ELSEVIER

Contraception xx (2017) xxx – xxx

Contraception

Original research article

Complications with use of misoprostol for abortion in Madagascar: between ease of access and lack of information☆,☆☆,★,★★,☆☆☆

Dolorès Pourette[a,*], Chiarella Mattern[b,c], Rila Ratovoson[b], Patricia Raharimalala[b]

[a]Centre Population et Développement, Institut de recherche pour le développement (IRD), Université Paris-Descartes, INSERM
[b]Institut Pasteur de Madagascar
[c]Université Catholique de Louvain

Received 15 November 2017; revised 25 November 2017; accepted 4 December 2017

Abstract

Objective: The objective was to learn what complications some women experienced in Madagascar following use of misoprostol for abortion and what treatment they received post misoprostol use.
Study design: This was a qualitative study in 2015–2016 among women who had experienced complications after use of misoprostol, with or without additional methods, for abortion; what information they received before use; what dosage and regimens they used; what complications they experienced; and what treatment they received postuse. We initially conducted in-depth, semistructured interviews with 60 women who had undergone an abortion that resulted in complications. The results presented here are based on interviews with the subset of 19 women who had used misoprostol.
Results: The 19 women were aged 16–40, with an average age of 21–26 at interview and average age of 18–21 at abortion. To obtain an abortion, they sought advice from partners, friends, family members, and/or traditional practitioners and health care providers. Misoprostol was easily accessible through the formal and informal sectors, but the dosages and regimens the women used on the advice of others were extremely variable, did not match WHO guidelines and were apparently ineffective, resulting in failed abortion, incomplete abortion, heavy bleeding/hemorrhage, strong pain and/or infection.
Conclusions: This study provides data on complications from the use of misoprostol as an abortifacient in Madagascar. Health care providers need training in correct misoprostol use and how to treat complications. Law and policy reforms are needed to support such training and to ensure the provision of safe abortion services in the public health system.
Implications: Health care providers who provide abortion care and treatment of abortion complications need training in correct misoprostol use and treatment of complications. Women and pharmacy workers also need this information. Law and policy reforms are needed to allow training and provision of safe services. Further research is needed on the extent and impact of incorrect misoprostol administration.

Keywords: Madagascar; Misoprostol use; Women's experiences; Lack of information; Complications of unsafe abortion; Postabortion care

1. Introduction

In Madagascar, in 2015, the maternal mortality ratio was 353 maternal deaths per 100,000 live births, down from 778 in 1990 [1]. Abortion is illegal in Madagascar except to save the life of the woman [2]. Nonetheless, many women have abortions illegally, and some health care providers provide abortions illegally [3]. According to data published in 2007, in the capital Antananarivo, 20.4% of women aged 15–49 who had been pregnant had had an abortion, compared to 10.6% in rural areas [4]. In 2012, 11.8% of maternal deaths were attributed to complications

☆ Conflict of interest: All the authors declare no conflict of interest.
☆☆ Clinical trial registration number: N/A.
★ Permissions: none required.
★★ Ethical approval: The Madagascan Ministry of Public Health gave ethical approval for the study.
☆☆☆ Funding: This study was supported by the US Agency for International Development (grant no. AID-687-G-13-00003, "Surveillance and Data for Management" (SDM) Project).
* Corresponding author.
E-mail address: dolores.pourette@ird.fr (D. Pourette).

https://doi.org/10.1016/j.contraception.2017.12.005

of unsafe abortion [5]. In spite of legal restrictions, however, there are no prosecutions of women or health care professionals for abortion.

Women in Madagascar self-induce abortions, go to a *reninjaza* (traditional birth attendant with no medical qualifications [6]) or go to a health care provider, whether a private doctor or private clinic (doctor, midwife, nurse) [7]. The methods used to induce abortion in Madagascar [8] include traditional methods (infusions or herbal decoctions), medical methods (misoprostol, estrogen–progestogen pills), and/or intrauterine insertion of probes or plant stems [7].

According to WHO, the most unsafe abortions can lead to complications such as incomplete abortion, heavy bleeding/hemorrhage, infection, uterine perforation, and damage to the genital tract and internal organs. The critical signs and symptoms of complications that require immediate attention include abnormal vaginal bleeding, abdominal pain, infection and shock (collapse of the circulatory system). In our study, we included women who reported having had complications severe enough to require treatment. The symptoms they described were mainly hemorrhage, heavy bleeding (in terms of quantity and duration: several weeks or months) and/or abdominal pain.

We conducted a study among 60 women to learn about complications women in Madagascar experience when they seek informal help to have an abortion involving misoprostol and/or other methods from traditional birth attendants and health care providers. For this paper, we analyzed a subsample of 19 women who said that they had used misoprostol for abortion and experienced complications. We have not been able to locate other published data on complications following the use of misoprostol for abortion in Madagascar, though we are aware of a Master's dissertation in Public Health which mentions complications following the use of misoprostol for abortion in Madagascar [7].

2. Material and methods

2.1. Study population

The main study was carried out between September 2015 and May 2016 in two geographical regions of Madagascar: the Analamanga Region, a mostly urban region where the capital Antananarivo is found, and the Atsimo Andrefana Region in the south, which has some of the lowest development indicators in the country and some very isolated areas. In both regions, we conducted semistructured interviews in a rural and an urban setting.

We purposively recruited 60 women who had had an abortion and experienced complications, for a descriptive qualitative research study. In each site, to find study participants, we received the assistance of the local traditional and official authorities and the health system authorities. To identify women who had had at least one abortion that was followed by complications, we used both a screening tool among women aged 15–49 and snowball recruitment methods. First, we used a screening tool with all the women in the communities who met our criteria aged 15–49 in each of the four settings to identify those who met the selection criteria. We also asked those women to put the interviewer in contact with others whom they believed met the same selection criteria. We stopped recruiting women in each setting when we had recruited 15 women per setting who had had at least one abortion involving complications, a total of 60 women.

The Ministry of Public Health (Madagascar) gave ethical approval for the study. An information letter was distributed to each respondent. We carried out interviews after the respondents accepted and signed a consent form. The interviews took place in the woman's home when no one else could hear them. All data have been anonymized, and pseudonyms have been used.

The national study coordinator and three female interviewers working at the Pasteur Institute of Madagascar conducted the interviews in the Malagasy language using an interview topic guide. The coauthors developed the interview questions based on several themes: the women's sociofamilial context, the relationship with health and contraception, the perception of abortion and the women's abortion trajectories (i.e., awareness of misoprostol, self-use or not, who they consulted, any other method used, costs, complications experienced and care following complications). The questions were written in French and translated into Malagasy by the national study coordinator. The interviewers were trained in data collection methods and the sensitivity of the subject. The topic guide was semistructured and open-ended in order that respondents would feel able to talk about issues of importance to them. The questions aimed to help the woman reconstruct the context of abortion (sociofamilial context, partner/conjugal situation, reproductive life, perception of abortion) and the trajectory of the abortion. Questions also included how the woman discovered she was pregnant, who she informed, whether she consulted a health care provider about abortion, her knowledge of abortion methods, her reasons for using misoprostol, where she got the misoprostol and how many pills, her use of the misoprostol and what happened, the development of complications and what postabortion care she received.

The interviews lasted between 45 min and 2 h. We recorded all interviews with the written consent of the respondents. A team of two bilingual translators transcribed all the interviews in Malagasy and translated them into French. We analyzed the interviews thematically, utilizing a thematic analysis chart that was designed to identify the themes cited in each interview and to make comparisons, in order to highlight recurring issues and differences in the conversations [9]. In our subsample analysis for this paper, we focused on women's misoprostol abortion trajectories: how did they learn about misoprostol, how did they use misoprostol and what were their experiences with the medication.