Knowledge and Attitudes About Emergency Contraception Among Health Workers in Ho Chi Minh City, Vietnam

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In a series of focus groups and in-depth interviews, physicians, midwives and other family planning providers in Ho Chi Minh City, Vietnam, were questioned about their knowledge and attitudes regarding use of three methods of emergency contraception—the Yuzpe regimen, a levonorgestrel-only regimen and postcoital insertion of a copper-bearing IUD. Most providers were familiar with the concept of emergency contraception and endorsed its practice, but lacked accurate and detailed information about method use. They also overestimated contraindications and potential side effects. Providers advocated for additional training for themselves and for druggists, who provide these methods over the counter. Participants generally agreed about the need for more empirical information about the safety and efficacy of these methods, but disagreed about the degree to which emergency methods should be made readily available to women in Vietnam.

Emergency contraceptives, sometimes referred to as “morning after” methods, are used to prevent pregnancy after unprotected intercourse. They are traditionally known as a treatment for women who have been raped. Recently, however, several international health advocacy groups have called for expanded access to these methods. Emergency contraceptives are typically less effective than other methods, but they are invaluable for a woman who has experienced a contraceptive failure, as well as for those occasions when she has not used a method. Additionally, by lowering the probability of unwanted pregnancy, emergency contraceptives can decrease the need for abortion.

The best-studied emergency method is the “Yuzpe” regimen, which consists of 200 mcg of ethinyl estradiol and either 0.5 mg of norgestrel or 1.0 mg of levonorgestrel—the same active ingredients found in four tablets of combined estrogen-progestin oral contraceptives. In this regimen, a woman takes half of the dose within 72 hours after unprotected intercourse, and the remainder 12 hours later. Efficacy studies estimate that the Yuzpe regimen reduces the probability of pregnancy by at least 75%.

A levonorgestrel-only regimen also has been found to be highly effective for emergency contraception: Two 0.75 mg doses are taken 12 hours apart; the first dose must be initiated within 48 hours of unprotected intercourse. The most recent trial of this method indicated a 70% reduction in the risk of pregnancy.

Regardless of the regimen selected, the opportunity to initiate emergency contraceptive treatment is brief. Therefore, women should know about these methods and have them on hand before the need arises. Several of these methods are available through standard family planning services, it may be lack of information that prevents women from using these regimens. Health care workers can help remedy this situation: If providers are knowledgeable about emergency contraceptives, they can routinely educate women about their use.

Few studies have assessed providers’ knowledge and perceptions of emergency contraceptives, and none have done so in developing countries, where the consequences of unwanted pregnancy are particularly serious and the need for these methods is greatest.

Vietnam has a high rate of unwanted fertility and, in 1992, had an estimated total abortion rate of 2.5 abortions per woman, the highest in Asia. Accordingly, the Vietnamese government has made reducing the number of unwanted pregnancies a priority. The government is committed to an active family planning policy and has taken measures to make available a broader range of contraceptive methods.

Increasing the availability of emergency contraceptive methods would further the objectives of these family planning initiatives. The hormonal pills required for the Yuzpe and levonorgestrel-only regimens are already available in Vietnam; combined oral contraceptives, including several brands suitable for emergency use, can be purchased over the counter, and Postinor is sold in most pharmacies.

To determine the steps that should be taken to encourage the use of these methods, we enlisted family planning providers for participation in a series of focus groups and in-depth interviews. Although historically used for market research, focus groups are increasingly considered a legitimate and critical method of research in the health field, as the technique allows for exploration of a relatively unknown topic. By fostering interaction among a group of participants, focus groups encourage dialogue and an exchange of ideas and perspectives. For this reason, they are useful for generating public and private discourse on a specific topic.

The goals of our work were broader than pure research; we also sought to build research capacity and increase knowledge of emergency contraception at the local level. In addition to gathering data, we used the project to train researchers in qualitative data techniques, and we used the focus groups to impart basic information about emergency contraception to the...
participating health care workers.

In this article, we report on focus groups and in-depth interviews conducted between December 1995 and March 1996 to explore knowledge of and attitudes about three available forms of emergency contraception—the Yuzpe regimen, the levonorgestrel-only regimen and postcoital IUD insertion—among family planning providers in Ho Chi Minh City.

Methods
The research took place at tertiary and district-level hospitals belonging to the Maternal and Child Health and Family Planning (MCH/FP) network, a group of 18 hospitals in and around Ho Chi Minh City that work closely together on research and training. Nine locations considered to be broadly representative of the geographic makeup of the network were selected as recruitment sites. A total of 10 focus groups were conducted. In addition, nine in-depth interviews were conducted with individuals drawn from the pool of focus-group participants.

Participants were recruited from among the family planning staffs at each site; in some instances, a site’s entire staff took part. Approximately two-thirds of the 99 participants were medical doctors, and slightly fewer than one-third were nurses or midwives. Three participants were physician’s assistants. For the most part, the participants were equally distributed across three types of sites: city or tertiary hospitals, urban district hospitals and suburban district hospitals. Participants were not selected based on interest in or knowledge of emergency contraception.

Ten district-level doctors from the MCH/FP network moderated the focus groups and conducted the individual interviews. Prior to the study, these doctors received one week of training in qualitative methods and in emergency contraception; they worked in pairs when conducting the focus groups and the interviews, with one doctor moderating or interviewing and the other taking notes and operating the tape recorder. Doctors never moderated groups composed of staff from their own facilities.

The moderators followed a locally developed and pretested guide made up of a series of open-ended questions addressing knowledge of and attitudes about emergency contraceptives in Vietnam. The guide was written in English, translated into Vietnamese, backtranslated into English to ensure accuracy and then pretested in two pilot groups. (A copy of the guide in English or Vietnamese is available from the authors.) Data from the initial pretest group were discarded because the group served chiefly as a training exercise. Data from the second pilot group were combined with data from the main study, since no significant modifications to the guide were made following this pretest.

The focus groups were conducted in three separate segments. First, moderators inquired about participants’ knowledge of emergency contraceptives, asking questions about appropriate use, side effects and contraindications. They then conducted a short, scripted intervention to inform participants about emergency contraceptive methods, thus allowing participants to develop a common knowledge. Finally, the moderators led a discussion of the providers’ attitudes toward the availability and distribution of emergency contraceptives, as well as potential restrictions on the provision and use of these methods.

Moderators summarized the participants’ responses periodically during the course of the discussions in order to prompt discussion to clarify or restate their ideas. The moderators were also instructed to wait until the intervention section of the focus group before answering questions or providing participants with information about the basics of emergency contraception. In a few instances, however, the moderators deviated from this instruction.

In all cases, the results from the individual interviews closely mirrored the information gathered from the focus groups; therefore, we do not present results separately for the interviews. In this article, statements presented in quotation marks are not direct quotes but rather are translated reconstructions of the participants’ words based on notes taken during focus groups and interviews.

Results
Knowledge of Emergency Methods
In general, respondents were not familiar with the term “emergency contraception,” although many providers knew the concept, and some could cite examples of emergency regimens. With the exception of providers from one rural site, participants in all of the groups had heard of or used Postinor. Participants at seven of the sites were familiar with some version of the Yuzpe regimen, and the providers from an equal number of sites knew about the emergency use of IUDs. Providers who knew about emergency contraception typically had learned about the methods either through a seminar or during medical school.

Surprisingly, participants in half of the focus groups mentioned vaginal douching as an effective emergency contraceptive. In only one group was this assertion rebutted. Participants in three groups thought that spermicidal jelly doubled as an emergency contraceptive, and those in two groups mentioned traditional remedies, including “can ich mau” (an herbal remedy for delayed menses) and drinking large quantities of coconut juice. On rare occasions, other postcoital methods were suggested, including intramuscular prostaglandin, the contraceptive injectable, cervical caps and Rigevidon (a low-dose combined oral contraceptive). Mifepristone (known to participants as RU-486) was also mentioned on two occasions, but in one instance its use as an emergency method was clearly confused with its use as an abortifacient.

Although participants in most groups knew something about the three main methods of emergency contraception, there were many providers who had never heard of any of the regimens. Several remarked that they do not routinely see emergency contraceptives being used in their hospitals:

“No doctor prescribes it in the hospital, so midwives do not know it well.”—Midwife, tertiary hospital.

Those who had some awareness of emergency contraception were often misinformed. The levonorgestrel-only method, for example, was prescribed in a variety of regimens:

“I prescribe Postinor, one pill per day or one pill every other day.”—Medical doctor, tertiary hospital.

Moreover, the interval between repeat doses varied from six hours to 12 hours, and the time limit for starting the regimen was reported as anywhere from one hour to 48 hours following unprotected intercourse:

“I think that the first Postinor pill can be used within 72 hours after intercourse; the later women take it, the better it prevents pregnancy.”—Medical doctor, suburban district hospital.

The relatively complex Yuzpe regimen also baffled many providers. Several had detailed, accurate information and knew, for instance, that the number of tablets per dose must be increased when low-estrogen formulations are used. Other providers maintained that a dose containing twice the actual regimen was correct, and one provider recommended taking 1–2 tablets per day for five days.

Providers were also unclear about the...
recommended interval between doses, as well as the maximum length of time following intercourse that a woman could begin the regimen; for example, several providers reported unnecessarily strict limits of 48 or even 24 hours. Only a few knew the correct method for postcoital IUD use, and several believed the device should always be removed 48 hours after serving its emergency function.

Few providers had accurate, detailed information about side effects and contraindications. They typically overestimated the incidence and severity of side effects. Dangers including endometrial cancer and chloasma (facial skin discoloration) were incorrectly cited as risks associated with emergency contraceptive use.

Similarly, providers tended toward excessive caution regarding contraindications. Virtually all participants offering opinions mentioned unnecessary contraindications, often specifying those associated with regular oral contraceptive use. Providers mistakenly cited hypertension, goiters, cardiovascular disorders and uterine tumors as contraindications to the use of emergency contraception.

**Need for Information**
The discussants repeatedly expressed frustration regarding the dearth of dependable information on emergency contraception in Vietnam. Some felt hesitant about promoting these methods in the absence of widely publicized research findings:

“I think we should have careful research about it first. I cannot accept it if you just introduce it, but don’t have any outcomes of careful research.”—Midwife, urban district hospital.

“All methods that don’t affect a patient’s health and can prevent pregnancy should be publicized, but I think that health providers should know thoroughly the advantages, disadvantages and effects of emergency contraception before deciding whether to publicize it.”—Medical doctor, urban district hospital.

There were also forceful appeals for accurate information about the proper use of emergency contraceptives and about the mechanisms of action of the various regimens. The participants were adamant in calling for training as a prerequisite to providing appropriate treatment of complications and side effects associated with the methods. These concerns were particularly salient since emergency contraceptive supplies are already available over the counter, and providers feared that women might use these methods on their own and then present at the hospital or clinic reporting difficulties:

“Many patients buy Postinor at pharmacies, and take it by themselves. When they have side effect and complications, at that time they come to the hospital. So I think that we should instruct them carefully how to use Postinor.”—Midwife, tertiary hospital.

Many discussants insisted that patients also be educated about these methods so that women could make informed decisions about their reproductive health care:

“Any method has advantages and disadvantages. Using it correctly, based on good knowledge, proves useful. Otherwise, it is harmful. Therefore, I think that we should train health providers first, and then teach women in the society so they can know this method.”—Medical doctor, urban district hospital.

Several providers, however, noted that the intervention component of the focus group itself provided valuable information, and they intended to put the new knowledge to use:

“Why do we prescribe only two Postinor pills instead of four? In the past, I thought that it was necessary to use four pills. From this focus-group discussion, I know that two pills are enough. I will practice this way, and after I have gained some experience, I will share my comments on this practice.”—Medical doctor, tertiary hospital.

**Support for Emergency Contraception**
While some providers were cautious in their support of emergency contraceptives—desiring more information, believing the side effects too severe or feeling the efficacy of the methods to be too dubious—most participants endorsed the use of these methods. Emergency method use was defended wholeheartedly for rape victims, for sexually active unmarried adolescents, for women not in a permanent union or women having infrequent intercourse, and for perimenopausal women. Providers also supported the use of emergency contraceptives as a back-up if a woman doubted the efficacy of her regular method. Some suburban providers, however, did not support the use of emergency methods; they feared that their use would hinder progress toward meeting sterilization targets.

Providers who supported increased use of and access to emergency methods argued that they were invaluable to women because they reduced the need for surgical abortion:

“If we supply information soon and advise women to use the drug early, the efficacy will be high, and women can avoid menstrual regulation and curettage.”—Physician’s assistant, tertiary hospital.

These sentiments were linked to the belief that sexual mores in Vietnam have grown more liberal:

“Providing emergency methods broadly is suitable to society now because so many young people have intercourse so soon, and they fear pregnancy very much. Now we perform menstrual regulation so broadly. Why don’t we also do that with emergency contraception to reduce the total number of menstrual regulations in the society?”—Medical doctor, urban district hospital.

A small minority of providers argued that there is no real need for emergency contraception in Vietnam, since the majority of women seeking these methods are not likely to become pregnant even without their use. They argued that because abortion is so easy to obtain, women might as well wait to see if they did become pregnant and seek an abortion at that time.

Support for emergency contraceptives varied somewhat by regimen. Given their familiarity with the levonorgestrel-only regimen, it was not surprising that providers preferred it. Opposition to the postcoital insertion of the IUD was vehement in some cases. Providers were concerned about the possibility of ectopic pregnancy, the high risk of expulsion, abnormal bleeding and the difficulties of inserting an IUD in the absence of menstrual bleeding. Participants serving areas of lower socioeconomic status also noted that their patients’ poor hygiene practices deterred them from promoting the IUD as an emergency method.

Despite such occasional opposition, most providers generally agreed that emergency contraception was less burdensome psychologically, financially and physically than was abortion. Furthermore, they noted that the side effects, while of concern, were relatively simple to counteract or treat and tended to be short-lived compared with those associated with surgical abortion.

**Attitudes Toward Distribution**
While there was general consensus about the need for emergency contraception, providers differed in their beliefs about how these methods should be distributed. The majority of providers believed that distribution needed to be strictly controlled, and they voiced concern that pharmacists and other drug sellers lacked sufficient training to provide women with precise and correct instructions for use of these methods.
Many providers feared that expanded access to emergency contraception would lead to excessive use of these methods and that such widespread availability would increase the likelihood of incorrect use. A few participants suggested that the sale of emergency contraceptives be restricted to health centers to ensure that patients received the correct information on dosage, timing for initiation and expected side effects. The majority of providers, however, believed that requiring a prescription from a physician would offer sufficient control.

By contrast, other participants worried that women who lack access to health facilities would not be able to obtain emergency contraceptives if distribution were limited, and they appealed for wider availability of these methods through pharmacies. Providers advocating such availability did insist that pharmacists and other drug sellers dispensing emergency contraception receive training on these methods: “We should teach basic knowledge about emergency contraception to drug sellers. Women often hesitate to come to doctors. In most cases, they go to the pharmacies and get wrong information.” —Medical doctor, urban district hospital.

Some providers also argued for routinely dispensing emergency contraceptives in advance to women for home use. They noted that having emergency contraceptives at home was convenient for women and would ensure that the regimens were initiated within the required time period. Others feared that such expanded access would lead patients to substitute emergency methods for other forms of contraception, and insisted on clinical regulation.

Beliefs about the home use of emergency methods varied according to the clientele that respondents served. A midwife serving rural and less-educated women suggested that emergency contraception was not suitable at all for women in her region:

“This way is suitable for intellectuals, but not for a rural population such as that of my district, so I do not want to use it here.” —Midwife, suburban district hospital.

Several discussants proposed a publicity campaign that would clearly distinguish emergency contraceptives from other methods, as a way to minimize overuse of emergency regimens and increase the ongoing use of reliable methods: “This is a new method, so we have to try to know, is it different from other regular contraceptive methods? We are afraid that people will trust it so much that they will not use classical methods: IUDs, sterilization, oral contraceptives and condoms”—Medical doctor, urban district hospital.

“This is a temporary method. If women have so many acts of intercourse a month, they should not use it. It should be used only after sudden and unprotected intercourse. It cannot replace regular contraceptive methods.” —Medical doctor, urban district hospital.

Regardless of their stance on the delivery and availability of emergency contraceptives, all providers emphasized the need for clear packaging instructions. Most felt that the availability of several oral contraceptives of varying dosages made it necessary that the pills needed for the Yuzpe regimen be packaged separately; women could not be expected to correctly self-administer the appropriate dosage from a complete cycle of oral contraceptives. Most providers did not feel that the modest price for a specifically packaged product would deter women in need of emergency contraception.

Discussion
Our findings suggest that providers in Ho Chi Minh City who become knowledgeable about and receive proper training in the use of emergency contraceptives will be ready to add them to the contraceptive method mix they offer to women. Because these methods are often available from pharmacists as well as from health care providers, however, druggists will also need training in order to ensure that women receive accurate information as to the proper use of these methods. Training in the use of emergency contraceptives should be integrated systematically into medical school curricula and included in continuing education seminars offered to practicing providers. Training should focus on the correct regimens of emergency contraception, as well as on the relative safety of these methods.

Unfamiliarity with the term “emergency contraception” may hinder efforts to expand access to these methods in Vietnam. Publicity campaigns need to link this term with the methods already known to at least some providers.

Lack of familiarity with oral contraceptives in general is another obstacle to their use as an emergency method. In part, this inexperience results from a family planning policy that, in the past, rewarded providers for offering highly effective provider-controlled methods such as sterilization and IUDs; the use of oral contraceptives as a safe and effective method was rarely promoted. Therefore, efforts at public education must link hormonal emergency methods with reassuring information about oral contraceptives in general.

Providers also believed that since emergency contraceptives are available over the counter, women would benefit if these supplies were specially packaged and marketed with clear, simple instructions in Vietnamese. Products currently available provide only sketchy instructions in English and describe ongoing postcoital contraceptive use rather than the correct emergency contraceptive regimen.

Providers expressed interest in research on emergency contraception that focused specifically on a Vietnamese population. Even providers willing to accept the safety and efficacy of the methods based on North American and European data stated that their comfort in prescribing the methods would increase if they had access to data based on Vietnamese women.

It is necessary to note one caveat about this investigation. Because we sought to build skills and enhance knowledge as well as to collect data, we encountered occasional methodological problems, and these form a potential weakness of our study. For example, the quality of the moderating conversations and note-taking varied among focus groups.

In conclusion, our research indicates that providers in Ho Chi Minh City are familiar with the idea of emergency contraception, although the name is new to them and they lack detailed information about proper use of the methods. Moreover, providers vastly overestimate the dangers and contraindications of emergency contraception. Despite their caution, providers generally agree that emergency contraception would be suitable for women in Vietnam, and they express support for offering the regimens.

References
guntó acerca de su conocimiento y actitudes con respecto a tres métodos de anticonceptivos de emergencia—el método Yuzpe, el tratamiento de uso exclusivo de levonorgestrel y el método de la inserción postcoito de un anillo de cobre DIU. La mayoría de los proveedores del servicio estaban familiarizados con el concepto de anticonceptivos de emergencia y apoyaron su práctica, aunque carecían de información exacta y detallada acerca del uso de estos métodos y sobrestimaban las contraindicaciones y los efectos secundarios potenciales de los mismos; tenían gran interés en recibir adiestramiento para mejorar sus habilidades y conocimientos en este campo. En general, los participantes estaban de acuerdo acerca de la necesidad de obtener más información empírica acerca de la seguridad y eficacia de estos métodos. Los avisos estaban más similares en la ciudad de Ho Chi Minh, Vietnam, se les pre-

Corrección
In “Knowledge and Attitudes About Emergency Contraception Among Health Workers in Ho Chi Minh City, Vietnam” [23:68–72], by Nguyen Thi Nhu Ngoc et al., the proportions of medical doctors and nurses or midwives who participated in the focus-group discussions (p. 69) were reversed. Approximately one-third of participants were doctors, and slightly fewer than two-thirds were nurses or midwives.