



Position paper

Emergency Contraception for Adolescents and Young Adults: Guidance for Health Care Professionals



The Society for Adolescent Health and Medicine

Background

Statement of the problem

With improvements in the accessibility and range of contraceptive options available to female adolescents and young adult women, there have been dramatic declines in teen pregnancy, birth, and abortion rates in some parts of the world. However, many countries, especially developing countries, continue to struggle with high rates of unintended pregnancy. Although this has many causes, timely use of emergency contraception (EC) may be one tool that has the potential to prevent unintended pregnancies and abortions by decreasing the risk of pregnancy after unprotected or underprotected intercourse (referred herein as UPIC). The objective of this position paper is to provide updated information on EC, including new methods and limitations of methods discussed in the original position paper from 2004.

Brief history of emergency contraception

In the 1960s, EC consisted of regimens containing high-dose oral estrogen [1]. These were supplanted in the 1970s by a two-dose oral regimen combining estrogen and progestin (Yuzpe method) and the copper intrauterine device (IUD) [2,3]. High-dose levonorgestrel and the antiprogestin mifepristone were later developed and found to be effective methods of EC. However, the Yuzpe method remained the most commonly used method worldwide until the 21st century. Subsequently, single-dose levonorgestrel products became the mainstay of EC treatment in most countries because of higher efficacy and fewer side effects. In 2009, the antiprogestin ulipristal acetate (UPA) became available for EC in Europe, with access expanding into many countries since then.

Despite well-proven safety and effectiveness, global access to EC continues to vary with local political and religious conventions. Although EC is only effective before implantation (the medical definition of pregnancy), many people continue to conceptualize and discuss EC as an abortifacient. And in many locations, access to oral EC medication continues to be limited by

financial, knowledge, and other barriers. Other methods of EC are provider dependent due to need for prescription or insertion, thus further restricting access. Nonetheless, EC, and oral levonorgestrel in particular, is now more widely available to women of all ages throughout the world.

Emergency contraceptive options, efficacy, and mechanism of action

EC can be placed (IUD) or ingested (pills) after UPIC to significantly reduce the risk of unintended pregnancy. The copper IUD is the most effective option for EC with a pregnancy (failure) rate of .09% after insertion [4]. UPA and mifepristone are the most effective oral EC medications with pregnancy (failure) rates ranging from .9%–2.1% [5]. Levonorgestrel is less effective than UPA and mifepristone with pregnancy (failure) rates ranging from .6%–3.1%; however, levonorgestrel is more effective than the Yuzpe regimen [5]. All EC methods should be ingested (or placed) as soon as possible after UPIC [5].

Nonhormonal EC—The copper IUD. The copper IUD is the only nonhormonal form of EC. Although standard guidance is to place the IUD within 5–7 days of UPIC or up to 5 days after ovulation, one study suggested that the copper IUD may be inserted at almost any point in the menstrual cycle, after a negative urine pregnancy test, with a very low risk of pregnancy [6]. The copper IUD's primary mechanism of action is an inhibitory effect of copper ions on sperm that prevents fertilization. In addition, endometrial receptivity is adversely affected. This additional effect, not seen with hormonal EC, appears to increase the efficacy of the method. After placement for EC, the copper IUD may remain in the uterus to provide at least 10 years of highly effective ongoing contraception. Female adolescents and young adult women are appropriate candidates for IUDs, even if they have never been pregnant or had a child. There are very few contraindications to using the copper IUD for EC (current pregnancy, pelvic inflammatory disease, copper allergy, or uterine anomalies). Risks of infection, expulsion, or perforation associated with copper IUD insertion or ongoing use are also low [7]. Research to evaluate the effectiveness of hormonal IUDs for EC is needed; however their use for EC is not recommended at this time.

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Hormonal EC. UPA, a selective progesterone receptor modulator, is the newest and most effective oral EC product that is currently available in 79 countries. The recommended dose is 30 mg ingested orally as soon as possible after UPIC. UPA is effective up to 5 days after UPIC and does not decline in efficacy over time. UPA works by preventing or delaying ovulation and only works up until ovulation [5,7].

Mifepristone is an oral antiprogestone that is very effective for EC but only available for this indication in a few countries. It can be ingested in an intermediate (25–50 mg) or low dose (<25 mg) formulation and, similar to UPA, is effective up to 5 days after UPIC and does not decline in efficacy over time. Mifepristone works by preventing or delaying ovulation in a dose-dependent fashion; it may also affect endometrial development when used after ovulation [8]. There is often confusion about mifepristone's use as EC because it can also be used as part of a medical abortion regimen in much higher doses (600 mg). This is an important differentiation to make when educating patients about this medication.

Levonorgestrel, a progestin, is the most widely available form of EC worldwide and is available over-the-counter (OTC) in many countries. The recommended dose is 1.5 mg ingested as soon as possible after UPIC. Although levonorgestrel is clinically useful up to 5 days (120 hours) after UPIC, its efficacy may decline over this time. Levonorgestrel works by preventing or delaying ovulation and works only up until the luteinizing hormone surge [8].

The Yuzpe method (a combination of estrogen and progestin, commonly delivered using combined oral contraceptive pills) is the least effective EC method with the most side effects and should not be offered as first line unless there are no other available or acceptable options [5].

Contraindications to oral EC medications (levonorgestrel, UPA, and mifepristone) are limited to ongoing pregnancy, hypersensitivity to any product component (which is rare), undiagnosed and medically concerning abnormal vaginal bleeding, and chronic adrenal failure (for mifepristone only).

Effect of weight on emergency contraception efficacy

Although efficacy of all types of oral EC medications is reduced in obese women [9], obesity is not a contraindication for use of oral EC medications. The failure rate for levonorgestrel (5.8%) is greater than for UPA (2.6%) in obese women [9]. Data suggest that levonorgestrel becomes less effective for women with body mass indexes (BMIs) > 25 and ineffective for women with BMIs > 30, whereas UPA becomes less effective for women with BMIs > 30 and ineffective for women with BMIs > 35 [9]. In contrast, the efficacy of the copper IUD for EC is not affected by weight. Nevertheless, if a copper IUD is not available or acceptable to a woman needing EC, UPA is a better option than levonorgestrel for overweight and obese women [9]. There are no data on the variability of mifepristone efficacy by weight.

Efficacy and drug interactions

Although there are very limited data on interaction of oral EC medications with other drugs, interactions may be similar to those with oral contraceptive pills [10]. The copper IUD is the only method of EC not affected by drug interactions.

Positions and Recommendations

Emergency contraception in clinical settings

Timely and confidential access to EC can be facilitated in clinical settings by reducing unnecessary system-based barriers (such as requiring pregnancy or sexually transmitted infection [STI] testing or cervical cancer screening) and encouraging health care providers to become competent and comfortable discussing EC with adolescents and young adults of all genders [11]. Providers should review relevant regional and international guidelines and be familiar with all available EC options and their efficacy in reducing the unintended pregnancy risk. This includes knowledge of the superior effectiveness of the copper IUD for EC, as well as the reduction of efficacy for oral EC medication in overweight and obese women. When discussing EC with patients, it is helpful to begin with the most efficacious methods and to take menstrual cycle timing, weight, cost, and time since last UPIC into consideration.

Advanced prescription or provision of emergency contraception

Numerous national and international professional organizations, including the World Health Organization, the Society for Adolescent Health and Medicine, and the International Federation of Gynecology and Obstetrics, recommend advanced prescription or direct provision of EC to increase the likelihood and timeliness of use after an episode of UPIC [12]. In countries where oral EC medications are OTC, written prescriptions may help defray cost if medications are covered by insurance and can help ensure that patients get the correct medication. There is no evidence that female adolescents or young adult women are more likely to have UPIC after receiving advance EC provision [12].

Provision in emergency department settings

Sexual assault is commonly assessed in the emergency department. Pregnancy risk may be overlooked in the setting of this emotional and physical trauma. EC offers an important intervention to decrease the risk of unintended pregnancy in these situations.

Emergency contraception access and advocacy

To use EC, patients need to know about it and have access to it. Although awareness of EC is high in the United States and in many European countries (89% of reproductive-aged French women know of the method), there is great variability in knowledge and use of EC in other regions [13,14]. One study found <3% of sexually active women (ages 15–49) had ever used EC in 80% of the 45 countries studied [13]. In 2007, the International Consortium for Emergency Contraception found that awareness of EC ranged from 6% among married women in Indonesia to a high of 35% among married women in Ghana, however, <1%–3% of women reported that they had actually used EC [14]. There is also clear variability in EC access across different regions of the world. International data on EC medication availability can be found on the International Consortium for Emergency Contraception website (<http://www.cecinfo.org/country-by-country-information/status-availability-database>).

In the United States, health care providers (including pharmacists) and patients continue to have misconceptions and

inadequate information about EC which negatively impacts access and use [15]. Educators, school-based health providers, and other adolescent health providers should be a resource for proactively providing medically accurate information. Although current US regulations allow oral levonorgestrel EC to be sold OTC to individuals of any age or gender, one access study found that only 50% of pharmacies stock it on the shelves. Of these, 66% locked the medication in a portable box or in a fixed case requiring store employee assistance to access the medication; this may produce negative social interactions, stigma, or unwanted attention [16].

Cost is also a key barrier for female adolescents and young adult women who need and want EC. One reason that pharmacies cite for locking up EC is that it is a high-cost item [16]. Adolescent health care providers should urge pharmaceutical companies to set affordable pricing and charge reasonable fees for pharmacist counseling so that cost is not a barrier. It is currently projected that as generic forms of oral EC medication come to market, cost will continue to be a significant issue for young people (\$30–\$50 in the United States). Another challenge to timely access to EC is pharmacies not maintaining an adequate supply of the medication or only stocking one type of oral EC medication. Large retail pharmacy chains should be encouraged to keep all approved forms of oral EC medication in stock [16].

EC is a vital component of comprehensive reproductive health care, enabling women of all ages to decrease the risk of an unwanted pregnancy after assault or contraceptive failure or nonuse. Virtually all healthy female adolescents and young adult women can safely use EC. The combined efforts of clinicians, pharmacists, educators, and legislators are necessary to increase awareness, access, and use of EC for female adolescents and young women. Such work has the potential to decrease the consequences of unintended pregnancies throughout the world.

Society for Adolescent Health and Medicine Recommendations for Emergency Contraception in Clinical Settings

- Health care providers should be knowledgeable about all EC methods and are encouraged to provide confidential counseling for all adolescents and young adults of all genders about EC during visits for acute as well as routine health care.
- All health care providers should be able to counsel about the very high efficacy of the copper IUD for EC. Those who do not place IUDs should consider establishing collaborative relationships with clinicians who are available to insert copper IUDs in a timely manner and also provide or prescribe oral EC medication at the time of referral. Screening for STIs should not delay IUD placement.
- Women seeking EC should be counseled that the efficacy of the copper IUD is not affected by weight.
- Women seeking EC should be educated that oral EC medication may be less effective or ineffective in women who are overweight or obese and should be made aware of the most effective EC medication available to them.
- EC should be offered during routine and preventive visits, as an advance prescription or preferably medication to take home, for use in a timely fashion if needed.

- EC should be offered, and preferably provided, whenever UPIC is reported within the past 120 hours (5 days). The effectiveness of levonorgestrel likely wanes 3 days after UPIC, so other more effective options should be considered if EC medication is needed in this time frame.
- Provision of oral EC medication should not be contingent on female adolescents or young adult women receiving pregnancy or STI testing, cervical cancer screening, or pelvic examination.
- All female adolescents being treated for sexual assault in emergency department or other health care settings should be counseled and offered EC at the time of assessment.

Society for Adolescent Health and Medicine Recommendations for Emergency Contraception Access and Advocacy

- To reduce barriers to EC access, Society for Adolescent Health and Medicine strongly supports efforts to change the labeling and status of all oral EC medication (both levonorgestrel and UPA) from prescription only to OTC, without age or gender restrictions.
- Health care providers are encouraged to explore circumstances affecting EC access with patients, including financial and transportation issues, confidentiality, and prescription or OTC access and other barriers associated with access.
- Health care providers and pharmacies are encouraged to establish written protocols and to follow the relevant laws to avoid barriers for adolescents and young adults obtaining oral EC medication, irrespective of the individual health care provider's or organization's attitudes and/or beliefs.
- Health care providers and their professional organizations should develop and disseminate medically accurate and age-appropriate educational materials about EC and advocate for distribution of these materials by state and local departments of health.
- Teachers and schools are urged to disseminate medically accurate and age-appropriate materials about EC via their comprehensive health and sexuality curricula including electronically accessible information.
- Health care providers, adolescents, and other concerned parties should advocate for parity of insurance coverage and affordability of all contraceptive methods, including all options for EC, to improve access and reduce health disparities.
- Health care providers, family planning groups, and other concerned parties should advocate for EC to be added to the commodities list for family planning in other countries, along with patient education to improve access and reduce health disparities abroad.
- All pharmacies should routinely stock a sufficient supply of multiple oral EC medications to insure timely access.

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