____Number of Living Children_____

Last Menstrual period_____ Blood Pressure_____

History of Jaundice_____

Number of Living Sons _____ Age of youngest Child (In Months)_____

History of Thrombo -Phlebitis _____ Weight_____

PREVIOUS CONTRACEPTIVE USE

Urine Analysis _____

(Tick all those method used)

METHOD ACCEPTED NOW

Condom

Oral Pills Cu-T Oral Pills

IUCD Multiload Condom

Injectable Injectable Other

Foam

Others

Signature

Name

Designation

Date

FAMILY PLANING CARD

FAMILY PLANNING CARD (CIC)

Name & Address of Service outlet_____

Name of Client _____

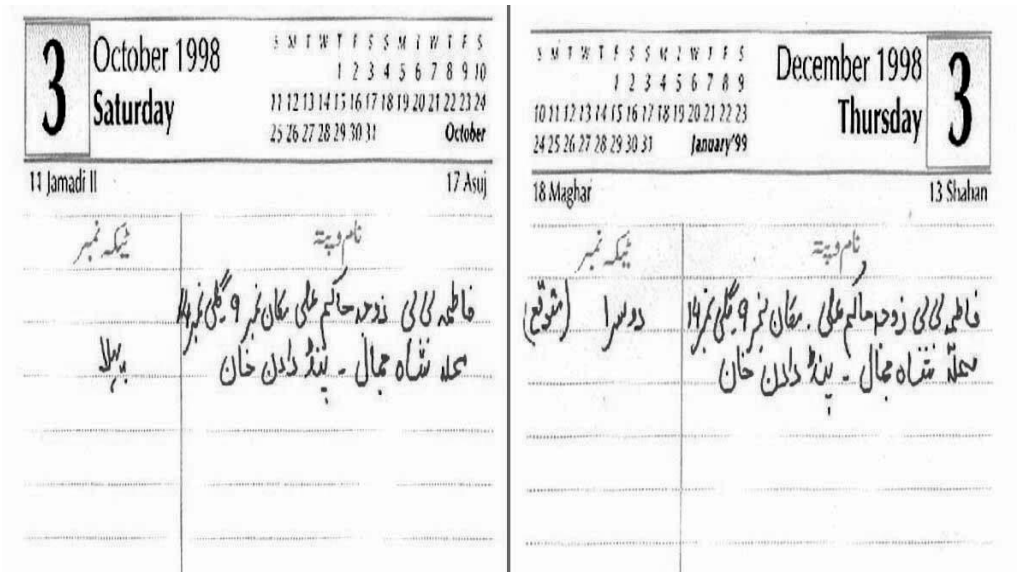
Name of Husband / Father _____

Client No _____Registration Date _____

FOLLOW UP INFORMATION

S. No.	Date of Visit	Purpose of Visit	Advice / Treatment	e & Quantity of Contraceptive Issued	If Method Change Give Reason	Date of Next Visit	Signature

.Sr No.	Date of Visit	Contraceptive Method Adopted	Date of Next Visit	Signature



3 October 1998 Saturday

S M T W T F S S M T W T F S
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20 21 22 23 24
25 26 27 28 29 30 31 October

11 Jamadi II 17 Asuj

ٹیکہ نمبر	نام و پتہ
پہلا	فاطمہ کا کی زوجہ حاکم علی مکان نمبر 9 گلی نمبر 14 محلہ شاہ جمال ۔ پنڈ دادن خان

S M T W T F S S M T W T F S
1 2 3 4 5 6 7 8 9
10 11 12 13 14 15 16 17 18 19 20 21 22 23
24 25 26 27 28 29 30 31 January'99

December 1998 Thursday 3

18 Maghar 13 Shahan

ٹیکہ نمبر	نام و پتہ
دوسرا (متوقع)	فاطمہ کا کی زوجہ حاکم علی ۔ مکان نمبر 9 ۔ گلی نمبر 14 محلہ شاہ جمال ۔ پنڈ دادن خان

NORIGEST DIARY

Counterfoil for Office Record	**SPR = 30**
POPULATION WELFARE DIVISION REFERRAL SLIP FOR C.S CLIENTS	**POPULATION WELFARE DIVISION REFERRAL SLIP FOR C.S CLIENTS**
Sr. No._____Date_____	Sr. No._____Date_____
Name & Address of Centre	Name & Address of Centre
_____	_____
Name of Client _____	Name of Client_____
Name of Client's Husband	Name of Client's Husband
_____	_____
Address_____	Address_____
Purpose of Referral _____	Purpose of Referral _____
Referred to _____	Referred to_____
Referred by:_____	Referred by:_____
Signature. _____	Signature_____
Designation _____	Designation _____

REFERRAL SLIP OF CS CLIENTS:

MONTHLY HEATH CARE RECORD CARD

CRC-2

MOTHER HEALTH CARE RECORD CARD

زچہ کی صحت کی دیکھ بھال کا ریکارڈ

DAY دن | MONTH مہینہ | YEAR سال

5 6 | 7 8 | 9 10

CLIENT NUMBER کلائنٹ نمبر

11 12 13 14 15

LOCATION OF CENTRE ——— مرکز کا جائے وقوع

DISTRICT/PROVINCE ——— ضلع/صوبہ

1- NAME OF PATIENT ——— مریضہ کا نام

2- HUSBAND'S NAME ——— خاوند کا نام

3- ADDRESS ——— پتہ

RESIDENCE سکونت
URBAN -- 1 بلدیاتی
RURAL -- 2 دیہی
16

4- L.M.P. ایل۔ایم۔پی ———

6- AGE OF PATIENT مریضہ کی عمر ——— 17 18

5- E.D.D. ——— بچے کی پیدائش کی متوقع تاریخ

7- NO OF LIVING CHILDREN زندہ بچوں کی تعداد

MALE لڑکا 19 | FEMALE لڑکی 20

8- TOTAL NO. OF PREGNANCIES کل حمل جو ہوئے ان کی تعداد 21 22

9- OBSTETRIC HISTORY زچگی کی تفصیل

	YES ہاں	NO نہیں
a) MORE THAN TWO STILL BRITHS ا۔ دو سے زیادہ مرے ہوئے بچوں کی پیدائش		
b) PREVIOUS ASSISTED DELIVERY ب۔ گزشتہ زچگی میں ہسپتال کی مدد لی		
c) SEVERE BLEEDING DURING OR AFTER DELIVERY ج۔ کیا بچے کی پیدائش کے دوران بہت خون ضائع ہوا		
d) MORE THAN 6 PREVIOUS DELIVERIES د۔ کیا اس سے پہلے چھ سے زیادہ بچے پیدا ہوئے		
e) HEIGHT BELOW 145 CM س۔ کیا قدہ ۱۴۵ سنٹی میٹر سے کم ہے		

IF THE REPLY TO ANY OF THE COLUMN 9 (a) TO 9 (e) IS "YES PLEASE REFER TO HOSPITAL

10- SCREENING وضع حمل سے پہلے طبی معائنہ	VISIT / DATE	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
NO. OF WEEKS SINCE PREGNANT	کتنے ہفتوں سے حاملہ ہے									
CLINICAL ANAEMA	قلت خون									
H. B. HOEMOGLOBIN	فولاد کی کمی									
BLOOD PRESSURE	خون کا دباؤ									
WEIGHT	وزن									
OEDEMA	سوجن									
URINE پیشاب کا معائنہ a) ALBUMIN ا۔ پروٹین										
b) SUGAR ب۔ شکر										
PRE-ECLAMPTIC TOXAEMIA PRESENT	کیا سومنیت حمل ہے									
PRESENTATION VERTEX	جنین کے سر کے بل رخ									
PRESENTATION OTHERS	جنین کے دوسرے رخ									
BLEEDING P.V.	رحم سے خون جاری ہے									
FOETAL HEART SOUND	جنین کے دل کی دھڑکن									
PATIENT AT RISK NOW	مریضہ کی حالت خطرناک ہے									
PATIENT AT RISK IN LABOUR	دوران زچگی مریضہ کی حالت خطرناک ہوگی									

MONTHLY HEATH CARE RECORD CARD

وضع حمل کے بعد معائنہ
POST NATAL CHECK UP

تاریخ پیدائش (بچہ)
12- DATE OF DELIVERY

13- DELIVERY ATTENDED BY [ ] 23
دایہ گیری سروضع حمل کا مرحلہ کس نے انجام دیا
ڈاکٹر DOCTOR -1 LHV / FWW -2 لیڈی ہیلتھ وزیٹر/مسلی ورکر
تجربہ کار TRAINED -3 UNTRAINED WORKER -4 غیر تربیت یافتہ ورکر
دائیہ TWA
گھر کی بزرگ SOME OLDER WOMAN OF THE HOUSE -5
خاتون

زچگی کی نوعیت
14- NATURE OF DELIVERY [ ] 24
نارمل NORMAL -1
ابنارمل ABNORMAL -2

زچگی کا نتیجہ
15- OUT-COME OF PREGNANCY [ ] 25
زندہ (لڑکا) LIVE BRITH (MALE) -1
زندہ (لڑکی) LIVE BIRTH (FEMALE) -2
مردہ پیدائش STILL BIRTH -3
حمل گر گیا PREGNANCY LOST -4

تاریخ DATE	MOTHER زچہ			BABY بچہ				
	رحم UTERUS	سیال رطوبت LOCHIA	پستان BREASTS	دودھ چوسنا SUCKING	ناف CORD	عام حالت GENERAL CONDITION	نمایاں نقص ANY ABNORMALITIES	حفاظتی ٹیکے IMMUNIZATION

مانع حمل ادویہ کے استعمال کی خواہش
DESIRE FOR THE USE OF CONTRACEPTIVE METHOD
ہاں YES -1
نہیں NO -2
[ ] 26

اگر حفاظتی ٹیکے لگائیں تو براہ مہربانی بچے کا صحت کارڈ/کارڈ بھی تیار کریں IF IMMUNIZATIONS IS GIVEN, PLEASE PREPARE A CHILD CARE RECORD CARD.

طریقہ اختیار کیا
METHOD ACCEPTED
ہاں YES -1
نہیں NO -2
[ ] 27

NOTE: IF CONTRACEPTIVE METHOD IS ACCEPTED, PLEASE PREPARE A FAMILY PLANNING CLIENT RECORD CARD.

نوٹ: اگر کوئی مانع حمل طریقہ اختیار کیا گیا تو براہ مہربانی خاندانی منصوبہ بندی کلائنٹ ریکارڈ کارڈ بھی تیار کریں

۳

MONTHLY HEATH CARE RECORD CARD

II. FOR ANTENATAL VISITS ONLY) وضع حمل سے پہلے معائنہ کے لئے

تاریخ DATE	COMPLAINTS شکایات	DIAGNOSIS تشخیص	ADVICE AND TREATMENT مشورہ اور علاج

۲

19. (FOR POST NATAL VISITS ONLY)

وضع حمل سے پہلے معائنہ کے لئے

تاریخ DATE	COMPLAINTS شکایات	DIAGNOSIS تشخیص	ADVICE AND TREATMENT مشورہ اور علاج

۴

DAILY ATTENDANCE REGISTER FOR CLIENTS / PATIENTS

S.No.	Name of Client With Complete Address	Age of Client	No. Of Living Children M/F	FAMILY PLANNING								MCH			General Ailments/ Complaints	Advice/Treatment Name of Medicine And quantity	Remarks
				New / Old	Client No.	Condom (units)	Oral Pill (cycles)	Foam (bottle)	IUD (Cu- T L.L)	Injectable (Dose No.)	C.S. Referred Slip No.	Ante- Natal	Post- Natal	Child Care			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

PEI (PERFORMANCE AND EVALUATION INDEX) CALCULATION SHEET FOR FWC

Contraceptives	Quantity Dispensed during the month	Unit	Denomination	PEI 2 / 4
Condoms		Each	250	
Oral Pills		Cycle	32	
IUD		Each New Insertion	0.33	
Injectable		Each Dose	12	
Foam		Bottle	10	
CS (Referred & performed)				

Overall PEI _____

PEI DISPLAY SHEET FOR FWC

	Contraceptives	PEI for Condoms	PEI for Pills	PEI for IUD	PEI for injectable	PEI for Foam	PEI for C.S	Overall PEI
Year Month								
January								
February								
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								

Name of Article_____

GENERAL STOCK REGISTER

Date	Opening Balance	Quantity / No of Items Received	Total (Sum of column. 2+3)	Quantity Issued	Closing Balance (Column. 4 – 5)	Source who received/ issued the items	Remarks	Signature
1	2	3	4	5	6	7	8	9

MEDICINES STOCK REGISTER

Name of Medicines

Date	Opening Balance	Quantity Received	Total	Quantity Issued	Closing Balance (4-5)	Details of Receipts & Issues	Remarks	Signature
1	2	3	4	5	6	7	8	9

CONTRACEPTIVE STOCK REGISTER

Contraceptive A / C Unit _____

Date	Received From / Issued to	Voucher		Quantity			Signature	Remarks
		No	Date	Received	Issued / Dispatched	Balance (5-6)		
1	2	3	4	5	6	7	8	9

MONTHLY PEFORMANCE REPORT OF FWC

Month / Year _____ F.W.C _____

Address _____

District _____

Province _____

Clinical Performance

Items	Category	No. of Clients		Total No. Utilized
IUCD	**NEW**	Cu T	M.L.	
	FOLLOW UP			
	TOTAL			
INJECTION	**NEW**	Magistra.	Norigest	
	FOLLOW UP			
	TOTAL			
ORAL PILLS	**NEW**	COP	EXLUTON	
	FOLLOW UP			
	TOTAL			
CONDOMS	**NEW**			
	FOLLOW UP			
	TOTAL			
C.S. REFERALS	**NEW**	T. L	NSV	
	FOLLOW UP			
	TOTAL			
G. PATIENTS	**TOTAL**			
EMERGENCY CONTRACEPTIVE PILLS	**TOTAL**			

Satellite Camps

NAME AND DESIGNATION	DATE	VENUE	NO OF PARTICIPANTS	REMARKS

33.11 SUPERVISORY VISIT PROTOCOL

33.11 SUPERVISORY VISIT PROTOCOL

Maintain a folder for each Family Welfare Centre and carry it with you so that it is readily available at the time of subsequent visit. Part I to Part IX to be used by both technical and non-technical supervisors and Part X to be used by technical supervisor only.

SUPERVISORY VISIT PROTOCOL

Annex 23.18

Note: Maintain a folder for each Family Welfare Centre and carry it with you so that it is readily available at the time of subsequent visit. Part I to Part IX to be used by both technical and non-technical supervisors and Part X to be used by technical supervisor only.

PART - I: IDENTITY OF THE SERVICE OUTLET

To be filled outlet unit _____ Date_____Time _____

Province Complete Address _____

Name of Incharge _____

Date Centre was established_____

Centre Code:

Area where F.W.C is located 1 Urban 2 Rural 3 Semi–Urban

Is F.W.C approachable? 1 Yes 2. No

Is direction board installed? 1 Yes 2. No

Is sign board displayed? 1 Yes 2. No

Are the clinic timings mentioned? 1 Yes 2. No

Is F.W.C open? 1 Yes 2. No

PART – II: STAFF POSITION

Staff	**Name of Incumbent**	**In Position / Vacant**	**Attendance Present / Absent**	**Number of Years in service**	**Dates of Training Received**	
1. F.W.C / F.W.W					Initial	Last Refresher
2. F.W.A (Female)						
3. F.W.A (Male)						
4. Aya						
5. Chowkidar						

Number of TBAs registered with F.W. Centre _____

Number of Friends at the F.W. Centre _____

Number of approximate cases referred each month by:_____

Worker	**IUD**	**Oral pill**	**Norplant**	**Injectable**	**Contraceptive Surgery**	**Other**
VBFPWs L.H.Ws						
LHVs (Health)						
TBAs						
Friends of F.W.C						

PART – III:

FACILITIES

1. Type of building 1. Kacha 2. Pacca
2. Number of rooms 1. One Room 2. Two rooms 3. Three rooms and above
3. FWW residence in the centre 1. Yes 2. No
4. If yes, No. of rooms occupied by F.W.W 1. One room 2. Two rooms
5. If no, how much distance she had to travel to the F.W.C_____

PART - I: IDENTITY OF THE SERVICE OUTLET

To be filled outlet unit _____

Date__Time _____

Province Complete Address Name of In charge _____

Date Centre was established _____

Centre Code:

Area where F.W.C is located 1 Urban 2 Rural3 Semi–Urban

Is F.W.C approachable? 1. Yes 2. No

Is direction board installed? 1. Yes 2. No

Is sign board displayed? 1. Yes 2. No

Are the clinic timings mentioned? 1. Yes 2. No

Is F.W.C open? 1. Yes 2. No

PART – II: STAFF POSITION

Staff	Name of Incumbent	In Position / Vacant	Attendance Present / Absent	Number of Years in service	Dates of Training Received	
1. F.W.C / F.W.W					Initial	Last Refresher
2. F.W.A (Female)						
3. F.W.A (Male)						
4. Aya						
5. Chowkidar						

Number of TBAs registered with F.W. Centre_____

Number of Friends at the F.W. Centre _____

Number of approximate cases referred each month by:_____

Worker	IUD	Oral pill	Jadelle	Injectable	Contraceptive Surgery	Other
VBFPWs L.H.Ws						
LHVs (Health)						
TBAs						
Friends of F.W.C						

PART – III:

B. FACILITIES

1. Type of building — 1. Kacha 2. Pacca
2. Number of rooms
   1. One Room
   2. Two rooms
   3. Three rooms and above
3. FWW residence in the centre — 1. Yes 2. No
4. If yes, No. of rooms occupied by F.W.W — 1. One room 2. Two rooms
5. If no, how much distance she had to travel to the F.W.C
   1. Less than 1 km
   2. 2. 1.5 km
   3. 3. 6—10 km
   4. 11—15 km
   5. More than 15 km (speed…….)

Approximate Travelling time required to reach the F.W.C (Mileage)

6. Price list of Contraceptives — 1. Available 2. Not Available
7. Electricity — 1. Available 2. Not Available
8. Gas — 1. Available 2. Not Available
9. Water Supply — 1. Available 2. Not Available
10. Toilet — 1. Available 2. Not Available

C. EQUIPMENTS AVAILABLE

D. FURNITURE

E. MEDICINES

F. MAINTENANCE

1. Cleanliness — 1. Yes 2. No

2. Whitewash — 1. Yes 2. No

3. Ceiling Condition 1. Yes 2. No

4. Ventilation 1. Yes 2. No

5. Light in the Room 1. Yes 2. No

PART – IV: STATUS OF IEC ACTIVITIES

- Material Available for Display 1. Yes 2. No
- Distribution 1. Yes 2. No
- Using During Health Talks
- Know the technique of use 1. Yes 2. No
- Are Maps / Chart / Graphs displayed in the Centre?

  1. Yes 2. No
- Is F.W.C staff able to interpret these Graphs / Charts?

  1. Yes 2. No

PART - V: ACCOUNT SITUATION

- Initial amount given Rs._____
- Current amount Rs. _____
- Date when first received_____
- Verify cash in hand_____

- Account register maintained: 1. Yes 2. No
- Reimbursement received: 1. Yes 2.No
- Problem explained: 1. Yes 2.No

PART - VI:

CONTRACEPTIVE STOCK POSITION

1. Is there any Inventory of Contraceptives? 1. Yes 2. No

After verification, the total number of Contraceptives available in F.W.C at the time of visit:

Type of contraceptive	**Actual quantity available**	**Number of months stock available**	**Quantity in clr—5**	**Remarks**
CONDOM				
ORAL PILL (CYCLES)				
COPPER-T (PIECES)				
INJECTABLE (VIALS)				

2. Is separate space provided for contraceptives? 1. Yes 2. No

3. Are storage facilities for contraceptives adequate? 1. Yes 2. No

4. Has the Centre expired / damaged contraceptive? 1. Yes 2. No

5. If yes, type & number of contraceptives expired: _____

TYPE	**QUANTITITY DAMAGED**	**QUANTITY EXPIRED**
CONDOM		
ORAL PILL (CYCLES)		
COPPER-T (PIECE)		
INJECTABLE		

6. Is supply of contraceptives / general medicine regular? 1. Yes 2. No

7. If not, when was last consignment received? (Date) _____

8. When was the request / indent placed for that consignment (Date) _____

PART –VII: PERFORMANCE DURING THE LAST THREE MONTHS

Method	Number of Patients / Clients			Contraceptive Performance			
	Old	New	Total	Month1	Month2	Month3	Total
Oral Pill							
Condom							
IUCD							
Injectable							
Foam							
CS referred							

PART - VIII: CONDITION OF RECORD KEEPING SYSTEM

Description	Available	Not available	Maintained up to	Not maintained	Remarks
Attendance Register					
Norigest Dairy					
Movement Register					
Daily Client Register					
Medicine Stock Register					
Contraceptive Stock Register					
General Stock Register					
Monthly Activities Report Performance					
Client Record Card (CRC)					

Do you have any problem in filling the record keeping forms? 1. Yes 2. No

Number of Supervisory visits during the last 3 months by:

1. T.P.W.O_____

2. D.P.W.O _____

3. Div. Director_____

4. Provincial Office_____

5 Federal Office _____

PART - IX: TRAINING REQUIREMENTS

GENERAL OBSERVATIONS

Number of clients present in the premises of F.W.C during the last visit

Is courtesy extended to clients? 1. Yes 2. No

The acceptor was attended in privacy? 1. Yes 2. No

PART - X:

QUALITY OF CARE SERVICES

A: COUNSELLING

Knowledge of technique of counselling 1. Adequate 2. Inadequate

Display of GATHER Technique poster 1. Adequate 2. Inadequate

Skill of Counselling (as per check list) 1. Adequate 2. Inadequate

In case inadequacies,

Was on job—training provided? 1. Yes 2. No

B. ASEPSIS

Is material available? 1. Yes 2. No

Is check list displayed? 1. Yes 2. No

Observation of aseptic technique (as per check list) 1. Adequate 2. Inadequate

Dispose of syringes and needles 1. Adequate 2. Inadequate

In case of inadequacies, was

On –job training provided? 1. Yes 2. No

C. MCH SERVICES

Ante natal care	1. Adequate	2. Inadequate
Post-natal care	1. Adequate	2. Inadequate
Advises / refers for T.T Immunization	1. Adequate	2. Inadequate
Encourages breast feeding for child health	1. Adequate	2. Inadequate
Advises on complementary foods	1. Adequate	2. Inadequate
Refers for immunization of children	1. Adequate	2. Inadequate
Organization of Camps	1. Adequate	2. Inadequate
in case of inadequacies,		
Was on Job training provided?	1. Yes	2. No

D. **TECHNIQUES OF IUCD INSERTION**

Observation of Aseptic procedures	1. Adequate	2. Inadequate
Proper techniques of insertion	1. Adequate	2. Inadequate
Management of side effects	1. Adequate	2. Inadequate
In case of inadequacies, was on –job training provided?	1. Yes	2.No

Signature of Inspecting Officer

Name & Designation

F.W.C SUPERVISION PROTOCOL SUPERVISION PROTOCOL

F.W.C BUILDING	Yes	No
Is the F.W.C easily accessible?	----------	--------
Are there direction boards to guide the way?	----------	--------
Is there a prominent sign board on building?	----------	--------
Is there enough accommodation?	----------	--------
Is the building & premises kept Clean?	----------	--------
Is the building well ventilated?	----------	--------
Are Health & F.P messages displayed?	----------	--------
Is the Monthly / Yearly performance displayed?	----------	--------
Is the list of Friends of F.W.C displayed?	----------	--------
Is the list of Dais displayed?	----------	--------
Is the list of Dias frequently updated?	----------	--------
Is the list of Volunteers displayed?	----------	--------
Is the list updated as per requirement?	----------	--------
Are the names of MC displayed?	----------	--------
Is the list of Mc updated as required?	----------	--------
Is there arrangement for comfortable seats?	----------	--------
Is there drinking water in the waiting area?	----------	--------

Discussion with F.W.W _____

Decide for Action to be taken _____

Was action initiated / taken? Find out what was exactly done (on next monthly visit) What is the outcome of the action taken? Give Details

---

B.	INSERTION ROOM	Yes	No
	Is the insertion table & other furniture properly placed?		
	Are instruments & equipment properly arranged?	----------	--------
	Is the room well lighted?	----------	--------
	Is the client properly screened for privacy?	----------	--------
	Is there any deficiency?	----------	--------
	In case of deficiency what action was decided to be taken?	----------	--------
	Has proper aseptic technique been adopted for asepsis of instruments / equipment?	----------	--------

MANUAL SKILLS

Check all manual skills of F.W.W for examining clients / patients with help of standard checklists and give feedback and conduct on-the-job training for re-enforcement of weak areas.

Keep filled checklists for record.

F.W.C STAFF

Sr. No.	Designation	Name of Incumbent/ Vacant	Present / Absent	Well Groomed	Dressed according to culture
1.	Family Welfare Worker / Counsellor				
2.	Family Welfare Assistant (F)				
3.	Family Welfare Assistant (M)				

4.	Helper / Aya				
5.	Chowkidar				

Discussion with F.W.W _____

Decide for Action to be taken _____

Was action initiated / taken? Find out what was exactly done (on next monthly visit)

What is the outcome of the action taken? Give Details

STATUS OF FURNITURE, EQUIPMENT, SUPPLIES

Sr. No.	Items	Present	Missing	Damaged	Details
				Repairable	Irreparable
1.	Furniture				
2.	Equipment				
3.	Instruments				
4.	Linen				
5.	Medicines				
6.	Contraceptives				
7.	Miscellaneous (Bulbs Switches, Plugs, broom, Detergents, etc)				

Discussion with F.W.W _____

Decide for Action to be taken _____

-What is the outcome of the action taken? Give Details

- RECORDING & REPORTING Yes No
- Are all files maintained? _____ _____
- Any deficiency? _____ _____
- Is the petty cash book maintained? _____ _____
- Any deficiency? _____ _____

- Are sale proceeds collected regularly? --------- --------
- Is sale deposited regularly in DPWO office? --------- --------

Are receipts of sale proceeds (Deposited with D.P.W.O) kept in a file? _____ _____

Are records of sale proceeds correct according to stock registers? _____ _____

Is the logbook maintained? _____ _____

Is the contraceptive stock register correctly maintained? _____ _____

Is it up to date? _____ _____

Does the last entry tally with the balance available? _____ _____

Is the medicine stock register correctly maintained? _____ _____

Is it up to date? _____ _____

Does the last entry tally with the balance available? _____ _____

Is the Equipment / Instrument / Linen well maintained? _____ _____

Has the action for damaged items been initiated? _____ _____

Are contraceptive side effect identified & treated? _____ _____

Are F.P client reassured about their health? _____ _____

Are complications of contraceptives recognized and client referred to proper facility?

Are contraceptive surgery clients properly counselled, referred & accompanied to RHSC? _____ _____

Is I.E.C campaign carried out for improving CPR? _____ _____

Are F.P users coming for follow up / supplies to F.W.C?

2. MCH Activities _____ _____

Are cards for ANC / PNC / Child Care maintained? _____ _____

*Is the required number of pregnant women attending F.W.C for Antenatal care?

Is AN Care being provided according to standards? _____ _____

Are pregnant women being advised for diet / personal hygiene, breast care & feeding, immunization, F.P? _____ _____

Are pregnant women being counseled for birth preparing? _____ _____

Are mothers reassured about their & baby's welfare? _____ _____

Are high risk / complicated cases referred? _____ _____

Are deliveries conducted for the needy? _____ _____

Is Post Natal Care offered to the needy? _____ _____

Is the Neonate being cared for? _____ _____

Is growth monitoring done regularly? _____ _____

Is advice of weaning & Complementary? _____ _____

Contraceptive Activities

- Are C.R cards for contraceptives maintained? --------- -

- Are C.R.C kept in proper sequence (date, month and year wise)?

---------- --------

Are mothers trained for preparing & giving ORS? _____ _____

Are expectant mothers & children referred for immunization?

Discussion with F.W.W _____

Decide for Action to be taken _____

Was action initiated / taken? ----------

Find out what was exactly done (on next monthly visit)

What is the outcome of the action taken? Give Details

Treatment of Minor Ailments

Is correct diagnosis of ailments made? Are correct medicines prescribed? ---------- --------

Are instruction for using medicines clearly given? ---------- -------

Are patients asked / made to repeat instructions?

Are they reassured about their health? ---------- --------

Are they asked to return for follow-up? ---------- --------

Are complicated cases referred to hospitals? ---------- --------

COMMUNITY ACTIVITIES

Is community survey conducted? ---------- --------

Has relevant data been collected & tabulated? ---------- --------

Have eligible couples been registered?	----------	--------
Is location / address of F.W.C publicized?	----------	--------
Are services of F.W.C been publicized?	----------	--------
Have friends of F.W.C been made?	----------	--------
Are they participating actively?	----------	--------
Has MC been formed?	----------	--------
Is it functional?	----------	--------
Have religious leaders been contacted for help?	----------	--------
Are they cooperative?	----------	--------
Are camps / satellite clinics conducted?	----------	--------
Are they operating efficiently?	----------	--------
Is home visiting being done regularly?	----------	--------
Are sukhi ghar mehfils conducted regularly?	----------	--------
Is F.W.A (M) active in the community?	----------	--------
Are their activities fetching more clients to the F.W.C?	----------	--------
Does F.W.A (F) exhibit proper attitude?	----------	--------
Does F.W.A (M) exhibit proper attitude? Is the Aya capable of providing relevant information to the clients?	----------	--------
Is the Chowkidar capable of providing required information to the clients?	----------	--------
Is Chowkidar exhibiting desired attitude?	----------	--------
Are Dais actively participating?	----------	--------

Do all Dais listed come to the F.W.C?	----------	--------
Are new, Dais being trained according to requirement?	----------	--------
Are lists of Dias updated?	----------	--------
Are community volunteers / friends of	----------	--------
F.W.C trained regularly?	----------	--------
Are they cooperative?	----------	--------
Are their lists updated?	----------	--------

33.12 F.W.C SUPERVISION PROTOCOL

33.12 F.W.C SUPERVISION PROTOCOL

A protocol is another name for a procedure or a set of steps to be followed. So the "Supervision Protocol" is simply a set of steps to be followed during the supervision visit. This is simply a form which should be used to record what happened during the visit -it is NOT a record of the performance of the F.W. Centre, since this data is collected in the monthly returns.

There is a Supervision Visit Protocol for use by the district office {DDPWO (Tech) & DPWO} but this one will be used by the FWW for self-assessment and by the trainees and R.T.I trainer during clinical attachment.

If the monthly returns show the performance of a Centre to be poor, analyze the reasons for this. Is it because of lack of awareness in the community about services offered by the Centre, or shortage of supplies, or poor organization of time by the staff of the Centre, etc.? Does the

F.W.W need to contact the DPWO, the Health officials or the influential in the community? Having found out the reasons (guided by the chart in the Protocol) then decide what action will be taken to solve the problem. Progress on this will be checked next month.

The trainees along with the R.T.I Trainer may discuss the weaknesses / lapses / deficiencies with the FWW and offer help and facilitate her in overcoming the difficulties and improving the conditions. They will keep the filled protocol for making entries / improvements at the end of their term of clinical attachment since they must present this before a panel of R.T.I trainers on their return.

The FWW after her own evaluation / assessment of the F.W.C will go through the same procedure, analyze the cause, discuss with her staff and take necessary action for improving the performance of F.W.C.Two specimens of Supervision Visit Protocol are given abobe, either or a combination of the two may be used.

JOB DESCRIPTION OF FAMILY WELLFARE WORKER

Reproductive Health

Family Planning

- Identify couples eligible for contraception in the community
- Assist eligible couples in making free and informed choice of contraception through Behaviour change communication
- Promote Healthy Timing and Spacing of Pregnancy (HTSP) through Couple Counselling
- Provide comprehensive FP services according to MEC (Medical Eligibility Criteria) of WHO
- Conduct and ensure follow up of all the cases of contraceptive users
- Manage /counsel for side effects of contraceptives
- Refer for surgical methods and Implants
- Identify and refer complications of FP methods

Maternal Health Care

- Identify pregnant and lactating women in the community
- Provide Antenatal and Postnatal care
- Counsel for maternal nutrition; prepare pregnant women for breast feeding and HTSP
- Refer pregnant women for TT immunization
- Identify danger signs of pregnancy and postpartum complications for giving obstetric first aid and prompt referral
- Provide information and refer pregnant women for safe delivery to trained personnel/facility

Infant Health Care

- Identify children under five in the community
- Counsel for infant care and child nutrition to promote exclusive breast feeding 0-6 months and timely appropriate weaning
- Refer infants for immunization
- Monitor growth of children under five
- Identify danger signs of childhood illnesses to provide first aid /refer

Management of Adolescent problems

- Counsel adolescents about personal hygiene, nutrition, and physiological changes
- Counsel/refer girls with developmental problems

Prevention and Management of RTIs/STIs and HIV & AIDS

- Counsel women for prevention of RTIs and STIs
- Provide syndromic management/refer STI cases

Management of other RH problem

- Treat minor ailments
- Provide first aid for minor injuries and emergencies
- Counsel/refer infertile couples
- Counsel/refer women with menopausal problems

Detection of Breast lump

- Train clients for self-examination of breast
- Counsel/refer women with Breast lump

Community Mobilization

- Conduct base line survey for assessing the RH needs of the community and data collection
- Develop relevant IEC material for Health education sessions of target audience
- Create awareness and build capacity of the community for preventive activities, health promotion and adoption of small family norm
- Maintain a list and hold meetings with the members of the community like local influential, community volunteers, health services providers, hakims/ homeopaths and satisfied clients
- Develop linkages with other service delivery outlets for referral/management

Administration and supervision of FWC (Family Welfare Centre)

- Maintain a basic community profile and display activities on wall charts
- Holds staff meetings to supervise and organize centre activities according to work schedule
- Supervise and maintain hygiene/cleanliness in the centre
- Ensure infection prevention practices during FP and RH services
- Maintain an inventory, registers, records and periodic reports
- Maintain imp rest money to meet day to day expenditure (petty cash

JOB DESCRIPTION OF FAMILY WELFARE COUNSELLOR (FWC)

She will provide family planning services, maternal and childcare at the Centre and at “Camps” satellite clinics or home visits organized in the community. She will give health education talks and organize programme of health education activities for other staff. She will provide treatment of minor ailments, supervise the community welfare activities and maintain links with the AMC (Advisory Management Committee) where it exists. She will be responsible for the management, administration and supervision of the Centre and will report to the District Office at monthly meetings.

- Supervising the work of her staff: The FWW has responsibility for the work done by the FWA(F) and the Aya. Therefore, this work must be supervised. From time to time, the FWC should make a point of watching how they carry out tasks and decide whether the tasks are done correctly. Supervision does not only involve finding things which are wrong and needs correction. It also involves praising and encouraging the Aya or FWA when tasks are timely and successfully done.
- Training: She may also train her staff routinely to enhance their knowledge and skills till they meet the desired standards of quality of care.
- Where any deficiency is noticed, the fault should be pointed out and, if necessary, training provided.
- Leading: Using the Democratic style of leadership she leads her staff to the goal covered by the FWC.

- Team Building: The FWW inspires the feeling of working together in co-ordination achieve the goal of having an impact (reducing) on mortality, morbidity, disability and malnutrition in the population served by FWC.

JOB DESCRIPTION OF FAMILY WELFARE ASSISTANT (Female)

She will assist the FWW with family planning cases, maternal and childcare and treatment of minor ailments. She will spend 60 percent of her time in F.W.C and 40% of her time in the community motivating and counselling clients to make use of the different services at the F.W. Centre. She follows up contraceptive acceptors, especially those who do not come to the centre for supplies. She works with the female community Volunteers and the Dais in the community. She may accompany clients who have been referred for contraceptives' surgery. She maintains links with the satisfied clients and encourages them to refer other clients.

Family Planning

- Register eligible couples in the catchment area.
- Visit 10-15 eligible women daily for counselling.
- Explain the concept of family planning to:
- Antenatal clients:
- Postnatal clients for spacing / limiting family size;
- Female groups in the community.
- Dispense oral pills and condoms to clients while visiting the community.
- Keep track of the users in the catchment area for regular follow up.
- Motivate high-parity couples for contraceptive surgery.
- Counsel newly wed couples for FP methods to postpone the first pregnancy especially in young females.
- Gives special focus to low parity couples for spacing.

Maternal Health and Child Care

- Register pregnant women in the community & advise them to visit FWC for antenatal checkup.
- Conduct health education discussions with mothers while visiting the community.
- Give specific nutritional education to mothers for breastfeeding & weaning foods for children.
- Give demonstrations regularly on the preparation of ORS.
- Educate women for tetanus vaccination and immunization of children against infectious diseases.

Health Education

- Hold discussions in homes on follow-up visits.
- Hold discussions with community groups.

- Distribute educational material to the community.

Other Activities

- Assist the Family Welfare Worker in the promotion and coordination of community activities within the centre.
- Make the home-visiting roster from a list of dropouts taken from the client record file.
- Make a list of influential people in that community.
- Contact female leaders and agencies as instructed by the Incharge of the Centre.
- Assist the In charge of the Centre in record keeping and preparation of monthly reports.

FAMILY WELFARE ASSISTANT (MALE)

He is responsible for the distribution of contraceptives to Community distributors. He motivates males to accept family planning, maintain links with the community, peculiarly with the AMC, works with informal groups (Such as farmers) and may coordinate the work of male community volunteers. He may assist the FWW with the maintenance of record

JOB DESCRIPTION OF FAMILY WELFARE ASSISTANT (Male)

Family Planning

- Explain the concept of family planning to male groups in the area.
- Motivate high parity couples for contraceptive surgery especially vasectomy for males.
- Counsel newlywed couples on small family norms to postpone the first pregnancy, space the second and then limit the family size.
- Sell contraceptives to government sales outlets.
- Distribute contraceptives on credit to non-government sales outlets.
- Collect proceeds from the sale points.
- Record the above in an “Issue” and “Sales” Register.
- Report to the In charge of the Centre and enters the balances each months in the contraceptive stock register.

Child Care: Health discussion with community groups on responsible parenthood.

Health Education

- Hold discussions in men’s group on selected list of topics with particular reference to environmental sanitation and hygiene.
- Hold discussion with individuals during home visits on selected topics of health education especially preventive health.

Community Activities

- Maintain contact with Male Workers / Social Mobilizers for supply of contraceptives.
- Assist and arranges the meetings of the Management Committee.
- Assist the Family Welfare Worker in the coordination and execution of the community activities.
- Collect information on community profile.
- Hold group meetings with the male youth.
- Assist Centre In charge in selecting / arranging sites for holding satellite camps.

CHOWKIDAR

- Works as watch and ward of the centre.
- Acts as Naib Qasid during daytime.
- Disseminate information about FP / RH to persons he comes in contact.
- Helps in maintaining the cleanliness of the Centre.
- Helps clients, who are referred to other outlets for management

FEMALE HELPER (Aya)

- Maintain cleanliness of the centre.
- Ensure asepsis of instruments by proper decontamination / sterilization.
- Properly dispose off clinical waste.
- Disseminate adequate information about FP / RH to women in target population.
- Assist In charge of the Centre in conducting promotional activities.
- Accompany Contraceptive Surgery cases to RHS -A Centres.
- Accompany In charge of the Centre during satellite camps.

33.13 STANDARD LIST OF EQUIPMENT FOR FAMILY WELFARE CENTERS

33.13 STANDARD LIST OF EQUIPMENT FOR FAMILY WELFARE CENTERS

1. Dressing trolley (1)
2. Kidney tray (set of 3) Stainless Steel.
3. Bowl (6'' diameter) Stainless Steel (2)
4. Tray with lid (2X10X12) Stainless Steel (2)
5. Deep tray with lid (large size Stainless Steel) (1)
6. Plastic Bucket (medium size) (1) with Mug (1)
7. Plastic Lota(1)
8. Glass Jar (medium) (2)
9. Syringe 2 cc (2)
10. Nail Brush (2)
11. Spirit Lamp (1)
12. Vaginal speculum, bi-valve (Medium) (4)
13. Vaginal speculum, bi-valve (large) (2)
14. Sponge forceps (4)
15. Vulsellum, double toothed (4)
16. Dressing forceps, (Medium) (2)
17. Scissors, blunt ended, (Medium) (4)
18. Cheatle's forceps (2)
19. Artery forceps (Medium) (4)
20. Tongue depressor (1)
21. B.P. Apparatus (1)
22. Fetoscope (1)
23. Stethoscope (1)
24. Urine Test set with 12 tubes (1)
25. Haemoglobin scale (1)
26. Weighing machine (adult) (1)
27. Weighing machine (baby) (1)
28. Mid arm circumference tape (1)
29. Thermometer (2)
30. Degcha with lid, 12'' to 14'' diameter, Stainless Steel (2)

31. Kerosine stove (where needed) (1)
32. Gas Cylinder (1)
33. Torch, large (3—Cell) (1)
34. Blanket (1)
35. Draw Sheets, Latha 2 meters each (8) Draw Sheet Latha 1meter each (5) 37. Towels (24'' X 12'') (3)

38. Wall Clock (1)
39. Water set Stainless Steel, (6 glasses, 1 jug)
40. Plastic water cooler, (Medium) (1)
41. Flit Pump (1)
42. Dai Kit (1)
43. Midwifery Kit (1)
44. Sterilizer (Boiler Type) Large
45. Gloves
46. Mackintosh sheet 1/2 meter (1)
47. Draw Sheets latha 1/2 meter each (5)
48. Refrigerator (medium size) (1)
49. IUCD insertion table (Folding) (1)
50. Autoclave Drum (Medium) (2)
51. Plastic Uterine Sound (1)
52. Air Cooler (1)

Subject to revision as and when required.

RECOMMENDED LIST OF MEDICINES FOR FAMILY WELFARE CENTRES

Analgesics / Antipyretics

1. Tab. Paracetamol / Tab. Ponstan.
2. Syps. Paracetamol.

Anti Rheumatics

1. Tab. Phenylbutazone / Ibuprofen

Anti Spasmodics

1. Hyoscine Compound
2. Sistalgin Compound

Anti Diarrheal

1. ORS Packets
2. Tab. Metronidazole
3. Syp. Metronidazole
4. Tab. Intestopan

Anti-Malarial

1. Tab. Chloroquine
2. Syp. Chloroquine
3. Syp / Tab Amodiaquine

Anti Allergic

1. Chlorphenaramine Maleate
2. Syp. Promethazine Hcl

Anti Emetics

1. Tab. Avomine
2. Syp. / Tab. Gravinate

Anti biotic

1. Syp. Cotrimoxazole
2. Tab. Cotrimoxazole
3. Cap. / Syp. Amoxil
4. Tetracycline Cap.

Supplementary Drugs

1. Syp. Multivitamin
2. Tab. Multivitamin
3. Ferrous Fumerate
4. Tab. Folic Acid
5. Tab. Vitamin B. Complex
6. Syp. B. Complex
7. Tab. Calcium Lactate
8. Tab. Vitamin C

Antacids

1. Syp Simethicone

2. Tab Aluminium Hydroxide

Respiratory Tract

1. Syp. Triprolidine
2. Syp. Pholcodine.
3. Cap. / Syp Amoxil
4. Syp. Hydrayllin

Anthelminthics

1. Syp. Pyrantel Pamoate 250 mg.
2. Tab. Pyrantel Pamoate

Drops

1. Chloramphenicol Eye Drops
2. Chloramphenicol Ear Drops
3. Polymixin B. Sulphate + Lignocaine Ear Drops

Dermatological Preparations

1. Benzyl Benzoate Lotion
2. Polymixin B Sulphate + Bacitracin Cream

General Items

1. Nystatin Vaginal / Vagmycin Vaginal Tab.
2. Nystatin Oral Drops
3. Tab. Methergine
4. Tab. Diazepam (2 mg)
5. Vaginal--Cream (Tetracycline Base with Amphotericin B)
6. Syp. Milk of Magnesia
7. Tincture Iodine
8. Disposable Gloves
9. Cotton
10. Methylated Spirit
11. Bandages
12. Pregnancy Test Sticks
13. Urine sticks (For Albumin & Sugar) Subject to revision as and when required.

STANDARD LIST OF FURNITURE FOR FAMILY WELFARE CENTERS

1. Examination table / Couch (1)
2. Steps for table (1)
3. Bed / cot with mattress, pillow (1)
4. Office table (2)
5. Chairs (6)
6. Benches (4)
7. Screen (2)
8. Revolving Stool (2)
9. Cupboards (2)
10. Wooden Stools (2)
11. Racks for papers etc. (2)
12. Ceiling / Pedestal Fan (1)

33.14 FORMS

33.14 FORMS

WORK SCHEDULE

F.W. Centre:_____Week Beginning: _____

F.W.W / F.W Counsellor:_____ F.W.A (F) :_____F.W.A (M) :_____

	TIME	ACTIVITY	PLACE	TIME	ACTIVITY	PLACE	TIME	ACTIVITY	PLACE
Monday									
Tuesday									
Wednesday									
Thursday									
Friday									
Saturday									
Sunday									

COMMUNITY SURVEY around F.W.C_____

NAMES OF TRAINEES:

(1) _____

(2) _____

Household Reg # With	Head of Family	Name of Client	KNOWS		MCH											FAMILY PLANNING				SANITATION		
					Mother Health						Child Health											
					Pregnant		Ante Natal	Post Natal	Total No of	Age of Last Born	Nourishment Stat		Chronic Illness	Immunization								
			F.W Centre	Services Provided	Normal	High Risk					Well-Nourish	Mal-Nourish		Complete	Incomplete	Knowledge	Current User	Method in Use	Side—effects/Complications	Personal Hygiene	Domestic Sanitation	Environmental Sanitation

STAFF ATTENDANCE REGISTER FOR THE MONTH OF_____20____

Sr. No	Name	Designation	1	2	.....	30	31	Total no of Days	Remarks

ANNEX23.5

MOVEMENT REGISTER OF F.W.C

Date	S. No.	Name & Designation	Purpose & Destination	Time of Departure	Signature	Time of Return	Signature

LOGBOOK OF VEHICLE No_____

ANNEX23.6

(May be replaced by scanned proforma of LOG BOOK)

Date	Timing	Name of Requisitioning Officer	Detail of Journey before Journey	Meter Reading	Meter Reading after Journey	Total K.M Covered	Signature of Requisitioned Officer	Remarks

Annex23.7a

Cash Memo

MARVI GENERAL STORE

Cantonment Saddar Hyderabad.

Date:……..…….. No……

Qty	Particulars	Rate	Amount	
			Rs.	Ps.
		Total		

Original Bill

TUFAIL PHOTO STATE CENTRE

Court Road, Gari Khata, Hyderabad

No. 3343 **Date:-09-07-1999**

Qty	Particulars	Rate	Amount	
			Rs.	Ps.
1	Photo Stat Copy Plastic Cover			
		Total:		

PETTY CASH ACCOUNT OF_____for the month of_____20

Annex23.7bs

Receipt Amount		Month & Date	Payment	G.Total Amount		Postage		Petty		Sundry		Cartage		Travelling		Stationary	
Rs.	Ps.			Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.

TRAVELLING ALLOWANCE BILL (TA / DA Bill) Annex 23.8

Particulars of Journey and Halts					Kinds of Journey by Rail				Journey by Road			Daily Allowance				Actual Expenses
Departure	Date	Arrival	Date	Hours	Journey	Class	Noof Fares	Amount	Noof Miles	Rate	Amount	Noof Days	Rate	Amount	Part	Amount

Name	Designation	Basic Pay	Head Quarter
Payment of Rs. (Rupees)	_____		
Signature of Travelling Officer	_____		
Signature of Sanctioning Authority _____			
	Counter Signed by_____		

33.15 CONTRACEPTIVE DISTRIBUTION

33.15 CONTRACEPTIVES DISTRIBUTION:

The FWW should issue contraceptives to the F.W. As both male and female, and to the clients. She should monitor the distribution to these personnel as per following procedure:

Family Welfare Assistant (Male):

Among other duties the F.W.A (Male) is also assigned the registration of contraceptive distributors, Outreach workers, retail shopkeepers etc., the supply and the collection of contraceptive sale proceeds, and the submission of monthly performance report along with the sale proceeds of contraceptives for the next months.

The report should provide information regarding:

- Distribution made directly by the F.W.A to the Clients.
- Quantity sold by commissioned agents.
- Amount received on account of sale proceeds from the commissioned agents.

Having received the performance report from the F.W.A. (M), the F.W.W will issue stocks of contraceptives to the F.W.A (M) for the next month equivalent to the consumption shown in the proceeding months. The issue of stock is to be recorded on the register and signed by him as a token of receipt. The F.W.A (M) should enter the supply in his stock register and immediately contact the outlets to replenish their stocks.

The account of issue of contraceptives to the distributing agents and the sale thereof should be maintained by him in the stock register.

He may supply contraceptives directly to the clients provided he maintains a list of such clients with full address, date of issue and the quantity issued.

Family Welfare Assistant (Female):

The F.W.A (F) may also receive the contraceptives from FWW and issue out to DAIS / TBAs, voluntary workers and the clients directly. She should also maintain records and report performance as is done by the F.W.A (M).

Upon receipt of the reports from the F.W. A the F.W.W should replenish their stocks in the first week of each month.

Reporting / Feedback to D.P.W.O:

Having received reports and sale proceeds from F.W.A at the close of the month, the FWW should complete her monthly report on the-prescribed form.

The report should indicate distribution of contraceptives made through the F.W.C. directly to the clients; the detail of sale proceeds the quantity sold by commissioned agents and after deducting their commission, how much amount has been utilized as well as the amount of contraceptives directly sold by FWW, FWA

In the first week of each month the F.W.W should submit the report to the District Office along with the sale proceeds of contraceptives on the day of meeting. In case the meeting is not held on the scheduled date immediate arrangements should be made by the FWW to dispatch the report and sale proceeds to the District Headquarter in the first week of the month.

33.16 PROVIDING SERVICES AWAY FROM THE F.W. CENTRE

33.16 PROVIDING SERVICES AWAY FROM THE F.W. CENTRE:

- Camps:
- A service should aim, as much as possible, to meet the needs and convenience of the client through feedback. For many clients travelling to the FW Centre may be inconvenient or difficult for several reasons. So the service should be taken to clients as much as is feasible. This can be achieved by organizing various types of services on a regular, periodic basis. The most important services are:
- FP Camps where all contraceptives will be available and IUCDs may be inserted.
- Follow-up visits to FP clients whose addresses are recorded with FWC.
- Delivery of contraceptives to individual clients and community outlets (shops, dais, other health outlets).
- Medical Care for general patients, sick children and antenatal care to expectant mothers may also be provided in the camps.

All the above must take place regularly and systematically as a minimum acceptable standard of performance.

- First aid services need in the community may be addressed as and when requested.
- Satellite Camps:
- The incharge of each Centre holds satellite clinics twice a week in the nearby villages on fixed days. A minimum of six camps are held during a month in the identified villages where no other service outlet exists. During the camp days, Aya attached to the clinic accompanies the Centre Incharge for assistance. Both visit the village on public transport and are given fixed TA / DA / conveyance charges @ Rs. 400/-- to incharge and Rs. 250/- to Aya. Family Welfare Assistant (Male) visits the identified places prior to satellite clinic to decide for holding the clinics and to carry out motivation and counselling among the eligible couples. He is given Rs. 250/- as fixed TA / DA / conveyance charges for each satellite clinic.

Family Welfare Assistant (Female) stays in the FW Centre on satellite clinic days to attend FP clients / patients in the absence of the centre in-charge. Sufficient publicity of the camps must be carried out by TPWOs before the camp.

Involving the community:

The tasks of ensuring that not only all the people in a community are aware of the FW Centre and its services The provision of services to clients in a way that is convenient to them, are difficult to accomplish all alone by the FW Centre staff. Therefore, others in the community must be invited to take part in the work, since the work is for the benefit of the community.

The most important people required to support the work of the FWC are community volunteers (CVs). Their role will be to support the provision of information or services as outlined above. In some communities the CV may have an important role as translator, introducer, or companion to FWC staff when they are working with the community.

The second most important group of people are the other health workers in the community

such as doctors and staff of clinics and health centres and NGOs. "Influential", Imams, Nazims and others should be invited to assist in specific ways to help the FWC achieve the program objectives.

The role of the community volunteers is especially important and is described in more detail below.

Community Volunteers:

Community Volunteers may be selected by the FW Centre staff. They should be recruited from all walks of life and may include satisfied clients, teachers, religious leaders, barbers, veterinarians, etc. they may be men or women.

There will be some variation between Centres in the way the Community Volunteer scheme operates, but all FW Centre staff must recognize that the community Volunteers are not full-time workers, nor are they paid. Therefore, they can only be expected to spend a limited amount of time on family welfare activities.

Willing volunteers should be recruited to assist the work of FW Centre. The FWW must have a clear idea of the assistance that she wants the volunteer to do. She should ask the potential volunteer if she or he would be willing to do that specific job and could spare some time for it. It may be necessary for the FWW to provide required training for the volunteer. One example of how this training could be done is given below.

The training and the work of Community Volunteers must be very closely integrated. One model which could be adapted to suit the needs of different FWW Centres is given below.

- Ten to fifteen women volunteers are recruited.
- Each volunteer is assigned a group of 15-20 families who live near the volunteer's house.
- The volunteers are trained for half a day at the FW Centre or other suitable place in:
    - The concept of family planning
    - What is meant by an eligible couple?
    - How to make lists of eligible couples
    - How to enquire at a house about who lives there.
- The CVs are then trained for another half day. This will involve:
- Checking that the list of eligible couples has been made
- Discussing any problems met
- Explaining in more detail the concept of family planning.
- Training in how to explain the idea of family planning to people in the community.
- The third training for half a day takes place. This will involve:
- Discussion of problems and experiences during the home visiting.
- Explanation of the methods of contraception including their advantages,

disadvantages, and side effects.

- The final half day training takes place. It includes:
- Discussion of experiences during the home visiting
- Explanation of contraceptive and other services available at the FW Centre.

After training the Community Volunteers visit each of the families in the neighbourhood to explain the FW Centre services and to offer to accompany them to FWC.

In this way at least 150 families can be contacted and will learn about the FW Centre and its services. They will have the chance to discuss the ideas in their own homes with a member of their own community. This will be achieved at a very low cost and will involve the FW Centre staff in only 4 half days of training. Simple training material may be developed by FWC staff to facilitate training activities.

When this program of training and work is complete the FW Centre may extend a similar program to more volunteers in a different part of the FW Centre catchment area. Or they may choose to build on the skills of the existing CVs so that they would be able to:

- Collect simple information about the community's needs relating to health.
- Provide regular follow-up to contraceptive users
- Assist for programs at the FWC or outside in the community concerned with growth monitoring and nutrition.
- Distribute appropriate contraceptives and resolve myths and misconceptions about them.
- Identify people in the community who could teach or otherwise contribute to skill development activities.

The essence of the work of community volunteers is to provide information and services on a regular basis for the limited population which they serve. Family Welfare Centers should start with limited objectives when working with CVs. They should begin by recruiting a limited number of volunteers and later expand this number as the FWC builds up its capacity to train, support and manage the community volunteers. The volunteers should start with only very limited responsibility and skills, then steadily build on their experience.

Friends of F.W.C:

The ‘Family Welfare Centre’s provide FP/ RH information and services to the population both in urban and rural areas since inception of the program The performance of Family Welfare Centres despite several additional inputs has not increased. The family planning clients’ attendance has remained static ranging from 3-5 clients per Family Welfare Centre per day. The satellite camps once in a week by Family Welfare Centres have not made much progress in enrolling family planning clients in the community. The referral of clients to Family Welfare Centres and higher level as well as follow up of family planning clients in the community still needs proper attention. Despite monitoring activities from Federal, Provincial and District level, the staff of Family Welfare Centres does not observe the official timing.

To address the above issues and to involve the local community in the affairs of Population Welfare Programme, the component of 'Friends of FWCs' needs to be revitalized. This new initiative for productive involvement of "Friends of FWCs" would be tested on pilot basis in eight selected districts of the country including AJK and FATA. The list of proposed districts where new initiative would be launched is as under

Membership of "Friends of FWC":

Sr. no	Service Providers	Members of Community
(a)	Staff FHC & RHS-B Centres)	Satisfied clients
(b)	Staff of Mobile Service Units (MSUs)	Volunteers: National Volunteer Movement (NVM), National Commission for Human Development (NCHD)
(c)	Male Mobilizers (MM)	Postmen
(d)	Nurses (Ministry of Health (MoH) Department of Health (DoH) & Private)	Teachers of Schools, Colleges, Universities
(e)	Lady Health Workers (LHWs)	Social Workers / Social Activists
(f)	Lady Health Visitors (LHVs) (Ministry of Health and Private)	Philanthropists
(g)	Dispensers	Local Lady Councilors / Nazims / Naib Nazims
(h)	Public Private Practitioners / Hakeems / Homeopaths	Councilors /Politicians /Parliamentarians
(i)	Traditional Birth Attendants (TBAs)	Wives of Local Influentials
		Citizen Community Board (CCBs)

Terms of Reference (TORs) for 'Friends of FWC'

- The motivation of the community to adopt Responsible parenthood.
- Scaling up family planning /reproductive health (RH) services.
- Increasing contraceptive prevalence rate (CPR).
- Decreasing PGR (Population growth rate), TFR (total fertility rate).
- Decreasing maternal mortality and morbidity and Neonatal & child morbidity and mortality.
- Informational, education and communication (IEC) activities and distribution of IEC material.
- Raising awareness about Population & Development and contraceptive use.
- Distribution of condoms to service providers
- Promote healthy practices such as nutrition, immunization and breast feeding etc.
- Awareness on Reproductive Health (RH) rights of women.
- Improving literacy with special focus on females.
- Form a bridge between community and FW centre
- Facilitate referral and follow-up
- Participate in population related events such as Camps, World Population Day, Baby Shows, Poster Competition, Sports Events etc.

Reporting Mechanism:

- The performance of the project will be consolidated at the level of Family Welfare Centres which will serve as the hub of the activities.
- The performance of all the FWCs will be reported to Tehsil Population Welfare Officers where available monthly basis in terms of:
    - The number of meetings held with the senior service providers of health.
    - The number of meetings held with the service providers of Population Welfare Departments.
    - Number of parcels delivered through postal department.
    - The number of meetings held with the members of the community, CCBs, volunteers of National Volunteer Movement or National Commission for Human Development etc.

Monitoring & Supervision

- Tehsil Population Welfare Officers (TPWOs) will be responsible for the overall supervision of the Project and shall keep an up-to-date record of performance of the centres under its jurisdiction. Tehsil Population Welfare Officers will verify at least 15% of the performance of the activities of the project.
- District Population Welfare Officer will pay visits to Tehsil Population Welfare Offices to monitor performance of the Tehsil offices on monthly basis.

- 10% validation of the cases already verified by Tehsil Population Welfare Officers will be done by District Population Welfare Offices
- Provincial Managers / other senior officers of Population Welfare Departments / MoPW will pay surprise visits to monitor the progress of project.

Management Committee:

Every Family Welfare Centre has a committee consisting of satisfied clients, wives of local influential, social workers, teachers, etc., to generate community support for improved working. This will be expanded to include besides others, LHVs / LHWs, representatives of NGOs, TBA, lady councilors' etc. Involvement of elected female leadership will not only enhance political support, but also advance empowerment of women.

Collaborate With Health Outlets and Non-Government Organizations (NGOs)

Development is a continuous process, and its requirements are so dynamic and complex that Government cannot achieve its goals without active participation of all sectors of society. Achievement of developmental goals must be promoted by a mutual understanding and cooperation which can establish a participative process. Non-Governmental Organizations (NGOs) have, historically, provided a major impetus in assisting Governments in initiating, improving, and implementing development programs. The population goals of Pakistan's development efforts are among its most important. The attainment of these population goals is so critical that tapping the recognized strengths of indigenous NGOs in providing family planning and family welfare services is indeed a worthy undertaking. NGOs are known to be innovative, cost-effective and community based and can extend family planning coverage to eligible population in rural and urban areas of Pakistan.

Hence it is important that F.W. Centre staff should coordinate with the Community Based Organizations (CBOs) for the success of P.W. Programs

Developing Working Relationship with a Health Outlet:

After collecting all the information required, about a Health Outlet develop linkages with the health facility.

Get an appointment with the in-charge of facility. Contact the person on telephone, through a letter or some person. Request an appointment. Note down the day, date and timings of the appointment. Observe these timings strictly.

Visit the Health facility – observing the proper channel as explained above.

- Be punctual
- Inform about your arrival to the person concerned
- Introduce yourself
- Inform about the service delivery of F.W.C
- Inform the purpose of your visit (developing referral linkages)
- Be polite and respectful during conversation

- Get the required information about the person / facility / services / OPD days and timings

Reach an agreement.

- Seek cooperation for referring clients / patients to this facility
- Inform the type of clients the F.W.C will refer
- Show the referral slip that the F.W.C will be using
- Ask if you can be of any help
- Request the in-charge to refer F.P clients to the F.W.C

Bid farewell

- Bid farewell warmly
- Repeat the agreement reached
- Inform that you will be looking forward for his/her cooperation for referral of clients / patients

Developing working relationship with LHW:

Lady Health Workers (LHW_s) of health department may be involved by requesting their supervisors.

33.17 HEALTH PROJECTS

33.17 HEALTH PROJECTS

During clinical attachment of FWW:

The FWW trainee in addition to learning how to manage a F.W.C is also expected to work on a health project which is identified, completed, and evaluated during the clinical attachment. This gives her a first-hand experience of working with the community (on a small scale) for a definite purpose / objective. This also enables her to reflect this experience during her posting at a F.W.C in the district after completion of her training.

In the R.T.I the trainees are briefed on what has to be done and what is the importance of the health project.

1) The trainees are provided a survey format. RTI trainer explains how to fill the format.
2) The trainees then practice how to deal situations through role plays using the "Interviewing Technique"
3) Five to six F.W. Cs are selected by RTI staff for clinical attachment of trainees.
4) The F.W. Cs are situated in the urban / semi urban localities of the city in which the R.T.I is located.
5) One to two F.W. Centres are supervised by one R.T.I Trainer during this period.
6) The trainees are divided into groups and four to six trainees are attached to one F.W.C.

Steps of Health Project:

Need Identification:

- The trainees conduct survey of a sample in the community using the prescribed format and register households.
- They collect data of the registered households on the survey format provided to them.
- The data is tabulated and interpreted.
- The health needs of the specific locality are identified and listed.
- The health needs are then prioritized according to their importance to the community and the capacity of FWWs to help in this respect
- The priority list of health needs of the locality is prepared.
- Three most important needs are selected and these topics are assigned to the group of six trainees in the particular FWC.
- The trainees work in pairs on the selected Health Project.
- The R.T.I Trainer assigns one (separate) health topic to each pair of trainees to work upon and complete it within the specified period.

Thus if 6 trainees are attached to a F.W.C, they are allocated 3 different topics to work upon.

The importance of each health topic assigned to the pair is discussed and the target group

for action is identified.

Planning:

Each pair of trainees prepares a plan of action to implement the project. The objectives are set, and it is decided what is to be done and how and when to do it.

Organizing:

Trainees organize their own resources i.e., collect materials, develop I.E.C material and decide whose help is needed & how and when to meet the Resource persons / influential for this health project.

Implementation:

The project is then implemented in the allocated period and all planned activities are conducted / carried out for the target group to be facilitated.

Evaluation:

At the completion of the specified period a second survey using the same format for the same households in the community is conducted by the trainees and its findings are tabulated and interpreted.

The results are quantified and compared with the findings of the first / previous survey.

It is estimated how much the objectives have been achieved.

Report Writing:

A brief performance report is prepared by each pair on the assigned health project. Samples of materials used in the I.E.C campaign are kept for the presentation at RTI. Some trainees even make photo albums of their activities in the community.

Presentation of report:

Each pair presents their report in the plenary, when the trainees collect back at the R.T.I, one trainee out of the pair is asked by the Panel Member to present the report, while the other is asked to show and explain the materials used in the I.E.C campaign of the health project.

Thus, the trainees gather a rich experience of working with the community as well as managing a F.W. Centre. They also learn from each other's experiences, when presentations are made in the R.T.I classroom in front of a panel of Teaching Faculty.

33.18 REPORTING / FEEDBACK TO D.P.W.O

33.18 Reporting / Feedback to D.P.W.O:

Having received reports and sale proceeds from F.W. As at the close of the month, the FWW should complete her monthly report on the-prescribed form.

The report should indicate distribution of contraceptives made through the F.W.C. directly to the clients; the details of sale proceeds the quantity sold by commissioned agents and after deducting their commission, how much amount has been utilized as well as the amount of contraceptives directly sold by FWW, FWA

In the first week of each month the F.W.W should submit the report to the District Office along with the sale proceeds of contraceptives on the day of meeting. In case the meeting is not held on the scheduled date immediate arrangements should be made by the FWW to dispatch the report and sale proceeds to the District Headquarter in the first week of the month.

RECORDS & REPORTS

Each F.W. Centre is required to maintain proper records of its activities, as well as of its furniture, equipment, medicines, and contraceptive supplies. F.W. Centres are also required to send regular reports of progress made in service delivery. A list of registers, cards and reports required to be maintained is given below. The FWW should ensure that all records are correctly maintained, are up to date and that monthly reports are prepared and sent to the District Office. It is essential that records are true and accurate. Sufficient details of client's addresses must be recorded, so that they can be traced in case of finding or sending a message to the client.

Importance of Maintaining Correct & Up to Date Records: The records are used to:

- Know the current workload of the centre.
- Conduct regular follow ups where and when necessary.
- Verify the validity of information e.g., if addresses are correct, IUCD cases could be verified; medicines, equipment and accounts could be checked:
- Interpret the data correctly (increasing and decreasing trends) for planning future activities.
- Calculate the prevalence and continuation rates of contraceptive use.
- Assess whether the targets of F.W Centre are being achieved.
- Conduct prospective and retrospective research studies e.g. acceptability of contraceptive, their side effects etc.
- Evaluate the programme with regard to its long- and short-term goals. And in light of its results make necessary changes and improvements.
- Assess contraceptive stock position
- Evaluate community development activities

Inventory Register of Area:

FWC Area Data Sheet

(It is heading and should be bold)

This sheet is completed by the FWW under the supervision of the DPWO. It is updated no less than annually. This sheet should be completed once and updated only as the information changes. An annual review of the data should be sufficient.

It should have:

1. Demographic data of the area

2. List of trained Dais in the area

3. List of area commission agents

4. List of medical facilities

5. Rough map of the area

Demographic Data of the Area

Purpose: It serves two functions. First, it displays the extent of the responsibility of the FWC Staff. Second, it displays the parameters of the service area for visitors to the FWC.

The number of eligible couples is particularly important. It is the denominator used to calculate contraceptive prevalence rate.

Column

e) Serial Number

f) Name of Village/Ward

g) Approximate area in square kms

h) Population:

- Males
- Females
- Total

h). Number of households

i). Number of Eligible Couples

j). Data and comments (be sure and pencil in the data of the last entry for this line).

Source of Data:

Area, population and number of households should be available from the municipal committee / Town Committee Office in urban areas and from Union Council Office in rural areas. A rough estimate of the approximate area is sufficient. If a contraceptive survey has been completed for this service area, it will include the number of eligible couples, alternatively FWW may (recall the portion of your training that discussed how to do) a baseline survey. A third alternative is to

multiply the population of each village / ward by 20% (or divide by five) to roughly estimate the number of Married Women in Fertility Age. This will approximately be the number of eligible couples.

Under remarks, note which of these alternatives has been used.

List of Dais in the Area:

Dais are an important asset in promoting FP acceptors and assisting the FWC in meeting FP targets. Many FWWs meet with the Dais, periodically, to solicit their support in motivating new Family Planning acceptors.

Column

- Serial Number
- Name of Dai
- Residential Address of Dai
- List private job she may be doing or self-employed. If she is employed, what is the name of organization for which she works
- In what year was she trained?
- What was the duration of her training?
- Write the date of the last update of this line of information.

Source:

A list of Dais who have participated in the training may be available. Information about Dais, both trained and untrained, may be provided by patients at clinics. Add these to the list but be sure to mark the untrained Dais as in need of training. Enter this in column 5.

The list includes not only those Dais who received training from FWCs but all those who received some formal training through the Health Department, UNICEF, or under the TBA programme and who reside in the catchment area of the FWC.

List of Commission Agents in the Area

This includes all types of agents, volunteers or otherwise.

Purpose:

Commission agents are an integral part of the contraceptive delivery system. The list of agents will support supervision of the performance of FWAs (M) and is a useful management tool for the FWW.

Column

- Serial Number
- Name of Agent

- Profession or occupation of the agent
- Address of Agent
- Date of Appointment.
- Write "Yes" if he is actively participating.
- Write "no" if he is not actively participating. Delete from the list any commission agents who are inactive for more than six months.
- Write here the date of recording, addition and deletion of the information.

The Contraceptive Stock and Sales Ledger CLR -14 (a) provides this information.

List of Medical Facilities:

This includes all the health facilities, doctors, homeopaths, and hakims in the area. If the facility is listed, do not list the staff separately.

Purpose:

Staff at medical facilities are potential motivators. This list also supports referral activities.

Column

- Serial Number
- Name of Practitioner or Facility
- Addresses

Rough Map of the Area

Purpose:

A map of the service area displayed on the wall of the FWC will help you organize your work. Clients appreciate it. It will be useful in discussing the work with visitors, and supervisors.

The map may be hung separately on the wall rather than be included on the data sheet.

Source:

DPWO staff can help in preparing the map. Include landmarks such as health facilities and schools. It can also be obtained from the local Union Council or Municipal Committee Office.

SPR -30

32 Performance Evaluation Index (PEI) Calculation Sheet

- Recording Responsibility: FWW
- Frequency:Monthly

Purpose:

The purpose of this calculation sheet is to use the contraceptive performance data for the month to calculate Performance Evaluation Index (PEI) of FWC for the month.

Source of Information:

The quantities of contraceptives dispensed will be obtained from the FWC Monthly Performance Report SPR -31.

Recording Instruction:

Trace the contraceptive quantities dispensed during the month from the SPR -31 and record the data in column -2 against the respective items.

Divide each quantity of contraceptives by the corresponding constant printed in column -4 and record the resulting quotient in column -5. This is PEI for individual items. Use a calculator for calculations.

Add all entries in column and record the resulting total at the bottom of column -5 against overall PEI

PEI Display Sheet for F. W. C

Recording Responsibility FWW

Frequency Monthly

Purpose

The purpose of this display sheet is to help FWW in making comparison of her center's performance in the previous month and with that in the same month last year.

Source of Information:

The source data is obtained from SPR -32 for the current month.

Recording Instructions

The PEI value for individual contraceptives as well as the overall PEI value are taken from the PEI calculation sheet SPR -32 and recorded in the respective column against the current month / year

33.19 RIGHTS OF FWWs

33.19 RIGHTS OF FWWs

All FWWs have basic individual rights, including the civil, constitutional, and statutory rights of each person as codified by the Geneva Convention and in the Constitution of the Islamic Republic of Pakistan.

FWWs have the right to:

1) Considerate and respectful behavior from the patients for whom they care and to be free from harassment, abuse, attack, verbal and mental abuse.
2) FWWs have the right to considerate and respectful behavior from their superiors and to be free from harassment, abuse, attack, and verbal and mental abuse.
3) Protect themselves from physical attack.
4) Register a complaint about a patient, and to pursue that complaint through the hospital system or in a court of law without risk to his employment.
5) Shall never be *required* to put their lives, their physical health, or the health of their families at risk.
6) Reasonable access to the tools needed to perform the duties of their position.
7) Sufficient personal time during the work shift to keep hydrated and nourished as needed.

Responsibilities of FWWs:

1) Consult with clients / patients, discuss their health care needs, and offer advice.
2) Diagnose illnesses and offer care as required.
3) Provide a medical service or perform a procedure depending on the patient's needs.
4) Prescribe medication and/or provide the best course of action.
5) Prepare health care plans as needed.
6) Determine whether a client / patient needs to consult with other specialists as part of their health care plan and refer appropriate
7) Attend ongoing training and courses to advance knowledge and learn about any new developments in their discipline.
8) Act in a professional manner at all times
9) Deal with and treat patients with compassion and consideration.
10) Comply with local, state laws and regulations to provide safe health care services.

SECTION THIRTY FOUR

ENTREPRENEURSHIP

34.1 ENTREPRENEURSHIP

34.1 INTRODUCTION TO ENTREPRENEURSHIP

This topic is a new addition to your syllabus, and many will wonder why it has been included. The reason is simple, we hope your re going to learn and train well so that you can provide services of a good standard to your clients. If so you deserve to progress in your life. Entrepreneurship may just be the thing for you.

This is a new concept of work and business, which has become very popular in recent years. Entrepreneurship refers to the concept of developing and managing a business venture in order to gain profit. Simply put, entrepreneurship is the willingness to start a new business. Entrepreneurship has played a vital role in the economic development of the expanding global marketplace. Entrepreneurship is an important driver of economic growth and innovation

Who is an entrepreneur?

(The word "entrepreneur" comes from the French verb entreprendre, meaning "to undertake"). An entrepreneur is someone who is willing to work for him/ herself and by him/herself. There are several different meanings of the term entrepreneurship.

A person who undertakes the risk of starting a new business venture is called and entrepreneur.

HOW ENTREPRENEURS WORK

Entrepreneurship is one of the resources economists categorize as integral to production, the other three being land/natural resources, labour and capital. An entrepreneur combines the first three to manufacture goods or provide services.

Entrepreneurs commonly face many obstacles during the process and most cite the following as most challenging:

- Overcoming bureaucratic hurdles
- Hiring talent
- Obtaining finances

How do you define success?

- Success is the achievement of something that you have been trying to do.
- Success is the achievement of a high position in a particular field, for example in business.
- Someone or something that is a success achieves a high position, makes a lot of money, or is admired a great deal

BUSINESS

A business is defined as an enterprising entity engaged in commercial, industrial, or professional activities. ... The term "business" also refers to the organized efforts and activities of individuals to produce and sell goods and services for profit or non-profit organizations that

operate to fulfill a charitable mission or further a social cause.

The term "business" also refers to the organized efforts and activities of individuals to produce and sell goods and services for profit. Businesses range in scale from a sole proprietorship to an international corporation.

QUESTIONS FOR ENTREPRENEURS

Embarking on the entrepreneurial career path to “being your own boss” is exciting. But along with all research, make sure to do the homework about yourself and your situation.

A Few Questions to Ask Yourself:

1) Do I have the personality, temperament, and mindset of taking on the world on my own terms?
2) Do I have the required ambiance and resources to devote all my time to my venture?
3) Do I have an exit plan ready with a clearly defined timeline in case my venture does not work?
4) Do I have a concrete plan for next "x" number of months or will I face challenges midway due to family, financial or other commitments?
5) Is there a mitigation plan for those challenges?
6) Do I have the required network to seek help and advice as needed?
7) Have I identified and built networks with experienced mentors to learn from their expertise?
8) Have I prepared the rough draft of a complete risk assessment, including dependencies on external factors?
9) Have I realistically assessed the potential of my offering and how it will figure in the existing market?
10) Have I identified my target customer base for the initial phase? Do I have scalability plans?
11) Have I identified various channels of communication?

Questions about External Factors:

1) Does the entrepreneurial venture meet local regulations and laws? If not feasible locally, can I and should I relocate to another region?
2) How long does it take to get the necessary license or permissions from concerned authorities?
3) Is there a plan about getting the necessary resources and skilled employees, and have I made cost considerations for the same?
4) What are the tentative timelines for services to be operational?
5) Who are my primary customers?
6) Who are the funding sources to approach to make this big? Is my venture good

enough to convince potential stakeholders?

7) What technical infrastructure do I need?
8) Once the business is established, will I have sufficient funds to get resources and take it to the next level?
9) Entrepreneurial spirit—Being a self-starter can make you very desirable.

Develop these nine qualities of an entrepreneur to help set yourself apart from the average worker.

34.2 CHRACTERISTICS OF A GOOD ENTREPRENEUR

34.2 CHRACTERISTICS OF A GOOD ENTREPRENEUR

There are definite characteristics that make entrepreneurship successful. A few are mentioned below:

Ability to take a risk-

Starting any new venture involves a considerable amount of failure risk. Therefore, an entrepreneur needs to be courageous and able to evaluate and take risks, which is an essential part of being an entrepreneur.

Constant Technology Innovations

It should be highly innovative to generate new ideas and earn profits out of it. Change can be the launching of a new product that is new to the market or a process that does the same thing but in a more efficient and economical way.

Visionary and Leadership Quality-

To be successful, the entrepreneur should have a clear vision of his new venture. However, to turn the idea into reality, a lot of resources are needed. Here, leadership quality is paramount because leaders impart and guide others towards the right path of success.

Open-Minded-

In a business, every circumstance can be an opportunity and used for the benefit of a company.

Flexible-

An entrepreneur should be flexible and open to change according to the situation. To be on the top, a businessperson should be equipped to embrace change in a product and service, as and when needed.

Know your Product-

Know the business venture and also be aware of the latest trend in the market. It is essential to know if the service meets the demands of the current market. Being able to be accountable and then alter as needed is a vital part of entrepreneurship.

Market Research for Need Assessment-

Doing market research to establish a business where there is a need of one and to look for regions that lack quality health care and offer quality health care solutions

Balancing between Profitability and Social Responsibility-

Health entrepreneur needs to establish a profitable business while maintaining their social responsibility to the general public.

While entrepreneur cannot afford to give free treatment to everyone, an association with an NGO or regular voluntary work by team members in rural camps can fill the gap of social responsibility.

Motivation

Hard-working business owners are incredibly motivated to succeed.

Creativity

It is important to be creative—to always be thinking of new ways you can improve your workflow and productivity.

Persuasiveness

Persuasiveness makes a better negotiator, which gives an edge when going after an assignment.

Vision

Successful entrepreneurs always keep an eye on the big picture, and this ability can make a better worker.

Versatility

Is to be able to adapt to changes in the work and workforce.

Risk tolerance

Don’t be afraid to take risks when starting a new venture.

Decisiveness

Exercise sound judgment under pressure, as an entrepreneur, there is no room to procrastinate

Collaboration

Good entrepreneurs are not only brilliant leaders, but also effective team players.

Financing

Money for startup and the running costs of the venture

34.3 KINDS OF ENTREPRENEURSHIP

34.3 KINDS OF ENTREPRENEURSHIP

There are four kinds

Small business, scalable startup, large company, or social entrepreneurship.

Small Business Entrepreneurship

Majority of small businesses in Pakistan fall into the small business category. Small businesses represent the overwhelming majority entrepreneurial ventures. A small business could be a clinic. Small business entrepreneurs usually invest their own money to get their ventures off the ground, and they only *make* money if the business succeeds. For a FWW, opening her own clinical practice is a brilliant idea!

There are a few distinct characteristics which distinguish small business entrepreneurs from other kinds of entrepreneur:

- Small business entrepreneurs focus initially on a single product, market, or locality. While in their startup phase, the entrepreneurs probably don't have plans to expand the company.
- The initial goal of small business entrepreneurs is to make a profit. The business may be motivated by the entrepreneur's desire to effect social change.
- Most small businesses are either self-funded or funded through small business loans.
- The greatest challenges small business entrepreneurs face include:
- Ensuring a steady cash flow without relying on third party investments
- Finding time for family and friends
- Staying abreast of technology and market changes that affect the business
- Devising a marketing strategy to attract the company's target audience
- Maintaining a solid reputation
- Keeping an eye on the competitors.

Flexibility

The advantage of having maximum control on the work can often help to gain maximum benefit. Being the authoritative figure at the workplace often leads to a lot of personal and professional benefits. Flexibility in professional careers and in entrepreneurship gives an added advantage.

Purpose of Entrepreneurship

Choosing a career path in order to gain profit for the long term is the most important reason why people opt for entrepreneurship. Maintaining a reliable source of income is the best and the most important way to create a stable job. Keeping this in mind, being your own boss and

having things in your control are what majority of the people desire. To fulfil this need, entrepreneurs start their own business to control their career.

Several advantages

Having the command and the authority over the kind of work you want to do is an advantage most entrepreneurs enjoy in their experience of successful entrepreneurship. This means that all the entrepreneurs will able to benefit from their hard work.

Control and independence

The sole purpose of choosing entrepreneurship as a career path is to control your venture, be an independent leader of the team and choose exactly what goes around in the workplace. Entrepreneurship provides entrepreneurs with the advantage of making the right decisions that will benefit them in the best possible way.

Demand for innovative ideas

With advanced technology and the increasing demands of the market for more innovative ideas shaped many individuals to become aspiring entrepreneurs. Even though most entrepreneurs' main purpose is to benefit themselves from their business, however, it makes a huge impact on the expansion of the business world.

34.4 MODERN PERSPECTIVE OF ENTREPRENEURSHIP

34.4 MODERN PERSPECTIVE OF ENTREPRENEURSHIP

Along with some other disciplines, the study of entrepreneurship is also paving its way as an important sub-discipline in many universities and colleges. This means that modern youth is extensively interested in pursuing entrepreneurship as a career path.

Due to this reason, several courses have been introduced related to entrepreneurship. Like any other important and popular discipline, entrepreneurship is also growing rapidly. Today, more and more people are in favour of becoming independent in their professional careers and therefore, there are fewer criticisms to be faced by any aspiring entrepreneur.

Social media age

Modern day entrepreneurs have the perk of expanding their businesses and reaching out to the target audience with the help of social media. This eventually provides the opportunity for the entrepreneur to pave the way into the large marketplace. Entrepreneurship in the modern world is something any independent individual with leadership quality would opt for.

Challenges / criticism

Due to popular belief, entrepreneurship is considered to be an easy way out for people not in favour of working under or for someone else. In several ways, many aspects of this statement might be completely true. However, just like any other profession, being an entrepreneur and choosing entrepreneurship as a career may come with several challenges. There are multiple challenges that every entrepreneur may face throughout their career.

Major responsibilities

One of the perks of choosing entrepreneurship as your career is the independence that you get by being an entrepreneur. However, being in charge of a unified team and having complete control over the decisions you make comes with a lot of responsibility.

This might prove to be very challenging for the business. Being in charge means being responsible for anything that may go wrong in the business, which may prove to be very challenging for any entrepreneur.

Risks of success or failure

There are several risks that may come along with entrepreneurship. Like mentioned earlier, an entrepreneur is responsible for several things. The risks associated with adopting and implementing new and innovative ideas may sometimes result in failure.

SECTION THIRTY FIVE

COMMUNITY WORKING

35.1 COMMUNITY HEALTH

35.1 COMMUNITY HEALTH

A community can be defined in many ways depending on size, geographical situation, ethnic composition, socio-economic conditions and political or administrative structure. Perhaps, the simplest way to think of a community is to think of a group of people, whose common interests are greater than their individual interests.

Community is a group of people living in the same area, sharing common traits and having a sense of belongingness; or a group of people living in same place under the same laws and regulations, who have common rights, privileges and interests.

Community health is the part of medicine which is concerned with the health of the whole population of a community and the prevention of diseases from which it suffers. Very often the time and money spent on preventing disease in the community by education, immunization, environmental health and child spacing has a much greater effect in the end than waiting until people become ill and then spending time and money on treating them.

Objectives of Community Health:

- Preventing disease
- Prolonging life
- Promoting physical, mental and social health and efficiency through organized community efforts for:
- sanitation of the environment
- control of communicable infections
- education of the individuals in regard to personal hygiene
- organization of medical and nursing services for early diagnosis and prevention of disease
- Development of the social machinery to ensure adequate living standard for the maintenance of health of all the individuals
- Organizing these benefits so as to enable every citizen to realize his birth-right of health and longevity.

For working with the community, it is essential to have clear concepts of health, disease, illness, disability, community health and preventive health, etc.

HEALTH

It is defined as an optimum state of physical, mental, and social well-being of an individual and not merely the absence of disease or infirmity. The concept of well-being or healthiness includes the subjective feeling of well-being, soundness of body and mind and social functioning consistent with expected roles in society.

Factors responsible for Health:

For a person to be healthy, one should possess:

- Mental Health
- Social Health
- Physical Health

Factors affecting Mental Health

- Financial worries
- Family commitments
- Health of family members
- Job satisfaction
- Stress & strains
- Drug addiction

These factors affect the behaviour of the individual in the community.

Factors affecting Social Health

- Beliefs, customs and traditions of the families / community e.g., marriages, dowry etc.
- Attitudes
- Social pressures i.e., how will the society / community take a particular action
- Subjective norms i.e., outside influences, what will the friends, relatives and family members say about a particular action.
- Enabling factors – which allow one to carry out the intensions e.g., resources, facilities, support of people / groups.
- Drug addiction

Factors affecting Physical Health:

- Poor environmental sanitation
- Infectious diseases
- Nutritional deficiencies
- Degenerative diseases
- Abnormal growths (benign / malignant)
- Inherited / congenital defects
- Injuries / disabilities
- Poisons

Disease: It is an abnormal state of body resulting from harmful effects of processes, injurious substances or accidents.

Illness: It is a state of body in which certain natural functions are so disturbed that the individual cannot meet the usual daily requirements of life.

Disability: Disease, injury or other causes of morbidity are commonly associated with varying degrees of disability. There are various measures of disability in use. The National Centre for Health Statistics of the United States has defined disability as 'limitation of mobility and major activities'. Interference with expected role performance, inability to carry out activities of daily living and limitation in mobility is among the indices of disability associated with disease.

Value of community health

A community's health reflects the interaction of its inheritance, environment and life experience. The inheritance of a community is both genetic and cultural, which together with various attributes of the environment determine the life experience of all in the community.

Community health is attained by a community diagnosis of which diseases are important and which can be prevented, and then suitable control programs are organized. The problem of how to do this arises when there is only a limited amount of money to be spent on the medical services. This makes necessary to identify the priorities among the important and preventable diseases and then to decide on the most effective control programs that can be afforded.

Need for Working with the Community

- The impact of the FW Centres Project is not enough to reduce the population growth rate to an acceptable level
- Many FWC staff are underutilized within the centres because clients do not come to the centres in sufficient numbers
- Many FWWs have a poor understanding of what they could do in the community and with the community.

NEED AND DEMAND FOR HEALTH SERVICES

Population of a Health Centre: It means that all the people who live around the health centre, their health is the responsibility of that centre. The number of populations may vary according to the current policy. This is the community of that Family Welfare Centre (FWC). Family Welfare Workers are supposed to help the community because:

For every person who comes to the health centre, there are many more that do not come for various reasons. These people, the non-attenders may also be in need of medical attention but may not come for different reasons, such as they live too far away, there is no one to look after the children, they are too sick to travel or they distrust the medical services. These people who do not come need medical attention just as much as those who do come.

A disease has already started by the time a person has symptoms and attends the health centre for treatment. It would have been better to prevent the disease from happening in the first place. If all the young children in a village receive measles immunization, the number who suffers from measles and its complications, like pneumonia and diarrhea, could be greatly reduced. The best way to prevent disease is to reach the healthy members of the whole community before the disease does.

Some diseases cannot be successfully prevented, and some services cannot work well in a community unless most people change the way they live. If a village decides to improve its

water supply or help run its own MCH clinic, it needs the co-operation of the whole community. This co-operation can only come about if everyone is involved and not just the few who are sick and attend the clinics.

A useful way of looking at a community is to consider both their needs and demands for health services.

The **need for health services** comes from all the health problems that actually exist in a whole community of that centre. These problems need some action, whether it is by the people, the health providers or by both working together. This action is not being demanded and includes such things as looking after undiagnosed and untreated infections, difficulties with deliveries, infant feeding and malnutrition, immunization, refuse disposal or mosquito control.

The **demand for health services** comes from the various problems for which the people seek help, whether they treat themselves, see a local healer / hakim or attend the health centre. These problems are first diagnosed by the people themselves when they say ‘I do not feel well’, or ‘I am weak, I cannot go to work.’ Their illnesses have already progressed as far as producing symptoms.

The health needs of the community are like a buffalo or hippopotamus in the water; the part of its head that we see above the surface (representing DEMAND of the community) is only a small part of a much bigger animal immersed in water apparently not seen (representing the NEEDS of the community).

NEED IS OFTEN MUCH GREATER THAN DEMAND

Population Coverage:

It is the proportion of the population of a centre that is being covered by its health services. The aim of community health is to reduce and then keep down the number of new cases of disease in the whole population. Curative services are concerned only with sick individuals. The more we work back towards the earlier stages of the disease process the more important it becomes to involve everyone in the community, particularly those with any special risks of getting disease.

If we are to prevent disease and to keep people healthy then we need to think about the health needs of the whole community and not just about those who demand services at the clinics. This is where the idea of population coverage comes in. We must find out what percentage of population with health needs is actually being helped by the different health services. For instance, what percentage of the pregnant women come to antenatal clinic, what percentage of the two-year-old have had measles vaccine, what percentage of all people have access to clean water supply or what percentage of the community lives within 5 km of a health centre?

It is only through the effective use of preventive medicine, preferably primary prevention, together with good population coverage of all those in the community who are at risk, that the medical services can actually reduce the incidence of many of the common diseases. This is particularly true for infectious diseases and malnutrition.

The importance of knowing the total population of a family welfare centre and then estimating the population coverage becomes clear if we think about reducing the incidence of new cases. This is why it is so important to base the health centre services on a good knowledge of the local population.

Comparison of problem solving in individual health and community health

Individual health Community health

1. Objectives Health Problem Health Problem
2. Gathering History taking Demographic data, information examinations and local environment,
3. investigations disease patterns, available health services
4. Best programme Differential diagnosis Community diagnosis and final diagnosis and priorities
5. Implementation Treatment and Community health rehabilitation programs
6. Evaluation Follow-up Evaluation / assessment

Health and development of disease:

The health of people is usually discussed in terms of the diseases they suffer from. Most people make a full recovery from diseases, but some suffer damage to their bodies and may have permanent disability. If the disease is very severe it may lead to death. The relationship between health, disease, disability and death is shown in the diagram.

At first the person is well and healthy (top left). Ideally this is how one should continue throughout life i.e. on the pathway of health. But then sometimes something begins to go wrong, a disease process starts in the body such as an infection with tuberculosis or lack of food containing sufficient protein.

To start with, although the affected person has started on the pathway of disease, he will be unaware that anything is wrong that means the disease is sub clinical or pre-symptomatic. For example, if there are tuberculosis bacteria in the lungs it will take several months before they begin to produce symptoms, or if there is a shortage of protein in the diet it will take weeks or months before the effects become obvious.

When the symptoms of a disease start and are recognized by the affected person, we say it is clinical. Even when the symptoms of a disease first begin, such as fever, cough or diarrhea, many people ignore them and hope they will go away. If the symptoms persist, people may try to treat themselves or consult a local healer. They may live too far away, or feel too ill to travel, or they may not believe that the health services can do them any good, or they may dislike the medical worker or may be uncomfortable with him / her for some reasons. There are many reasons why people may wait a long time before going for help. By the time a person has symptoms the disease is already well advanced.

The clinical stage of illness is the one we usually know best, since most outpatients and inpatients are at this stage. People complaining of various clinical symptoms are diagnosed

and treated daily at dispensaries, health centers and hospitals.

If the disease is severe and not properly treated, the patient may eventually die. Even if he does recover, he may have a disability for the rest of his life, such as a damaged lung from pulmonary tuberculosis, a paralyzed arm from polio, or an amputated leg from a severe injury. However, most of those who are cared for will have a full recovery to health.

35.2 ROLE OF FWW IN PROMOTING COMMUNITY HEALTH

35.2 ROLE OF FWW IN PROMOTING COMMUNITY HEALTH

The Family Welfare Workers (FWWs) are the grass root level health providers in the Population Welfare Program. Over the years it has been realized that if they work in isolation, they cannot achieve the targets provided by the program, so they have to work in consultation with the community which they are serving. Neglecting this area was the main reason for lack of desired impact of the FWC project, to reduce the population growth rate to an acceptable level without further motivation and counselling. This needs to be done through community members. As clients do not come to the centres in sufficient numbers the FWWs have to reach out to community/public to increase the acceptance of their services. In order to improve the activities of FWWs, three things are crucially needed (a) Better quality care within the centres, (b) Improved facilities and supplies at the centres(c) Increased emphasis on working with the community.

COMMUNITY WORK

Community work is an essential component of FWW's responsibilities. Community work includes:

- Helping local people to decide, plan and take action to meet their own needs with the help of available resources.
- Helping local services to become more effective, usable and accessible to those whose needs they are trying to meet.
- Taking account of the interrelation between different services in planning for people.
- Forecasting necessary adaptations to meet new social needs in constantly changing circumstances

Community work is educational, it creates desired demand for FP needs. It is about people in communities creating opportunities for growth and change and deliberate movement towards the end which they determine and, in process of doing so, increase their critical awareness, knowledge, skills and attitudes. In the modern conditions of social change, it is also a necessary professional task.

COMMUNITY FEELING

It is a feeling of belongingness to a specific area / community and sharing many common interests, in addition to language, beliefs, traditions, customs, culture and religion. This feeling has a bonding effect and creates cohesion amongst the people in that community, so much so, that they may sacrifice individual interests for common interests.

Creating Community Feeling: Ideally, a community is a place where an individual is accepted. It is a place where people share common interests and understanding. In order to create community feeling among a group of people, living within an area we need to overcome any differences that may exist among the people and create a feeling of common interest in the community. We have to help them identify their needs and problems and help them find solutions.

Qualities Required to Develop Community Feeling: FWWs needs to identify people who can

develop the following qualities to be able to reap the rewards of a community that supports acceptance of positive reproductive health behaviours. Some of the qualities include:

Respect: The individuals must be guaranteed that their ideas and insights are respected and worthwhile. Individuals must not feel that they can be ignored or dismissed or that their needs and interests do not matter.

Dialogue: Conversations should mean that all participants are heard and that their comments inform about the social relations among everyone. Monologues are characterized by one person dominating the social relationship. This prevents a full, rich exploration of all the different perspectives and positions; it obstructs creative resolution of differing viewpoints. In dialogic exchanges, people listen with heads and hearts as well as ears. Opportunities are created for people to share their various points of view. While the FWWs may still remain the focus of the conversation, they try to direct it in response to community needs.

Trust: People work best in social groups on which they can trust to meet their needs. This means that they must believe that the work the social groups are doing is in their best interests and the groups rely on people to act responsibly (to meet the goal). One builds trust in community by making the connections between actions and consequences clear. Each assignment has an obvious purpose, the result of which is a recognized improvement in understanding or ability. Activities are worthwhile and frequently connected to people's understanding of needs in the real world.

Cooperation: Communities enhance learning productivity because they coordinate efforts of different people. There are a variety of skills needed for cooperative work. This includes skills for recognizing differences, finding consensus, and even those of critiquing others in supportive ways.

Celebration: Being a member of a group is usually marked by moments that recognize acceptance of newcomers, successes, advancements, and separations. In many settings these moments are small and subtle, while remaining important are introduction, jokes, compliments and other community rituals.

Knowing health needs of the community

In order to know the health needs of the community (through a survey), FWW should be able to:

- Identify Health Problems and with the help of the supervisor, plan the actions or task to deal with these problems.
- Identify people and organizations in the community that can help with the health problems and prepare a list of what they can do how they can help, and how to build an understanding with them. People who can help in various ways are sometimes called "resource persons".
- Collect information on health problems and needs of the community.
- Decide which Risk Groups i.e. social groups, families, and individuals are at special risk of health problems. These people are sometimes referred to as the "target population" because health care activities will be aimed particularly at them.

- Decide which seriously ill people should be referred to the nearest health facility.

Basic information is needed on people, population, environment, disease patterns and available health services. One should know from where to get this information and how to collect it. A great deal of information is already available if people know where to look for it, and if it is not available, then simple surveys can often find out what is required.

Information can be obtained from people and records in the local community, the health centre, the district and other centres of Ministry of Health. Information should be collected on:

- Local people and their environment, the individual, family and community
- Number of people and their distribution
- Diseases they suffer from, the local pattern of diseases and deaths
- Organization of the local health services that handles these diseases in that community.

Activities to be carried out in the Community

Order to carry out activities in the community the FWW needs to know with whom and how she must work in order to accomplish the health-related goals people to Work with.

When finding out about the needs of the community, the community health worker will meet many people who can help in solving problems. Such people will include “formal” leaders such as the local religious heads (Imam & Khatibs), educated people like schoolteachers, post-masters, local doctors, landowners, heads of small industries, heads of women’s or farmer’s clubs, civil servants and political leaders. It is also important to contact the “informal” leaders i.e., those people who do not hold any formal position in the community but are nevertheless influential and helpful. These people must be told about the importance of resolving problems. They must understand how they can help, and their cooperation must be won. Their support will be essential in influencing the community.

The FWW should seek the help of any government or private organization working on community development programmes. The FWW should also have close contact with the schools in the community.

Roles of Community Health Workers

The roles and activities of community health workers (CHWs) are tailored to meet the unique needs of the communities they serve. A CHW's role depends on factors such their education, training, lived experience, and experience working with specific populations. CHWs may perform the following roles:

- Create connections between vulnerable populations and healthcare providers
- Help patients navigate healthcare and social service systems
- Manage care and care transitions for vulnerable populations
- Reduce social isolation among patients
- Determine eligibility and enroll individuals in health insurance plans

- Ensure cultural competence among healthcare providers serving vulnerable populations
- Educate healthcare providers and stakeholders about community health needs
- Provide culturally appropriate health education on topics related to chronic disease prevention, physical activity, and nutrition
- Advocate for underserved individuals or communities to receive services and resources to address health needs
- Collect data and relay information to stakeholders to inform programs and policies
- Provide informal counselling, health screenings, and referrals
- Build community capacity to address health issues
- Address social determinants of health
- The specific roles of CHWs may depend on:
- Services provided by the program, such as:
- Advocacy
- Outreach and enrolment
- Navigation
- Education
- Health services
- Social-emotional support
- CHW skills and background, such as:
- Education
- Certification
- Training
- Communication
- Interpersonal and relationship-building
- Cultural competence
- Advocacy and capacity-building
- Facilitation and motivational interviewing

Part of what makes a CHW such an effective member of a health care delivery team is the flexibility and diversity of what they can do within the clinic and in the community. There is a wide range of activities, tasks, and responsibilities a CHW can take on in the HCH setting.

The primary responsibilities of any CHW working in the HCH setting are to build trusting relationships with clients and to connect those clients to care, eliminating barriers and advocating for systemic changes along the way. The effectiveness of CHWs lies in their ability to gain access to hard to reach individuals and to patiently coach and support them as they work towards health care goals.[iii]

Generally, the role of the CHW includes the following

- Create connections between vulnerable populations and the health care system

CHWs in HCH programs work to guide patients experiencing homelessness toward more permanent primary care services outside the hospital system. Establishing a secure, trusted connection with a primary care provider can help prevent persons experiencing homelessness from reliance on Emergency Departments to meet primary care needs.

- Care coordination and care transitions for clients

The mobility of CHWs within their communities creates opportunities for more coordinated care. CHWs can serve as a liaison between multiple services and help with care coordination and care transitions for their clients. In the process of connecting clients with multiple services, CHWs build relationships with local agencies, advocating for their clients in the process. The more CHWs are involved in the community at large, the more effective the linkages between the community and the health care system become.[v]

- Assist clients with enrolment in programs and benefits for which they are eligible

In addition to connecting clients with health care services, CHWs work to connect clients with various social service programs for which they may be eligible. These programs and benefits can range from enrolment into SSI/SSDI to enrolment into a GED program.

- Encourage cultural competence among health care professionals serving vulnerable populations

CHWs' lived experience of homelessness helps them build rapport with clients while also informing policies, procedures, and practices within the HCH clinic. CHWs have a unique insight into the perspectives of their clients which helps them identify barriers or unmet needs within the HCH clinic that may go unnoticed by HCH clinicians or administrators.

- Advocate for vulnerable populations within the health care system and the community at large

CHWs amplify the voices of the community within their HCH clinics thereby informing health professionals of the evolving needs and conditions of their target population

To achieve the above objectives the FWW will:

- Collect basic information about the community
- Make a community diagnosis
- Plan a community health programmes
- Get community participation
- Run community health programmes
- Evaluate the community health programmes and report.

35.3 Community involvement

35.3 Community involvement

The community shall be made aware of the overall benefits and availability of services for FP. FP programs and services including IEC/BCC activities shall respect the customs and traditions of the community. Community involvement is key to dispel rumors and misconceptions, develop ownership of FP programs by the community for successful and sustainable outcome. The following strategies shall be used for the promotion of FP and reproductive health in the community:

- Advocacy
- Community mobilization /involvement
- Promoting family life education
- Strengthening the use of RH data base
- involving religious leader

Information from them may not be enough to represent the community

Social and Demographic Data: In the past a traditional primary-care practitioner or a family or a village doctor, was renowned for his knowledge about people he dealt. It was wisdom born of experience in his day-to-day practice and his own participation in the activities of the social world. However, this does not meet the present day needs of the community-oriented primary health care. The systematic development of demographic and other relevant data is essential for the community diagnosis in primary care.

It is usual to describe the health of a community by comparing various health indices of groups within the community itself and those of other populations. The use of variables which define different groups of a community, changes according to the kind of community and the particular health condition being measured.

A community health centre will therefore require a record system that will include information about the community. The minimal inclusions in such a record are age, sex, occupation, education, eligible couple, family, kinship, ethnic group, religion, locality and migration. It also includes data on knowledge, attitude and practice regarding reproductive health.

Age and Sex: All individuals should be registered according to their sex and date of birth, by a recording system that makes these data readily available for analysis of various community health indices and changes in the age and sex structure of the community.

Occupation: The register should show the occupation of all individuals in two ways. First are the details of the person’s occupation; and second is the classification of the occupation according to social class or socio-economic status, using an accepted method.

Education: The simplest way of recording education is to enter details of the highest educational achievement, taking into consideration all education, including regular schools, professional schools, technical and religious institutions. This should then be summarized by a figure representing the total years of formal education, for example, 0, 8, 12, 20 years.

Eligible Couple: A married couple of reproductive age living together i.e. with the age of wife

between 15 to 49 years.

Family: A number of family indices may be used in community diagnosis. These include marital status, maternal history, and structure and size of the family.

KAP about RH: KAP i.e., knowledge, attitude and practice in Reproductive Health Issues should be assessed.

Kinship: Family trees are of special interest in certain genetic or other health conditions having a familial tendency. There are also some communities in which kinship networks are an outstanding feature of the social structure and thus may have health implications which are of interest to primary-care practitioners.

Ethnic Group: An ethnic group has both biologic and social features of health importance. A common method of ethnic classification is by country of origin, since such groups often share a distinctive cultural tradition and ancestry. They may thus have genetic characteristic as well as shared habits, values, or religious beliefs which are of importance to their health.

Religion: Religious conviction and practice may have a profound influence on health and behaviour.

Locality: Among the physical features that differentiate residential areas are the following health relevant characteristics:

- The material, maintenance and development of housing, its spatial distribution ranging from high-rise apartment buildings, single-family houses to slums and shelter.
- Development of roads, sidewalks, and parks with provision for the flow of traffic and parking facilities, play areas for children, sport and leisure time facilities.
- Shopping areas and other amenities, community centres, schools, health and welfare service buildings, their proximity and accessibility.
- Water supplies, electrical supply to houses and streets, systems of disposal of waste and excreta.
- Standard of cleanliness of neighbourhood, including absence of garbage/ litter.

In addition to the personal characteristics listed earlier, observations on personal appearance, clothing and activities are useful.

Migration: The stability of residence and community services is of health relevance, and in some areas measurement of migration, in and outward movements are a central feature of the health picture.

Health Needs of the Community

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i.e. those people who do not hold any formal position in the community but are nevertheless influential and helpful. These people must be told about the importance of resolving problems. They must understand how they can help, and their cooperation must be won. Their support will be essential in influencing the community.

The FWW should seek the help of any government or private organization working on community development programmes. The FWW should also have close contact with the schools in the community.

The staff of local health services is particularly useful. They support and help to train the

community health workers. In addition, the cooperation of a traditional birth attendant (TBA) or traditional healer should be sought since they know the people, have confidence of the community, have much knowledge about common ailments and have provided health care for years.

There may also be programmes to increase the food production in the community, e.g., poultry and dairy development programmes, and those for improved fishponds and home gardens. The community health worker should work closely with these. Other programmes which help indirectly include programmes for improved sanitation and water supply, and those for the control of infectious diseases and for family planning.

Steps to Work with the Community

- With the assistance of the head of the community, prepare a list (if one is not already available) of the organizations, formal and informal leaders, and personnel of both government and private organizations. Against each name write out their functions. It will be also useful to indicate what resources (financial or special skill or knowledge) each of them represents.
- Find out when the highest community body (this may be the community council or some other equivalent body) meets regularly. With the help of the village head, arrange to attend one of their meetings. If the community health worker has come from outside the community, this gives her an opportunity to be formally introduced to its leaders. It also provides an opportunity for her to explain her purpose and role in the community and to present the findings (i.e.. problems and solutions) of her survey. In this way she can learn the reactions of the leaders and seek their support. On this important occasion, she may be accompanied by her supervisor.
- If there is no such meeting, the community health worker arranges for individual meetings with the community leaders and personnel of community development organizations for the same purpose. An alternative and faster step is to be introduced formally to the people by the village head and through a community meeting or assembly.
- Arrange for periodic exchange of information between the community health worker and the community. This can be done through periodic meetings with community leaders and personnel of community development organizations. Such meetings also provide an occasion for discussing the progress of the work of the community health worker, the problems encountered, and the results expected. It is important to make the community feel that the programme belongs to it.

There are three main areas of activity:

Collecting information (e.g. about eligible couples, pregnant and lactating women, children, adolescent & elderly etc).

Providing Information (e.g. information about FWC services and location, information about health or RH/FP etc)

Providing an MCH/ FP and other RH services in the community (e.g. IUCD camps, follow-up of FP acceptors, retrieval of drop outs, baby friendly clinics, distributing contraceptives.

35.4 COMMUNITY DIAGNOSIS (CD)

35.4 COMMUNITY DIAGNOSIS (CD)

It is the diagnosis of the state of health of a community. It is as important for community health care as is careful diagnosis of the state of health of an individual patient seeking care. The basic elements of community diagnosis include investigation of the community's state of health and its determinants. CD is a means of deciding, in consultation with the people, which of the local diseases or health problems are important and which should be given a high priority in the activities of health workers.

Making a community diagnosis and maintaining a system of surveillance of the community's changing state of health, involves the systematic collection of data about the community, its environment and various facets of its health. The emphasis will depend on the priority given to various conditions by the community and the primary health care team. This will depend on the kind of community, its social, economic and cultural characteristics, locality and housing conditions. From knowledge of the local causes of sickness (morbidity) and deaths (mortality) we can answer the following questions:

- What are the 10 commonest diseases seen in outpatients?
- What is the distribution of the common diseases in the area?
- What is the local distribution of uncommon but important diseases?
- What diseases have been epidemic in the area in the past?
- What disease is the community most concerned about?
- What are the main causes of death in the community?
- Which are the most important local health problems?

The next step is to decide which disease can be controlled and which health problems can be tackled. Give priority to those diseases and health problems for which something effective and practical can be done by the local community, health centre or district health staff. Making a community diagnosis is a way of deciding where the health centre services should put their efforts and resources. Community diagnosis helps to decide on local priorities.

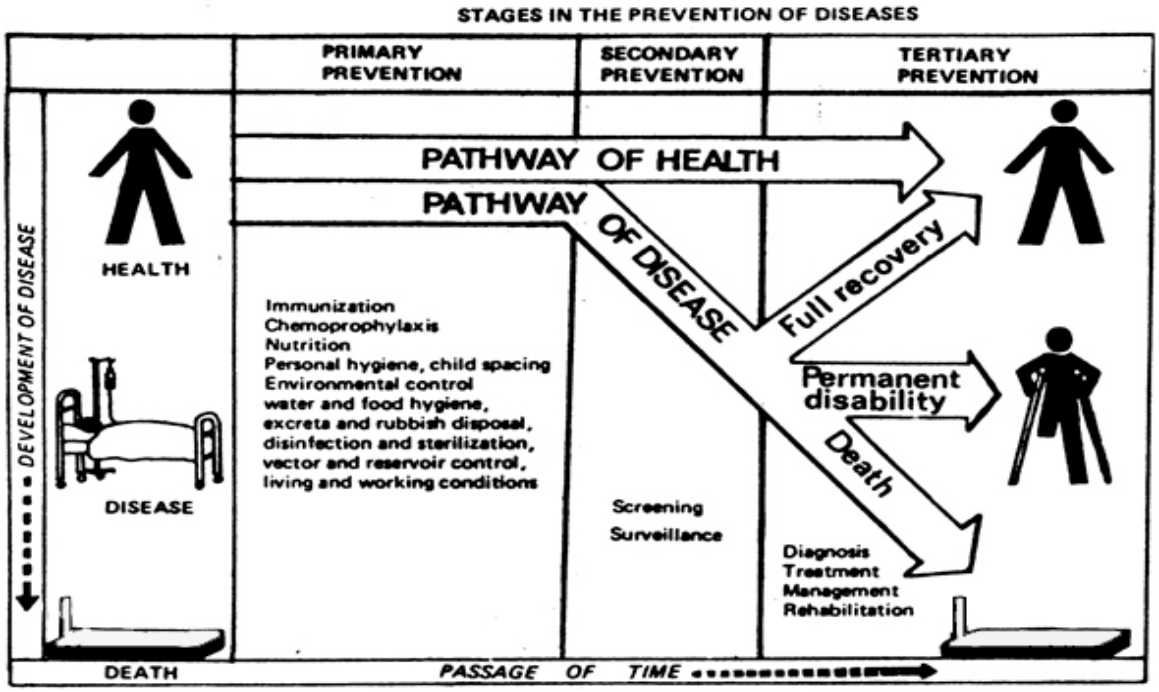
Medical Services: There are two main branches of Medical Services

The **Preventive medicine** helps in preventing people from becoming sick. The **Curative medicine** deals with treatment of the disease to cure them.

The medical services have traditionally been organized around "curative medicine" like that carried out by dispensaries, outpatient departments and hospitals. These services offer help to sick people who come and ask for it, but they do very little for those who do not come and do not ask. For those people who come, curative medicine can cure some disease, reduce some suffering and prevent some deaths, but it can do very little to alter the number of new cases of an illness which occur in the community. For instance, curing children of kwashiorkor or gastroenteritis will have little effect on the number of new cases in the future. To control the number of new cases we have to start before the people become sick, this is preventive medicine. To practice effective preventive medicine it is necessary to make some simple health services available to all those who might get sick.

Individual and Community Health: When an individual is sick, to help him it is necessary to collect some basic information about his state of health or what stage the disease has reached. This is done by history taking, physical examination and investigations. This is followed by making a diagnosis of what is wrong. Knowledge of what help is available, a plan is made of the best way to help this patient i.e. management and rehabilitation. He should then be followed up to see that the treatment has worked or not.

The same process is appropriate for the community. First it is necessary to collect some basic information about the whole community. Then make a community diagnosis by deciding what are the main things that are wrong with it; then decide on the most appropriate community health (treatment) programmes; and finally follow up and evaluate the programmes to see if they have done any good in making the community healthier.



PREVENTION OF DISEASE

It is a popular saying that “prevention is better than cure”. Although most people agree that preventive activities are more useful for the community than treating individuals still prevention is not always easy to practice. Firstly, we need to have the background knowledge and skills which are the basis of community health; Secondly, we must believe in its importance; and thirdly, we must be able to divide the available time, money, and other resources reasonably between treatment and prevention. If we are not careful the demands for treatment exhaust our limited resources before we have allocated anything to prevention.

Stages of Prevention

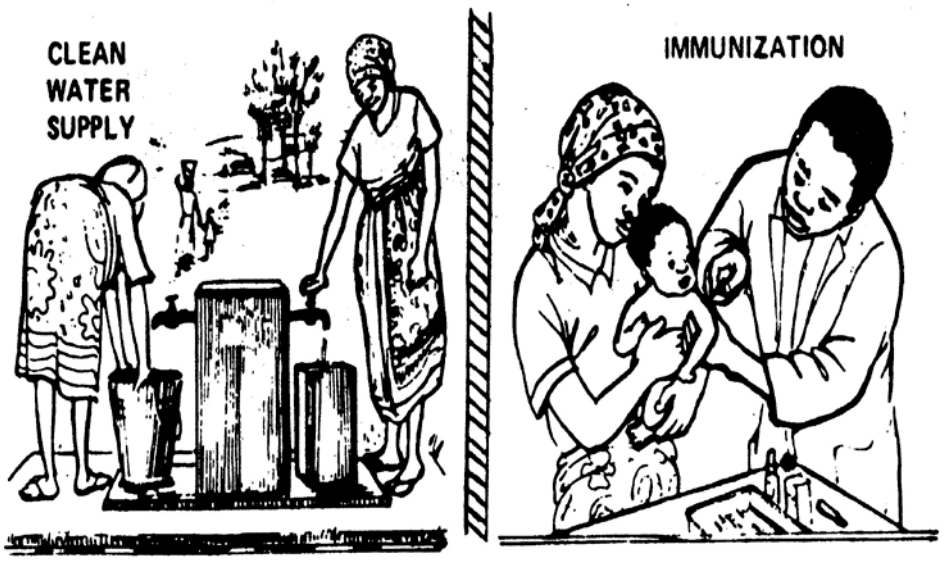
There are three levels or stages in the prevention of disease and health education is needed at all three levels of prevention.

Primary Prevention: It becomes obvious that the best sort of prevention is before the person becomes ill i.e., before he starts down the pathway of disease. This is called primary

prevention. Primary prevention can be provided by a combination of methods mainly aimed at people and the environment in which they live. Primary prevention keeps people healthy

Primary prevention methods are:

- Personal behaviour
- Balanced nutrition
- Personal hygiene
- Healthy behaviour
- Child spacing
- Immunization
- Prevention by medicines
- Environmental control
- Safe water supplies
- Good food hygiene
- Safe excreta and rubbish disposal
- Disinfection and sterilization
- Vector and animal reservoir control
- Appropriate living and working conditions



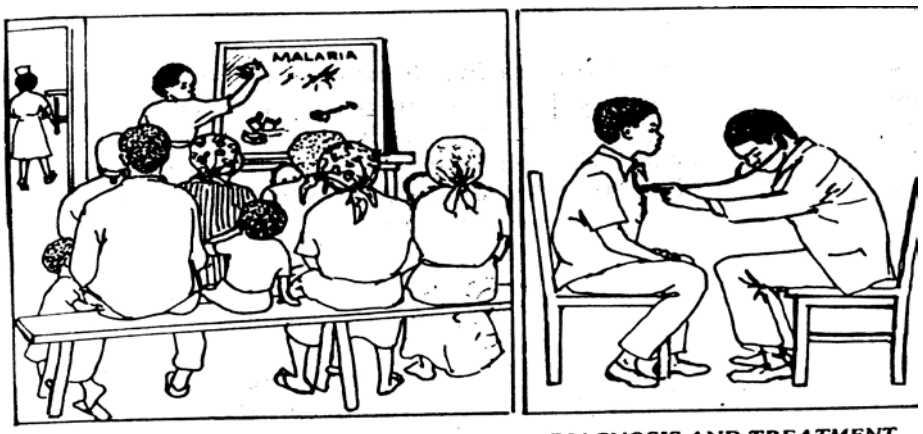
Secondary Prevention: The next best time for preventing disease is after it has started but before symptoms have appeared i.e., before the patient has diagnosed himself as sick. This stage of disease is called pre-clinical or sub clinical or pre-symptomatic. Prevention at this time is called secondary prevention. Obviously, it is often not possible to say precisely when a disease started or when the patient first noticed symptoms. This is particularly true for some of chronic illnesses like tuberculosis, malnutrition, and anaemia. Secondary prevention methods

are:

- Screening for Early Detection: The process by which we try to find sub clinical cases is known as screening. Examples are weighing babies and young children to see if their weight falls into the nutrition danger area; examining urine and faecal specimens of school children for parasites; examining pregnant women for early signs of complications in their pregnancy. Screening is only valuable if the medical services can do something to help the affected person. An effective treatment must be available and if it is not then after screening the patients should be referred to an appropriate health facility.
- Tracing of Contacts: Another form of screening is the tracing of contacts of a person with an infectious illness such as tuberculosis or HIV/AIDS, to see if anyone else in the family or among friends also has the disease. The detected contact should be treated and isolated, if required.
- Surveillance: This is another form of secondary prevention called surveillance and it covers the whole community. In this process a watch is kept over thehigh risk clients. When a regular record is kept of the number of new cases of disease, like measles or meningitis, it is possible to detect an epidemic early if a control programme is working.

Weighing Screening

Tertiary Prevention: When a person himself recognizes that he has symptoms and is ill, then diagnosis and treatment i.e. tertiary prevention becomes important. Most of the curative work of outpatient and inpatient services is concerned with this stage of disease. The methods are based on diagnosis and management of the disease. The aim is to reduce suffering, cure the disease completely and prevent disability. If there is some permanent disability like blindness or paralysis, then special rehabilitation services may be necessary.



EDUCATION OF PATIENTS DIAGNOSIS AND TREATMENT

Various methods of preventing disease are summarized below:

- Primary prevention
- Personal: Environmental:
- Nutrition - Safe water supplies
- Personal hygiene - Excreta and refuse disposal
- Good healthy behaviour - Disinfection and sterilization
- Child spacing -Vector and reservoir control
- Chemoprophylaxis - Good living and working conditions
- Secondary prevention
- Early detection of disease by screening
- Contact tracing followed by prompt and effective treatment
- Surveillance
- Tertiary prevention
- Diagnosis
- Treatment
- Management
- Rehabilitation

COMMUNITY HEALTH PROGRAMMES FOR DISEASE CONTROL

When the community diagnosis has helped sort out the local priorities the next step is to decide how to use the effort and resources of the health team to give the greatest effect. Community health programmes emphasize disease prevention and high population coverage.

These are usually aimed at one of the following:

- **Specific disease** control such as tuberculosis, poliomyelitis, measles, hepatitis and HIV/AIDS etc.
- General disease control such as malaria, goitre etc. achieved by environmental

health and nutrition programmes

- High-risk groups of people such as mothers and children and other special groups

In practice the services are integrated in such a way that all three approaches are often combined, as is seen in the work of the MCH services.

HIGH-RISK GROUPS IN THE POPULATION

No country has enough trained medical staff and money to run all the health services it would like. The resources for the development of the health services are limited and health services must compete with other priorities like education, agriculture and water. The problem is how to use these limited resources so that everyone in the population gets some benefit and those who are at high risk of getting diseases receive special attention. Hospitals are, and will always be, needed for the small proportion of the community who are very sick.

Every man, woman and child is at risk of getting ill and dying but some groups are more at risk than others. These are called high-risk groups. Women and children make the largest high-risk groups. Some people are more at risk of getting some diseases and some make less use of the health services than others which put them at high risk. These high-risk groups can be defined by certain features that are common to them. Such features may describe people, or the places they live in, or particular times of the day, month or year.

Some may use health services less often than they could like young children, HIV/AIDS patients, and those who live far away. If these groups are known, the health services can spend extra resources like time, staff, buildings, mobile clinics, effort and money in helping them, rather than putting the few available resources into caring only for those who live nearby and come to the center without any problem

There are three categories of high-risk groups:

People

Mothers (1/5th of the whole population) are more likely to get complications in pregnancy and die during childbirth.

Infants and young (1/5th of the whole population) have a very high number of deaths because they suffer from malnutrition and a lot of infections like tetanus, measles, gastroenteritis, and malaria.

School going children (1/5th of the whole population) are also very likely to get childhood illnesses like communicable diseases.

Some workers may have extra risk or hazards, for instance accidents in factories or with agricultural machinery and insecticide poisoning amongst crop sprayers.

Old people suffer from chronic and degenerative diseases like bronchitis, heart failure etc.

Contacts of an infectious disease like tuberculosis or HIV/AIDS.

Different cultural and economic groups, such as subsistence farmers are more likely to suffer from famine if crops fail.

Different local beliefs and customs affect how people care for their health, what they do when they are ill and what use they make of the health services.

Place

- Different geographical areas have particular disease or certain diseases are common there, such as guinea worm in D.G. Khan and goitre in hilly areas.
- People living far from medical services are at high risk because they are less likely to use the services. Availability of roads and transport will also make a lot of difference. The rainy seasons may make travelling to clinics difficult.

Time

At particular times of the week, months or year people are more at risk of certain diseases, like malaria following the rains or road accidents while travelling for eid holidays, festivals and melas.

HOME VISITING

Home visiting is an active approach for making the work of F.W Centre more effective. Home visiting can be done for any of the reproductive health related objectives or according to the situation encountered in the field. Instead of sitting in the F.W Centre and waiting for the clients/ patients to arrive, the services are taken to their doorstep.

Importance:

- Health coverage is provided to large population
- More clients / patients start visiting F.W Centre due to the spread of information during home visits
- Clients / patients who cannot come to the F.W Centre for any reason are provided service at their doorstep
-
- Staff of F.W. Centre.
- becomes more acceptable to the community
- gets to know the community
- gets to know the lifestyle of people in the community
- gets to know the problems of the community

The community knows the location of F.W Centre and the services provided by it. Co-operation of the community can be sought.

Community can be involved through use of Community Volunteers (CVs), Dais, Influential leaders by home visiting.

35.5 COMMUNITY SURVEY, PLANNING AND INTERVENTION

35.5 COMMUNITY SURVEY, PLANNING AND INTERVENTION

To identify needs, problems or interests of community, a careful approach must be used. The best approach, which seems to work well, is a simple Community Survey (of that area) to collect data in order to identify their needs and problems. Then plan solutions for their problems and implement them. It is necessary to follow a particular pattern or set of steps for need assessment and implementation of the plan to address the identified needs.

Identification of needs: This is done through a simple survey, during which information or data is collected, which is tabulated and analyzed to find out the needs of the community.

Prioritization: Once needs are established it is necessary to prioritize them and identify feasible solutions according to resources available.

Planning: It is an important step l before implementing the solution. This includes what resources are needed and how they should be used to achieve the maximum results. The most important resource is the FW Centre and its staff. A great achievement is to help the community to see the centre as a resource and get community participation.

Implementation: The planning is carried over into implementation. The implementers must ensure the quality and sustainability of the solutions, which have been implemented.

Evaluation: Implementers must arrange for evaluation of the activities carried over. The aim should be to find out weaknesses and problems and their remedies to further improve the activities.

Community Participation

There should be maximum involvement of community in all the above steps because:

- People believe and accept ideas or problems which they have discovered by themselves
- People can help to prioritize the needs and mobilize the available resources
- Involving people in the activity, like identifying problems or collecting information is in itself an activity that helps to create community feeling
- Community can help in quality assurance and sustainability of the solutions which have been implemented
- The more closely the community can do its own evaluation, the more thoroughly it will be committed to improve its own activities.

SURVEY

- A survey is an orderly series of questions or statements assessing attitudes, behaviours or personal characteristics that is administered to individuals in a systematic manner. The word survey implies to examination of a problem by asking questions to the respondents for collecting primary data. The survey method is thus the questionnaire technique of data collection. The questionnaire cannot usually be administered to all members of the population to be surveyed hence a sample of the

population is chosen for this purpose and the process is called sampling.

Sampling: When the population to be surveyed is too large, all the members cannot be involved hence, random sampling or systematic sampling is used which increases the representativeness of results. However, even if random sampling is carefully applied some error may result from chance variation. This error can be reduced by increasing the sample size.

Small Sample Size	
150	108
200	**132**
300	**168**

Larger Sample Size	
400	196
500	**217**
1000	**277**
3000	**340**
5000	**356**
10000	**369**

General Instructions: Before going on a survey the trainee should be thoroughly familiar with the questionnaire and its administration. They should:

- Visit at least 3-4 houses during the field visits
- Knock at the door and request permission to enter
- Greet the family members
- Introduce herself to the respondent in a proper way, before starting the interview
- Emphasize the importance of the survey and its findings from the respondent point of view
- Ask if time could be spared to answer a few questions or she could come back later
- Conduct the interview in a relaxed and friendly manner, but be careful not to waste time
- Read the questions word by word, exactly as printed
- Give time to the respondent to understand each question thoroughly
- Strictly follow the order of the questions in the questionnaire
- Record the particulars of the respondent and the replies in legible writing
- Check the filled in questionnaire for completeness and legibility before leaving the respondent's house
- When the questionnaire has been filled, thank the respondent courteously and take permission to leave with a promise to come back again at a later date
- Do not make any promise about providing services which cannot be fulfilled.

Guidelines for Conducting Survey

Describe the personal characteristics: Include the age, educational background, motivational and skill levels of the respondents.

Determine the purpose of the survey: A survey should have a clear purpose and focus. Avoid the temptation of asking too many questions in a single survey or surveying "just to see what's going on".

Determine how to use the survey results: How to use results should also guide the content of survey. If responses to a survey question will not be used to guide the course content, omit the question out.

Devise a Survey Questionnaire: Consider these guidelines and potential pitfalls when writing questions:

- Write survey questions: Writing good survey questions is crucial to avoid compromising the validity of responses.
- Use simple language: Use language that respondents understand to avoid producing biased data.
- Write clearly: Good survey questions are clear and direct. Respondents should

know exactly what the investigator is asking for.

- Avoid universal words and double negatives: Because respondents may avoid choosing extremes, do not use universal words such as "all", "always", "none" and "never".
- Write short questions: Questions should be short and simple, rarely exceeding 20 words.
- One concept per question: Each survey question should contain only one concept. “Double-barrelled” questions, addressing more than one concept, may confuse the respondent. E.g., ‘what food are you taking and do you go for antenatal check-up regularly or have your blood pressure checked?’
- Avoid biased questions: Write questions that do not lead the respondent to answer in a particular way. E.g., ‘you don’t smoke, do you?’

Organize and format the survey questionnaire: The survey format is very important because a poorly organized questionnaire may confuse respondents and lead them to skip questions or not complete the survey.

Administer the survey: Notify respondents before administering the survey to explain why it is being administered and to discuss confidentiality and anonymity, so they understand the conditions for participation. Thank the respondents for their participation to increase the likelihood of their participation in future surveys.

Administration of Survey

The administration of survey has four essential components:

- **Collection of data:** The survey of a community is conducted for its need assessment and the information required is collected by administering a questionnaire to a sample of respondents in that community.
- Analysis / Interpretation of data: The data is then analyzed and interpreted. The response frequencies and percentages for each question are calculated. Calculation of percentages and ratios is important to analyze the information collected about the community.

The FWW should know how to interpret the information gathered by observations, surveys and clinical records. The community needs can only be identified if we know the percentage of different types of people living in a certain area or the percentage of people adopting certain behaviour.

Name of Head of family	Male Members	Female Members	Total
A	3	4	7
B	4	3	7
C	2	4	6
D	1	3	4
E	5	3	8
F	2	2	4
G	3	2	5
H	6	2	8
I	3	1	4
J	-	2	2
Total 10	**29**	**26**	**55**

The following table is the example of family members (both male and female) of a group from the community which will be utilized for different calculations.

From the above data, the method of calculation of Mean, Ratio and Percentages is given as under:

Total no. of family members = 1.

Mean no. of family size = ----------

Number of Households = 55 / 10 = 5.5

Total no. of males = 2.

Ratio of Male to Female = ----------

Total no. of females = 29 / 26

= 1.12 male: 1 female

Tabulation and presentation of data: The data collected and analyzed is then tabulated. It is then arranged according to a prescribed format and may also be displayed. The format of

3. Percentage of males

$$\frac{\text{Total no. of males}}{\text{Total no. of family member}} \times 100$$

29 / 55 x 100 = 52.73 %

4. Percentage of females

$$\frac{\text{Total no. of females}}{\text{Total no of family member}} \times 100$$

26 / 55 X 100 = 47.275 %

presenting may be a simple table or by plotting a graph or by presenting it through a bar graph or a pie chart etc.

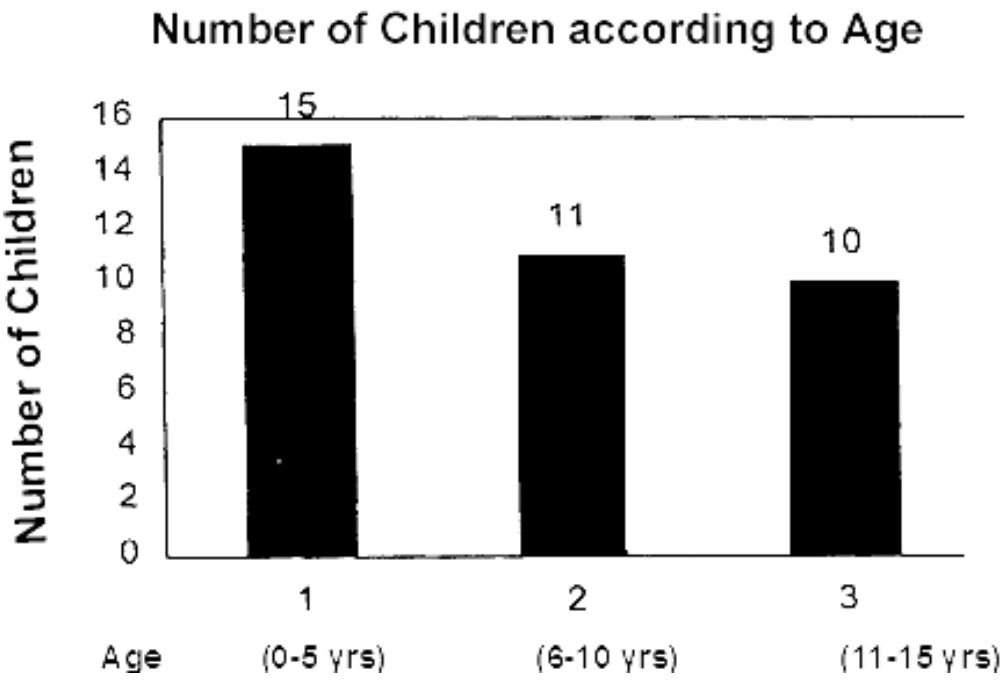
For example: the data obtained from a survey of families shows that there are 15 children of the age group 0-5 years, 11 children of the age group 6-10 years, 10 children of the age group 11-15 years. Present this data in table, bar graph and pie charts. The information is first represented in a table form:

Table showing the Number of Children according to age group

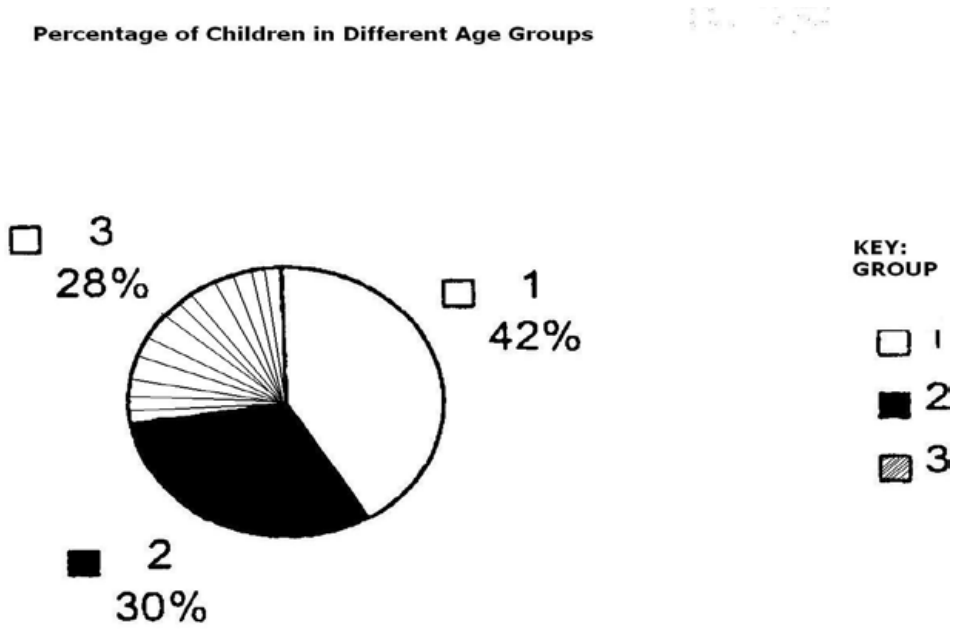
Group	Age in years	Number of children	Percentage (%)
1	0-5	15	42 (41.67)
2	6-10	11	30 (30.55)
3	11-15	10	28 (27.78)
	Total	**36**	**100%**

Bar Chart: The above information is presented below as a bar graph

- The bar chart is presented through bars.
- Draw two line perpendiculars to each other. One line to represent age group and other line to represent the number of children in each age group.
- Put the markings of numbers of children on the vertical line and age group on the horizontal line.
- Keep the width of the bar equal.
- Draw the bars as shown in the figure below.



- Pie Chart: The same information is represented in pie chart
- Information represented in pie chart is always in percentage. The full circle shows 100%, half circle is equivalent to 50% and one quarter of circle represents 25% and so on.
- Draw the pie chart for percentage of age group of children as shown below.



- **Making conclusions:** Identifying needs and reporting. Evaluate the results by how well they answer the study's central questions and make / draw conclusions. Identify needs, prioritize needs, work out possible solutions and write a report. Submit it to the concerned authority for necessary action i.e. planning and implementing activities to address the identified health needs of the community

COMMUNITY SURVEY FORMAT

Name of Interviewer _____ Date _____

Name of Respondent _____

Date of Birth _____

Age (in years_____

- 15-91 1
- 20-24 2
- 25-29 3

Husband's Name _____

Husband's age _____

- 30-34 4
- 35-39 5
- 40-44 6
- 45-49 7

Respondent Husband

1. Educational status of Respondent and Husband. (What is your and your husband's education?).

- No Schooling
- Primary
- Middle
- Matric

Respondent Husband

- Intermediate
- Graduate and above
- Other

(Specify) _____

2. Work status of Respondent and Husband. (What do you and your husband do?).

- Agriculture

- Business
- Salaried employee
- Skilled worker

Respondent **Husband**

- Unskilled worker
- Unemployed
- House wife

3. Construction of the house. (What is the condition of your house?)

- Katcha
- Pukka
- Semi Pukka

4. Electricity in the house. (Is there electricity in your house?)

Yes No

5. Latrine (Toilet) Facilities. (What type of latrine facility do you have?)

- Flush Type
- Pit hole2
- Open

Any other (Specify)_____

6. Source of Domestic water supply.

- Pipe inside the house
- Community water stand/tap
- Well with a hand pump
- Well without hand pump

Any other (Specify) _____

7. How many children were given birth?

Boys_____Girls _____Total _____

8. What is the age of your youngest child?

Years_____ Months _____

9. Has any of your children (up to one year age) died during last year?

Yes No

10. How many family members are there living in this house?

	Male	**Female**
0-11 months	_____	_____
1-5 years	_____	_____
6-12 years	_____	_____
13-25 years	_____	_____
above 25 years	_____	_____
Total:	_____	_____
Grand Total:	_____	_____

11. Has any family member died during last year? Yes No

If yes, specify age and reasons of death _____

12. In case of illness, from where do you get the health services? ☐

- FWC
- MCH Centre
- Govt Hospital
- Private Doctor
- Hakim

Any other (Specify) _____

13. Is there any Family Welfare Centre in the Community?

Yes No

14. If yes, have you visited the Family Welfare Centre?

Yes No

15. If yes, were you satisfied with the services?

Yes No

If No, (Specify) _____

Name of Interviewer: _____ **Date:** _____

Name of respondent: _____W/o _____

Age of respondent: _____ Total number of pregnancies: _____

Number of living children: _____Age of youngest child (in months) _____

How did you feel when you knew you are pregnant?

1 Happy 2. Sad 3. Worried

Can you explain above feelings: _____

Are you satisfied with the available services?

1. Yes 2. No

SURVEY QUESTIONNAIRE OF PREGNANCY AND ANTENATAL CARE

If pregnant, what is the expected date of delivery: _____

Do you keep well during pregnancy?

1. Yes 2. No

If No, what discomforts do you experience during pregnancy? (enumerate)

Do you think you need a checkup during pregnancy?

1. Yes 2. No

If No, specify _____

Do you get ante-natal care?

1. Yes 2. No

If No, specify _____

Are you satisfied with the available services?

1. Yes 2. No

If No, give your comments _____

From where do you get antenatal care?

Dai_____

- Dispensary_____
- Hospital_____
- FW Centre _____

Have you ever been to a doctor for your antenatal check-up?

1. Yes 2. No

If Yes, why did you feel the need for a doctor?

(Specify) _____

The survey is carried out to:

Q.1 The age of the youngest child can be used for calculating the birth rate in the total Population of the survey. The child should be less than 1 year in age. Compare the findings with the national figure and discuss the reasons for a high/low birth rate in the community and what steps should be taken to reduce it.

Q.2 & 3 This will reveal the attitude of the woman towards pregnancy. Is she feels happy then she should be advised for Antenatal care, and if a multi gravida then she should be counselled for family planning. If sad/worried ask for her reasons and use this for advising/counselling during Health Education and try to pacify her and remove her fears during Health Education.

Q. 4. Calculate the fertility rate in the Population surveyed and compare with the national figure. If the figure is high, health education of the women for family planning is required.

Calculate the birth rate of surveyed community

Know the attitude of the woman towards pregnancy and Antenatal care Find out the proportion of women receiving antenatal care

Find the quality of antenatal care received through the available Health Centre (preferably FW Centre)

Compile the list of minor and major complications suffered by the women interviewed.

Analysis and Inference for the Findings

Q. 5. The status of general health and the list of minor and major discomforts can be compiled.

Q. 6. This question will reveal the attitude of the women towards Ante-natal care. If negative, use the information for advices and counselling to Antenatal Care.

Q. 7. This will reveal the proportion of women who receive antenatal care. Health education must be provided to the women who do not avail any health care. This aspect is important as its one of the causes of maternal mortality when complications are not detected earlier. Health Education is required to convince the mothers that Antenatal Care is necessary.

Q. 8. Will confirm the list of major discomforts.

CHECK LIST FOR FOLLOW-UP OF FAMILY PLANNING CASES DURING HOME VISIT

		Yes	No
1.	Knocks at the door		
2.	Asks permission to enter the house		
3.	Greets the clients to be followed up		
4.	Introduces herself		
5.	Requests client to spare some time to talk to her		
6.	Inquires about the use of contraceptives		
7.	Listens to the client		
8.	Explains correct use again if necessary		
7.	Uses simple language		
8.	Asks her to repeat what she has understood		
9.	Gives supplies of condoms/ oral pills where required		
10.	Asks client to report to FWC if there is any problem		
11.	Tells client to report at the centre for routine follow up / check up of contraceptive use		

A**TTITUDE / MANNERISM**	Excellent	Bad
1. Is Respectful		
2. Is Patient		
3. Is Polite		

4.

CHECKLIST FOR VISITING HOMES FOR RETRIEVAL OF DROPOUTS OF FAMILY PLANING CASES

	Yes	No
• Knocks at the door		
• Asks permission to enter the house		
• Greets the clients to be followed up		
• Introduces herself		
• Request's client to spare some time to talk to her		
• Inquires reason for not coming to FWC		
• Finds out reason for stopping use of Contraceptives		
• Reassures her for treatment of side effects at FWC		
• Advises client to try the method again		
• Informs her that, the method can be changed		
• Fixes date and time for her visit to FWC		

ATTITUDE / MANNERISM	Excellent	Bad
1. Is Respectful		
2. Is Patient		
3. Is Polite		

35.6 CHARACTERISTICS OF FAMILIES WITHIN A GIVEN COMMUNITY

35.6 CHARACTERISTICS OF FAMILIES WITHIN A GIVEN COMMUNITY

What is a family?

Family defines obligations that group members have to one another, both economically and socially. Generally, family members live together, but that is not always the case.

Family Types

Nuclear family:

This is also known as the conjugal family or family of procreation. Nuclear families are comprised of married partners and their offspring. This is common in industrial societies, but it is not the most common type of family in the world, although the practice is spreading through modern development.

Extended family:

The extended family is the most common type of family in the world. Extended families include at least three generations: grandparents, married offspring, and grandchildren.

Joint family:

Joint families are composed of sets of siblings, their spouses, and their dependent children.

Blended family:

Blended families are becoming more common, especially in industrial societies like the United States. A blended family is formed when divorced or widowed parents who have children marry.

Family by Choice:

A relatively newly recognized type of family, again especially in industrial countries like the United States, is the family by choice. The term was popularized by the LGBTQ (Gay, Lesbian, Bisexual, Transgender, Queer) community to describe a family not recognized by the legal system. Family by choice can include adopted children

Pakistani family system

In Pakistan, family is the core of social life, with family honour serving as the key to many ethnic groups. Parents, their sons, and the sons' families will often live together in the same household. In more traditional families, men serve as head of their homes.

In less traditional families, men and women make decisions together. Women are typically responsible for household duties. In rural areas, women tend to the field and livestock in addition to household duties.

Families tend to be large; the average woman has three children. From a young age, Pakistani

children help with chores. Parents raise their children, providing education and health care up to and even beyond their children's marriage. Typically, at least one son lives in the family home to take care of his elderly parents with his wife and children.

Loyalty

In general, Pakistani people are deeply interdependent and loyal to those who are in their inner circle. Social connections are essential to daily life, as citizens have often had to rely on themselves instead of their government for support and opportunities. Relationships play an important role in completing professional, personal and social tasks.

This is understood through the concept of '*wasta*' – relationship forming. Wasta can be observed when, for example, people turn to a close friend or relative for help, instead of a government institution. This kind of social support network is crucial and gives many Pakistanis a very strong sense of community.

One sees the strength of this support network most visibly within families. The loyalty shown to these relationships is often extremely strong. For instance, individuals may place their family's interests over their own, even if they conflict. Furthermore, relatives often expect to receive preferential treatment. In return for this loyalty, an individual gains a sense of belonging, protection and unity.

People tend to identify with their family before any other social indicator. Following that, those who are very urbanised generally tend to consider themselves predominantly 'Pakistani'.

Adolescents

It is estimated 53.3% of the population is under 25., in year 2016. Drastic demographic shifts and turbulent politics have meant that the social security afforded to the average Pakistani citizen is minimal. Instead, adaptability, resilience and self-reliance have become important qualities.

Elderly

The value of a strong family system has played an important role in influencing an individual's living, social role, profession and decision making. The elderly form a central beacon in a traditional Pakistani family, where they are treated with reverence and hold an authoritative place.

They are looked upon as the primary source of guidance. In return, they are provided with care and support from the family members. In recent times, however, changes have been noted in our family systems, whereby several factors have emerged to influence the way the structure and function of families is evolving.

Gender

Is an important feature in the family dynamics in Pakistan. In most of the urban and educated household the power dynamics may be not so different but the final decision making usually rests with man of the house. In rural and less educated families the male member has more deciding power.

Another tradition, which is now less common than before, is preferring the male children over the females, in education and even food distribution.

In the areas where this practice is still rampant, your role as FWW is very important so as to reduce this gap. This can be accomplished by building good rapport with the women and heads of the families, teachers and the religious leaders.

35.7 AIMS AND STEPS INVOLVED IN COMMUNITY DEVELOPMENT

35.7 AIMS AND STEPS INVOLVED IN COMMUNITY DEVELOPMENT

The theme of “Working with the Community” is appropriate because it provides opportunities for the trainees to find out what the community is and appreciate why it is necessary to work with the community and learn new skills for community involvement. It stresses that the work of a community health worker/ FWW is more than dealing with individual clients or patients, as a whole community is to be served.

Activities to improve the Community:

Three types of activities are needed:

- Better quality of care within the centers
- Improved facilities and supplies at the centers
- Increased emphasis on working with the community.

Reason to know the Community:

In order to help a community, we must know what are its ‘actual needs’ and what are its ‘felt needs’ with respect to health. The things a community wants or thinks it needs (its felt needs) may not always be the same things that are necessary (its actual needs). If we do not know the hopes and desires of a community it may be difficult to help the people. For instance, the felt needs and the actual nutritional needs should both be satisfied if a program to improve nutrition is to succeed.

Services intended to help people will be most effective when the people help themselves in their planning and implementation. But first the people must realize that there are solutions to their problems and must have confidence in their own capabilities. If they feel that a program is being forced on them, they may oppose it and it will fail.

If you live in a community, you may think you already know all about it. But to help to know the people and know all of them, not simply the ones who live near you or who appear to be important. It is essential to know their problems and what causes them. It is also important to know what people and what organizations can help in different ways. This requires a systematic study and the desire to understand and help people. The sections below highlight the different things the community health worker needs to learn about a community.

COMMUNITY DEVELOPMENT

Community development is a process of working with the people of a community to help them to solve their problems. It is an activity which aims at the development and improvement of the people in a way that they can understand their common problems and develop within themselves the ability and attitude to pool their resources to solve their common problems and improve their living conditions, physically, socially and economically. Community development work is done scientifically and systematically in a planned way through certain organized processes or steps. These steps are briefly outlined.

Steps of Community Development:

A community worker should first know the community in which she is working and try to understand it. It is necessary to have a complete knowledge of the area to bring about some change. FWW should recognize the following characteristics for her community by conducting small scale surveys, general observation, and review of available data etc.

- Population: different social, ethnic, and economic groups, their living standards, setup of families and local people.
- Physical environment
- Housing standards
- Means of communication
- Attitudes, beliefs and habits of the people.
- Source of income of the people and the nature of their jobs.
- Status of health education and facilities available for them.
- Nutritional status of the people.
- Culture of the society, their lifestyle and language etc.
- Influential people of the community.
- Basic amenities of life, water & power supply and sewerage system etc.
- Recreational facilities

A brief survey of the community with a keen observatory power will reveal the surroundings and the resources, which affects the behaviour of the people. Once a worker has studied the community, it is possible for the worker to decide how much she should act, and these will help identifying:

- The problems faced by the people with a possible solution.
- Resource to solve these problems
- Influential people of the community and their role in the development of the community.
- Other social organizations already working for future development of the community

35.8 WORKING WITH THE COMMUNITY

35.8 WORKING WITH THE COMMUNITY

The central purpose of "Working with the Community" is to increase the number of eligible couples who continue to use contraceptives.

Reasons for Inviting the Community

- F.W. Centre provides population and health services in response to community needs.
- F.W.C is responsible to the community for quality of service.
- F.W.C staff depends on members of the community for provision of resources.
- F.W.C staff work together with members of the community (W.W.T.C)

Importance of Working with the Community:

- Helps to provide cover to a larger population.
- F.W. Centre staff is better accepted.
- Active approach fetches better achievement (performance is more / better results) than by working in isolation.
- A feeling of ownership is created in the community.

Providing a high-quality service from the FW Centre is of course essential. But it is not enough. Providing the service within the Centre will only meet the needs of the people who attend the FW Centre. Working with the community is intended first to increase the number of people who attend the FW Centre and secondly to provide a service away from the FW Centre for those people who do not visit the FW Centre itself.

Reasons for People not visiting the FWC:

- People do not know if the FWC has been established in their area.
- People are not aware of the location and exact address of the FWC.
- People are not fully aware of the services rendered by FWC.
- People are not satisfied with the services of FWC.
- Transport is not available.
- They do not have money to pay for the transport.
- People are too busy. They do not find time to visit the FWC.
- The woman is not allowed to go to the FWC.
- The woman cannot go alone to the FWC or there is no one to accompany her.
- She cannot leave her home and children.
- The center is too far away.
- She or her child is too sick and cannot go to the F.W. Centre.
- There is no money to bare the expenses of treatment.

- She does not believe in the treatment given at the F.W.C
- She does not trust the health providers.
- The client / patient is lazy or forgets to attend the F.W.C

"Work with the Community" includes the follow-up of clients, conducting 'clinics' outside the Centre, FP camps, health education talks, attending group meetings in the community supervising community volunteers, etc.

It is important to find out whether the work done in the community is complementing and supporting the work being carried out in the Centre. For example, if the family planning motivation, being done in the community, is providing enough new clients at the centre. The amount of work being done in the community can be checked by examining the work schedule.

The main areas of activity in Working with the Community are providing information in the community; providing services away from the FW Centre; and involving people in the community to assist the FW Centre activities. These are described as below:

KNOW THE COMMUNITY

Social and Demographic Data:

In the past a traditional primary-care practitioner or a family or a village doctor, was renowned for his knowledge about people he dealt. It was wisdom born of experience in his day-to-day practice and his own participation in the activities of the social world. However, this does not meet the present day needs of the community-oriented primary health care. The systematic development of demographic and other relevant data is essential for the community diagnosis in primary care.

It is usual to describe the health of a community by comparing various health indices of groups within the community itself and those of other populations. The use of variables which define different groups of a community, changes according to the kind of community and the health condition being measured.

A community health centre will therefore require a record system that will include information about the community. The minimal inclusions in such a record are age, sex, occupation, education, eligible couple, family, kin ship, ethnic group, religion, locality and migration. It also includes data on knowledge, attitude and practice regarding reproductive health.

Age and Sex:

All individuals should be registered according to their sex and date of birth, by a recording system that makes these data readily available for analysis of various community health indices and changes in the age and sex structure of the community

Occupation:

The register should show the occupation of all individuals in two ways. First are the details of the person’s occupation; and second is the classification of the occupation according to social class or socio-economic status, using an accepted method.

Education:

The simplest way of recording education is to enter details of the highest educational achievement, taking into consideration all education, including regular schools, professional schools, technical and religious institutions. This should then be summarized by a figure representing the total years of formal education, for example, 0, 8, 12, 20 years.

Eligible Couple:

A married couple of reproductive age living together i.e. with the age of wife between 15 to 49 years.

Family:

Several family indices may be used in community diagnosis. These include marital status, maternal history, and structure and size of the family.

KAP about RH:

KAP i.e., knowledge, attitude and practice in Reproductive Health Issues should be assessed.

Kinship: Family trees are of special interest in certain genetic or other health conditions having a familial tendency. There are also some communities in which kinship networks are an outstanding feature of the social structure and thus may have health implications which are of interest to primary-care practitioners.

Ethnic Group: An ethnic group has both biologic and social features of

health importance. A common method of ethnic classification is by country of origin, since such groups often share a distinctive cultural tradition and ancestry. They may thus have genetic characteristic as well as shared habits, values, or religious beliefs which are of importance to their health.

Religion: Religious conviction and practice may have a profound influence on health and behaviour.

Locality: Among the physical features that differentiate residential areas are the following health relevant characteristics:

- The material, maintenance and development of housing, its spatial distribution ranging from high-rise apartment buildings, single-family houses to slums and shelter.
- Development of roads, sidewalks and parks with provision for the flow of traffic and parking facilities, play areas for children, sport and leisure time facilities.
- Shopping areas and other amenities, community centres, schools, health and welfare service buildings, their proximity and accessibility.
- Water supplies, electrical supply to houses and streets, systems of disposal of waste and excreta.
- Standard of cleanliness of neighborhood, including absence of garbage/ litter.In addition to the personal characteristics listed earlier, observations on personal

appearance, clothing and activities are useful.

Migration: The stability of residence and community services is of health relevance, and in some areas measurement of migration, in and outward movements are a central feature of the health picture.

Providing information to the community:

Many people do not know that it is possible to control their fertility, that the FW Centre provides contraceptive services, or even the location of the FW Centre. This lack of knowledge has been demonstrated in many surveys and is true even of people who live quite close to Family Welfare Centres.

Of course, if people do not know of the FW Centre or its services, they will not attend the FW Centre. Therefore, every FW Centre should work to provide information throughout their catchment area. This will supplement the other IEC activities of the Population Welfare Program. The following information is important:

- The location of the FWC, the services provided and the working hours / schedule of camps in the community is also important.
- The fact that it is possible for a woman (or man) to control her (or his) own fertility.
- The advantages to a woman or family of using contraception.
- The cost of Family Planning Services and health services at the FWC
- Information about health (e.g.: concerning antenatal care, breast feeding, ORS, growth monitoring and nutrition, immunization).
- Incentives for contraceptive surgery.
- The hazards at the community or national level of a high population growth rate.

The ways of communicating this information about FWC are:

- "Registration" visits to households near the FWC. At least 10-15 households should be visited every day by the FWA (f) or FWW until at least all houses within one km have been registered.
- Other health outlets (Health Department centres, NGO centres, private doctors) should all be visited and given the above information.
- Sign boards should be prominently displayed.
- The above is regarded as an absolute minimum for acceptable performance of an FWC.
- Distribution of pamphlets prepared by FWC staff.
- Registration and home visiting by community volunteers and dais.
- Meetings called by ADPWO, and film shows using the AV van.
- Group meetings in the community (Sukhi Ghar Mehfils)

- Announcements at the mosque.

Other Avenues of advocacy/publicity:

- Evening meetings organized by the FWA (m).
- Well-baby shows
- Craft / cultural classes in the FW Centre.
- Other events.

35.9 RAPPORT BUILDING AND COMMUNITY PARTICIPATION

35.9 RAPPORT BUILDING AND COMMUNITY PARTICIPATION

Rapport is a connection or relationship with someone else. It can be considered as a state of harmonious understanding with another individual or group. Building rapport is the process of developing that connection with someone else.

Why Does Rapport Matter?

Rapport is important in both our professional and personal lives. Employers are more likely to employ somebody who they believe will get on well with their current staff. Personal relationships are easier to make and develop when there is a closer connection and understanding between the parties involved – i.e., there is greater rapport.

When we first meet someone new, we start to try to build rapport. Like it or not, therefore small talk exists it is a way to try to find things in common with other people and build that shared bond. The following can help when you meet the notables in the society.

1 Break the Ice. Creating rapport at the beginning of a conversation with somebody new will often make the outcome of the conversation more positive.

2 However stressful and/or nervous you may feel, the first thing you need to do is to try to relax and remain calm. By decreasing the tension in the situation communication becomes easier and rapport grows.

3 When you meet somebody for the first time, there are some easy things that you can do to reduce the tension. This will help both of you to feel more relaxed and communicate more effectively.

4 See How to be Polite for more ideas. Listen to what the other person is saying and look for shared experiences or circumstances. This will give you more to talk about in the initial stages of communication.

5 Active Listening to learn how to listen effectively.

6 Be conscious of your body language and other non-verbal signals you are sending. Try to maintain eye contact for approximately 60% of the time. Relax and lean slightly towards them to indicate listening and mirror their body-language if appropriate. This must remain in context of the local socio-cultural context.

COMMUNITY PARTICIPATION

In Community Participation the willing members of community are involved to take part in activities / projects aimed for community development especially reproductive health services aimed at improving the health status of people and preventing them from becoming sick.

Community participation is often invoked as an essential tenet of primary health care; yet, despite the rhetoric, there is only partial agreement on the nature and advantages of participation, and even less agreement on ways to achieve it.

Who should Participate:

Ideally all community members should participate e.g., influential, voluntary health workers, schoolteachers, shop keepers, dais, housewives etc by contributing for the project; and activities ranging from payment of fees to planning for community projects. Some members participate “actively” especially when they possess the desired knowledge & skills and have been trained for the purpose and are willing to work. Others may participate passively by their consent / approval / appreciation of the Primary Health Care project. Utilizing the health services and co-operating in I.E.C campaigns is another form of community participation. In most cases, who in the community participates is more critical than the number of participants. Since most Primary Health Care projects emphasize maternal and child health services, participation of women has been found to be critical.

Types of Participation:

The influential, the local leaders, the resource persons in the community should all participate in their own ways. They act as catalysts for implementation and success of the programs

Narrow Participation:

In this only community leaders and other elite participate.

Broad participation: In this the entire community, including women and lower socioeconomic classes participate. This is a better form of community participation.

Benefits of Community Participation:

In Primary Health Care (PHC) the community participation produces the following benefits:

- Expands the impact of PHC programs: By contributing resources, increasing service utilization, and facilitating preventive activities, while at the same time enhancing the community’s self-respect and ability to control its environment.
- Promotes socioeconomic development: Community participation can build community will, skills, and self-confidence in undertaking activities which promote integrated socioeconomic development. Evidence indicates that this may indeed be essential for bringing about improved health.
- Increases community self-reliance: Community participation is now generally recognized as being an essential component of activities designed to lessen community dependence on outside agencies. The movement towards increased community autonomy may be manifested, for example, by self-reliance in ideas and initiatives, in funding and control, or in materials and manpower. This increased self-reliance is considered a key requirement for success of PHC programmes even though these are not usually planned to create completely self-sufficient communities or to absolve government from responsibility for the people’s health. In fact, PHC programmes assume referral and support, including supervision, from a larger system.
- Lowers the costs: In community health Programmes, the community contributions of human and material resources will almost always be required to assure sustainability of PHC programs, especially those begun with external assistance. Host government’s financial contributions are unlikely to increase materially, at least in the

poorest countries, during the next ten years. Thus, community contributions are crucial.

- Increases service utilization: Community participation in defining needs and priorities can help ensure that programs respond to felt needs and can thus facilitate utilization and support.
- Facilitates behavioural change: Community participation in project planning and implementation can promote the attitudinal and behaviour changes necessary for improved health conditions.
- Encourages government support: Community involvement can help to promote continued government support of PHC, and the essential “political will” needed over the long terms for project success.
- Contributes unique knowledge and resources: A participatory approach can result in much greater use of substantive community resources (e.g., traditional medicine) and knowledge (e.g., of the best time and place for service delivery), some of which may be unknown to people outside the community.
- Creates more culturally appropriate services: PHC services provided by community people are often more culturally acceptable than those provided by outsiders.
- Facilitates service coverage: Health workers selected and compensated by the community can facilitate coverage of PHC services at the village level.

Limitations / Risks of Community Participation:

In Primary Health Care (PHC) and Family Planning provision community participation is necessary for activities to be effective but despite this community participation is not a panacea or a solution for all problems. Sometimes, some kinds of participation are neither feasible nor necessary in certain circumstances.

In general, community participation requires an investment of substantial personnel, time for motivation, training, and monitoring; moreover, it has political implications that may not be acceptable. The most common limitations / risks are outlined here. Community participation can:

1 Absolve the government of responsibility:

There is a risk that health agencies will use community participation to absolve the health system of responsibility by placing primary responsibility for health on communities that still need some outside assistance. It is particularly inequitable to ask rural residents to make financial contributions if urban dwellers receive free services.

2 Threaten political authorities:

Community participation is politically sensitive; it can lead to increased community demands and become threatening to authorities.

3 Support local elites:

Working with community leadership – a common way for projects to tap into existing

organizations and decision-making channels – risk supporting traditional patterns of exploitation by local elites. This occurs more easily if the agency relinquishes all control.

4 Disillusion community members:

Community participation may make great demands on the implementing agency to sustain a level of project management adequate to maintain population credibility. Providing sufficient supplies, supervision, monitoring, and training are often problems for larger projects that may have to support activities in hundreds or even thousands of individual villages. Once communities have made contributions toward programme objectives, the failure of the project to follow through with services and other support may lead to a backlash against further development programmes.

Ways of Community Members' Participation:

Supported by guidance that rarely goes beyond such directives as 'projects shall incorporate community participation', the project planners and managers in such cases are often uncertain about how to proceed. They may make a few ritualistic references to community participation in project plans and hope that participation will somehow occur despite weak effort to sustain it. Although community participation cannot be planned in the same detail as a training course or construction of a hospital, systematic planning for encouraging participation is quite possible for PHC projects.

The following are the ways in which communities participate in primary health care and Reproductive Health projects and help to achieve their goals by:

- Increasing service availability by ensuring Quality of Care
- Increasing service utilization by creating sufficient demand through awareness raising
- Modifying behaviour
- Initiating or carrying out health-related community activities
- Contributing resources
- Carrying out management functions
- Participating in evaluation of PHC Project

Improving utilization of Services:

Projects seek to improve the utilization of both preventive and curative health services. Information from the projects reviewed and literature on community participation indicate that involving the community in decisions about service can be an important factor in improving their use. Specifically, the following types of decision-making by the community are important: setting priorities for the project to address, determining services to be provided, selecting sites for health facilities, and selecting community health workers.

Modifying behaviour:

PHC projects strive to modify the behaviour of individuals and families in the community. Changes in dietary habits, child-feeding practices, sanitary practices, and fertility behaviour are

common project goals. However, these are individual rather than community actions. The community can participate in carrying out health education and can also play an important role in establishing new social norms, thus increasing the impact of health-education efforts.

Carrying out health-related community activities:

In many of the projects reviewed, communities have provided labour, materials, and even money for activities designed to improve health. Such activities are often the most visible aspect of participation. Unlike individual behavioural change, they constitute a communal approach to improve health, since they involve the community or groups of individuals in collective solutions to environmental, nutritional, and other health problems.

Contributing resources:

To keep project costs low and so help governments increase the number of communities that can be served, most projects have tried to mobilize community resources to support health activities. This form of participation stimulates community involvement and a sense of project ownership.

The most frequent kinds of community contributions include:

- labour and materials for construction and maintenance of facilities
- financial contributions
- local medicines and medical knowledge

Carrying out management function:

Another way in which communities have contributed resources for Primary Health Care/ Family Planning projects, and thus assist in keeping program costs low, is by undertaking management functions that would otherwise have to be carried out by paid project staff and other government personnel at various levels.

Participating in evaluation:

Communities participate in monitoring and evaluating projects to identify problems and areas requiring attention. Community involvement in evaluation fosters community awareness of problems and promotes communal action to resolve them. This does not happen when evaluations are carried out by outsiders and findings are not discussed with the communities. Community involvement in these activities helps projects, meet community needs and contributes to a sense of communal ownership and responsibility for the project. It can also help the managers to understand the reasons for problems.

35.10 COMMUNITY MOBILIZATION

35.10 COMMUNITY MOBILIZATION

Is defined as a process whereby a group of the people from the community have been encouraged and motivated to surpass their differences and to meet on equal terms, to facilitate a participatory process for community development. They dialogue to determine who, what and how issues are decided and to provide an avenue for everyone to participate in decisions that affect their life through this project.

For community mobilization the FWW must work in coordination with the women in the community. These women may be the practicing dais, other health service providers or influential women of the area. These women have to be chosen, contacted, and requested to work

for the given purpose. Meetings have to be held and feedback has to be taken during the process from these women and the community members as well.

Effective Communication is Vital for Community Mobilization:

For communication to be effective the FWW should:

- Follow the principles of interpersonal talk which are described briefly below
- Keep in mind the dignity of the individual
- Appreciate problems and indicate willingness to be of maximum help
- Be aware of culture, language, and socio-cultural characteristics of the area
- Know the subject well
- Be fully confident
- Build a positive relationship with the individual
- Keep an eye-to-eye contact with the individual
- There should be no barrier between the two
- Use audio-visual aids where necessary
- Remove doubts and mis concepts
- Create a pleasant environment
- Develop appropriate communication skills

The following “communication skills” for community mobilization have been dealt-with in the concerned chapter, i.e.

- Informing / Giving information
- Motivating / Persuading
- Counselling
- Other practical aspects of communication skills for mobilizing the community and developing working relationships will be dealt here i.e.

- Requesting
- Explaining
- Giving & receiving feedback
- Reaching an agreement
- Chairing a meeting

COMMUNICATION SKILLS USED IN COMMUNITY MOBILIZATION

Requesting is making a request or asking someone politely for co-operation, favour or help etc. FWW may request help / favour / co-operation from different community members for promoting the work of Family Welfare Centre.

EXPLAINING

“Explaining” is telling the detailed meaning of some knowledge, information, facts or something and giving reasons for taking certain action or doing something. It also helps to remove any doubt or misconceptions in the minds of people and to counter false rumours.

Principles of explaining to a group of women

- Group should not consist of more than 8- 10 persons
- Only one topic should be chosen for one occasion
- Community mobilizer should have thorough background knowledge of the topic
- Community mobilizer should take into consideration the cadre or category of the group of audience (their knowledge, education, social class etc)
- Know at least one person in the group to initiate discussion and break the barrier
- Ask each person to introduce herself
- Find out as much as possible about the group, particularly the interests, attitude towards the topic under discussion
- Ensure a friendly and positive environment
- Maintain a degree of informality that will assure the progress of discussion with the group
- Make sure that all members understand the problem by frequently summarizing the important points and coordinating the efforts of the group
- Avoid domination by one member
- Members should be allowed to give their views one by one
- Encourage those who are not participating actively
- Explain the topic by using Audio-Visual aids where necessary
- Clarify / remove misconcepts / doubts

FEEDBACK (Giving & Receiving)

Definition: Feedback refers to the response or reaction given to or received from someone about his / her ideas or actions, Feedback can be seen as a 'helping relationship between the giver and the receiver' in terms of increasing or improving mutual understanding.

Negative Feedback:

Negative feelings are reported to help clarify the situation, and make the receiver reflect on his/ her thoughts and actions, be aware of how it is perceived by others and when ready, choose to improve or change it.

Positive Feedback:

Positive feedback, on the other hand is given to encourage or reinforce good ideas or actions. Both positive and negative feedback should be provided when appropriate, or necessary and timely.

Rules for Feedback:

Feedback must be wanted or requested: It should be asked for and not imposed. It should be in hands of the receiver; in that she asks for it and then controls how much of it she gets in content and depth. It should therefore be timely.

- Feedback is given for the benefit of the receiver: The person who receives feedback can ask for clarification on the specific behaviour but not to be defensive about it. The receiver should ease the feelings of the giver. On the other hand, if many feel the same towards the receiver, then he should make efforts to change the behaviour in order to improve his relationship with the group. If positive feedback is given, he should receive it without being defensively shy.
- Feedback is only the perception of the provider: It expresses her perception or feeling at the time it was given. Since feedback is only the perception of the provider, both parties may wish to check with others who are present, for their perception of the situation.
- Feedback is more meaningful when it closely follows the event. It is very difficult to reconstruct situations when several days or even weeks have passed.
- Feedback can be better understood and used when it is specific rather than general. To be told that one is "dominating" is not as useful as to be told that it is a specific behaviour, such as talking and not listening, which makes the receiver seem that way.
- Feedback will be received less defensively if it is descriptive rather than evaluative. To describe a person's behaviour or reaction, such as 'I felt left out when you excluded me from the class' is more useful than 'you are not sensitive to other people's feelings.
- Feedback should be useful and meaningful. It should be important enough to affect the receiver and directed towards behaviour, which can be changed. When feedback is too shallow, it is not useful; when directed towards unchangeable behaviour, it only

leads to frustration.

REACHING AN AGREEMENT

Agreements summarize the evaluation procedures and clarify everyone's roles and responsibilities. An agreement describes how the evaluation activities will be implemented. Elements of an agreement include statements about the intended purpose, users, uses, and methods, as well as a summary of the deliverables, those responsible, and a timeline.

Importance of reaching an agreement:

Bothparties understand what is to be done thus positive results are achieved.

Importance of recording an agreement:

An agreement makes things clear for both parties and there is no chance of forgetting things. It helps in follow-up even after a long period and helps in follow-up even if a different person is in-charge /visiting the F.W. Centre.

Need for reaching an agreement:

In the community there are people, who are willing to work, they promise to do so but they forget and do not turn up at the F.W. Centre. Therefore, to reinforce their willingness an agreement is reached on doing specific tasks and it is preferably signed to get a positive outcome.

Criteria of a good agreement:

- Specific activity is assigned.
- Small achievable tasks are given one at a time.
- FWW and the C.V should both understand what exactly is to be done.
- The agreement reached is repeated for clarification.
- The agreement reached is recorded.
- FWW has the desirable manner.
- FWW realizes that C.V / Dai/ other health care professional has her own life to live.

Criteria of a poor agreement:

- No specific agreement is reached, the two parties just talked casually.
- Community volunteer does not know what to do.
- C.V does not know how to help the FWW
- Too many activities are assigned to the C.V / Dai.
- Complicated work is asked from the C.V / Dai, which she cannot accomplish.
- One does not realize that C.V s / Dai’s have their own life to live.
- No specific activity is assigned.

- FWW may not be polite.

Importance of reaching an agreement and recording it:

- Both parties understand what is to be done.
- Positive results are therefore achieved.
- Recording an agreement.
- Makes things clear for both parties.
- There is no chance of forgetting things.
- Helps in follow-up even after a long period.
- Helps in follow-up even if a different person is in charge / visiting the F.W. Centre.

CHAIRING A MEETING

FWW will chair a meeting of

- F.W. Centre Staff
- Dais
- Community Volunteers.
- Satisfied clients.
- Women groups of the community.

Qualities of good chairperson: A good chairperson should:

- Possess knowledge
- Possess a pleasant personality
- Is polite, friendly and has a sense of humour
- Control the proceedings
- Conduct discussion at the right speed
- Involve participation of all

Tasks of Chairperson:

- Preparing Agenda.
- Order of items for discussion is decided on the basis of their importance
- Nature of out put of various discussions.
- Date of next meeting.
- Controlling who speaks.

Get opinion of all, especially lower status members.

- Keeping discussion to the point

- Interpreting / clarifying.
- Comparing points of view / defining issues of conflict.
- Summarizing.
- Reaching decisions etc.

Planning a meeting:

Planning starts with deciding a subject for activity to be conducted and preparing an agenda. It helps to recognize the order of items for discussion and the nature of output of various discussions. The agenda should also include the date of next meeting. The next thing is to fix a date, time, and venue for meeting which is intimated to all the concerned persons. Finally sitting arrangements are made e.g. chairs, tables etc., depending upon the number of people.

Conducting the meeting:

Greet the participants and inform them about the agenda. The meeting should be conducted with politeness and friendliness at a pace which should not be very fast or very slow to the participants, and a touch of humor in the meeting will keep the interest of all those who are attending and will encourage them to be a regular member of the meetings. Invite suggestions and questions on each topic and involve those who are quiet in the discussion. The chairperson should get opinion of all, especially of lower status members and ensure to the point discussion. She also has the responsibility of interpreting and clarifying the points under discussion, comparing points of view and defining issues of conflict. At the end she must reach decisions also, clarify / interpret any suggestions which are not clear and help solve issues of conflict. Make sure to keep the discussion to the point. Finally, she summarizes the discussion, helps reaching decisions with the concerned and records the minutes of the meeting.

Checklist for chairing a meeting	**Yes**	**No**
Planning a meeting:		
Decides a subject / topic for activity to be conducted		
Prepares an agenda	---------	---------
Fixes a date, time and venue for meeting	---------	---------
Intimates the concerned persons	---------	---------
Arranges the place where meeting is to be conducted		
e.g., chairs, tables etc., depending on the number of people	---------	---------
Conducting the meeting:		

Greets the participants	---------	---------
Distributes the agenda with timeline	---------	---------
Informs them about the scope of agenda	---------	---------
Distributes the scope of agenda	---------	---------
Invites suggestions and questions on each topic	---------	---------
Involves those who are quiet in the discussion	---------	---------
Clarifies / interpret any suggestions which are not clear	---------	---------
Helps solve issue of conflict	---------	---------
Keeps the discussion to the point	---------	---------
Summarizes the discussion	---------	---------
Helps reaching decisions with concerned	---------	---------
Records the minutes of the meeting	---------	---------
Reports the minutes of the meeting to DPWO / TPWO	---------	---------

Mannerism of FWW		
Is polite	Polite	Impolite
Is friendly	Friendly	Unfriendly
Is patient	Patient	Impatient
Is helpful	Helpful	Not helpful
Is quick in taking decisions	Quick	Slow

35.11 PUBLICITY METHODS

35.11 PUBLICITY METHODS

Preparation of publicity material

Publicity is required to increase the awareness of the community regarding various issues and services rendered by the FWW. The methods of publicity are publicity materials such as Pamphlets/Posters/Handbills/Flash Cards/Flannel Graph, and activities like Home Visits, Health Talks, Film Shows and Health, Antenatal and F.P Camps in the community.

Channels of Publicity:

F.W.W should develop working relationship with the following for promoting the work of F.W.C and use them as channels of publicity

- Dais
- Community Volunteers
- Satisfied Clients
- Health Outlets
- NGOs
- Private Practitioners
- Community Leaders
- Religious Leaders
- Women's Groups

VISITING A HEALTH OUTLET

To improve her performance the FWW should not remain in isolation but should work in co-ordination with other health outlets in the area. She should find out the exact location of these health outlets, know the names of the in-charges and their work timings and get their contact numbers. She needs to meet the in-charge of health outlet personally to request for her co-operation. She should then seek for an appointment on telephone or through a messenger.

Procedure of Visiting a Health Outlet:

Following are the steps of the correct procedure for visiting a Health outlet to get its support for the Family Welfare Centre, which must be followed by FWW

- Contact the Health Outlet and obtain an appointment for meeting
- Fix date & time for meeting with the in charge of health outlet
- Visit the health outlet at the agreed time and day (be punctual)
- Inform about your arrival.
- Greet the person in charge on entering
- Introduce yourself at the start of meeting
- Ask about the services provided by the Health Outlet

- Offer appropriate help
- Inform about the services provided by the F.W. Centre
- Request to refer Family Planning Cases to F.W. Centre
- Reach an agreement about action to be taken for mutual help.
- Record the agreement
- Thank the in charge for sparing time and bid farewell warmly.

35.12 STEPS FOR HOLDING A FILM SHOW

35.12 THE STEPS FOR HOLDING A FILM SHOW

Why host a film screening?

Films are more than purely entertainment; they spark ideas, discussions, and interest. Below are just a handful of advantages to hosting your own film screening.

Passion

To get exposure for a film that you love and believe others will love too. It's for all those films that slip under the rad.ar or never get the release schedule they deserve.

Community

Starting a film club or community cinema is a fantastic way of getting people with a shared interest together and opens a host of possibilities for adjoining events.

Awareness

Film screenings can be a great way to raise awareness on issues and to get people involved in a wider social movement.

Fundraising

Putting on events such as film screenings can be a great way of raising money for your campaign.

Education Film can be a powerful and engaging educational tool, especially for children. It helps break down barriers and spark discussion and interest.

Budget

Location

Ensure that the location of your film screening is easily accessible for most guests. Look for places with great transport links. Once you have an area in mind and know your budget, you can start to shortlist venues to visit.

Venue

To show the film to its best advantage, high quality projection and sound equipment is a must, but it isn't everything. As well as considering the available facilities, technical equipment, and flexibility of space, don't forget to answer the more unusual questions:

• Can the venue be darkened sufficiently?

• Are the seats comfortable?

• Can you change the temperature of the venue?

• Is the screen high enough to be seen clearly from any seat?

• Is there enough room for a live orchestra or band in the auditorium?

Think outside the box and choose a venue that will also create a buzz with your audience. It could be that the venue has some connection to the film being shown.

Making your cinema accessible for all

Community cinemas are not always an option for everyone. Stand out by making your film screen accessible to all and include the following:

- Ensure there are separate enclosure for women and girls only and families
- Subtitles or sign interpreters for hard of hearing audiences
- Closer seating options available for partially sighted audiences
- Ensure the venue has wheelchair access

Make your film screening memorable

With online film streaming and home cinema systems now so easily available, it's more important than ever to create something your audience can't experience at home. Think outside the box and go that step further to create an event that your audience won't forget.

Invite special guests

Special guests are a great way to pull in a crowd. Although having actors from the film is a huge bonus, it isn't always possible. Any one of note or a public figure from the community will be able to attract the public to come..

How to introduce a film?

Good film introductions can open your eyes to a new way of watching film and can breathe life into an old classic. It is always great to show case a movie with moral and teaching. Introducing your audience to the film they're about to watch sets the scene and encourages them to enjoy themselves.

Here are some top tips on how to deliver a great introduction:

Be enthusiastic:

It's difficult to get the audience excited about a film if you aren't excited yourself.

Don't overdo it:

If you know a lot about the film, it's easy to go into too much depth. Keep your introduction short and treat it as a teaser for what's about to follow.

Practice:

Just because you aren’t the main attraction, it is not OK to wing it. Preparation is key. If nothing else, practicing your introduction will give you a chance to ditch those notes and immerse yourself in the experience.

35.13 ESTABLISHING GOOD WORKING RELATIONSHIP WITH NON-PROGRAM SERVICE PROVIDERS

35.13 ESTABLISH WORKING RELATIONSHIP WITH NON-PROGRAM SERVICE PROVIDERS

Requesting a woman to work as a community volunteer (CV)

Criteria for selecting a woman:

- Choose a right woman who:
- is willing to work.
- can spare time for community work.
- has a good reputation.
- is social.
- knows several families in the community.
- Choose a task for the Community Volunteer (CV) to perform, which is:
- simple
- specific
- achievable
- Assign one Task at a time:
- Do not burden the C.V with many tasks to do simultaneously
- consider the fact that the C.V has her daily chores to perform
- remember it is voluntary work which is not paid for.
- Make the request in the right manner. By being:
- Polite
- Friendly
- Patient

Reach an agreement: If the woman agrees to do the assigned task, repeat the task at the end of the talk and reach an agreement that it would be done by her.

Record the agreement: After reaching the agreement, record it on a paper which is easily available (like a diary or table calendar etc) for future reference.

Developing a working relationship with a Community Volunteer (C.V):

To develop a working relationship with a CV, greet, and ask about her well-being. Ask for help in publicity of the centre, removing doubts about the use of contraception, propagation of R.H messages, arrangement of camps, attending the health talk meetings to deliver health talks and motivation and counseling of women. Promise priority care and special attention to her and her referred clients.

Checklist for developing working relationship with C.V	**Yes**	**No**
Greets the C. V	---	---
Asks about C. V's welfare.	---	---
Asks for help in:		
Publicity of the F.W. Centre	---	---
Removing doubts about the	---	---
use of Contraceptives	---	---
Propagating of R.H messages	---	---
Arranging camps for F.P / ANC	---	---
Attending the health talk meetings to deliver health talks	---	---
Motivating and Counselling women	---	---
Promises priority care and special attention to her and clients referred by her	---	---

Mannerism

Is Polite	**Yes**	**No**
Is Courteous	**Yes**	**No**
Uses Simple Language	**Yes**	**No**

Requesting a Satisfied Client to Work as C.V

- Criteria for selecting a satisfied client:
- No personal problems or family commitments.
- Pleasant personality
- Extrovert.
- Regular user of contraceptive.
- Satisfied with the contraceptive.
- Satisfied with the services and staff of the centre.

- Frequent visitor of the F.W. Centre.
- Willing to work as a community volunteer.
- Can spare time for the specific purpose.

Tasks to be performed by a satisfied client

- Attends meeting with potential F.P clients
- Answers the questions asked by clients
- Satisfies clients on issues of contraceptives
- Removes their doubts / misconceptions about various contraceptives.
- Reassures women on use of the contraceptive being currently used
- Informs women about advantages of small family norms.

Requesting a practicing DAI to promote work of F.W. Centre:

Criteria for selecting a Dai:

The following criteria should be considered while selecting a Dai to promote family planning and other services rendered by a F.W.C. She should be preferably married, mature and cooperative by nature, with a good running practice. A local resident of the area who is popular in the community is to be preferred. The Dai will work better if she is physically fit, trained and efficient in her job.

Developing a working relationship with a Dai:

Introduce yourself politely and ask about her welfare. Reassure the Dai about any help i.e. provision of contraceptives and general medicines and management of her referred cases (General ailments of women and children, F.P clients and obstetrical patients). Request for help in publicity of the centre, management of camps, follow up services and retrieval of dropouts. Promise priority care and special attention to her and her referred clients.

Check list for requesting a Dai:	**Yes**	**No**
The FWW:	---------	---------
Introduces herself.	---------	---------
Requests for time to talk.	---------	---------
Explains the purpose of the visit	---------	---------
Asks for her previous experience / work	---------	---------

Identifies specific co-operation required --------- ---------

Offers help and co-operation. --------- ---------

Makes an agreement. --------- ---------

Mannerism of the FWW for recruiting a Dai:

FWW pays due respect to the dai. --------- ---------

She appreciates the services being provided by the dai. --------- ---------

Acknowledges the importance of Dai in the community --------- ---------

Accepts that the dai is a very busy person --------- ---------

Attitude is helpful. --------- ---------

She is polite --------- ---------

She is tactful --------- ---------

Agreement between the FWW and the dai exists --------- ---------

Checklist for developing working relationship with Dai

Introduces herself politely --------- ---------

Asks about dai's welfare --------- ---------

Reassures the dai about any help e.g.

- Provision of contraceptives --------- ---------

- Management of her referred cases --------- ---------

(General ailments of women and children, F.P clients and obstetrical patients) --------- ---------

- Provision of general medicines to cases referred to FWW --------- ---------

Requests for help of dai in:

- Publicity of the centre	---------	---------
- Management of camps (IUCD, ANC).	---------	---------
- Follow up services.	---------	---------
- Retrieval of dropouts.	---------	---------
Promises priority care and special attention to her and her referred clients		
Mannerism of F.W. W	---------	---------
Is Polite	Yes	No
Is Courteous	Yes	No
Uses Simple Language	Yes	No

35.14 HOME VISIT, FOLLOW UP AND FAMILYPLANNING DROPS OUTS

35.14 HOME VISIT, FOLLOW UP AND FAMILYPLANNING DROPS OUTS

Objectives of Home Visiting

FWW visits homes for any of the following objectives according to the situation encountered in the field:

- Disseminate information on RH/Family Planning, MCH, nutrition, etc.
- Identify eligible couples
- Counsel eligible couples on Family Planning methods
- Provide contraceptives to willing clients
- Encourage continuous use of Family Planning methods
- Manage patients with side effects of contraceptives
- Refer patients with complications of contraceptives
- Replenish contraceptive supplies
- Retrieve FP dropouts
- Identify satisfied clients to work as CVs
- Identify and refer high risk mothers
- Identify and refer high risk children (malnourished, dehydrated & seriously ill)
- Advise on balanced nutrition / diet
- Advise on importance of antenatal care and vaccination against Tetanus
- Encourage breast feeding
- Advise on complementary/ weaning foods according to age
- Refer children for immunization
- Train mothers to prepare Oral Rehydration Solution (O.R.S)
- Advise women on personal hygiene
- Advise on environmental sanitation

Planning for Home Visiting

Certain activities must be undertaken before going on home visit to make it successful.

Criteria for selecting a Target Area:

Selecting a target area for home visiting is important. Preferably area should be:

- Near the centre so that no transport is needed

- Have a sufficient population density
- FWW should already know some people in that area e.g. Community leaders, friends and satisfied clients
- When a request has come from the area through a community volunteer, dai or a satisfied client.

Preparing for Home Visiting

- Identify the purpose of home visiting
- Master the knowledge and skills required for this purpose
- Prepare and collect relevant Informative Educational and Communicative material including slips having address of FWC
- Make a realistic schedule i.e., fix date, time and number of homes to be visited
- Inform the concerned persons through FWA (M&F) about time and date
- Collect other material / equipment such as contraceptives, clinical record cards, B.P apparatus, stethoscope, thermometer, and medicines etc.
- Arrange for transport if required.

Entering a Household

A proper procedure should be adopted by the FWW for entering a household.

- Knocks at the door
- Greets the person who opens the door
- Introduces herself
- Explains the purpose of her visit
- Asks permission to enter the house
- Enters the house after permission is granted
- Greets the lady of the house cordially
- Asks her about her welfare
- Keeping in mind the busy schedule of the lady, asks her to allow some time for talking / discussion
- After seeking permission sits in a proper place
- Asks permission of the elderly woman (if present) to talk to the one the FWW intends to explain the specific purpose of the visit in detail.

Retrieval of Family Planning dropouts:

Home visiting is important and beneficial in retrieving the dropout cases of contraceptives. FWW while paying home visits should take care to be very polite and tactful in her manner. She should enter the house with permission of the inmates. Introduce her and greet the family members, then after requesting some time from the client she should inquire reason for not

coming to the FW Centre. After finding out the reason for stopping use of contraceptives, she should reassure her for treatment of side effects (if applicable) at FW Centre and advise the client to try the method again. She should fix date and time for her visit to the F.W. Centre. If the client cannot come to the clinic and if possible, the contraceptive such as pills or injection should be provided to the client in her home. Lastly the FWW should inform the client that, if necessary, the method can be changed.

The number of dropouts for Injection Norigest can be found out by adding the total new cases of a month to the number of injections given two months earlier and then subtracting from it the total injections given during that month.

Month	**New cases**	**Old cases (due to report)**	**Total injected**	**Total Dropouts injection**	
January	10	20	19	30	11
February	11	25	28	36	8
March	9	19	25	27	3
April	20	28	30	62	18
May	15	25	36	60	4
June	14	30	35	61	9

Record of Injection Norigest given in six months:

If we add the new cases in the month of March (9) to the total number of injections given during January (19) in the above table we get 28, from this we subtract the total number of injections given in March (25), we get 3, which is the number of dropout cases in the month of March.

35.15 COMMUNITY PROJECTS

35.15 COMMUNITY PROJECTS

Community engagement is the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people It is a powerful vehicle for bringing about environmental and behavioral changes that will improve the health of the community and its members .It is important to engage target communities to begin developing community-level capacity through a community project or talk

For an optimal community project:

1 Identify community priorities by knowing the people well.

You may use a *Household questionnaire to identify community leaders and priorities*. Map community priorities and identify community leaders through community assessments

Once you have identified your target communities, design a simple questionnaire with the goal of identifying potential community leaders as well as what community members saw as their most pressing priorities. Ask the hard questions and conduct a thorough needs and resource assessment

2 Design the project by taking the context into account and be practical

Choose a project which is of relevance and use for the community. At the same time it should be do-able.

3 Mobilize resources and investments

Hold community assembly meetings to elect local representation to coordinate program activities

Hold preliminary meetings with community leaders and enlist their support to mobilize community participation

Often vulnerable communities are skeptical of outsiders and have been on the receiving end of broken promises to improve community infrastructure or provide much needed basic services. Trying to engage communities directly through public calls for meetings without establishing community channels and trusted intermediaries may limit or delay your success in mobilizing communities to participate early in the program.

Allow communities to prioritize and select quick impact projects to solidify support and galvanize local participation. Make the Connections and build your relationships with the relevant stake holders

4 Implement community projects, transform into formal community-based organizations with legal representation and ability to receive funding from outside source

5 Evaluate the Project. Make sure your work is making an impact. It is important in your first community assembly meeting to select a community project that can be completed in a short period of time. These projects will build off the initial enthusiasm at the prospect of the

program's start-up.

6 Maintain Quality Assurance, Regular spot checks are essential to ensure a quality service

THREE STEPS TO PLANNING A SUSTAINABLE COMMUNITY SERVICE PROJECT

Planning your community service project can be made easier once you know the steps involved and guidance on how to get started. Here are three areas to keep you organized, avoid the pitfalls, and give you the resources you need for a successful community service project.

1. USE GOOD PROJECT MANAGEMENT PRACTICES TO STAY ORGANIZED

To be successful, break down your project into smaller steps. Then make sure these steps are in the right order.

Work Backward

Start with your deadline for your community service projects and then work backward in planning out timelines.

Estimate Your Needs

Estimate the resources and time it will take to complete each step. You can always adjust later, but you want to have a good idea of what it will take to get to your goal.

Build in Milestones

Include milestones in your plan, along with clear goals and objectives. Reaching milestones can be encouraging for the team, and they will help to keep your community service project on track.

Assign Tasks

Identify the people who will help and assign them tasks to do. Make sure to be aware of the time commitment as well as skills needed (if any). It is okay if you don't have specific names, yet. You can fill them in later as volunteers and team members come on board.

Plan for the Risks

Look at your tasks and access likely risks to completion. Then create backup plans for the most obvious possibilities. For example, what might you do if your outdoor fundraising event gets rained out?

2. **ONGOING VOLUNTEER RECRUITMENT TO ENSURE ENOUGH RESOURCES**

Your community service project will need the right volunteers to be successful. You'll need to find volunteers who will commit to the project and keep them engaged and interested.

Create Volunteer Job Descriptions

Create a list of job responsibilities for your volunteer spots. This will help everyone know exactly what is needed and expected.

Alert Your Network

Start with your personal networks to get the word out. Let your friends, family and business contacts know that you have fun and interesting volunteer opportunities available.

Post Your Volunteer Opportunities Online

Post volunteer spots on social media and on free volunteer websites,

Interview and Train Volunteers

Volunteers should feel comfortable with the job they have been assigned, and you should feel comfortable with them. Make sure to at least do a quick chat to make sure the opportunity is the right fit, and then support your volunteers with training if needed.

Recruit More Volunteers Than You Need

Even the best volunteers may need to drop out for unexpected reasons. Continue to recruit volunteers to allow for attrition and new unexpected needs that might arise.

3**. PARTNER WITH OTHERS FOR KNOWLEDGE AND SUPPORT**

A community service project works best when there are many members of the community available to not just offer hours of service but also knowledge and support. This may be especially critical when a program is brand new.

Find Someone Who Has Done It Before

Reach out to others who have run a similar community service project. Online forums and Facebook groups are great places to ask questions of those who have similar successful community service projects.

Look for Local Business Support

Reach out to the local businesses in your community and ask for support. From sponsoring an event to allowing you to collect donations to helping you make connections; business leaders can be a valuable part of your team.

Partner with Another Organization

Teaming up with another organization can double your impact and provide additional solutions and support.

Get Publicity

Ask the local media to support your project with articles and announcements.

Talk to Influencers

Bring your project to the attention of local officials, local celebrities, and prominent citizens. If they share information about your community service project, you will be able to reach more people who may support your cause

35.16 HEALTH CAMPS

35.16 HEALTH CAMPS

The United Nation's Universal Human Rights Constitution (1948) states in Article 25: "Everyone has the right to a standard of living adequate for the health and well-being of him/herself and of his/her family, including food, clothing, and housing and medical care and necessary social services."

Health camp or out-reach clinic is one of the frequently used methods of reaching the unreached, where people get health consultation and along with the distribution of drugs at local level.

Health camps are effective way to of delivering public the primary health care, typically in the unreached area to achieve universal health coverage. Free medical camps are organized with a sacred mission to combat diseases and malnutrition and serve the poor unconditionally. Besides providing primary health care, the camps also contribute to raising awareness amongst the people informing them about the necessity of adequate nutritious food, clean drinking water, dangers and risks of environmental pollution, virtues of preventive health care, the vitality of family planning education and services.

In the medical camps, patient rights are strictly reserved and maintained: the right to privacy, information, life, and quality care. These camps also serve the marginalized groups, such as migrants and persons who have been displaced, racial and ethnic minorities women, and the vulnerable community, for example, those living with HIV.

Free medical camps are organized to provide health services and create an environment where the underprivileged community gets sensitized about health issues. Thousands of poor people in villages and urban areas attend the health camps.

Planning Consideration

Planning is the primary phase of conducting a health camp. This phase includes mapping out the overall aspects of health camp including venue, manpower planning, financial planning, resource allocation, logistic & transportation planning with proper planning, monitoring and supervision in between the camp.

Timing

Health camp should always be conducted during holidays or weekends to allow maximum number of participants in the camp. Venue should be accessible from the area where there is dense population, preferably in school, local health post, colleges where there are adequate waiting area and examination space.

Organizers need to collaborate with the interested stakeholder so as to ensure adequate budget for conducting the camp. Medicine and consumable supplies can be obtained from prior request to various pharmaceutical companies.

Knowledge of Health statistics

Adequate knowledge of recent prevalence of the disease in the targeted community will be

very much helpful in planning a health camp scientifically. It would also help in choosing the medicines and specialists for the camp e.g; There will be no significance of conducting an epilepsy camp in the area where there is very less prevalence of epilepsy or no any relevant data about epilepsy is available. Availability of proper statistics of certain disease can help in conducting periodic camp in the targeted area to decrease the disease prevalence rate through the camp. It can be collected through the proper government or private health authority of the area where camp is going to be conducted.

Permission from relevant authority

After having initial planning for the camp, the organizer should also seek permission from the relevant authority to conduct the camp in the desired area. The relevant authority may be a single body or multiple bodies and may include both government, community and private organizations. Depending upon the objectives and modalities of the camp, the permission granting authority ranges from Health Ministry, public health office, municipality, ward office, local committee & concerned authority of the camp venue like school, orphanage, old age care home etc.

The main purpose of this step is to ensure that the organizer will conduct the camp in ethical manner providing a quality care without any profit motive and self-interest.

Camp information dissemination

Organizer should create a hype for the camp at least few days prior to the event. The camp information can be disseminated by pamphlets with catchy headlines and short sentence mentioning free medicine if applicable, loudspeaker announcement in community, placing a camp banner in the decent visible height & broadcasting through local TV, radio and newspaper.

Camp Inauguration

Organizers should always have small opening of the camp in presence of local leaders involving mayor, police personnel, social workers, local health authority personnel. This will help addressing the local authority's commitment to improve the quality of health of the community as well as improving the current health statistics. The inauguration program should not be too long, and it should not overshadow the program itself.

Multidisciplinary approach

Health camp should always be led by multidisciplinary manpower ranging from helper, health assistant to different categories of consultants. Even a specific camp should have multidisciplinary approach as those health camps in unreached area tend to have multiple disease specific service seekers.

Technology Transfer

It is the most important aspect during the camp conduction. Technology transfer is the process of sharing the knowledge and technology related to the disease and its management from a competent health professional to the local health professionals residing in health camp area.

This will allow the local health professional for early diagnosis of disease even after the camp and refer the case to the preferred treatment destination whenever needed. This allows the general capacity building of the local health professionals so as he/she can manage the patients who come for follow-up after the camp.

Community Participation

Local students, members of local clubs, societies, health professionals should be encouraged to volunteer in the camp as well as to help in registration process and crowd management. It also provides them a bond of community participation and a learning opportunity.

A multisectoral stake holder's participation

Is required from the individual level to any organizational level in the community. Unless the local leaders of the society take interest, medical camps will not be able to achieve its objective. The active participation of the community also makes a health camp more fruitful. The overall community participation also helps in making the camp harmonious.

Health promotion and awareness

Medical camps should be encouraged to provide health education to the people attending the camp. There should be volunteers in the camp who can help in health promotion of the local community and providing awareness in various types of diseases and illness prevalent in the community. This will help in sharing the preventive, promotive part of the disease to make them aware before the disease process starts.

BEHAVIOUR AND MANNERISMS OF VOLUNTEERS

Volunteers

All the health volunteers involved in camp should communicate to the community people in local dialects as much as possible. They should also follow the local customs and traditions and mannerisms. The volunteers should act courteously and guide the patients as per the patient's requirements.

Legal & Ethical Aspects

Health camp should be strictly conducted under proper ethics. The provision of unauthorized personnel treating the patient, prescribing and distributing drugs may lead to unsuccess of the health camp. There may be the lack of monitoring and supervision by competent authority in these issues, but it is sole responsibility of the organizers to follow the legal and ethical aspect. The health volunteers should always be careful about the use of appropriate medicines, especially in regard to antibiotics and should refrain themselves from using third generation drugs which may cause more harm than good. Reporting the data, the morbidity profile recorded during the camp should be submitted to the local health authority with proper recommendation and photographs if possible. Similarly, the morbidity profile of the community can be disseminated by scientific publications to deliver it to public health personals working in improving the health status of the people in community.

Organizing a free medical camp isn't an easy task. However, if done correctly, it can

potentially help a lot of people to get healthcare free of cost. Though many hospitals organize free camps, in which a sizeable number of patients turn up only when the medical services are given free of cost. Later, these patients do not make it to the hospital for further checkups because they feel it's too costly to pay a visit. NGOs and Medical Trusts also organize free medical camps and, in many cases, people are seen to show up for further treatment in the recommended hospitals because those treatments are entirely funded by the Trust or NGO's.

Before organizing the medical camp you should decide what kind of medical camp you are setting up.It can be diagnostic or for treatment or both. Try to do a survey on the type and size of the population you are about to serve. This will give you an estimate of things and quantity that are needed. Below are the things that are essential to set up the camp:

How to Organize a Free Medical Camp

1 – Several doctors required like General physicians or Specialists separately.

2 – The number of drugs required depending on how many people you are expecting.

3 – Instruments like BP apparatus, Glucometer, Glucostrips, ECG machine, Needles, spirit, cotton, etc.

4 – Other manpower like: Pharmacists, nurse, and

5 – Stationary and other materials.

You can get manpower from a nearby hospital which may be a government or a private hospital. Many people advise seeking help from the private hospitals because in government hospitals you often need a political backing to get their staff. Private hospitals either charge you some money or may provide it for free. You also need to get in touch with an NGO or any community-based organization for they might fund to set up the camp and provide volunteers.

These camps provide free tests for Diabetes, Blood Pressure, Haemoglobin etc and offer counselling & treatment by trained Doctors and Specialists. Free medicines are given to the people. Iron and Folic Acid supplements are also distributed to the malnourished at the camp. The underprivileged community also has aging members who are not able to purchase health care and access the facilities due to the long distance and other joint problems that have demobilized them.

Apart from providing basic treatment and general check-up, the Medical Camps also help people to be aware of their health status. Often these camps provide support exclusively for adolescent girls and boys to inform them on reproductive and sexual health. Sanitary pads are distributed to adolescent girls to encourage better hygiene practices during menstruation.

Specifically, the medical camps seek to provide both preventive and curative treatment for common conditions in the community and refer those who require specialized treatment to the relevant hospitals that are often funded by the medical trusts or NGOs. These camps play a significant role to create awareness and provide counselling on HIV/AIDS, breast cancer, and other life-threatening ailments. They create awareness on the need for personal hygiene

in prevention of serious disabling diseases such as eye and dental, which are prevalent in some slum areas due to dust and lack of adequate water. The free medical camps also encourage the use of available nutritious food products in the area and discourage drug and substance abuse among the community members.

RUNNING THE CAMP

Organize the camp on a holiday or a weekend. This will allow more patients to visit the camp. Make sure you carry a lot of medicine samples to be distributed free among the patients. IT would be a wise decision to set up the camp with the association of an NGO or some local government body or politicians or businessmen or all of these to bear some percentage of expenses for the procedures you would carry out.

Now informing the public about your camp is essential and the success of your camp depends on the effectiveness of your public relations. Design Pamphlets with a catchy headline, use short sentences, mention free medicines, including a picture of it to catch attention. You can contact the local hawker to use these pamphlets as by inserting them in the daily newspapers.

Hire a person to announce the event date and other essentials using a loudspeaker mounted on the top of a vehicle. You can have these announcements be made in the form of a poem or a song which will immediately gain public attention.

Put up banners at a decent height so that it is visible in places like bus stand or a busy crossing. Run an ad on the local cable TV channel with highlights of the medical services that are free.

Organize a small opening ceremony for the camp. To inaugurate the camp choose a businessman, president of an NGO, local MLA or the Deputy Commissioner who already has a good reputation for social service amongst the people.

During the camp manage the crowd in a systematic way. Make sure that people do not have to wait for long hours and are taken good care of. People are likely to get upset if they experience any bad behavior or service. Also, keep a guy who will take the addresses and phone numbers of all the potential patients so that they are informed whenever you have another camp in the area.

Organizing a medical camp is a serious work which requires sincerity and a team in which at least one is a marketing professional with some exposure in that area. While organizing the medical camp you should keep in mind that it has a noble purpose to serve. So, every patient visiting the camp must be treated with respect and dignity.

Requirements for a medical camp:

The main objective of all medical camps is to bring affordable healthcare and free health information to the community and identify the common health problems to devise ways of addressing them. A lot of logistic supports are needed to carry out such responsible programs successfully.

Therefore a list of the requirements is presented below. Additional financial resources will be

required for transportation of supplies, personnel, and volunteers from one region to another. Heavy security is required and sufficient nonmedical personnel to assist with registration and the management of the crowds.

Drugs:

- Iron supplements
- Deworming agents or Anthelmintic
- Anti-malaria
- Antibiotics
- Cough Syrups
- Antihistamine
- Analgesics
- Antiepileptic treatment
- Eye ointments
- Local applications

Though some commonly used drugs have been suggested here, it is always better to consult a physician about which drugs are required for specific medical camps. A thorough research can be conducted within the community to find out the prevalent diseases in particular areas and drugs can be administered accordingly.

Surgery supplies:

- Needles G 18, 21, 22, 24
- Syringes 20cc, 10cc, 5cc, 2cc
- Antiseptic
- Disposal dressing packs
- Sterile surgical packs
- Cotton wool
- Wound dressing gauze
- Rubber gloves sterile and nonsterile

Other supplies and materials:

- Tents, chairs, and stationary for clinical recordings
- Vital signs monitoring equipment, medical equipment, stethoscope, and torches
- Reading glasses
- Refreshment for volunteers
- Insecticides, treated mosquito nets, and blankets
- Wheelchair for physically challenged patients

- Baby clothes from age zero to five years old
- Sanitary pads
- Condoms and tampons

Required personnel to support the medical camp:

- Doctors, Clinical officers, Dentists, Opticians, and Nurses
- Medical students, Clerical staff, Pharmacists, and Counselors
- Administrative and security teams to support registrations, managing crowds, and general logistics

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35.17 MICRO TEACHING

35.17 MICRO TEACHING

The word "Micro" means small. It is a training technique used by educators to give feedback, assess, and evaluate teachers by encouraging them to teach specific topics to a small group of 5 to 10 students for a short period of 5 to 10 minutes.

Microteaching is a technique aiming to prepare teacher candidates to the real classroom setting. Microteaching can also be defined as a teaching technique especially used in teachers' pre-service education to train them systematically by allowing them to experiment main teacher behaviors.

By the help of this technique, teacher candidates can experiment and learn each of the teaching skills by breaking them into smaller parts and without encountering chaotic environment of the crowded classes. While instilling teaching skills in students during microteaching, reciprocal negotiation of the students actively presenting and watching about the performances can make great contribution to the acquisition of the skills

The aim of the technique is to improve teaching and active-learning process, give teacher candidates a real-life classroom experience, strengthen intellectual skills, introduce instructors to modern teaching methods, enhance student-teacher interaction, and build confidence in educators. Micro teaching occurs when a teacher works with a small group of students for a short period of time. This usually happens with a group of 5 to 10 students for a period of 5 to 10 minutes, Micro lesson planning happens when a teacher creates individual classroom activities that occur on a day-to-day basis.

During the microteaching session, the teachers need to demonstrate their ability to handle students in classroom, creativity in coming up with innovative teaching ideas, prowess in organizing educational activities and programs for learners, precision in planning effective lesson and unit plans, interactive speaking skills, conceptual and theoretical knowledge on subject, and other erudite capabilities. Fellow instructors and higher educators usually carry out the review and assessment procedure before providing expert feedback and opinion.

The teacher candidates can experience real teaching and teaching rules with the help of this method. This method offers teachers opportunities for discovering and reflecting on both their own and others' teaching styles and enables them to learn about new teaching techniques (Pre-service teacher can benefit to a great extent from microteaching applications.

Firstly,

- they reveal teaching facts
- the teacher helps pre-service teachers to see the importance of planning and
- taking decisions enable them to develop and
- improve their teaching skills

Microteaching technique is an application in which video recordings have been made possible because of developing technology. Audio and visual technology is an effective and reflective tool in preparing pre-service teachers to the profession of teaching. Video recordings provide

pre-service teachers with the chance of evaluating themselves by engaging them in more experiences and configurations video recordings can not only be used for demonstrating model teacher behaviours but can also be used for the analysis of microteaching. Using video recording method in microteaching applications contributes to the professional development of pre-service teachers by identifying strengths and weaknesses and improves their competencies

MERITS OF MICRO TEACHING

- A primary reason why micro teaching has benefits in the classroom is because it allows a teacher to provide in-depth instruction to a few students at a time. For example, if a teacher has several students who are struggling with a math concept, she might separate them from the rest of the class to provide more focused instruction, while allowing the rest of the class to work independently on math problems.
- Allows teachers to perceive a student's mindset and behavior
- Provide an in-depth closure to the level of understanding of every individual student
- Introduce teachers to the latest and innovative teaching techniques
- Empowers educators to provide valuable supervision and expert feedback on teachers' work and their teaching methods
- Gives teachers self-evaluation opportunity
- Develops necessary teaching skills in instructors
- Improves teacher's self-confidence and passion for teaching
- Encourages implementation of education technology such as LMS, Virtual Classroom, etc.
- Improves student-teacher collaboration
- Motivates teacher to plan effective teaching strategy with Lesson plans

DISADVANTAGES OF MICRO TEACHING

- Lack of proper planning conveys an undesired and unrelated concept
- The teaching strategy utilized in the microteaching session to teach a small group of students fails in some situations while handling a large group of students
- The training program is time-consuming and sometimes costly
- The skill doesn't emphasize personalized learning
- The program usually concentrates on teachers’ development and sometimes disregards social-emotional development of students
- Children who are performing well also may get less of a chance to work in a small group because they don't usually need additional help to grasp a concept.

35.18 HEALTH PROGRAMS FOR DISEASE CONTROL

- Community Health Programs for Disease Control
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- Specific Disease Control- T.B, Polio, Measles, Hepatitis, HIV/AIDS
- General Disease Control- Malaria, Goiter
- High Risk groups – mothers, children, other special groups

SEE RELEVANT SECTIONS FOR DETAILS PLEASE

35.19 FIELD VISITS

35.19 FIELD VISITS

It is pre-planned, predetermined visit to a particular place/environment during which an ongoing activity is observed and studied.

Uses:

- To relate theory to real life problems
- To study something that cannot be brought into the classroom
- To demonstrate a course of action ‘in the field’ or in a work environment
- To talk to workers in their working environment
- To find out details of how things are done
- To study foreign culture or environments.

Advantages:

- Seeing is more meaningful than hearing or reading alone since it becomes easier to relate to the real-life situation
- A particular practice can be related to its environment
- A ‘team spirit’ can be fostered through participants becoming acquainted socially
- Usually more enjoyable than classroom learning
- Useful for competitive learning
- Each group prepares a report of field visit.

Limitations:

- Planning and organizing can be time consuming
- Travel and accommodation are costly
- Definite number of trainees is often difficult to estimate
- Tight schedules are hard to maintain
- Certain risks are always involved e.g., injuries or sickness.

Development of skills:

Helps in the development of following skill sets;

- Organizing
- Managerial
- Observational
- Communication
- Socializing
- Teamwork
- Reporting

Requirements:

- Definite starting time
- Detailed transport, accommodation and catering arrangements
- Maps, information handouts and a detailed program for each stop
- A final ‘get together’ to review the project.

Preparation and procedure:

- An organizer must plan the visit in detail and contact concerned persons
- Plan schedule, prepare maps and handout material (learning aids)
- Every member of the group must be well briefed on what they will see, the purpose of visit, what will be expected from them, the amount of spare time that will be available and the time of their return
- After each stop, trainees should meet to review what they have seen and its significance for them.
- A field visit report (written or verbal) may be required outlining the experience and observations of individuals or group

PROJECT MANAGEMENT:

Project assignment involves trainees in a task or project to complete and then evaluate the product completed. Products may be written, such as a booklet/pamphlet or unwritten such as preparing posters on education.

Examples

- Recording Research report
- Slide preparation
- Project reports
- Community service

Uses:

- Used to evaluate the competency performed over a period of time
- Used to assess the product

Advantages:

- Can be used to evaluate complex behaviours that requires considerable time to perform and are otherwise difficult to observe directly
- The product if static is available for careful assessment, over the time
- Asses the ability to work independently.
- Reflects ability to collect and synthesize real world data.

Limitations:

- Sometimes difficult to prevent cheating and plagiarism etc.
- Cannot assess the performance process itself, such as amount of outside assistance received or amount of time and effort consumed in producing product
- Developing standards for judging the quality of product may be difficult and applying these standards consistently may be time consuming.

35.20 GROUP COMMUNICATION FOR COMMUNITY ACTIVITIES

35.20 GROUP COMMUNICATION FOR COMMUNITY ACTIVITIES

It is face-to-face interaction between the provider and two or more persons as clients. Many fieldworkers are often faced with communication situations involving this mode of communication. Mastery of this mode of communication is as important as mastering one-on-one communication.

Group:

A group is composed of three or more individuals who have come together for a purpose or goal. The individuals in the group have a specific common interest, usually towards achieving a group goal. Each, however, may have different motives.

Advantages of a group communication:

- It can reach more individuals and couples.
- Information is more meaningful since it is personalized and drawn from concrete examples and experiences.
- It encourages exchange of ideas leading to sharing of experiences, clarification of attitudes, value preferences and experiences and correcting misconceptions.
- The data drawn from information and experiences shared by friends, neighbours, and relatives is more easily accepted or internalized and can encourage group members to act.
- Informal atmosphere and personal involvement increases enthusiasm and interest for the topic or messages.

Disadvantages of group approach:

In terms of counselling, the group approach would have its difficulties and limitations. For example, the varying opinions and values of individual members in a group will limit focusing on individual problems due to insufficient time, lack of interest or relevance to all group members. The disadvantages associated with a group situation can be minimized by limiting the size of the group.

Many types of group communication are in use like lecture, brainstorming with facilitator, panel discussion, meeting, debate, role play and Group Discussion and for each one of these there is a specific seating arrangement.

Group Facilitator:

A group facilitator is a catalyst, an arranger of experiences and not merely a giver of information. Thus, a critical key to her/his effectiveness is interaction. Each session conducted should be dynamic with positive experience i.e., one wherein participant leave with enthusiasm and interest.

Role and Responsibilities of a Group Facilitator:

Creating a warm emotional climate: Participants should feel free to:

- Openly share ideas, experiences, feelings, and concerns, without fear of judgment or breach of confidentiality.
- Actively dialogue and explore difference with co-participants and the facilitator.

Maintaining interest and intensifying feelings of personal involvement to:

- Make participants feel they have something valuable to contribute
- Relate discussions to participants life situation (i.e., needs, concerns, feelings)
- Adapt the level of discussion to participants' level of interest and understanding
- Simplify own language (i.e., avoid technical language or jargon and use examples that own participants can identify with
- Emphasize uniquely personal and subjective nature of discussion.
- Use a variety of techniques and materials to keep participants enthusiastic and actively involved.

Mediating and resolving conflicts or disagreements:

Disagreements, differing opinions or ideas are a natural part of group learning sessions. Considering the personalities in a group and participants' unique experiences and perceptions, conflicts cannot be avoided. However, they can be handled and put to good use.

An effective facilitator must be able to build on conflict, using it to further deepen the discussion and explore the various issues being discussed.

Thus, in the face of conflict, a facilitator must remain calm, and:

- Explore each side in depth and look for areas of agreement with differing sides
- Summarize and clarify the points and issues raised by different sides
- Identify areas of differences, and focus discussion on potential causes for differences
- Allow the participants to comment on the key points and issues
- Expand the discussion or original conflict area
- Where the issue cannot be resolved, discuss implications of different sides.

Supporting and encouraging participation:

The heart of group learning is interaction. Participants learn not so much by being told, but by gaining insight into themselves and the consequences of their attitudes and choices. To effectively do this, a facilitator must have:

An open and accepting attitude:

The facilitator must show respect and acceptance for each participant's attitudes, values,

beliefs, perceptions, and motivations. He must not judge them in terms of being right or wrong. Rather, the facilitator must tactfully explore, clarify and probe their attitudinal and perceptual roots (i.e., since when and why?) as well as to help the participants identify possible consequences of such attitudes and perceptions. An accepting attitude does not necessarily imply agreement, rather, it means recognizing the participant's right to his own way of thinking and believing. It also means having positive expectations that the participant is open, willing to listen and learn; and that his / her differing beliefs are a function of his being a unique individual. Thus, an idea no matter how insignificant should be reacted to as positively as possible. Behaviorally, this attitude is shown by:

- Encouraging participation
- Encouraging diversity of opinion.
- Showing appreciation for all types of contributions.
- Establishing a warm and relaxed atmosphere where participants feel they are accepted.
- Being patient and non-judgmental.
- Asking open-ended questions that evoke further discussion.
- Projecting non-verbal behavior consistent with all the above.
- The facilitator must avoid giving evaluative statements to participants (i.e.,
- Condemning, devaluating, moralizing, judging, (e.g., "That was a stupid thing to say", "You are wrong", "This is a ridiculous way to look at it", "You are not being cooperative", "How terrible") because it can be threatening to them and may cause them to withdraw, avoid participation and become defensive.
- Active and empathetic listening: This enables the facilitator to tune-in and discover
- each participant's own unique way of looking at reality, thinking, feeling and valuing
- Active listening is total listening, i.e., using one's eyes to observe non-verbal cues (e.g., tone of voice, gestures, facial expression) and using one's heart to feel and empathize with the persons' feelings and emotions.

PREPARATORY STAGES TO GROUP LEARNING ACTIVITIES

Assessing community / client needs:

- Meet with the community leaders to discuss what is intended to be done, ask for their support.
- Find out how many people are interested in taking part in the learning session or activity.
- Find out when and where the client group can attend.
- Find out what the client group considers as major concerns and problems.
- Find out what kind of activities the client group is engaged in.
- Find out what related activities the client group have previously taken part in.
- Find out the client group's major learning interests.

- Review basic information about the community (e.g., health, agriculture, education, transportation service available, nutritional habits, and sanitation practices).
- Plan the learning activity
- Decide on the learning group to be reached, how many, where and when.
- Define the specific objectives of the learning activity in terms of knowledge, attitudes, and skills and habits.
- Define the specific content that must be covered to meet the objectives.
- Decide on the group technique(s) to be used. Decide on ways to encourage the learners to contribute ideas and ask questions, e.g., to participate actively in the learning session.
- Plan and design materials.
- Decide what resources are needed to design the learning materials (e.g., artist, transport, clerical help, and materials).
- Get consultants or resource group to suggest improvements that could be made before moving ahead.
- Decide who will conduct the learning activity and who will help where, when, and how
- Decide for letting the learners know when and where the session will take place.
- Pre-test the materials and practice using the learning activities.

Finalizing the Discussion Plan

- Decide effective, provocative and innovative ways of introducing and terminating the topics or sessions.
- Prepare details of key points, questions to be raised, ways to encourage participation, compile stories or anecdotes.
- Schedule for effective utilization of time and coverage of the selected topic.
- Anticipate various situations that may arise.

Preparing Oneself

- Find out more about participants (i.e., background, interest, needs, concerns RH / FP attitudes, experiences, expectations).
- Be thoroughly familiar with the topics and content area, module sequence, teaching methods and key messages.

Facilities

- Arrange the room and seating positions to allow for maximum interaction, and for members to face each other with minimum effort.
- Ensure adequate facilities and equipment (blackboard, chalk, eraser, films and flipcharts).

During the Discussion:

- Start or provoke people to think.
- Awaken or stimulate interest; find out what previous knowledge of the subject members may have.
- Keep the discussions moving.
- Keep the discussion on the subject or bring it back to the subject.
- Recall a 'wandering' mind.
- Stop private conversations.
- Prevent monopolization by one member.
- Draw out members' experiences which may be relevant and helpful.
- Get each member to hear a range of opinions, all different from his / her own.
- Put a "difficult" member in his / her place.
- Highlight important aspects of the subjects.
- Check on the group understandings on the subject matter. Closing the Discussion:
- Highlight major points of discussion and points of agreements.
- Help participants to synthesize personal learning.
- Pose questions for reflection and unresolved issues.
- Invite participants to the next session.

Guidelines for Facilitating an Effective Group Discussion

Group Discussion is a good way to:

- Give information to more than one client at a time.
- Help clients share their own experiences and support one another in their decisions.
- Learn about client's concerns and ideas.
- Answer questions some clients may be too shy to ask.

Location and Arrangement:

- Choose a quiet place with enough space. Avoid places where many people are coming and going.
- Limit groups to 10 or fewer if possible.
- Seat group members in a circle and sit with them.

Orientation and Introduction:

- Introduce yourself and explain the subject of the discussion.
- Help group members feel at ease. This may be done by playing a short game or by

asking group members to introduce themselves.

- Start the discussion by presenting a clear outline of the content of the discussion. For example, if the purpose of the discussion is to talk about family planning methods, begin by briefly describing the methods.

During the discussion:

- Encourage full and active participation from everyone by:
- Calling on people by name (not volunteers) to avoid the same people always answering and to limit participation by known" monopolizes".
- Drawing out quiet or shy members.
- Keeping yourself in the background and refraining from dominating.
- Ask group members to tell their own experiences related to the discussion topic.
- Keep the discussion on track by:
- Making notes, avoiding simultaneous speakers and tactfully deferring issues not related to the discussion topic.
- Telling or illustrating from concrete events, situations, statistics, and statements.
- Using questions to direct and stimulate discussions. Take note of verbal and non-verbal feedback of the group and adjust the flow of discussions accordingly.
- Using flipcharts, flashcards or writing-boards or showing samples to help the Learning process.
- When asking and answering questions:
- If your question does not bring results, rephrase it. Encourage group members to talk to each other about the answer.
- Encourage group members to ask questions. Respond to questions where appropriate.

At the end of the discussion

- Summarize the principal issues, concerns, and key messages.
- Highlight common experiences and feelings.

AUMMARY OF POINTS TO MAKE A GROUP COMMUNICATION EFFECTIVE

1 Commnd attention through completeness.

- Provide all necessary information.
- Do not hide facts.
- Answer all questions.
- Give extra information where required.

2 Cater to the heart and the head through conciseness.

- Cater to feelings & needs.
- Include only relevant material.
- Avoid unnecessary repetition.
- Use the right level of language.

3 Clarify the message (clarity)

- Choose precise, concrete, and familiar words.
- Construct effective sentences and paragraphs.
- Meaning should be easily understandable.

4 Communicate a benefit for consideration.

- Focus on ‘You’ Instead of ‘I ’ or ‘We’
- Highlight a Benefit or show interest in a particular activity.
- Emphasize positive, pleasant facts.

5 Create trust through courtesy.

- Provide Correct and Accurate Facts & Figures.
- Be Tactful, Thoughtful, and Appreciative.
- Use Expressions that show respect & sincerity.
- Choose Non-discriminatory Expressions.

6 Convey a consistent message (consistency)

- Design a clear and precise message.
- Convey benefits on compliance.
- Give a persistent message.
- Do not use contradictory statements in a health message.

7 Call for action

- Provide logic.
- Recall Benefits
- Encourage for actions considering benefits.
- Warn of consequences if timely action is not taken.
- Reach an agreement

35.21 LINKAGES AND REFERRAL PATHWAYS

35.21 LINKAGES and REFERRAL PATHWAYS

Are crucial for making health improvements in a community. The FWWs and the FWCs need to be supported by the RTIs as well as the district hospitals. The latter should strive to create a welcoming environment for women, communities and providers from peripheral health units. It should support the worthy efforts of other providers and work with them to correct deficiencies.

When dealing with other providers, doctors and midwives at the district hospital should:

- encourage and thank providers who refer patients, especially in the presence of the woman and her family
- offer clinical guidance and corrective suggestions in private, to maintain the provider's credibility in the community
- involve the provider (to an appropriate extent) in the continued care of the woman.

When dealing with the community, doctors and midwives at the district hospital should:

- invite members of the community to be part of the district hospital or health development committee
- identify key persons in the community and invite them into the facility to learn about its role and function, as well as its constraints and limitations
- create opportunities for the community to view the district hospital as a wellness facility (e.g., through vaccination campaigns and screening programs).

MEETING THE NEEDS OF WOMEN

To enhance its appeal to women and the community, the district hospital should be willing to examine its own service delivery practices. The facility should create a culturally sensitive and comfortable environment which:

- respects the woman's modesty and privacy.
- welcomes family members.
- provides a comfortable place for the woman and/or her newborn (e.g., lower delivery bed, warm and clean room).

With careful planning, the facility can create this environment without interfering with its ability to respond to complications or emergencies.

Improving referral patterns

Each woman who is referred to the district hospital should be given a standard referral slip containing the following information:

- general patient information (name, age, address)
- obstetrical history (parity, gestational age, complications in the antenatal period)
- relevant past obstetrical complications (previous caesarean section, postpartum haemorrhage)

- the specific problem for which she was referred.
- treatments applied thus far and the results of those treatments.
- The referral slip should also include the outcome of the referral
- The referral slip should be sent back to the referring facility with the woman or the person who brought her. Both the district hospital and the referring facility should keep a record of all referrals as a quality assurance mechanism:
- Referring facilities can assess the success and appropriateness of their referrals.
- The district hospital can review the records for patterns indicating that a provider or facility needs additional technical support or training.

PROVIDING TRAINING AND SUPPORTIVE SUPERVISION

District hospitals should offer clinical training for peripheral providers that is high-quality and **participatory**. Participatory training is skill- focused and is more effective than classroom-based training because it:

- improves the relationship between providers at the district hospital and the auxiliary and multipurpose workers from peripheral units.
- increases the familiarity of the peripheral providers with the clinical care provided at the district hospital.
- promotes team building and facilitates supervision of health workers once they return to their community to implement the skills they have learned.

35.22 COMMUNITY PROFILE

35.22 Community Profile

It is a description of a community that includes basic information about that community such as landmarks, population, language, cultural activities, staple foods, and other resources. Put together in one document, this information is called a community profile.

The main features described in a typical community profile include:

- Name of community
- Name of sub-district in which community is located

Mapping

- Mapping is a process of drawing or creating a visual representation of an area with a specific aim in mind e.g., distribution of health facilities.
- What is a community map? A community map is a drawing or a visual representation of a specific community, which indicates the distribution of health facilities and other landmarks.
- What can a CHO use a map for?
- Estimate the number of people or households in the community
- Learn about the presence and location of resources
- Identify which resources are important to different community groups e.g. men might focus on farming while women might focus on trading and commercial activities
- Establish dialogue among different community groups
- Learn about general community problems including health and hygiene
- Learn about specific characteristics of community members

Facilitator introduces the topic and leads a discussion on:

What a community register is

- The importance of a community register
- Types of information needed to prepare a community register
- Use of a community register in planning
- How often the community register should be updated

What is a community register?

1. It is a record of the characteristics of individual members of the community and a summary of basic demographic information about community members

2. Importance of community registers

- It serves as a tool for effective planning
- It keeps track of migration in and out of the community

- It helps to determine the immunization status of women and children
- It determines the contraceptive status of women and men

3. Types of information needed to prepare a community register
    - Household identification particulars
    - Particulars of household members
    - Particulars of birth and nationality
    - Immunization, disability, literacy records
    - Occupation and particulars of death

4. How often should a community register be updated?
    - A register should be updated regularly to show new events e.g., a birth, death or when vaccination is given

5. How can a community register be used in planning?
    - community register can be used to determine the:
    - Amount of logistics e.g., vaccines and FP commodities to request in a month
    - Number of households in an area to be visited daily
    - Types of health education methods to be used and topics to address

Module V

THE NEW BORN

An Essential Element of Universal Health Coverage

World Health Organization