Sometimes you do get a second chance: emergency contraception

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Abstract:
Emergency contraception (EC) provides a last chance to prevent pregnancy after unprotected sex, contraceptive failure, or sexual assault. There are 2 methods of EC available in India, oral hormonal methods also called the Emergency Contraceptive Pills (ECP) and post-coital insertion of a copper intrauterine device. Levonorgestrel, as an oral emergency contraceptive is available from the government hospitals and other government outlets. Since 2005 over-the-counter availability of the levonorgestrel pack has facilitated wider utilization of the method in India, especially in under-resourced settings where availability of doctors for prescribing the method is limited. An advanced supply of oral EC is supported by evidence, for women at high risk of unintended pregnancy, because it can increase timely access to EC. All providers who see women of reproductive age should be prepared to counsel, provide, and appropriately refer for EC.

Keywords: Emergency contraception, levonorgestrel, high risk.

Introduction
Emergency contraception (EC) provides a last chance to prevent pregnancy after unprotected sex, contraceptive failure, or sexual assault.

Unintended pregnancies are common even in developed countries. In the UK, as many as one third of all pregnancies are thought to be unintended, and over half of these end in termination. The US also reports high rates of unintended pregnancy and abortion: 45% of the 6.1 million pregnancies in the United States in 2011 were unintended. Emergency contraception (EC) gives women a second chance to prevent unintended pregnancy.

Unintended pregnancy rates are considered a key indicator of women’s autonomy and control over their reproductive lives and are used extensively in research, policy, and program planning.

EC is a form of birth control
The standard approach to unwanted pregnancy problem has always been primary prevention (contraception), backed up by induced abortion. However, for a long time, ‘contraception’ has generally been understood to mean only anticipatory contraception. The definition of the primary prevention of unintended pregnancy could and should be expanded to include post hoc contraception.

EC provides women with a means of reducing the risk of conception of an unintended pregnancy following UPSI. [UPSI = unprotected sexual intercourse (no contraception used or contraception used incorrectly)]
EC is the preferred term; other terms include ‘postcoital contraception’ and ‘the morning after pill’. EC is intended for occasional emergency use and should not be considered a substitute for effective regular contraception.

Definition
EC is defined as any drug or device used after intercourse to prevent unintended pregnancy when no contraceptive method has been used or following an error in contraceptive use. They are intended as a back-up for occasional use rather than a regular form of contraception.

To have the maximal efficacy it should be used as soon as possible after the unprotected intercourse and preferably within 72 hours.

There are 2 methods of EC available in India: oral hormonal methods (ECP=EC pills) and post-coital insertion of a copper intrauterine device.

When is EC indicated?
It is recommended that EC is considered for any woman who does not wish to conceive if there is a potential risk of pregnancy after UPSI.

Candidates for emergency contraception are women who have had recent unprotected intercourse (including sexual assault), or who have had a recent possible failure of another method of contraception, and who do not desire pregnancy.

These include not using any type of birth control when having sex, forgot to take birth control pills, partner's condom broke or slipped off during sex, were forced to have unprotected sex.

Ulipristal is an effective oral method, especially 72 to 120 hours after unprotected intercourse, but is not available in India as EC. Levonorgestrel alone is less effective than ulipristal, but is available from Govt Hospitals & can also be purchased over-the-counter. Levonorgestrel is more effective than the combination of estradiol plus levonorgestrel (Yuzpe regimen) and has a lower frequency of side effects.
Mechanism of action
ECPs do not interrupt an established pregnancy, defined by medical authorities such as the United States Food and Drug Administration/National Institutes of Health and the American College of Obstetricians and Gynecologists as beginning with implantation. Therefore, ECPs are not abortifacient.

Direct laboratory evidence overwhelmingly supports the hypothesis that oral EC works primarily by delaying ovulation. EC providers should understand that the available evidence suggests that oral EC administered after ovulation is ineffective.

Copper intrauterine contraception inhibits fertilization by affecting sperm viability and function. The Cu-IUD used for EC may prevent an oocyte from being fertilised if inserted before fertilisation has occurred but will also prevent implantation if it is inserted later. The copper IUD as an emergency contraceptive is effective up to five days after ovulation because of its post-fertilization effect.

The most effective method of EC, which also provides quick start of regular contraception, remains the copper IUD.

Effectiveness of EC
Is difficult to study. The overall pregnancy rate after use of a method of EC in a study reports the number of pregnancies that occurred after use of the EC as a percentage of the number of women who used the EC in the study. However, a significant number of the women studied would not have become pregnant in any case. Some studies assessing the effectiveness of EC in preventing pregnancy depend, therefore, on an estimation of the number of pregnancies that would have occurred without the EC intervention.

The way that the effectiveness of a method of EC is explained to an individual woman is extremely important. For example, if 1% of all women receiving a particular method of EC within 72 hours of UPSI at any time in the cycle become pregnant, the overall pregnancy rate is quoted as 1%. However, for a significant proportion of the women included in the study, UPSI would not have occurred during the fertile period and they would not have become pregnant in any case. The pregnancy rate if the EC method is used after UPSI during the fertile period would therefore be significantly higher than 1%. If an individual woman requests the method of EC after UPSI that has taken place just before her likely time of ovulation, it would be inappropriate to tell her that if she uses the method she has only a 1% chance of pregnancy.

For all ECPs, the risk of pregnancy is related to the cycle day of intercourse. Women who have intercourse the day before estimated day of ovulation have a fourfold increased risk of pregnancy compared with women having sex outside the fertile window. Time elapsed since intercourse (coitus-treatment interval) and further acts of intercourse during the same cycle in which EC was used are two other factors affecting the success of EC. It is suggested that EC may be less effective among obese women, though clinical data are sparse. In clinical practice EC however is offered, when indicated, without regard to day of the menstrual cycle due to uncertainty in timing of ovulation.

LNG-EC could be less effective in women weighing >70 kg or with a BMI >26 kg/m²: a double dose (3 mg) of LNG-EC can be used.

Providing oral hormonal (progestin-based) EC
Neither physical examination nor any laboratory tests are needed before providing oral hormonal (progestin-based) EC.

There are no medical contraindications to use of oral EC. A pregnancy test is not necessary before administering EC, unless pregnancy is suspected because of history, symptoms, or a missed or abnormal last menstrual period. Oral hormonal contraception will not interrupt an established pregnancy and has no known adverse effects on the pregnancy or fetus if administered inadvertently.

A routine follow-up office visit is not required after taking EC. Menstrual bleeding after oral hormonal EC typically occurs within one week of the expected time. A urinary pregnancy test should be performed if bleeding has not occurred within 3 weeks or if there is persistent vaginal bleeding or abdominal pain.

Any contraceptive method can be started immediately after the use of levonorgestrel or estrogen-progestin emergency contraception. In addition, barrier methods of contraception (e.g., condom) or abstinence are required during the first seven days of use of the started/resumed method.

The significant increased risk of pregnancy with further UPSI later in the cycle in which oral EC has been taken should be explained to women at the time that oral EC is first given. Clear advice regarding the need for effective ongoing contraception must be given. However, women do present requesting EC for further UPSI in the same cycle.

Repeated EC
If a woman has already taken LNG-EC once or more in a cycle, EC providers can offer her LNG-EC again after further UPSI in the same cycle.

Concerns about repeated use of hormonal EC as a primary contraceptive method include that repeated EC can be less effective, contains higher hormone levels per dose, and causes more menstrual irregularities than ongoing use of either combined or progestin-only oral contraceptives.

Repeated use of 1.5 mg levonorgestrel as a primary contraceptive method (the drug is taken on every day that sex occurs) is being evaluated as a contraceptive option, although there are not yet enough data to recommend this approach.

Since 2005 over-the-counter availability of the
levonorgestrel pack has facilitated wider utilization of the method in India, especially in under-resourced settings. where availability of doctors for prescribing the method is limited.16

National Family Welfare Program
In the National Programme ECP is now available free of cost from the government channels.16

Emergency Contraceptive Pill (ECP)

- In national program, EC pill contains only progesteron -Levonorgestrel (1.5 mg per tab) and available as free and ASHA supply (ezy-pill)
- To be taken immediately after unprotected/accidental intercourse or as soon as possible within next 3 days (72 hours)

ECP side effects
- Nausea, Vomiting, & Bleeding irregularity

Counselling
Counsel to choose a regular FP method
Most contraceptive methods can be started on the same day of ECP use
ECP does not protect from STI/HIV
ECP will not harm an existing pregnancy
Advise to return to health care provider, if her next monthly bleeding:
- Is very light (possible pregnancy)
- Period is delayed beyond one week of expected date
- Is unusually painful (possible ectopic pregnancy)

Advanced provision and counseling
An advanced supply of oral EC is supported by evidence, for women at high risk of unintended pregnancy, because it can increase timely access to EC

Conclusion
All providers who see women of reproductive age should be prepared to counsel, provide, and appropriately refer for EC.

References
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