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Abortion in two francophone African countries: a study of whether women have begun to use misoprostol in Benin and Burkina Faso $^{\stackrel{\sim}{\sim},\stackrel{\leftarrow}{\sim}\stackrel{\leftarrow}{\times},\bigstar,\bigstar,\stackrel{\leftarrow}{\times}\stackrel{\leftarrow}{\times}\stackrel{\leftarrow}{\times}$

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Abstract

Objectives: This study aimed to document the means women use to obtain abortions in the capital cities of Benin and Burkina Faso, and to learn whether or not use of misoprostol has become an alternative to other methods of abortion, and the implications for future practice. **Study design:** We conducted in-depth, qualitative interviews between 2014 and 2015 with 34 women – 21 women in Cotonou (Benin) and 13 women in Ouagadougou (Burkina Faso) – about their pathways to abortion. To obtain a diverse sample in terms of socio-demographic characteristics, we recruited the women through our own knowledge networks, in health facilities where women are treated for unsafe abortion complications, and in schools in Benin.

Results: The 34 women had had 69 abortions between them. Twenty-five of the women had had 37 abortions in the previous 5 years; the other abortions were 5-20 years before. Pathways to abortion were very different in the two cities. Lengthy and difficult pathways with unsafe methods often led to complications in Ougadougou, whereas most Cotonou women went to small, private health centers. Six of the 37 abortions in the previous 5 years involved misoprostol use, and were all among educated women with significant social and economic capital and personal contact with clinicians.

Conclusions: Use of misoprostol for abortion has appeared in both Cotonou and Ougadougou in the past 5 years. Evidence that the use of misoprostol for abortion occurred among women with the most access to information and resources in this study suggests that increased awareness of and use of misoprostol in both countries is likely in the coming years.

Implications: Although no pharmaceutical company that produces misoprostol has as yet tried to obtain marketing authorization in either Burkina Faso or Benin for gynecological-obstetric indications, making its use more potential than actual for the time being, international advocacy for access to medical abortion is growing rapidly and is likely to lead to many changes in this picture in the coming years. © 2017 Elsevier Inc. All rights reserved.

Keywords: Abortion care-seeking pathways; Medical abortion; Misoprostol; Unsafe abortion; Francophone African countries; Africa

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1. Introduction

Given the reality of unwanted pregnancies in the context of highly restrictive abortion legislation in many countries, medical abortion pills seem to be a solution for both individual women and public health. Although medicines have specific rules for administration that must be followed and should be supervised by a health professional [1], medical abortion opens a window to opportunities for uses that are completely outside medical control. There has been little documentation to date of self-use of misoprostol in Africa, however, with or without professional involvement, particularly in Francophone countries [2], which we will discuss later. In contrast, in both Brazil and the Dominican Republic, self-medication with misoprostol was described as early as 1986-87 [3-5].¹ Its use has spread widely since the 1990s and, according to some experts, has been at least partly responsible for the significant decline in maternal mortality observed in countries where its use has become common [7].

Abortion laws in Africa are among the most restrictive in the world, and medical abortion use is less developed than elsewhere. Yet, African women do turn to abortion in case of unplanned or unwanted pregnancies, as shown by estimated abortion rates of 31 per 1000 (in West Africa) and 38 per 1000 women of reproductive age overall (in Northern Africa). These vary by region, but attest to widespread practice, despite restrictive laws [8]. Curettage and especially manual vacuum aspiration (MVA) are currently the most commonly used methods, alongside so-called traditional methods [9]. Moreover, maternal mortality from unsafe abortion has remained high across Africa, and abortion remains one of the major causes [10].

Given this context, we wanted to learn what means women are using to have abortions in two Francophone African countries where we have been working for several years, Benin and Burkina Faso. We wanted to find out whether or not medical abortion with misoprostol is currently serving as an alternative to less safe abortions: There is a complex risk continuum that depends on method use, and "informal use of misoprostol has added a layer complexity to the continuum of safety" [11]. We conducted a qualitative study in order to gain insights into abortion methods used and pathways to abortion in Cotonou in Benin and Ouagadougou in Burkina Faso, which we report in this paper.

1.1. Abortion law and practice in the two study contexts

Benin and Burkina Faso share a colonial past that has shaped current restrictions on access to safe abortion. For many years, the "French Law of 1920" prohibited access to both abortion and contraception [12].² This law was repealed in 1986 in Burkina Faso by the revolutionary government of Thomas Sankara, and in 2003 in Benin as part of legislation on sexual and reproductive health (Loi n°2003–04 du 03 mars 2003). Abortion is now legal in both countries in cases of risk to the woman's life, rape, or incest, and in cases of malformation of the fetus [13]. However, in practice, access to safe abortion is more theoretical than actual. Women face major barriers, including lack of knowledge of the law by women and health professionals; medical authorization being required for abortion in case of risk to the woman's life and fetal malformation; legal authorization needed in cases of rape and incest; and the opposition of some healthcare providers [14]. Considerable stigma also surrounds the use of abortion, as it conflicts with social and religious norms that value high fertility and that consider the fetus a human being [15].

There are no official government statistics on the practice of abortion in either Benin or Burkina Faso. In Burkina Faso, the abortion rate is estimated as 25-28 per 1000 in Ouagadougou and 42 per 1000 in other cities [16]. No such data are available for Benin. The vast majority of these were illegal abortions obtained with unsafe methods. Only 6% of the women in this study reported having had a safe surgical abortion, while around 50% had used traditional methods (various potions, high doses of caustic products such as bleach or laundry soap, and vaginal insertion of coffee, Coca-Cola or Guinness), 15% had used hormonal methods, and the rest had used methods such as insertion of a catheter or suppository or unspecified methods. In Benin, there are no available data on abortion, legal or illegal, but data on complications associated with clandestine abortions attest to its widespread practice [17].

One important element to consider regarding abortion is that in both countries the use of modern contraceptive methods is limited. Among women living with a partner in Cotonou, only 12% were using a modern method of contraception in 2011-12 [18]. In Ouagadougou, the prevalence of modern contraceptive use in 2010 was higher: 33% of women living with a partner were using one of these methods [19]. The prevalence of modern contraceptive method use in both countries is higher for sexually active single women, but there is again an important difference between Benin (24% of users) and Burkina Faso (58%). In spite of these differences, however, total fertility rates were comparable between Ouagadougou and Cotonou (3.4/3.6). Emergency contraception is available over the counter in both countries, but according to DHS data, the level of knowledge of it was low, less than 20% of married women and 32-38% of sexually active unmarried women, while the use of emergency contraception was less than 1% [18,19].

2. Methodology

2.1. Methods and measures

We conducted in-depth interviews between 2014 and 2015 in order to study the women's pathways to abortion and the methods used. In both countries, we focused on the

¹ In 2005, the World Health Organization included mifepristone and misoprostol on its Essential Medicines List [6].

² Several other Francophone countries are still subject to this law, including Senegal, Mali, and Côte d'Ivoire.

capital cities, where access to medicines is easier and we surmised that changes to induced abortion practices were more likely to emerge than in rural areas.

As this was a qualitative study, it did not seek to be representative but rather to understand complex social phenomena, which quantitative research cannot address. To make sure we could learn about different abortion practices, we sought a balanced proportion of women from very different backgrounds in terms of socio-economic status, household income, daily activities, and assets (vehicles, housing). We also took into account age, family situation (single, living in a couple, with or without children, living with or without parents), and current household composition. We looked for them through our two interviewers' knowledge networks (17),³ using the snowball technique. We decided against interviewing women who were living in extremely vulnerable situations (a very young housemaid, for example).

Collecting personal accounts about a practice that is so deeply condemned presented genuine challenges--because women were very reluctant to give evidence about their experiences. Hence, we were able to interview less than half the number of women we approached. A total of 34 women agreed to be interviewed-21 in Cotonou and 13 in Ouagadougou. They included women in two health centers in each country where women are treated for complications of abortion and where health professionals also helped us to contact women (12), and schools in Benin (5 final year secondary students). We estimate that 10 respondents could be considered as "rich", 16 as "middle class", and 8 as "poor". Fourteen of the women were aged 18-25 years old, 14 were aged 26-36 years old, and 6 were aged 37-43 years old. Fourteen were young and single, with no children; 8 women, most of whom had children, were not or were no longer living with a partner; and 12, most of whom also had children, were living with a partner.

We used the same interview guide in both countries. In addition to the background information outlined above, it asked about the woman's reproductive pathways since she had begun her sexual life and relationship(s); her reproductive and contraceptive history; and her most recent pathway to and experience of abortion, as well as any previous abortions. We pre-tested the guide in both settings through an exploratory study. We conducted one or more interviews with each woman, until we had gained the in-depth information we sought. The interviews were in French or local languages (Fon in Cotonou, Mooré in Ouagadougou). We recorded all interviews. They lasted on average 1 h in total with each woman.

³ Two students in our team, Inès Boko from Cotonou and Adjara Konkobo from Ouagadougou, conducted the interviews. They are both around 35 years old and have lived in these cities with their own families for more than 15 years. They found our interviewees using their own knowledge networks through their families, friends from school, college, university, and their local neighborhoods.

The interviews were transcribed literally by Inès Boko and Adjara Konkobo, who then translated the ones in local languages into French. They coded the texts thematically, which were discussed collectively within the research team. We identified recurrent themes and analyzed the texts in relation to the research objectives. We have selected quotes that are particularly significant of the social processes analyzed and highlighted them within the paper.

We obtained ethical approval for the study from the *Comité d'éthique de la recherche de l'Institut des Sciences biomédicales appliquées* in Benin and the *Comité d'éthique pour la Recherche en Santé* in Burkina Faso.

3. Results

Between them, the 34 women interviewed had had 69 abortions (40 in Cotonou and 29 in Ouagadougou)–-15 women had had one abortion, 10 women had had two, 6 women had had three, and 3 women had had four or more abortions. Of these abortions, 37 had occurred less than 5 years before the study, 17 were 5–10 years before, and 15 were 10-20 years before.⁴

3.1. Pathways rarely led to medical abortions

The women's pathways to abortion in Cotonou and Ouagadougou were very different. However, a common feature was that medical abortion was not commonly used, involving only 6 of the abortions reported, but all 6 had taken place within the 5 years previous to the study, or 6 of the 37 abortions reported in this period.

3.1.1. Difficult pathways for the women in Ouagadougou

For the women in Ouagadougou, the pathway to abortion was complex and even tortuous, a finding also reported in 2015 by Ramatou Ouédraogo [14]. The women described a broad range of practices and unsafe and ineffective methods. First attempt for 24 of the 29 abortions reported started with methods of self-medication that were in common circulation, which the women found out about from friends. All 29 women we interviewed from Ouagadougou had tried these techniques for their first abortion, which included a variety of pharmaceutical products, often a combination of several, and frequently accompanied by the consumption of large quantities of what they called "bitter" drinks (coffee, beer, and Coca-Cola).

"I mixed together a lot of Nescafe, and then I added heavy Guinness, and then I put in a lot of yellow toupaye (local

⁴ It is important to note that even if just less than the half of documented abortion occurred more than five years before interviews, we didn't know before the study if misoprostol was used or not at this time. It was precisely one of the purposes of our study. For the record, self-use of misoprostol is described in Brazil from 1986–87 and the first commercialized brand for misoprostol, Cytotec[®], obtained market authorization at the end of the 1980's in most countries, including countries of Africa [20].

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name for an antibiotic capsule) also, and then I drank it. Nothing, big sister, came out." (Djénéba, 23 years, December 2014).

Some women took a large number of contraceptive pills, such as Stediril[®], or emergency contraceptive pills, such as Norlevo[®]. They also mentioned using anti-malarials such as Nivaquine[®] or quinine as abortifacients. They also described plant-based concoctions that they ingested or used as enemas. For four of the reported abortions, the women also consulted a male or female "traditional practitioner" to assist with the abortion.

"I arrived and she had me lay down and she spread my feet apart and she put something inside. (...). It was like, I don't know, millet wood; she put it inside and pushed hard. I fainted... I felt so much pain that I can't even describe it. When I woke up, my mother told me that she had applied the medicine and that it would open the thing there." (Agathe, 19 years, July 2014).

As a last resort, the women all ended up going to a facility, where their pregnancies were terminated. Nine of the 29 abortions were completed in a public health facility (including one in a national referral hospital) and 19 in a private clinic. Misoprostol was provided by a medical student to complete one of the abortions. They went to these facilities because the methods they had used had failed or caused complications, such as heavy bleeding. But this was not necessarily the end of the story for all of them. Some went to one or more private health centers first, only to end up in a public health facility where the abortion was finally completed. One woman attended four different facilities, one after the other:

"A friend⁵ accompanied me; there was a doctor there who works in a health center somewhere, but he lived there, so he did it there... I felt nothing. He said it was going to hurt, and all that, but I felt nothing. So we went back there. Then there was another guy somewhere else. Just the same as the other place, it didn't work... He had me lie down and spread my legs. He inserted something inside, in my private part... When it was done, I got up and left. I waited but I didn't feel anything. Then, I went to another one, and in that clinic, ooooh, right away, it was really hurting me and I was bleeding a lot... He also inserted something, like this (she shows a small tube, that resembles a probe) and that really hurt me. I even thought I was going to die when it began to flow down there. But it didn't come all the way out, so I went to the [health] center" (Amandine, 22 years old, July 2014).

The abortion methods used in the health centers were curettage, MVA, and injections (the women could not say what kind). The fees were about 30,000 Francs CFA (USD 48.50) in the public health centers and as high as 60,000 Francs CFA (USD 97) in the private clinics.⁶

Overall, 11 of the 13 women interviewed experienced fairly serious complications during these various abortion attempts, involving 14 of the 29 abortions reported. Eight of the 11 women with complicated abortions had to be hospitalized in a public health facility for post-abortion care.

3.1.2. Most women in Cotonou went to health care professionals

In Cotonou, unlike Ouagadougou, of the 40 abortions reported, in 34 cases the woman and/or her partner or a family member approached a health care professional directly for an abortion. Only six women, who were school students at the time, tried to abort by themselves first, but then they too went to a professional after the attempt failed. Young women like these, still living with their parents, are more vulnerable to having less safe abortions in this context because they have little or no money of their own for a clinic and often feel afraid to ask for anyone for help. These six cases involved using different unsafe methods from those used in Ouagadogou. They used Chapoteaut's Apioline® (supposedly composed of parsley, but it is difficult to get information on this drug); Gynecocide[®] or Gyneacosid[®], composed of hormones (methyloestrenolone and methyloestradiol); and Cumorit® (progesterone and estradiol benzoate) or potassium permanganate inserted into the vagina. None involved the more dangerous methods known either (such as insertion of plants, bones, and plant stems into the vagina). There were no dangerous practices mentioned, such as jumping from various heights or violent repeated sexual intercourse, though they too had heard of them. According to these women, the fear of complications led them to go to a professional. Regardless of their socio-economic status and unlike the numerous other health problems that the women in Cotonou attempt to treat through self-medication [21], in the case of abortion they seemed to prefer to turn to a health professional.

Although the abortion sometimes took place in the woman's or the provider's home, they were usually done in a private facility. There are a few large private clinics in Cotonou where the general consultation fee is expensive (upwards of 10,000 FCFA, or USD 16.18⁷) and a multitude of "small private health centers" with prices comparable to those charged in public health centers. "Small private health centers" are specific to Benin and are ubiquitous in the southern part of the country; in addition to their role in reproductive health, described elsewhere [22], they appear to play a significant role in abortion too. Overall, these small centers were the predominant sites where our interviewees went for abortions, for a fee averaging between 15,000 and 55,000 FCFA (approximately US \$24.50–89).

It was not usually just by chance that women ended up at a specific center or with a specific health professional. Except for one case where the woman went from center to center before she obtained an abortion, the woman or her

⁵ The role of other people in their lives (e.g. mothers, partners, friends) is important to consider in women's abortion trajectories. Another paper covering this aspect from our larger study should be published soon in the journal Anthropologie et Santé.

 $^{^{\}rm 6}\,$ The minimum wage in Burkina Faso is 32,218 FCFA (around USD 58.10).

⁷ The minimum wage in Benin is 40,000 FCFA (around USD 69).

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partner discussed the situation with a close friend or relative who recommended a clinic or professional they could consult. It is not hard to find these types of services in Cotonou. Importantly, however, they described making sure that the abortion took place far away from their homes to ensure that it remained secret. The abortions were performed by gynecologists, nurses, and sometimes medical assistants; one was performed by a midwife. The most commonly used method was MVA, followed by curettage, and more rarely a Synergon[®] (progesterone + estrone) injection, a product indicated in the symptomatic treatment of non-gravid amenorrhea.⁸ If the initial attempt with a professional did not result in a successful abortion, they turned to another professional, usually with a higher level of expertise. In contrast to Ouagadougou, only one of the women interviewed in Cotonou had complications from an abortion performed by a health professional, which did not result in any health sequelae.

3.1.3. The six abortions with misoprostol

In spite of the low utilization of medical abortion observed in both Cotonou and Ouagadougou, its use merits emphasizing. Three abortions in Cotonou and three in Ouagadougou of the 69 abortions we documented were carried out using misoprostol. In one case in Cotonou, the misoprostol was ingested on a friend's advice, while a midwife prescribed the pills for four of these abortions and a medical student provided the prescription for the other one. All six of the women who used misoprostol had secondary level or higher education and had a fairly high socio-economic status. Either they or their partners knew health professionals personally through their social networks. They were educated, well-off women with significant social and economic capital.

On the other hand, we found that most of the other women we interviewed in both countries did not know anything about misoprostol or any of its various trade names.⁹ Only three other women in Cotonou, in addition to the six who had used it, who were all also relatively well-educated, were aware of the use of misoprostol for some of its other reproductive health indications, i.e. inducing labor and post-abortion care.

4. Discussion

Based on our findings, the use of misoprostol for abortion is not the norm either in Cotonou or Ouagadougou. In spite of our small sample, we believe we would have found wider use had it been incorporated more into current practice. This emerging practice does not appear to promote women's appropriation of the medicine themselves, since women prefer to have a health professional mediate than self-medicating. Basically, women "figure it out" when an unwanted pregnancy occurs, and, depending on the country, they either embark on complex routes that often result in health complications for them (Burkina Faso) or they head for "small private health centers" that seem to play a major role in regulating fertility (Benin).

Nevertheless, even though there are difficulties accessing misoprostol in both countries, we believe the use of misoprostol will increase in Benin and Burkina Faso, even if slowly, for a number of reasons:

- first, as our current study shows, at least some educated, well-off women with personal contacts among health professionals are already using it;
- second, in Benin, although misoprostol is one of the few medicines that cannot be obtained in pharmacies without a prescription [21], it is available on the informal drug market in the Adjegounlè section of the large Dantokpá international market [23];
- third, orchestrated by international associations working in the field of reproductive health and relayed by local professional associations (gynecologists, for example) and NGOs working in family planning, misoprostol was included on the essential medicines list in both Benin in November 2013 and Burkina Faso in December 2014 [23]. This suggests it is likely to become more known and then more available, even though the approval in both countries was for other reproductive health indications, not induced abortion, and
- fourth, the demand for medical abortion is growing at international level, and even in Anglophone African countries, interest in misoprostol seems to be more developed [22,23], which may eventually influence Francophone countries.

Thus, for example, in 2008, officials in Uganda issued a marketing authorization for misoprostol use for the prevention of post-partum hemorrhage and included it on their Essential Medicines List in 2012 [24]. Nigeria also included misoprostol on its Essential Medicines List in 2010 for reproductive health indications [25]. In Zambia, the use of misoprostol for abortion is growing, and misoprostol is now widely available and for sale in pharmacies [26,27]. Moreover, the pharmaceutical systems in some Anglophone African countries seem to be more liberal than those in most Francophone countries, with greater readiness to integrate new medicines, which are more easily distributed through multiple wholesalers, pharmacies, and drugstores in the private sector [28,29]. It is therefore not surprising that misoprostol has become more available and faster in these countries. On the other hand, given legal and service delivery restrictions, whether self-use of misoprostol in these countries is safe and effective remains to be learned.

⁸ Frequently however, in 10 cases, the women, who were sometimes anesthetized, could not specify the method used to do the abortion.

⁹ Cytotec[®], Misoclear[®]; Ace Miso[®]; Medabon[®], in which misoprostol is packaged with mifepristone; and Artotec[®], in which misoprostol is combined with diclofenac.

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What may militate against interest among some women in misoprostol is the fact that in Cotonou women in our study were able to access surgical abortions without difficulty from "small private health centers". From their point of view, these abortions were both safe and accessible, and the cost was not unreasonable.

On the other hand, based on the experience of many countries, in particular in Latin America, we know that misoprostol is a real opportunity for women to practice abortions in the context of illegality, and has contributed to a decrease in maternal mortality and morbidity [30,31], as the possible complications are less severe than with unsafe traditional methods. Additionally, it is cheaper, easier for women to use [32,33], and also easier to obtain post-abortion care from healthcare providers because the effects are similar to miscarriage [14,34].

5. Conclusion

Although no pharmaceutical company that produces misoprostol has as yet tried to obtain marketing authorization in either Burkina Faso or Benin for gynecological-obstetric indications, making its use more potential than actual for the time being, international advocacy for access to medical abortion is growing rapidly and is likely to lead to many changes in this picture in the coming years.

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