# Awareness and Perceptions of Emergency Contraceptive Pills Among Women in Kinshasa, Democratic Republic of the Congo

**CONTEXT:** Despite the commitment of the Democratic Republic of the Congo (DRC) to expand the family planning method mix and increase access to services, awareness of emergency contraception is low among women, and the method remains underused and poorly integrated in family planning programming.

**METHODS:** Data from 15 focus group discussions conducted in 2016 among women aged 15–35 were used to examine awareness and perceptions of, and attitudes toward, emergency contraceptives. After facilitators explained emergency contraceptive pills' mechanism of action and other characteristics, participants were asked about the potential benefits and risks of making the method more widely available. Transcripts were analyzed using an iterative approach.

**RESULTS:** Women reported employing a wide range of postcoital contraceptive behaviors, albeit often using inappropriate products, and generally agreed that emergency contraceptive pills seemed to be a potentially effective solution to their family planning needs. Perceived benefits and limitations of the method were almost always framed in reference to other, better-known contraceptives, and women expressed strong preferences for pharmacy-based provision that aligned with their usual behaviors for obtaining contraceptives. Participants were reluctant to see the method available for free.

**CONCLUSIONS:** Emergency contraceptive pills have the potential to address gaps in the family planning method mix in the DRC. Assessing whether women have incomplete or erroneous information about family planning methods can provide better understanding of women's contraceptive choices in low-income countries.

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The Democratic Republic of the Congo (DRC) has the second highest fertility rate in Sub-Saharan Africa (6.6 children per woman) and the second lowest modern contraceptive prevalence rate (only 8% of women aged 15-49 use a modern method).1 Although the prevalence of modern contraceptive use in the capital city of Kinshasa (24%) is higher than the national prevalence, the level of unmet need is high: Sixteen percent of all women and 26% of married women do not want to have a child in the next two years but are not using a contraceptive method. Moreover, 59% of women aged 15-49 report that their most recent birth was unintended.2 Data on abortion are almost nonexistent because the procedure is illegal in the DRC; however, separate studies conducted in the provinces of Western Kasai and South Kivu among women hospitalized for complications following high-risk abortions suggested that around 10% of unintended pregnancies end in abortion, often with tragic consequences for the woman's health (e.g., sterility, fistula, septicemia, death).3,4

The determinants of low contraceptive prevalence and high unmet need in the DRC and other developing countries are complex and often interrelated. High poverty levels explain both the lack of access to contraceptive methods and the perception that large families are a potential economic asset. Male domination and gender inequality limit women's agency in family planning decision making. Cultural and community norms that associate maternity with a high social status tend to generate negative perceptions of family planning and foster rumors and misconceptions about contraceptive methods and their supposed long-term effects. 5,6

Since 2012, the combined efforts of the government and of national and international partners have started to yield significant progress in improving contraceptive availability in the DRC, both in the formal health care system and at the community level.<sup>7</sup> Moreover, the number of family planning users has increased steadily since 2014.<sup>2</sup> This progress is partially due to the increasing diversity of contraceptives available, including innovative methods such as Sayana Press and Implanon NXT that can address specific contraceptive needs for a variety of women.

However, emergency contraceptive pills remain largely absent from this expanding contraceptive mix, despite their potential as a life-saving commodity.<sup>8</sup> Although emergency contraceptive pills are on the DRC's list of essential

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medicines (as a 1.5-mg levonorgestrel formulation) and theoretically are available without a prescription at public and private outlets, their integration into the range of contraceptives available in Kinshasa is impeded by several barriers, according to a 2016 "landscaping" exercise that reviewed all technical and programmatic documents referring to emergency contraception and compiled information from interviews with national and international organizations regarding the positioning of the method in their service provision policies.\*9 These barriers included the perception that the method is applicable only in cases of rape, incest or mental incapacity; poor knowledge of the method and its mechanism of action, even among highlevel family planning policymakers; and limited distribution of the method by international partners who support certain health facilities and pharmacies.

Consistent with findings from studies conducted elsewhere, <sup>10</sup> the landscaping report found that, among national family planning providers and program managers, the most commonly reported constraints on making emergency contraceptives more widely accessible were concerns about the long-term side effects of the method, the repeated use of or sole reliance on the method (as opposed to use of more effective, long-term contraceptives) and the potential for increases in risky sexual behavior (including prostitution and sex with multiple partners), especially if emergency contraceptives were available to youth and adolescents.

The still-limited body of research on awareness and use of emergency contraceptives in developing countries sheds light on the last two of these concerns. Findings from Sub-Saharan African countries consistently indicate that age and economic status are correlated with awareness of emergency contraceptive pills. <sup>11,12</sup> Morgan et al. pointed out that the majority of users in urban areas of Kenya and Nigeria were not adolescents, as is often feared by program managers, but were aged 20–30 and were educated, typically unmarried, professionals. <sup>11</sup>

In surveys, women who had been unfamiliar with emergency contraception often responded to information and questions about the method with a mix of interest and caution regarding its long-term side effects (some expressed concern about sterility) and routine use. <sup>13–15</sup> Research on advance or over-the-counter provision of emergency contraceptive pills has yielded a strong consensus that this service delivery strategy is safe, but conflicting findings on its impact on preventing unintended pregnancies among either adults or adolescents. <sup>16</sup>

Similarly, research on whether advance provision of emergency contraceptive pills will increase repeat or routine use

\*Although emergency contraceptive pills have been part of the postrape kit provided by humanitarian organizations that serve refugees and internally displaced persons in the eastern provinces of the country, this specific use of the method is beyond the scope of this research. In fact, because the aforementioned "landscaping" exercise revealed that emergency contraception was often considered only a postrape method, the focus group discussions in the current study were organized in part to explore opportunities for better integrating emergency contraceptive pills into the method mix available within larger populations.

of the method has been inconclusive. In a study conducted in Nairobi, Kenya, emergency contraceptive clients at pharmacies reported having purchased emergency contraceptive pills an average of 3.8 times in the past six months, and more than half had purchased the pills more than once in the past month, suggesting that many were using emergency contraceptives as their regular method. 17 Two other studies looked at both Kenya and Nigeria. The first, which surveyed women in shopping areas, found moderate to frequent use of emergency contraceptive pills (2.2 and 5.1 times per six months among ever-users in Nairobi and in Lagos, Nigeria, respectively).18 The second study, which surveyed women from a representative sample of households in 5-6 cities in the two countries, found that although only 6-12% of sexually active women had ever used emergency contraceptives, many of the women who had used the method at least once in the last year considered it their main method of contraception (12% in Kenya and 38% in Nigeria).11

A finding common to all studies of emergency contraceptives in Sub-Saharan Africa is that knowledge of the method's 120-hour maximum time frame and its mechanisms of action are extremely limited, even among groups in which method awareness is higher than in the general population. <sup>14,19,20</sup> In addition, it is unclear whether the recourse to noncontraceptive drugs and folk remedies documented in the 1990s as postcoital contraceptive regimens<sup>21</sup> is still a common occurrence.

Women in Kinshasa present similarly low rates of awareness and use of emergency contraceptives. In 2015, only 23% of women aged 15–49 reported having heard of the method, and just 2% and 4% of married and unmarried sexually active women, respectively, reported using emergency contraceptive pills as their primary contraceptive method.<sup>2</sup>

The current study thus aimed to explore, from the perspective of potential users of emergency contraceptives, how this apparently neglected method is positioned in the contraceptive mix in the DRC.† Its specific objectives were to understand women's behavior when faced with the risk of unintended pregnancy; to evaluate women's perceptions of emergency contraception after they have received information on the method's mechanism of action, potential side effects and most commonly available brands; and to identify potential users' preferences for service delivery strategies.

#### **METHODS**

Because of the extremely low levels of awareness and use of emergency contraceptives in Kinshasa, this research used a qualitative approach to provide a deeper contextual

tEmergency contraceptives encompass a variety of products (levonorgestrel and ulipristal acetate pills, and the combination oral contraceptive pills used in the Yuzpe method) and devices (copper IUD). However, this study focuses on emergency contraceptive pills, which are available in Kinshasa almost exclusively in the 1.5-mg levonorgestrel formulation. Other emergency contraceptive pills are not authorized for retail sale in the DRC, and the copper IUD, while sometimes used in postrape care by international organizations operating in the eastern provinces of the country, is one of the least preferred contraceptive methods for women living in Kinshasa.<sup>2</sup>

understanding of the opportunities and challenges associated with making the method more widely known and available and encouraging its use by different segments of the capital city's population.

The data presented here were collected through 15 focus group discussions conducted in July and August 2016. We recruited participants at public locations in their communities (markets, churches and schools) and organized focus groups by both age (15-19, 20-24 or 25-35) and setting (rural or urban) to reflect the diversity of Kinshasa's population (Table 1). The age brackets were selected to maximize the likelihood that participants would be comfortable sharing opinions and beliefs among their peers. Six groups were held in rural zones (Maluku 1 and Mont Ngafula 2) and six in urban zones (Kintambo and Matete); three additional focus groups were organized among university students aged 20-24, a population that is commonly represented in the emergency contraception literature and is considered a prime target for use of the method.<sup>22</sup> All student participants were in their first or second year of nursing or medical school, but had not been exposed to the family planning module of their curricula. Women older than 35 were excluded from the study because they are only minimally represented among emergency contraceptive users in Sub-Saharan Africa. 11,23

The focus groups ranged in size from 10 to 12 women, and the average length of the conversations was 90 minutes. Each discussion was moderated by two trained female facilitators; the focus groups consisting of younger women (aged 15–19 and 20–25) were facilitated by women aged 26 and 28, while the groups consisting of 25–35-year-olds were facilitated by women aged 35 and 37. Facilitators received three days of training on how to follow the discussion guide, probe when needed, create group dynamics that encouraged open discussion and make sure that all participants had the opportunity to express their views. Training also included role-playing and value-clarification discussions to ensure the facilitators' neutrality in their role. During focus group discussions, the facilitators alternated

TABLE 1. Number of focus groups and participants, by setting and participant age, Kinshasa, Democratic Republic of the Congo, 2016

Setting	Age			All
	15–19	20-24	25-35	
Urban				
Focus groups	2	2	2	6
Participants	24	24	24	72
Rural				
Focus groups	2	2	2	6
Participants	22	21	24	67
University				
Focus groups	0	3	0	3
Participants	0	30	0	30
Total				
Focus groups	4	7	4	15
Participant	46	75	48	169

between taking notes and leading the conversations, which were audio-recorded with participants' consent.

After opening the discussion with general questions concerning preferred family size, family planning choices and issues associated with unintended pregnancy, the facilitator asked if the participants had ever heard of "emergency contraception" (or the "morning after pill"). Once their answers had been recorded, the facilitators showed participants two brands of emergency contraceptives commonly available in Kinshasa (Alèze and Pilule S) and briefly explained their mechanism of action. They then explored whether the participants were familiar with these products and whether they understood the explanations presented to them. Further topics of conversation included perceived advantages and disadvantages of emergency contraceptives relative to other methods, possible consequences if emergency contraceptives were made more widely available in their community, and preferences for modes of delivery. Appendix Table 1 presents the sequence of questions and probes that were used during the focus group discussions. All focus groups were conducted in Lingala, the most frequently spoken language in Kinshasa; the transcripts were translated into French.

Using the iterative processes of qualitative data analysis used in other studies conducted in Sub-Saharan Africa, <sup>24,25</sup> two independent teams organized the transcribed records by age-group and location (urban, rural, university) and by themes; within themes, quotes corresponding to a similar variation (opinion, attitude or argument concerning an emergency contraceptive–related theme) were grouped together. After comparing and coming to a consensus on their classifications, the research teams coded each variation and calculated its frequency. Finally, both teams conducted independent quality checks by re-examining the transcripts, and met again to validate the results.

Findings are presented below according to the main themes, in the order in which they were included in the focus group discussion guide. Quotes were chosen not only for their relevance to and representativeness of the themes and variations, but also to illustrate the texture and tone of the conversations; all quotations have been translated into English. The study methodology was approved by the Tulane University Institutional Review Board and by the Ethics Committee of the Kinshasa School of Public Health.

## RESULTS Emergency Contraceptive Behaviors and Awareness

Focus group participants reported that unprotected sex is a frequent occurrence in their lives because of contraceptive failure or, more often, nonuse of any family planning method. The most frequently mentioned reasons for nonuse of contraceptives were participants' poor knowledge of their fertile period, negative opinions about certain methods (related to rumored long-term side effects, particularly sterility) and limited ability to negotiate sexual abstinence or condom use with their partner.

This does not mean, however, that women in Kinshasa do not have an arsenal of potential postcoital "emergency" solutions. Only about one-third of participants thought that "nothing could be done" if a woman had unprotected sex and did not want to become pregnant. Virtually all other respondents noted that women can use treatments ranging from folk remedies (douching, drinking salted water or sodas, using an herbal concoction or even "jumping really hard to make the sperm come out") to taking noncontraceptive drugs, the most frequently mentioned of which were antibiotics, deworming medicines (Décaris, Tanzol) and antimalarial medicines (quinine, tetracycline).

Participants explained some of the reasons for the wide-spread use of these drugs for emergency contraception. First, most women had never been counseled by a health care provider on family planning and obtained all of their information about pregnancy prevention from their family, friends and neighbors, which largely explains the perpetuation of erroneous beliefs and practices. Second, most of these drugs include a warning on the label—"not recommended during pregnancy"—that is mistakenly interpreted as the drugs' having potential abortive effects. For example, one woman noted:

"A lot of my friends think that [the warning] means that [the pills] can destroy a pregnancy, so they take a lot of them to make sure that if they do get pregnant, these pills will make it go away."—*Urban, aged 20–24* 

Another reason for the use of antibiotics, as well as deworming and antimalarial medicines, is that they are often cheaper and more accessible than actual contraceptives, and requesting them from a pharmacist or a doctor is associated with less social stigma than is requesting modern family planning methods.

Participants often mentioned that the window of opportunity was narrow for using these inappropriate products as a postcoital method of avoiding pregnancy. They further indicated that ensuring the effectiveness of the medications required following some sophisticated regimens. As one woman explained:

"Décaris has two pills, but you have to take it the day after [unprotected sex] or it will not work. With Tanzol, you have more time, almost a week, but you have to take all the powder from five pills out in the morning and drink it with water and lime, and then do the same thing in the evening. With the quinine, you also have one week, but if you go more than three days then you need to take 20 pills all at once."—*Urban, aged* 25–35

Several participants spontaneously mentioned some of the more common brands of emergency contraceptive pills available in Kinshasa (Duogynon\* and Pilule S), but often lumped them together with noncontraceptive drugs. For example, a 20–24-year-old woman in one of the university focus groups said:

"If a woman has sex during the 'wrong' dates,† she can take the Tanzol or quinine or Dorgino [sic] or the Pilule S. The good thing about Pilule S is that it has only one pill, so for women who do not like to swallow drugs with water it's good. For Tanzol, you have to swallow 10 pills at once and some women don't like that."

However, when asked directly about their awareness of a method called "emergency contraception," very few participants reported having heard of it. Even after the facilitator explained what the method was and showed two different brands, only a small minority of women said they had heard of or seen emergency contraceptive pills. Similarly, very few respondents reported knowing someone who had used emergency contraceptive pills. Overall, awareness of the method was more common among women aged 25–35 and university students than it was among younger or lesseducated women, and only a handful reported having used it themselves.

While a few women recognized the Pilule S and Alèze packages, these products were often confused with other contraceptives and pharmaceutical brands.‡ For example, an urban women aged 20–24 said, "I know Alèze, but the one I use is not like this. The pills are larger and the box is bigger, and there are 30 pills in it."

It is not unusual for women in Kinshasa to refer to specific contraceptive methods by the brand name of the most widely used product (e.g., Jadelle for the implant, Prudence for male condoms or Confiance for the monthly pill). Many women in our focus groups noted that the term "emergency contraception," which has no equivalent in Lingala, was hard to remember and pronounce. Most suggested using "morning after pill" ("Pilule ya lobi") or simply the brand name when talking about emergency contraceptives. However, some women noted that this method was sometimes referred to as "pill 1" or "one-dose pill" to differentiate it from oral contraceptives.

In part because of this confusion, participants were unsure of how long the contraceptive effects of the method would last. Even after the facilitator explained the mechanism of action, several women understood the method to be, as a rural woman aged 20–24 described it, "a pill you only have to take once and then you are protected for the rest of the month."

#### Perceived Advantages and Risks of the Method

Almost all women reacted positively to learning about the characteristics and mechanism of action of emergency contraceptive pills. However, because the method was entirely new to most of them, their perceptions of its advantages and risks were informed by their (sometimes erroneous)

†Women in the DRC refer to the fertile period of their cycle as "les fausses dates" ("the wrong dates").

‡DKT International, which distributes both drugs in the DRC through social marketing, has adopted the strategy of presenting a portfolio of products with the same brand name and similar packaging. Although the packaging of the oral contraceptive and the emergency pill are different colors, the name and general design are similar enough to explain the confusion among our focus group respondents.

<sup>\*</sup>Duogynon is a brand of emergency contraceptive pill produced by a pharmaceutical company in Brazzaville (Republic of Congo) that, because of reported strong side effects, has not been authorized for use in the DRC since the 1990s. It is nonetheless widely and cheaply available through Kinshasa's vast network of informal drugstores.

knowledge and perceptions of other contraceptives. Thus, as the following examples illustrate, women favorably compared emergency contraceptive pills to the oral contraceptive pill because the former seemed easier to use and posed less risk of forgetting:

"I don't like to swallow lots of pills with water, so with this [emergency contraceptive] I only have to take one small pill once a month and I feel safe."—Rural, aged 25–35

"The 28-day pill you are condemned to take every day and we are humans, we may forget one day and then the punishment is that we get pregnant. [Emergency contraception] is good because you only have to remember to take [the pill] the day you have sex."—*Urban*, *aged* 15–19

Participants also suggested that they would prefer emergency contraceptives to other methods because single-dose regimens seemed less likely to create the rumored nefarious side effects of long-acting reversible contraceptives. These concerns are illustrated by comments such as these:

"It doesn't stay in your body like the implant and the IUD, so it won't cause cancer."—*University, aged 20–24* 

"If you only take one pill once in a while when you are in the 'wrong' dates, you don't destroy your [uterus] like with the pill or the injectable that you have to take all the time."—Rural, aged 25–35

The discreet nature of emergency contraceptive use was perceived as giving women more flexibility and agency in their contraceptive choices. For example, a 15–19-year-old in an urban focus group explained:

"[Emergency contraceptives are] easy to use compared to the condom, where you have to ask the boy to put it on. But [emergency contraceptive pills] I can take before or after we have intercourse without the boy knowing anything, and it's done."

In addition, some participants mentioned that being able to use emergency contraceptive pills for up to five days after having sex is an advantage of the method, given that sexual intercourse is not always planned. As a university student aged 20–24 noted:

"You don't always have condoms with you, and sometimes your boyfriend surprises you with sex and then you are nervous. [With emergency contraception] I know I can have sex and make him happy, and then the next day or the day after I can find a pharmacy and buy the pill and not worry."

Several other women pointed out that the window of opportunity to use emergency contraceptive pills might be advantageous because it offers some financial flexibility. One woman explained:

"You don't always have the money with you to buy the method, but if I know I have five days, I can sell more at the market or find a sister to borrow money from, and then I can still have a chance of getting it."—Rural, aged 20–24

When asked about the potential disadvantages of emergency contraception, most women indicated that they were not able to answer because they had never used the method. Thus, their perceptions of the hypothetical limitations of emergency contraceptive pills were largely framed

by their perceptions of the disadvantages of other methods. For example, a participant in an urban focus group said:

"We don't know the consequences of emergency contraception because it's new, but these methods always have consequences.... We say that an excess of anything is bad, and so it's true for all these methods."—*Urban, aged* 20–24

The most commonly mentioned limitation specific to emergency contraceptive pills was that using the method appropriately would require an understanding of the menstrual cycle. This perception stemmed partially from a misunderstanding of the moderator's explanation of the method's mechanism of action: Because emergency contraceptive pills postpone ovulation, women concluded that they would need to know their ovulation period to use the method properly. Thus, a university student aged 20–24 suggested that "women who are illiterate and cannot calculate the 'wrong' dates correctly will not be able to use [emergency contraceptives] or they will get pregnant or sick."

#### **Advantages and Risks for the Community**

When the facilitators asked about the potential impact of making emergency contraceptive pills better known and more accessible in the community, participants' responses once again tended to reflect attitudes toward increasing access to family planning in general, rather than to emergency contraceptives in particular. About half of the women mentioned positive impacts, notably the prospect of reducing the number of unwanted pregnancies and abortions and improving women's health through better birthspacing.

However, other women expressed concerns about making the method more easily available, so that overall the discussions suggested that increased accessibility could have both positive and negative impacts on family stability, as the following two quotes illustrate:

"Because of this [emergency contraception], wives will not be afraid to have sex during the 'wrong' dates, and they will not argue with their husbands. So the husbands will not have to seek out girlfriends to party with, and so it will be for the good of the family."—Rural, aged 25–35

"Now men are going to be more unfaithful, because they know their girlfriends will never get pregnant."—Rural, aged 25–35

Participants viewed the prospect of increasing the access of youth and adolescents to the method with the same mix of opposition and pragmatism that they held for other family planning methods. On the one hand, they suggested that making emergency contraceptive pills available to very young women would "encourage prostitution" and "push little girls toward having sex and creating disorder." However, many respondents, especially those in the younger age-groups, acknowledged that, as an urban woman aged 20–24 stated, "Nowadays, even 12- or 13-year-old girls have boyfriends, and they have sex with them, and so they need to have access to emergency contraceptive pills to avoid unwanted pregnancies."

Overall, about three-quarters of women thought that emergency contraceptive pills should be available to everyone, regardless of age. Women who thought that individuals younger than 18 should not have access to the method were disproportionately likely to belong to older aggroups (a third of 20–24-year-olds and 25–35-year-olds espoused this view) or to be university students.

#### **Preferences for Service Delivery Strategies**

The majority of women indicated that they would prefer to purchase emergency contraceptive pills at pharmacies. This preference was most strongly expressed by the youngest respondents (those aged 15–19), who indicated they would not be able to use emergency contraceptive pills if they had to go to a health center to obtain them. As two such young women explained:

"At the health center, they will ask you questions and make your life complicated because you're young. And they will say, 'Little girl, where do you think you're going with this method? What will your parents say?" —Rural, aged 15–19

"It's too embarrassing to go see a doctor for [emergency contraceptive pills]. Some girls are ashamed that even when they ask for Décaris or Tanzol, the doctor will know they've had sex, so it would be even worse for [emergency contraceptive pills]!"—*Urban*, *aged* 15–19

However, university students stood apart from other women in the two younger age-groups in that they more often expressed opposition to making emergency contraceptives available in pharmacies. They frequently suggested that limiting the method's availability to health centers would, as one woman stated, guarantee against "adolescents abusing it and [having a much greater number of sexual encounters because they know they can just buy emergency contraceptive pills afterwards"; another suggested that "if the women who take emergency contraceptive pills all the time without a doctor's advice get sick, they [would] not know what to do." An additional reason for preferring health centers to pharmacies was the availability of trained nurses and doctors who could properly counsel women on family planning and address potential side effects of emergency contraceptive pills.

Preferences for certain service delivery points were also grounded in the perceived function of the different structures. Health facilities are "where everyone goes when they're sick," and were perceived as being able to reach and inform a larger number of potential users. As a woman in an urban focus group for 25–35-year-olds noted:

"To go to the pharmacy, you already need to know that emergency contraceptive pills exist. Whereas all women visit the health center for antenatal care visit or post–child delivery, [so...] this is a good place and time to catch them and talk to them about emergency contraception."

On the other hand, pharmacies were perceived as both discreet and convenient, and many respondents indicated that they felt more comfortable purchasing emergency contraceptive pills there. For example, two urban women aged 25–35 explained:

"You can buy emergency contraceptives very discreetly at the pharmacy. You don't have to wait, you don't have to ask your husband for the consultation money."

"At the health care center, the entire neighborhood can see you and will ask why you're sick.... Even the doctors and the nurses, they know you and if they ask, 'Maman, what is your disease?' [How] are you going to respond? 'Having sex with my husband?'"

#### Cost

Cost issues also strongly underlined preferences for emergency contraceptive pills to be available at pharmacies and without a prescription, which in the DRC can be obtained only from a doctor at a health facility. Other cost concerns were the additional registration and consultation fees typically charged by facilities, as well as transportation fees. For example, one woman noted:

"Especially in the isolated rural places, where the hospital is very far, it's possible that women will wait too long to find transportation there and they will miss the five-day window."—Rural, aged 25–35

Nonetheless, the majority of the respondents did not wish to see emergency contraceptive pills made available for free. One of their justifications for preferring at least a minimum charge was the perceived unsustainability of free distribution. For instance, a rural woman aged 20–24 suggested that "[distributors] need to charge a little bit if we want to be sure that [manufacturers] can keep making it and coming back," while an urban adolescent aged 15–19 said that "we know that no one will always give you something for free."

Moreover, suspicions regarding the value of free products were pervasive among study participants. For example, an urban woman aged 20–24 stated that "if [a method is] free, people will think that it is poor quality," while a rural participant aged 25–34 suggested that "you should have to pay in order to see the value; if it's free, like injections, people will think that it has lots of disadvantages, or that the products are expired."

One university student stated that, paradoxically, "if the method is available for free, then it is going to be really hard to obtain." This statement was likely motivated by the strong association between free contraceptives and the "campaign days" organized in Kinshasa's communities by local or international health organizations that offer family planning methods and counseling to anyone who attends. Typically taking place at or near a health facility, these campaigns draw very large crowds, frequently run out of contraceptives and seemingly occur on a random schedule. Focus group participants concluded that if emergency contraceptive pills are free, "there will be very long lines ... and we'll have to wait for the next campagne" and overwhelmingly preferred to buy the pills at the pharmacy when they needed it, "without having the entire neighborhood waiting here and watching."

A few women also mentioned that charging a fee for the method would limit "immoral' sexual behavior." For example, a university student stated that "if it's not free, it's going to limit access [to the method] and prevent its abuse. Girls will not have unprotected sex if they know that they don't have the money to pay for the method." However, the costs of the method could also be a deterrent to using emergency contraceptives, as the following two quotations illustrate:

"If you want to use [the method], you need to have 1,200 francs every time you have sex. If you add this up every month, it's less expensive to use the implant."—*University, aged* 20–24

"It needs to be the same price as the other drugs we are taking, like Décaris and Tanzol; otherwise, people will not buy the Pilule S."—*Urban, aged 20*–24

When asked to suggest a reasonable cost for the method, most women mentioned prices between XOF 200 and XOF 500 (US\$ 0.20–0.52), which is well below the median price charged at pharmacies (US\$1.21) for emergency contraceptive pills.<sup>26</sup>

#### DISCUSSION

Our data indicate that women in Kinshasa use a wide range of postcoital "emergency" strategies, such as taking pseudocontraceptive drugs, a finding consistent with results from similar research conducted in Nigeria.<sup>27,28</sup> The beliefs and behaviors documented here have programmatic and research implications for the DRC. First, they indicate a need to better understand local beliefs and practices that compete with use of effective contraceptives in Congolese communities. Second, they suggest that confusion about awareness and use of emergency contraceptives may exist among respondents participating in large quantitative surveys (e.g., Performance Monitoring and Accountability 2020), as our findings revealed that women frequently use this concept to describe their use of pseudocontraceptives or folk remedies after unprotected sex. Finally, they signal a strong opportunity for formally including dedicated emergency contraceptive pills in the contraceptive method mix available in Kinshasa, given that focus group participants reacted positively to the possibility of replacing the products they use most often (which they recognize as having high failure rates) with Pilule S.

In fact, because many women do not use regular contraceptive methods—either because of perceived impracticality (fear of forgetting to take the pill, the need to negotiate condom use) or concerns over long-term side effects—ad hoc postcoital contraception might be a method that meets their needs and satisfies their preferences. In particular, the results of our focus group discussions echo those from research conducted in Ghana, where women expressed an aversion to condoms and a strong fear of side effects from oral contraceptives, IUDs, implants and injectables, while deeming the perceived side effects of emergency contraceptive pills to be acceptable.<sup>29</sup>

Preferences for emergency contraceptive pills were also framed by perceived constraints on the accessibility of other methods. In particular, the focus group discussions revealed women's conflicting views regarding free access to family planning methods. Thus, this research contributes important insights not just on the repositioning of available contraceptives as the method mix expands, but also on service delivery preferences in the quickly shifting landscape of family planning provision in Kinshasa.

Our data also address family planning program officers' concerns that women would switch from long-acting reversible contraceptives to regular or repeated use of emergency contraceptive pills, should the latter method become more widely and easily accessible in Kinshasa. The findings suggest that the perceived convenience of a one-time pill might tempt some women to regularly use emergency contraceptive pills. However, most participants who mentioned this possibility were not contraceptive users or had used only pseudocontraceptives. Women who were already using other methods typically were more cautious and assumed that emergency contraceptive pills, like other modern methods, would have side effects. This fear of long-term side effects might be the strongest deterrent to repeat use for participants.

More specifically, this research highlighted some implications regarding repeat or routine use by young people, since university students tended to be the most vocal proponents of restricting access to emergency contraceptives, either by age or prescription requirements. This is consistent with findings from another qualitative study conducted among university students in Nairobi, Kenya, where "education was inversely related to women's willingness to use or recommend" emergency contraceptives and "interviews indicated that students, contrary to stereotype, might be among the more informed and cautious users." <sup>30</sup>

#### Limitations

Although respondents were enthusiastic about emergency contraception when the method was presented to them, some methodological issues should be noted. First, because levels of awareness and use of the method were so low, many of our findings rely on hypothetical use and on attitudes toward other contraceptive methods, rather than on specific knowledge of emergency contraceptive pills. Second, the sensitive nature of the topic may have introduced some desirability bias in the responses provided during focus group discussions. In particular, the background of the university participants (all were studying nursing or medicine) could explain this group's stronger bias toward facility-based family planning services and against having emergency contraceptive pills available at pharmacies without prescriptions. Finally, the strong interest in the method that women expressed might be partially due to a novelty effect. Consistent with other family planning surveys recently conducted in Kinshasa,2 this study highlighted acute fears of unwanted pregnancies and high demand for ways to avoid them; in this context, any additional contraceptive method is eagerly welcomed.

#### CONCLUSION

This research highlights the potential of emergency contraception to address gaps in contraceptive awareness and use by reaching women who are currently not using a family planning method or are using drugs that they erroneously believe to have contraceptive effects. It provides insights on the determinants of contraceptive preferences in an environment where both contraceptive stocks and the method mix are still limited.

Although family planning programming often focuses on improving delivery of commodities, this study should steer future research toward a more locally grounded understanding of the motivations underlining adoption of specific methods. Participants' contraceptive choices often were based on poor knowledge of basic fertility processes, randomly acquired information on available methods, and a shifting and unpredictable family planning accessibility landscape, and weighed the estimated costs of unwanted pregnancies against the necessity to preserve, or even demonstrate, future fertility. These findings could appropriately inform the development of more relevant introduction strategies and communication programs for new and underutilized contraceptive methods.

#### **REFERENCES**

- 1. Ministère du Plan et Suivi de la Mise en œuvre de la Révolution de la Modernité (MPSMRM), Ministère de la Santé Publique (MSP) and ICF International, *Enquête Démographique et de Santé en République Démocratique du Congo 2013–2014*, 2014, https://dhsprogram.com/pubs/pdf/FR300/FR300.pdf.
- 2. Performance Monitoring and Accountability 2020 (PMA2020) Project, Kinshasa School of Public Health and Tulane School of Public Health and Tropical Medicine, *PMA2015/DRC-Round 4: Key Family Planning Indicator Brief*, 2015, https://www.pma2020.org/sites/default/files/DRCR4-Kinshasa-EN-family planning-Brief-v7.2016.05.03.pdf.
- **3.** Milongu Kasongoma S et al., Aspects épidémio-cliniques des avortements illégaux compliqués en milieu hospitaliers de Mbuji-Mayi en République Démocratique du Congo, *Revue Médicale des Grands Lacs*, 2015, 6(3):26–32.
- **4.** Chabo Byaene A, Les femmes et les avortements à risque dans la ville de Bukavu, 2007, http://www.genreenaction.net/LES-FEMMES-ET-LES-AVORTEMENTS-A-RISQUE-DANS-LA.html.
- 5. Matungulu CM et al., Déterminants de l'utilisation des méthodes contraceptives dans la zone de santé Mumbunda à Lubumbashi, République Démocratique du Congo [Determinants of contraceptive use in Mumbunda health zone in Lubumbashi, Democratic Republic of Congo], *Pan African Medical Journal*, 2015, 22:329.
- **6.** Williamson LM et al., Limits to modern contraceptive use among young women in developing countries: a systematic review of qualitative research, *Reproductive Health*, 2009, 6:3.
- 7. Mukaba T et al., Family planning policy environment in the Democratic Republic of the Congo: levers of positive change and prospects for sustainability, *Global Health: Science and Practice*, 2015, 3(2):163–173.
- **8.** Jonathan HGE and Stoltenberg RHJ, *UN Commission on Life-Saving Commodities for Women and Children*, New York: United Nations, 2012, https://www.unfpa.org/sites/default/files/pub-pdf/Final%20UN%20Commission%20Report\_14sept2012.pdf.
- 9. National Reproductive Health Program, Fiche Technique du Prestataire: Administrer la Contraception d'urgence, Kinshasa, DRC: Ministry of Health, 2012.

- **10**. Westley E et al., A review of global access to emergency contraception, *International Journal of Gynaecology and Obstetrics*, 2013, 123(1):4–6.
- 11. Morgan G, Keesbury J and Speizer I, Emergency contraceptive knowledge and use among urban women in Nigeria and Kenya, *Studies in Family Planning*, 2014, 45(1):59–72.
- 12. Palermo T, Bleck J and Westley E, Knowledge and use of emergency contraception: a multicountry analysis, *International Perspectives on Sexual and Reproductive Health*, 2014, 40(2):79–86.
- 13. Akani C, Enyindah C and Babatunde S, Emergency contraception: knowledge and perception of female undergraduates in the Niger Delta of Nigeria, *Ghana Medical Journal*, 2008, 42(2):68–70.
- 14. Fourn N et al., Connaissances, attitudes et pratiques de la contraception d'urgence chez les étudiantes à l'Université de Parakou (Bénin) [Knowledge, attitudes and practices of emergency contraception among female students at Parakou University (Benin)], *Santé Publique*, 2014, 26(4):541–546.
- 15. Obi SN and Ozumba BC, Emergency contraceptive knowledge and practice among unmarried women in Enugu, southeast Nigeria, *Nigerian Journal of Clinical Practice*, 2008, 11(4):296–299.
- **16.** Rodriguez MI et al., Advance supply of emergency contraception: a systematic review, *Contraception*, 2013, 87(5):590–601.
- 17. Keesbury J, Morgan G and Owino B, Is repeat use of emergency contraception common among pharmacy clients? Evidence from Kenya, *Contraception*, 2011, 83(4):346–351.
- **18**. Chin-Quee D et al., Repeat use of emergency contraceptive pills in urban Kenya and Nigeria, *International Perspectives on Sexual and Reproductive Health*, 2014, 40(3):127–134.
- **19.** Byamugisha JK et al., Emergency contraception and fertility awareness among university students in Kampala, Uganda, *African Health Sciences*, 2006, 6(4):194–200.
- **20.** Ikeme ACC, Ezegwui HU and Uzodimma AC, Knowledge, attitude and use of emergency contraception among female undergraduates in Eastern Nigeria, *Journal of Obstetrics and Gynaecology*, 2005, 25(5):491–493.
- **21.** Glasier A et al., Case studies in emergency contraception from six countries, *International Family Planning Perspectives*, 1996, 22(2):57–61.
- **22.** Ellertson *C* et al., Emergency contraception: a review of the programmatic and social science literature, *Contraception*, 2000, 61(3):145–186.
- **23.** Myer L et al., Knowledge and use of emergency contraception among women in the Western Cape province of South Africa: a cross-sectional study, *BMC Women's Health*, 2007, 7:14.
- **24.** Ajayi AI et al., Use of non-emergency contraceptive pills and concoctions as emergency contraception among Nigerian university students: results of a qualitative study, *BMC Public Health*, 2016, 16:1046.
- **25.** Gure F et al., Emergency contraception in post-conflict Somalia: an assessment of awareness and perceptions of need, *Studies in Family Planning*, 2016, 47(1):69–81.
- **26.** Population Services International (PSI) and FPwatch, DRC 2015 outlet survey findings, *FPwatch Research Brief*, Washington, DC: PSI and FPwatch, 2016, http://familyplanning-drc.net/media/fpwatch/FPwatch%20DRC\_Findings%20Brief\_English%20FINAL.pdf.
- 27. Abasiattai AM et al., Misconception of emergency contraception among tertiary school students in Akwa Ibom State, South-south, Nigeria, Nigerian Journal of Clinical Practice, 2007, 10(1):30–34.
- **28**. Aziken ME, Okonta PI and Ande AB, Knowledge and perception of emergency contraception among female Nigerian undergraduates, *International Family Planning Perspectives*, 2003, 29(2):84–87.
- 29. L'Engle KL, Hinson L and Chin-Quee D, "I love my ECPs": challenges to bridging emergency contraceptive users to more

effective contraceptive methods in Ghana, *Journal of Family Planning and Reproductive Health Care*, 2011, 37(3):146–151.

**30**. Muia E et al., Emergency contraception in Nairobi, Kenya: knowledge, attitudes and practices among policymakers, family planning providers and clients, and university students, *Contraception*, 1999, 60(4):223–232.

#### RESUMEN

Contexto: A pesar del compromiso de la República Democrática del Congo (RDC) de expandir la mezcla de métodos de planificación familiar y aumentar el acceso a los servicios, el conocimiento sobre la anticoncepción de emergencia es bajo entre las mujeres, y el método continúa siendo subutilizado y deficientemente integrado a los programas de planificación familiar.

**Métodos:** Se usaron datos provenientes de debates en 15 grupos focales conducidos en 2016 con mujeres en edades de 15–35 años, para examinar conocimientos, percepciones y actitudes en relación con los anticonceptivos de emergencia. Después de que los facilitadores explicaron el mecanismo de acción de las píldoras anticonceptivas de emergencia y otras características, se preguntó a las participantes sobre los beneficios y riesgos potenciales de aumentar la disponibilidad del método. Las transcripciones se analizaron utilizando un enfoque iterativo.

Resultados: Las mujeres reportaron estar usando una amplia variedad de conductas anticonceptivas posteriores al coito, aunque con frecuencia utilizando productos inapropiados, y en general, estuvieron de acuerdo en que las píldoras de anticoncepción de emergencia parecían ser una solución potencialmente efectiva para sus necesidades de planificación familiar. Las percepciones acerca de los beneficios y limitaciones del método estuvieron casi siempre enmarcadas con referencia a otros métodos más conocidos, y las mujeres expresaron fuertes preferencias por la provisión a través de farmacias, lo cual coincide con sus conductas usuales en la obtención de anticonceptivos. Las participantes mostraron dudas respecto a que el método estuviera disponible de forma gratuita.

Conclusión: Las píldoras de anticoncepción de emergencia tienen el potencial de dar respuesta a las brechas en la mezcla de métodos de planificación familiar en la RDC. Evaluar si las mujeres tienen información incompleta o errónea sobre los métodos de planificación familiar puede proporcionar una mejor comprensión acerca de sus preferencias en materia de anticonceptivos en los países de bajos ingresos.

#### RÉSUMÉ

Contexte: Malgré l'engagement pris par la République démocratique du Congo (RDC) d'élargir son éventail de méthodes de planification familiale et d'accroître l'accès aux services, la sensibilisation à la contraception d'urgence est faible parmi les femmes et la méthode reste sous-utilisée et mal intégrée dans la programmation de la planification familiale. Méthodes: Les données obtenues de 15 discussions de groupe menées en 2016 parmi des femmes âgées de 15 à 35 ans ont servi à l'examen de la sensibilisation aux contraceptifs d'urgence, ainsi que des perceptions et des attitudes à leur égard. Après leur avoir expliqué le mode d'action et d'autres caractéristiques de la pilule contraceptive d'urgence, les animateurs ont invité les participantes à parler des avantages et des risques potentiels d'un accès plus large à la méthode. Les transcriptions ont été analysées selon une approche itérative.

Résultats: Les femmes ont fait état de divers comportements contraceptifs post-coîtaux, utilisant cependant souvent des produits inappropriés. Elles ont généralement convenu que la pilule contraceptive d'urgence semble offrir une solution potentiellement efficace à leurs besoins de planification familiale. Les avantages et inconvénients perçus de la méthode sont presque toujours comparés en référence à d'autres contraceptifs mieux connus et les femmes ont exprimé de nettes préférences pour une prestation en pharmacie, conforme à leurs comportements habituels d'obtention de la contraception. Les participantes se sont montrées réticentes à l'idée d'une disponibilité gratuite de la méthode.

Conclusion: La pilule contraceptive d'urgence offre le potentiel de combler les lacunes de l'éventail de méthodes de planification familiale en RDC. Il est possible de mieux comprendre les choix contraceptifs des femmes dans les pays à faible revenu en évaluant si elles sont informées de manière incomplète ou erronée sur les méthodes de planification familiale.

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#### Appendix Table 1. Interview guide for study of women's knowledge and perceptions of emergency contraceptives in Kinshasa

To begin, let's talk about families and family planning in your community:

#### 1. Do people in your community prefer to have large or smaller families?

- a. What would you say are the benefits of large families for people in your community?
- b. Are there some inconveniences to having large families?
- c. What about young people? Do they prefer to get married and start their family early or later?

#### 2. Would you say that family planning is popular in your community?

(Probe) Do you know many women who use it for limiting or spacing their births?

(Probe) Would you say that most people in your community approve of family planning?

(Probe) What would you say are the benefits of family planning for individuals in your community? And for the community itself?

(Probe) Are there any negative aspects/resistances to using family planning methods?

#### 3. What do you think are the most popular family planning methods in your community? Why?

(Probe) What are their advantages?

(Probe) Are there some methods that women do not like at all?

#### 4. Have you ever heard of "emergency contraception"?

(Probe) Some people also call it "the morning after" pill...

(Probe) Where/When/From whom did you hear about it?

(Probe) Do you know anyone who has used it? (Do not give any specific names!)

#### 5. (If you have heard of it) do you know how it works?

(Probe) Do you know how it works inside a woman's body?

(Probe) How many hours or days after unprotected sex can a woman take it if she does not want to get pregnant?

To clarify, an emergency contraceptive is a pill that you can take up to five days after risky sexual intercourse in order to avoid getting pregnant. It is more effective when it's taken in the first 72 hours that follow the intercourse.

#### 6. According to you, what could be the advantages of using emergency contraceptive pills as a contraceptive?

(Probe) Can you think of situations in which it would be useful for a woman to have access to emergency contraceptives?

(Probe) What would be the advantages of emergency contraception compared to other contraceptive methods you know?

#### 7. According to you, what could be the negative aspects of using emergency contraceptive pills as a contraceptive?

(Probe) Do you think emergency contraception might not work the same way as other contraceptive methods?

(Probe) Do you think emergency contraception might change the way people approach sexual relationships?

### 8. Do you think emergency contraceptives should be available for everyone or should the method be reserved for certain categories of population?

#### 9. Where do you think the emergency contraceptive pill might be available?

(Probe) Do you think you can find it at health care centers? At pharmacies in your neighborhood?

(Probe) Do you know if you need a prescription to obtain it? Do you think people should get it only if they have a prescription for it?

(Probe) Do you think it's available for free? Do you think it should be available for free?

## 10. Would you tell women your age who do not want to get pregnant but are not using any contraceptive methods about emergency contraceptives?

(Probe) Why or why not?

(Probe) What about younger women (aged 15 to 24)?

(Probe) Do you think health care providers/government programs/nongovernmental organizations should do more to advertise and educate people in your community about emergency contraception? (Why/why not?)

11. Before I turn off the recorder, do you have anything to add? It can be opinion or recommendation on emergency contraception, family planning or any information you think is important to better understand how you and your community feel about these issues.