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Provision of medical abortion using telemedicine in Brazil☆,☆☆,★

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Abstract

Objective: To evaluate the need for and outcome of self-administered medical abortion with mifepristone and misoprostol in Brazil, provided through Women on Web, a global telemedicine abortion service.
Study Design: A retrospective case review of women from Brazil who contacted Women on Web in 2011. Information from the online consultation, follow-up questionnaire and emails were used to analyze data including demographics, gestational age, outcome of the medical abortion and symptoms that lead to surgical interventions.
Results: The Women on Web website had 109779 unique visitors from Brazil, 2104 women contacted the helpdesk by email. Of the 1401 women who completed the online consultation, 602 women continued their request for a medical abortion. Of the 370 women who used the medicines, 307 women gave follow-up information about the outcome of the medical abortion. Of these, 207 (67.4%) women were 9 weeks or less pregnant, 71 (23.1%) were 10, 11 or 12 weeks pregnant, and 29 (9.5%) women were 13 weeks or more pregnant. There was a significant difference in surgical intervention rates after the medical abortion (19.3% at <9 weeks, 15.5% at 11–12 weeks and 44.8% at >13 weeks, p=.06). However, 42.2% of the women who had a surgical intervention had no symptoms of a complication.
Conclusion: There is large need for medical abortion in Brazil. Home use of mifepristone and misoprostol provided through telemedicine is safe and effective. However, after 13 weeks gestation, there is an increased risk of surgical intervention that may be due to the regimen used and local clinical practices in Brazil.
Implications: The current study shows that there is an unmet need for medical abortion in Brazil, a country with legal restrictions on access to safe abortion services. Telemedicine can help fulfill the need and self administration of medical abortion is safe and effective even at late first trimester abortion. Prospective trials are needed to establish safety, effectiveness and acceptability of home use of medical abortion beyond 12 weeks of pregnancy.

Keywords: Medical abortion; Mifepristone; Sublingual misoprostol; E-health; Home-use; Self-administration; Telemedicine; Women on Web; Brazil

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1. Introduction

An estimated 22 million unsafe abortions are performed worldwide each year. Unsafe abortions result in the death of an estimated 47,000 women and cause disabilities for an additional 5 million women [1].

Although abortion is legally restricted in Brazil, it is estimated that more than 1 million abortions take place every year. This is an average rate of 2.07 abortions/100 women aged 15–49 [2]. Self-use of misoprostol has been associated with a reduction in maternal mortality in several countries. In Brazil, where misoprostol became available in 1986, the number of serious abortion complications such as infections and excessive bleeding declined from 80,000 serious complications in 1992 to about 33,000 in 2009. Most of this decline occurred during the years 1992–1997. In 1998, the Brazilian government restricted the use of misoprostol to hospitals only to prevent women from accessing it in pharmacies so that they could not easily use it to induce abortion [3–6].

In 2011 the Brazilian government took additional measures to restrict access to misoprostol by attempting to control the flow of information about misoprostol at Internet sites and social networks [7].

Women on Web (www.womenonweb.org) is a telemedicine abortion service that supports women in countries where there are no safe abortion services, to get access to safe medical abortion with mifepristone and misoprostol. Its aim is to reduce maternal mortality and improve reproductive health. Earlier research has shown that the telemedicine abortion service is safe and effective, though in some regions in the world, including South America, the surgical intervention rate after a medical abortion is high compared to other regions [8,9].

Although the World Health Organization (WHO) only supports home use of medical abortion up to 9 weeks of pregnancy, a recent study by Winikoff et al., showed the safety and efficacy of home use of medical abortion with 200 mg mifepristone and 4 tablets of 200 μg misoprostol at a gestation of 64–70 days [10–12]. Medical abortion has also been proven to be safe and effective for midtrimester abortion [13].

While Women on Web provides the telemedicine service to women who state that they are less than 9 weeks pregnant, women sometimes have a higher gestational age when they use the medication. This can be caused by several factors including delayed delivery of the medicines, the woman waiting to take the medicines after she receives the package or a woman acknowledging that she is more than nine weeks pregnant only after she received the medicines. In this study we describe the demographics of the women who used the Women on Web service and analyze the proportion of women who reported a medical abortion at gestation of 9 weeks or less, at a gestation of 10, 11 and 12 weeks and at a gestation of 13 weeks or more with regard to ongoing pregnancy and surgical intervention rates. As a secondary outcome we analyze the symptoms reported by women that led to a surgical intervention.

2. Materials and methods

This study analyses the data of women from Brazil who contacted Women on Web from January 1 through December 31 2011 and performed a medical abortion provided through Women on Web's telemedicine service. Women filled in an online consultation of 25 questions and provided information about pregnancy duration based on last menstrual period (LMP) or ultrasound examination, their age, parity, contraceptive use, any diseases or allergies, and the current use of any medications. If there were no contraindications, a package containing 1 tablet of 200 mg mifepristone and 6 tablets of 200 mcg misoprostol was sent to the woman. Contraindications included allergy to misoprostol or mifepristone, chronic adrenal failure, hemorrhagic disorder, inherited porphyria and not being able to get to a hospital within 60 min. Women with gestations of 9 weeks or less were advised to swallow 200 mg mifepristone, followed 24 h later by sublingual application of 800 mcg misoprostol and a repeat dose of 400 mcg misoprostol sublingually four hours later. It has previously been shown that a repeated dose of misoprostol reduces the rate of continuing pregnancy [14].

All women received an email with information about the use of medicines, including a description of signs and symptoms that might indicate a complication for which they have to seek medical care. Women were also advised to do a pregnancy test after 3 weeks or have an ultrasound after 10 days to confirm that the pregnancy was terminated.

If a woman acknowledged she was actually pregnant for more than 12 weeks, after she had already obtained the package of medicines, she received an additional email. The email informed her that a medical abortion in a later gestation can cause more pain and more blood loss, as well as a higher risk of surgical intervention and continuing pregnancy. She was also warned that she might recognize a fetus after expulsion of the pregnancy, which can be very distressing. The woman was strongly advised not to be alone and to take the medication inside or close to a medical facility. In this email the woman was also informed about the treatment protocol as recommended by the WHO for gestations >9 weeks; 200 mg mifepristone, followed by vaginal application of 800 mcg misoprostol 36 h later, followed by sublingual use of 400 mcg misoprostol 3 h later repeated a maximum of 5 times until abortion occurs. As the medication package only contains 6 tablets of misoprostol, women would not have enough misoprostol to complete the maximum 4 additional doses of misoprostol advised by the WHO if the abortion did not occur after the second dose [11].

A helpdesk that is available 7 days a week, supports the women who receive the Women on Web service through the medical abortion process.