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10 EMERGENCY CONTRACEPTION

1 Introduction

Emergency contraception refers to the type of contraception that is used as an emergency procedure to prevent unintended pregnancy following an unprotected act of sexual intercourse.

Emergency contraception is sometimes referred to as the “morning-after pill” or “post-coital contraception”. This terminology can be confusing since the contraceptive is not necessarily a pill and can be used within 5 days after unprotected intercourse and not merely the morning after. The term “emergency contraception” is also preferred because it conveys a sense of urgency.

Since the mid-1960s, the postcoital use of certain orally administered steroid hormones has been shown to be effective in preventing pregnancy. In addition, the copper-releasing IUDs are also highly effective for emergency contraception.

1.1 General Indications

Emergency contraception is meant to be used following an unprotected act of sexual intercourse. For example:

- When no contraceptive has been used.
- When there has been a contraceptive accident or misuse:
 - Three or more combined oral contraceptive pills missed in consecutive days.
 - One progestogen-only contraceptive pill taken 3 or more hours late.
 - Condom rupture or slippage.
 - Diaphragm dislodgement or early removal.
 - Failed coitus interruptus (e.g. ejaculation in vagina or on external genitalia).
 - Miscalculation of the safe period when using a fertility awareness-based method.
 - IUD expulsion.
- When the woman has been a victim of sexual assault.

1.2 Types of emergency contraception

The following methods can be used for emergency contraception:

- *Emergency contraceptive pills (ECPs)*: progestogen-only or combined oestrogen/progestogen oral contraceptives.
- *Copper-releasing IUDs*.

2 Emergency Contraceptive Pills (ECPs)

2.1 ECP regimens

Progestogen-only pills

The most convenient regimen is a single dose consisting of 1.5 mg levonorgestrel taken as soon as possible after unprotected intercourse; alternatively, one dose of 0.75 mg levonorgestrel can be taken as soon as possible after unprotected intercourse followed by a same dose taken 12 hours later.

For both regimens, the sooner they are taken after unprotected intercourse, the more effective they are. They are most effective if taken within 3 days (or 72 hours). However, new evidence shows that there is still some effect up to 5 days after unprotected intercourse.

Where pills containing 0.75 mg levonorgestrel are not available, levonorgestrel pills, each containing 0.03 mg used for regular contraception (mini-Pill), are being used instead. Twenty-five of these mini pills should be taken initially, to be repeated 12 hours later. *(There is a possibility that absorption of the hormone may be less when the dose is taken in a large number of pills).*

Combined pills

Combined oestrogen/progestogen pills, containing ethinyl oestradiol and levonorgestrel, can be taken in a regimen known as the "Yuzpe method".

When pills containing 50 µg ethinyl oestradiol and 0.25 mg levonorgestrel are available:

- 2 pills should be taken as the first dose as soon as convenient but no later than 72 hours after unprotected intercourse. These should be followed by another 2 pills 12 hours later.

When only pills containing 30 µg ethinyl oestradiol and 0.15 mg levonorgestrel are available:

- 4 pills should be taken as the first dose as soon as convenient but no later than 72 hours after unprotected intercourse. These should be followed by another 4 pills 12 hours later.

For information on brand names of pills containing this formulation that are available in specific countries, see IPPF's *Directory of Hormonal Contraceptive* at IPPF web page: www.ippf.org

Mode of action

Hormonal emergency contraception achieves its contraceptive effect by several mechanisms depending on the time in a woman's cycle it is taken. It can inhibit or delay ovulation and may also interact with ovum and sperm transport, and fertilization. Studies differ on whether hormonal emergency contraception can cause changes in the endometrium that would be sufficient to interfere with implantation. There is no evidence that hormonal emergency contraception dislodges the embryo after implantation has occurred. Hormonal emergency contraception does not cause an abortion.

2.2 Efficacy

The progestogen-only regimen reduces the risk of pregnancy after a single act of sexual intercourse by about 60%-93% and the combined regimen by about 56%-89% if taken within 72 hours. This means that if a woman has an 8% probability of pregnancy after unprotected intercourse, these regimens would reduce that probability to about 1% or 2% respectively. The efficacy is better the sooner the method is used after sex.

2.3 Side-Effects

- *Nausea*: occurs in about 50% of clients using combined ECPs, but it does not usually last more than 24 hours. Nausea occurs in approximately 20% of women using progestogen-only ECPs.
- *Vomiting*: occurs in about 20% of clients using combined ECPs and 5% of women using the progestogen-only ECPs. When the combined regimen is used, anti-emetic pre-treatment may be considered; with the levonorgestrel-only regimen this is unnecessary.

If vomiting occurs within one hour after taking a dose, it is common practice to repeat the dose. However, there is no evidence that this improves efficacy; indeed, vomiting can be an indication that the hormone has been absorbed.

In case of vomiting, further pills may be administered vaginally. Although there are no clinical data supporting the efficacy of this practice, contraceptive steroid hormones are known to be readily absorbed from the vagina.

- *Irregular uterine bleeding*: some women may experience spotting after taking ECPs. The majority of women will have their menstrual period on time or early; if there is a delay of more than 1 week, the possibility of pregnancy should be excluded.
- *Other side-effects*: breast tenderness, headache, fatigue, abdominal pain and dizziness.

2.4 Indications

See section 1.1 of this chapter.

2.5 Medical eligibility criteria

No known contraindications exist to the use of hormonal emergency contraception. Although this method is not indicated for a woman with a known or suspected pregnancy, it will not affect the course of her pregnancy, or cause harm to the foetus if hormonal emergency contraception is used. There is no need for a physical examination before providing it.

Suspected pregnancy:

If a woman wants ECPs and you cannot rule out pregnancy with absolute certainty, it is permissible to give ECPs if you explain to the client that she

could already be pregnant, in which case the regimen will not be effective.

Because the dose of hormones used in emergency contraception is small and the pills are given for a short time, the medical eligibility criteria for continuous use of combined oral contraceptives and progestogen-only pills do not apply.

Drug interactions:

Women should be advised that effectiveness of ECPs may be reduced if they are taking drugs which reduce the efficacy of regular oral contraceptives (including but not limited to rifampin, griseofulvin, barbiturates). At the current time there is insufficient information on the possible interaction of hormonal emergency contraception with other drugs to make any specific recommendations on increasing ECP dosing schedules.

2.6 Who can provide ECPs?

Doctors, nurses, midwives, other clinical personnel, pharmacists and community health workers who have been properly trained may provide ECPs, in accordance with local laws and regulations.

All ECP providers should receive appropriate training and follow clear service guidelines. When emergency contraceptive pills are provided through non-clinic outlets, the providers must have access to referral facilities for those cases where it may be required (e.g. if more than 72 hours have elapsed since the act of intercourse and hormonal emergency contraception is no longer the first choice).

When ECPs are available through pharmacies, adequate client information should be ensured.

2.7 Counselling and information

Counsel clients in a private and friendly environment. Reassure them about absolute confidentiality. This should extend to young people. Be as supportive as possible and refrain from making judgemental comments or indicating disapproval through body language or facial expressions. In situations where it is difficult to maintain privacy (e.g. in pharmacies), give the method to the client with appropriate instructions for using it, and advise her to attend a clinic or contact a health care/family planning provider for counselling on regular contraception.

Counselling on emergency contraception

Counselling on emergency contraception should be responsive to the client's concerns and circumstances. Some clients may not wish to discuss their decision for requesting emergency contraception. In this case, clients should be given the method with appropriate instructions for using it and encouraged to return at a convenient time for counselling on the use of regular contraception. Some issues which clients may wish to discuss include:

- Mode of action (some clients may need reassurance that emergency contraception is not an abortion).
- Emergency contraception options.
- Possibility that the emergency contraceptive may fail.

Inform the client that the use of emergency contraceptive pills cannot protect them from the possibility of pregnancy if unprotected intercourse occurs later in the cycle.

Advise that emergency contraception does not protect against sexually transmitted infections (STIs), including HIV, and that unprotected sex may have exposed her to this risk. After assessment of the risk of exposure to a STI, a woman should be counselled and offered services as appropriate.

Advise the client who takes ECP that, if they have intercourse in the same cycle after ECP have been taken, a risk of pregnancy still exists, particularly since the method sometimes alters the timing of ovulation. They should use a method of contraception (e.g. condoms) for the rest of the cycle after taking emergency contraception.

Counselling on regular contraception

Whenever possible, clients seeking emergency contraception should be offered counselling on regular contraception. Contraceptive counselling should not be a prerequisite for providing emergency contraception but should be given whenever it is requested or accepted by the client.

- Find out the current method of contraception, if any.
- If the reason for requesting emergency contraception is an accident or misuse of the regular contraceptive method, discuss with the client how to prevent that situation in the future.
- Discuss future contraception in an empathetic way (see section 2.11).

2.8 Health Assessment

Exclude the possibility that the client may be pregnant by:

- Assessing the date of the last menstrual period and whether it was normal.
- Assessing the date and time of the last episode of unprotected intercourse.
- Establishing whether any other act of unprotected intercourse has occurred earlier in the cycle.

Other health assessment (e.g. pelvic exam, laboratory tests) is not required.

2.9 Instructions to the client

Provide the method to the client with appropriate oral and written instructions for using it.

- Explain the correct use of the method (see section 2.1). Make sure the client understands when to take each dose of pills.
- Advise the client to drink milk or eat a snack with the pills to reduce nausea.
- Explain to the client that ECPs will not protect her from pregnancy if she engages in unprotected intercourse in the days or weeks following treatment. Advise her to use a barrier method until her next menstruation if she has sexual intercourse.
- Emphasize that ECPs are not suitable for regular contraception. Repeated use would result in a high risk of pregnancy and side-effects are common.
- Explain that after the use of ECPs most women will have the next menstrual period early or on time. If the menstrual period is delayed more than 1 week the possibility of pregnancy should be considered.
- Advise the client to come back or visit a referral clinic (as appropriate) if there is a delay in her menstruation of more than 1 week; if she has any reason for concern (e.g. lower abdominal pain, heavy bleeding); or as soon as possible after the onset of the menstrual period for contraceptive counselling.

2.10 Follow-up care

If the client has already adopted a method of contraception for regular use, no follow-up should be required in relation to the use of emergency contraception, unless she has a delay in her menstruation, suspects she may be pregnant or has other reasons for concern.

During the follow-up contact

- Record the client's menstrual data to verify that she is not pregnant. If in doubt, perform a pregnancy test (see chapter 11: Diagnosis of pregnancy).
- Discuss suitable contraceptive options (see section 2.11).
- If the woman wishes, provide a contraceptive method according to her choice .

ECP failure

- Advise the client on available options and let her decide which is most appropriate for her situation. Her decision should be respected and supported. Refer the client to other service providers as appropriate.
- If the client decides to continue the pregnancy, reassure her that there is no evidence of any teratogenic effect following ECP use.
- While ECPs are unlikely to increase a woman's overall risk of ectopic pregnancy, there may be a higher percentage of ectopic pregnancies among ECP failure cases than among the general pregnant population. Be certain to rule out the possibility of ectopic pregnancy in all cases of ECP failure.

2.11 Initiating regular contraception after ECP use

Condoms: can be used immediately.

Diaphragms: can be used immediately.

Oral contraceptives: There is no need to delay starting oral contraception until the onset of the next menstrual period – it can be started the day after the single or second dose of ECP is taken.

Injectables: the first injection can be given within 7 days of the beginning of the next menstrual cycle.

Subdermal implants: the implants can be inserted within 7 days of the beginning of the next menstrual cycle.

IUD: the IUD can be inserted during the next menstrual period. If the client intends to use an IUD as a long-term method and meets IUD screening criteria, emergency insertion of a copper-releasing IUD may be a convenient alternative to ECP use (see section 3).

Fertility awareness-based method: this method may be initiated at the next menstrual cycle if there are no bleeding irregularities. If this method is new to the woman, she should use another method of contraception (non-hormonal) while learning the technique.

Sterilization: the operation should be performed only after informed, free choice has been ensured. It is not recommended that clients make this decision under the stressful conditions that often surround ECP use.

3 Copper-Releasing IUDs

A copper-releasing IUD can be used within 5 days of unprotected intercourse as an emergency contraceptive. When the time of ovulation can be estimated, the IUD can be inserted beyond 5 days after intercourse, if necessary, as long as insertion does not occur more than 5 days after ovulation.

3.1 Efficacy

This method has been reported to be highly effective. After an act of unprotected sexual intercourse, less than 1% of women become pregnant if they use a copper-releasing IUD as an emergency contraceptive.

3.2 Indications

In addition to the indications stated in section 1.1 of this chapter, the IUD is especially indicated when:

- When the hormonal methods are less effective because more than 72 hours have elapsed.
- The client is considering using an IUD for continuous, long-term contraception.

3.3 Medical eligibility criteria

The eligibility criteria for regular use of IUDs generally apply to emergency use.

Category 4 (contraindications)

Do not advise the use of any IUD or provide it to women with:

- Known or suspected pregnancy.
- Puerperal or post-abortion sepsis current or within the last three months.
- Pelvic inflammatory disease (PID) current (if develops during IUD use becomes a category 2).
- Sexually transmitted infection (STI) current (refers to STIs that may produce cervical infection, chlamydia or gonorrhoea) (if these develop during IUD use becomes a category 2).
- Purulent cervicitis.
- Confirmed or suspected malignancy of the genital tract.
- Unexplained vaginal bleeding (suspicious for serious condition) (if develops during IUD use, becomes a category 2).
- Cervical cancer awaiting treatment (if develops during IUD use, becomes a category 2).
- Endometrial cancer (if develops during IUD use becomes a category 2).
- Congenital uterine abnormalities or benign tumours of the uterus (fibroids) which distort the cavity in a manner incompatible with proper IUD placement.
- Malignant gestational trophoblastic disease.
- Known pelvic tuberculosis (if develops during IUD use becomes a category 3).

For the levonorgestrel-releasing IUD, the following contraindication also applies:

- Current cancer of the breast.

Counsel any woman with any contraindication (other than pregnancy) about alternative methods of contraception (see also chapter 2: Counselling).

3.4 Special situations

Risk of STIs

For a woman without a clinically obvious gynaecological infection, but at high risk of STIs (e.g. multiple sexual partners), ECPs are a better option than an IUD. However, she can use an IUD for emergency contraception, but advise her to switch to another contraceptive method at the next menstrual period.

Rape

Insertion of an IUD may be emotionally traumatic for a woman who has been a victim of sexual abuse. There is also a possibility of STI/HIV transmission. Therefore, ECPs provision should be the first choice. However, an IUD may be provided on condition that women are appropriately counselled and STI/HIV risk properly assessed.

3.5 Who can provide IUDs?

Doctors, midwives, nurses and other health professionals who have been properly trained may insert IUDs, in accordance with the local laws and regulations.

3.6 Counselling and information

The general aspects of counselling described in section 2.7 of this chapter also apply to emergency use of an IUD.

When counselling on future contraception, discuss the possibility that the client may keep the IUD for continuous contraception. If she wants to continue using the IUD, see chapter 6 for further counselling points. If she does not want to continue using the IUD, tell her to return during or soon after her next menstrual period for removal.

3.7 Health assessment

Exclude the possibility that the client may be pregnant by:

- Assessing the date of the last menstrual period and whether it was normal.
- Assessing the date and time of the last episode of unprotected intercourse.
- Establishing whether any other act of unprotected intercourse has occurred earlier in the cycle.

- Performing a bimanual pelvic examination.

If after doing the above you are in doubt, perform a sensitive urine pregnancy test (see chapter 11: Diagnosis of pregnancy).

Record:

- Gynaecological history.
- Present illnesses, including history of STIs and risk factors for STI such as multiple sexual partners.

Perform a physical examination:

- Speculum visualization of cervix and bimanual pelvic examination.
- Any other examination as indicated by the medical history.

3.8 Insertion of the IUD

Insertion is the same as for continuous IUD use (see chapter 6: Intrauterine devices, section 10).

3.9 Instructions to the client

- Advise the client that cramping pain may occur for the first 24 to 48 hours after insertion of the device. If she experiences this she can take pain-relief tablets such as aspirin, ibuprofen or paracetamol.
- If the client does not plan to keep the IUD for continuous contraception, instruct her to come back during or soon after her next menstruation for removal of the IUD.
- If the client plans to keep the IUD for continuous contraception, advise her according to instructions provided in chapter 6: Intrauterine devices, section 11).

3.10 Follow-up care

Advise the client to return during or soon after the next menstrual period.

- If the client does not wish to keep the IUD, remove it and provide counselling on alternative contraceptive options and relevant services, as necessary.

- If the client wishes to keep the IUD for continuous contraception, check that the IUD is properly placed and provide information related to continuous use and follow-up (see chapter 6: Intrauterine devices, sections 11 and 12).

If the menstrual period is delayed after insertion of an IUD for emergency contraception, consider the possibility of pregnancy (see chapter 11: Diagnosis of pregnancy). If the client is pregnant, proceed according to guidelines in chapter 6, section 15.

3.11 Side-effects

Side-effects are the same as for continuous IUD use (see chapter 6, section 14). If the client does not keep the IUD for continuous contraception, any side-effect will usually disappear after the IUD is removed.

4 Service management

4.1 Advocacy

Those involved in SRH/family planning should advocate for the availability of emergency contraception. All efforts should be made to increase awareness among policy makers to gain their support. It is important to collaborate in this regard with women's organizations and sexual and reproductive health advocacy groups.

4.2 Providing information

People need to know about emergency contraception and how to obtain it, so that they can consider its use in the event of having had unprotected intercourse.

The lack of information on emergency contraception is not limited to potential users but also extends to health care and family planning providers. It is therefore important that sexual and reproductive health programmes develop strategies to:

- Address providers' concerns and attitudes.
- Increase providers' knowledge on methods available and their use by giving appropriate training.

- Develop awareness among potential users, including adolescents, by advertising the methods available for emergency contraception and where to obtain them. Information on emergency contraception should be included in sexual and reproductive health education provided at service delivery outlets and in communities.

4.3 Increasing accessibility

In order to make emergency contraception more accessible, sexual and reproductive health programmes should keep the following points in mind when offering emergency contraception:

- Provide an affordable service.
- Make the service available to all potential users who need it.
- Provide ECPs through clinical and non-clinical outlets to reach individuals who reside in outreach areas (e.g. rural) or who are too embarrassed to visit a clinic (e.g. single women, adolescents or victims of sexual assault).
- Maximise the use of emergency contraception by carefully studying existing restrictions on its use and removing unnecessary obstacles.

4.4 Service delivery outlets

Clinical outlets

- Sexual and reproductive health /family planning clinics.
- Other health care facilities.
- General practitioners/family doctors.

Non-clinical outlets

- *Community-based services (CBS)*: community-based services are a very practical approach for providing hormonal emergency contraception to individuals beyond the usual catchment area of the clinic. A referral system is needed for clients who contact the community worker 72 hours or more after unprotected intercourse as they may require insertion of a copper-releasing IUD or other sexual and reproductive health services including the diagnosis of pregnancy. Workers in clinical facilities that provide oral contraceptives should be prepared to offer

services to clients who are referred from the non-clinical CBS system. See chapter 5, section 4.1.

- *Commercial outlets:* commercial outlets such as pharmacies can be very useful in providing hormonal emergency contraception. These are easily accessible and service is fast. Pharmacies should be supplied with printed brochures providing detailed information on emergency hormonal contraception and staff should be trained. They should be able to refer clients to a clinical facility if they come 72 hours or more after unprotected intercourse and if other clinical care is required. Social marketing of pills specifically packaged for emergency contraception may be an effective way of making emergency contraception easily accessible.

Youth advisory centres

Emergency contraception is particularly important for adolescents, who are in the process of establishing their sexuality. Teenage pregnancy poses health risks and use of emergency contraception would reduce the number of teenage pregnancies. Young women may find it difficult to access relevant emergency contraception information and/or services because they:

- Are unaware of the availability of emergency contraception.
- Lack confidence or feel embarrassed to visit an SRH/ family planning clinic.
- Do not know where a service delivery site is located.
- Find the hours of the clinic inconvenient.
- Fear a pelvic examination, which is not a requirement for ECPs.
- Are concerned that providers will be judgemental.

Youth advisory centres could provide information on emergency contraception in their counselling sessions, and some centres, if necessary, may provide emergency hormonal contraception.

Teenagers are best helped by empathetic counselling, in confidence, and by helping them to have access to measures that will minimize risks.