Combined Oral Contraceptive Pills

Mode of Action

The combined pills contain both oestrogen and progestin. They act in the following ways:

- Inhibit ovulation.
- Thicken cervical mucus.
- Make the endometrium less suitable for implantation.

There is no evidence of a harmful effect if an unsuspecting pregnant woman inadvertently uses OCPs; nevertheless, a woman should be given OCPs only when it is reasonably certain she is not pregnant.

Effectiveness

Effectiveness Depends on the User

- Risk of pregnancy is greatest when a woman starts a new pill pack after the prescribed time, or misses three or more pills.
- As commonly used, about 8 pregnancies occur per 100 women using COCs over the first year. This means that 92 of every 100 women using COCs will not become pregnant.
- When pills are taken regularly, less than 1 pregnancy occurs per 100 women using COCs over the first year.

Advantages

- Very effective when used correctly.
- No need to do anything at the time of sexual intercourse.
- Increased sexual enjoyment because no need to worry about pregnancy.
- Monthly periods are regular with lighter monthly bleeding and fewer days of bleeding.
- Can be used as long as a woman wants to prevent pregnancy.
- No rest period needed.
- Can be used at any age from adolescence to menopause.

- Can be used by women who have children and by nulliparous women.
- User can stop taking pills at any time.
- Fertility returns soon after stopping.
- Can be used as an emergency contraceptive after unprotected sex.
- Can prevent or decrease iron deficiency anaemia.
- Help prevent:
  - Ectopic pregnancies
  - Endometrial cancer
  - Ovarian cancer
  - Ovarian cysts
  - Pelvic inflammatory disease (PID)
  - Benign breast disease
- Reduce:
  - Menstrual cramps
  - Menstrual bleeding problems
  - Ovulation pain
  - Symptoms of polycystic ovarian syndrome (irregular bleeding, acne, excess hair on face or body)
  - Symptoms of endometriosis (pelvic pain, irregular bleeding)

Limitations

Common side effects (not signs of sickness):

- Nausea (most common in first 3 months).
- Spotting or bleeding between menstrual periods, especially if a woman forgets to take her pills or takes them late (most common in first 3 months).
- Mild headaches.
- Breast tenderness.
- Slight weight gain.
- Amenorrhoea (some women see amenorrhoea as an advantage).
- Not highly effective unless taken every day. Difficult for some women to remember every day.
- New packet of pills must be at hand every 28 days.
- In a few women, may cause mood changes including depression and less interest in sex.

- Very rarely can cause stroke, blood clots in deep veins of the legs, or heart attack. Those at highest risk are women with high blood pressure and women who are aged 35 or older and at the same time smoke 15 or more cigarettes per day.
- Do not protect against sexually transmitted infections (STIs), including HIV.

Client Assessment as per World Health Organization Medical Eligibility Criteria for Combined Oral Contraceptive Pills
Ask the client the following questions about known medical conditions. Examinations and tests are not necessary. If she answers "no" to all of the questions, then she can start COCs if she wants. If she answers "yes" to a question, follow the instructions. In some cases she can still start COCs. These questions also apply for the combined patch and the combined vaginal ring. 1. Is the client breastfeeding a baby younger than 6 months old? If fully or nearly fully breastfeeding: Give her COCs and tell her to start taking them 6 months after giving birth or when breast milk is no longer the baby's main food—whichever comes first. If partially breastfeeding: She can start COCs as soon as 6 weeks after childbirth. 2. Has the client had a baby in the last 3 weeks but she is not breastfeeding? Give her COCs now and tell her to start taking them 3 weeks after childbirth. 3. Does the client smoke cigarettes? If she is 35 years of age or older and smokes, do not provide COCs. Convince her to stop smoking and help her choose another method. 4. Does the client have cirrhosis of the liver, a liver infection, or liver tumour? (Are her eyes or skin unusually yellow? [Signs of jaundice]) Has she ever had jaundice when using COCs? If she reports serious active liver disease (jaundice, active hepatitis, mild or severe cirrhosis, liver tumours) or ever had jaundice while using COCs, do not provide COCs. Help her choose a method without hormones. 5. Does the client have high blood pressure? If blood pressure cannot be checked and she reports a history of high blood pressure or if she is being treated for high blood pressure, do not provide COCs. Refer her for a blood pressure check if possible or help her choose a method without oestrogen. Check blood pressure if possible: If her blood pressure is below 140/90 mm Hg, provide COCs. If her systolic blood pressure is 140 mm Hg or higher or diastolic blood pressure is 90 or higher, do not provide COCs. Help her choose a method without oestrogen, but not progestin-only injectables if systolic blood pressure is 160 or higher or diastolic pressure is 100 or higher. (One blood pressure reading in the range of 140–159/90–99 mm Hg is not enough to diagnose high blood pressure. Give her a backup method to use until she can return for another blood pressure check, or help her choose another method now if she prefers. If her blood pressure at next check is below 140/90, she can use COCs.) 6. Has the client had diabetes for more than 20 years or damage to her blood vessels, vision, kidneys, or nervous system caused by diabetes? Do not provide COCs. Help her choose a method without oestrogen but not progestin-only injectables.

Client Assessment as per World Health Organization Medical Eligibility Criteria for Combined Oral Contraceptive Pills
7. Does the client have gall bladder disease now or is she taking medication for gall bladder disease? Do not provide COCs. Help her choose another method, but not the combined patch or combined vaginal ring. 8. Has the client ever had a stroke, blood clot in her legs or lungs, heart attack, or other serious heart problems? If she reports heart attack, heart disease, or stroke, do not provide COCs. Help her choose a method without oestrogen, but not progestin-only injectables. If she reports a current blood clot in the deep veins of the legs or lungs (not superficial clots), help her choose a method without hormones. 9. Does the client have or has she ever had breast cancer? Do not provide COCs. Help her choose a method without hormones. 10. Does the client sometimes see a bright area of lost vision in the eye before a very bad headache (migraine aura)? Does she get throbbing, severe headaches, and often on one side of the head, which can last from a few hours to several days and can cause nausea or vomiting (migraine headaches)? Such headaches are often made worse by light, noise, or moving about. If she has migraine aura or migraine headaches without aura and is age 35 or older, do not provide COCs. Help these clients choose a method without oestrogen. If she is under 35 and has migraine headaches without aura, she can use COCs. 11. Is the client taking medications for seizures or taking rifampicin for tuberculosis or other medicine? If she is taking barbiturates, carbamazepine, oxcarbazepine, phenytoin, primidone, topiramate, or rifampicin, do not provide COCs. They can make COCs less effective. Help her choose another method, but not progestin-only pills or implants. 12. Is the client planning major surgery that will keep her from walking for 1 week or more? If so, she can start COCs 2 weeks after the surgery. Until she can start COCs, she should use a backup method. 13. Does the client have conditions that could increase her chances of heart disease (coronary artery disease) or stroke, such as older age, smoking, high blood pressure, or diabetes? Do not provide COCs. Help her choose a method without oestrogen but not progestin-only injectables.

Indications

- Have or have not had children
- Are fat or thin
- Are any age, including adolescents and over 40 (except clients who smoke and are above 35 years of age)
- Smoke cigarettes but are below 35 years of age

- Have just had an abortion or miscarriage
- Heavy, painful menstrual periods or iron deficiency anaemia (condition may improve)
- Irregular menstrual periods
- Benign breast disease
- Diabetes without vascular, kidney, eye, or nerve disease
- Mild headaches
- Varicose veins
- Malaria
- Thyroid disease
- Pelvic inflammatory disease (PID)
- Endometriosis
- Benign ovarian tumours
- Uterine fibroids
- Past ectopic pregnancy
- Tuberculosis (unless taking rifampicin)

Method of Use

Starting Time

- Any of the first 5 days after menstrual bleeding starts, if she has a normal cycle. The first day of menstrual bleeding may be easiest to remember.
- Any other time it is reasonably certain that she is not pregnant. If more than 5 days since menstrual bleeding started, she can begin COCs but should avoid sex or also use condoms or spermicide for the next 7 days. Her usual bleeding pattern may change temporarily.
- When switching from injectables or implants, she can start COCs immediately if it is reasonably certain she is not pregnant. No need to wait for a first period after using injectables or implants.
- After she stops breastfeeding or 6 months after childbirth, whichever comes first.
- Three to 6 weeks after childbirth if she is not breastfeeding. No need to wait for menstrual periods to return to be certain that she is not pregnant.
- Six weeks or more after childbirth if she is partially breastfeeding, or any time it is reasonably certain that she is not pregnant. If not reasonably certain, she should avoid sex or use condoms or spermicide until her first period starts, and then begin COCs.
- In the first 7 days after first- or second- trimester miscarriage or abortion. Later, at any time it is reasonably certain that she is not pregnant.

Oral Contraceptive Pills

Technique

28-pill packet (containing 21 white [active] and seven brown [placebo]):

- Start the white pills within the first 5 days of the menstrual cycle.
- If not menstruating, start the pills on the same day and keep taking one pill every day until finishing all of the white pills, but use a backup method for the first 7 days of taking the pills.
- Start the brown pills immediately after finishing the white pills and continue taking one pill every day for 7 days.
- Menses usually starts 2–3 days after starting the brown pills.
- After finishing the seven brown pills, start the new packet of 28 pills (it does not matter if bleeding continues). 21-pill packet (containing 21 white pills):

- Start the pills within the first 5 days of the menstrual cycle.
- If not menstruating, start taking the pill and keep taking one pill every day until finishing all of the pills, but use a backup method for the first 7 days of taking the pills.
- After finishing the pills, do not take any pills for the next 7 days.
- Menses usually starts 2–3 days after the pills are finished.
- After a 7-day period of no pills, start the new packet of 21 pills.

Missed Pills

Instructions If a Woman Forgets to Take a Pill or Pills

- Take a missed hormonal pill (white) as soon as possible.
- Keep taking pills as usual, one each day. (She may take two pills at the same time or on the same day.) Missed one or two pills? Started a new pack 1 or 2 days late?

- Take a hormonal pill as soon as possible.
- There is little or no risk of pregnancy. Missed three or more pills in the first or second week? Started a new pack 3 or more days late?

- Take a hormonal pill as soon as possible.
- Use a backup method for the next 7 days.
- Also, if she had sex in the past 5 days, she should consider using emergency contraceptive pills (ECPs).

Missed three or more pills in the third week?

- Take a hormonal pill as soon as possible.
- Finish all hormonal pills in the pack. Throw away the seven non-hormonal pills in a 28-pill pack.
- Start a new pack the next day.
- Use a backup method for the next 7 days.
- Also, if she had sex in the past 5 days, she should consider using ECPs.

Missed any non-hormonal pills (brown pills)? (Last seven pills in 28-pill pack)

- Discard the missed non-hormonal pill(s).
- Keep taking COCs, one each day, and start the new pack as usual.

Severe vomiting or diarrhoea?

- If she vomits within 2 hours after taking a pill, she should take another pill from her pack as soon as possible, and then keep taking pills as usual.
- If she has vomiting or diarrhoea for more than 2 days, follow instructions for missed pills, above.

Side Effects and Management

Most women tolerate COCs very well. However, a number of women may have side effects, especially in the first few months of taking the pill.

Table 8-1. Combined Oral Contraceptive Pills: Side Effects and Their Management

Side Effect	Management
Dizziness or nausea	• Make sure she is taking the pill at bed time. • She should take the pill with meals and not on an empty stomach. • Check for pregnancy; if no cause is found, reassure the client.
Vomiting	
• Once or twice during the day	• If she vomits within 2 hours of taking the pill, ask her to take an extra pill from another packet. • Make sure she is taking the pill just before going to bed and with food.
• More than twice a day	Pills should be stopped; inform her that withdrawal bleeding will occur. Change over to another suitable contraceptive method of her choice.
Severe diarrhoea	If she has diarrhoea for more than 2 days, follow instructions for missed pills as mentioned above.
More than 24 hours of tenderness or fullness of the breast	• Follow the instructions for missed pills. – Examine breasts for lump. – If none, reassure the client. – Prescribe a mild analgesic (paracetamol), if necessary

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Side Effect	Management
Weight gain	
• Less than 2 kg in months	Ask if her appetite has increased, and if so, ask her to decrease food intake, especially of fats and sweets.
• More than 2 kg in 3 months	Stop pills; provide another suitable contraceptive method.
Spotting or irregular bleeding	
• If due to STI or PID	Continue treatment and COCs.
• Within 3 months of starting the pills	• Reassure the client that it is transitory. • Ask if she has been forgetting to take pills. If so, ask her to be regular and take the pill at the same time each day. • For temporary relief, give: – Tab. ibuprofen 800 mg TDS (max) after meals for 5 days, or – Tab. Ponstan, 2xTDS, beginning when irregular bleeding starts.
• After 3 months of starting the pills	If this persists despite the client being regular in taking pills, then stop pills and give a backup method and watch/investigate. If no problem, reassure and provide another suitable contraceptive method.
Amenorrhoea	• Check for pregnancy. • If negative, reassure and give oral pills with higher dose of hormones. • If amenorrhoea persists (after changing pills) for more than 3 months, stop pills and give another suitable contraceptive method.
Rise in BP (above 140/90)	Advise her to come to the clinic for a regular check of BP on three visits, 1 week apart. If high BP persists, stop pills and give another suitable method and refer.
Severe migraine Rare side effects **Acne**	If it develops while using COCs, stop the pills. Give her another suitable contraceptive method.
• Mild acne	• Avoid use of creams containing lanolin. • Ask her to keep the skin clean. • Avoid fatty food.
• Severe acne	Stop pills. Give another suitable contraceptive method.
Pigmentation of skin (especially of face)	• Stop pills. • Give another suitable contraceptive method.
Generalized loss of hair	• Avoid use of creams containing mercury. • Ask if this followed after the start of pills; if so, stop pills and give another suitable contraceptive method.
Depression or irritability	If confirmed to have happened after starting the pills, stop pills, and give another suitable contraceptive method.
Loss of sexual desire	If confirmed to have happened after starting pills: • Rule out local infections as a cause. • Stop pills, and give another suitable contraceptive method.

Counselling

A woman who chooses low-dose COCs can benefit from good counselling. A friendly provider who listens to a woman's concerns, answers her questions, and gives clear, practical information about side effects and advice about their proper use will help the woman use COCs with success and satisfaction.

The health care provider should follow these steps to provide COCs:

- Show her which kind of pill packet you are giving her, 21 pills or 28 pills.
- Tell her about the advantages and limitations.
- Inform her about the common side effects and what to do.
- Give her a sufficient number of pill packets, depending on her need. Running out of pills is a major reason for unintended pregnancies.
- Explain how to use COCs and what to do if she misses pills.
- ⑩ If possible, give her condoms or spermicide to use:
  - Until she can start taking her pills (if needed).
  - If she starts a packet of pills late, if she forgets several pills in a row, or if she stops taking oral contraceptives for any reason.
  - If she or her spouse is at risk of HIV/AIDS or any other STI, show her how to use condoms.
- Plan a return visit in time to give her more pills before her supply runs out.
- Invite the client to come back to the clinic at any time if she has questions, problems, or wants another method.
- Ask her to repeat the most important instructions and, using the pill packet, show how she will take her pills.
- Ask her if she has any questions, fears, or concerns, and answer her concerns respectfully and caringly.
- For any unscheduled visit, ask her to bring the packet in use with her.

Follow-Up

The follow-up care and support of the client is very important for continued use of OCPs. The health care provider has a responsibility to keep the client satisfied, in case she has side effects, by providing correct information and reassurance.

Explain Specific Reasons to See a Trained Health Care Provider

- Describe the symptoms of problems that require medical attention.
- Serious complications of pill use are rare. Still, a client should see a doctor or return to the clinic if she has questions, or problems that may be symptoms of a serious problem or warning signs.

Warning Signs

COCs may or may not cause these problems. But if any of the following occur, the client should immediately contact a trained provider:

A= Abdominal pain (severe) C= Chest pain (severe) with cough and shortness of breath H= Headache (severe) with dizziness and shortness of breath E= Eye problems (vision loss, blurring, or flashes of light) S= Severe leg pain (calf or thigh)

Helping Clients at Any Return Visit

At any return visit, ask the client:

- If she has any questions or anything to discuss.
- About her experience with the method, whether she is satisfied, and whether she has any problems. Give her any information or help that she needs and invite her to return again any time she has questions or concerns. If she has problems that cannot be resolved, help her choose another method.
- ⑩ If she has had any health problems since her last visit, and assess the following:
  - Check blood pressure once a year if possible.
  - Ask if she has developed high blood pressure, heart disease due to blocked arteries, stroke, breast cancer, active liver disease, or gall bladder disease, or she is taking medicines for seizures, rifampicin, or griseofulvin. If appropriate, help her choose another method.
  - Ask if she has developed very bad headaches. If appropriate, help her choose another suitable method.

Plan for Her Next Visit

If she has not developed any condition, that means she can use COCs; provide more supplies if needed. Plan for her next visit before she needs more pills.

Minimum Record

Maintain the following record for follow-up of the client:

- Daily register.
- Client record card.
- ⑩ Client card, to be given to the client with information such as:
  - Name, age, and registration number
  - Type of COCs given
  - Date for follow-up visit
- Update records at each visit including details of complaints, side effects, and treatment given.