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Original research article

Provision of menstrual regulation with medication among pharmacies in three municipal districts of Bangladesh: a situation analysis☆

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Abstract

Objective: The objective was to assess the provision of the combination of mifepristone–misoprostol for menstrual regulation (MR) in randomly selected urban pharmacies in Bangladesh.
Study design: We conducted a cross-sectional survey among 553 pharmacy workers followed by 548 mystery client visits to the same pharmacies in 3 municipal districts during July 2014–December 2015.
Results: The survey found that 99% of pharmacy workers visited had knowledge of MR procedures but only two-thirds (67%) could state the legal time limit correctly; they mentioned misoprostol (86%) over mifepristone–misoprostol combination (78%) as a procedure of MR with medication (MRM); 36% reported knowing the recommended dosage of mifepristone–misoprostol combination; 70% reported providing information on effectiveness of the medicines; 50% reported recommending at least one follow-up visit to them; 63% reported explaining possible complications of using the medications; and 47% reported offering any post-MR contraception to their clients. In contrast, mystery client visits found that the mifepristone–misoprostol combination (69%) was suggested over misoprostol (51%) by the pharmacy workers; 54% provided the recommended dosage of mifepristone–misoprostol combination; 42% provided information on its effectiveness; 12% recommended at least one follow-up visit; 11% counseled on possible complications; and only 5% offered post-MR contraceptives to the mystery clients.
Conclusions: We found knowledge gaps regarding recommended dosage for MRM and inconsistent practice in informing women on effectiveness, follow-up visits, possible complications and provision of post-MR contraceptives among the pharmacy workers, particularly during the mystery client visits.
Implications: Pharmacy workers in Bangladesh need to be trained on legal time limits for MR services provision, on providing accurate information on disbursed medicine, and on proper referral mechanisms. A strong monitoring and regulatory system for pharmacy provision of MRM in pharmacies should be established.

Keywords: Pharmacy worker; Menstrual regulation; Mifepristone–misoprostol combination; Mystery client; Post-MR contraceptive; Bangladesh

1. Introduction

Abortion is illegal in Bangladesh, except to save a woman's life. Menstrual regulation (MR), a procedure to regulate the menstrual cycle when menstruation is absent for a short duration [1–3], was introduced into the country's national family planning program in 1979 as a strategy to reduce maternal morbidity and mortality associated with unsafe abortion [4]. A medical doctor can provide MR up to 12 weeks from the first day of the last menstrual period (LMP), and midlevel providers, such as family welfare visitors (FWVs), can provide MR up to 10 weeks from LMP [5,6]. FWVs are the cadre of service providers recruited to provide maternal and child health and family planning services by the Directorate of Family Planning under the Ministry of Health and Family Welfare. They must have 12 years of education and 18 months of in-service training prior to offering these services [7,8].

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MR services are provided free of cost at all levels of public health facilities and with fees in some nongovernmental organizations (NGOs) and private clinics using manual vacuum aspiration (MVA). In 2015, the Government of Bangladesh approved the use of mifepristone–misoprostol up to 9 weeks from LMP to be administered by service providers who have received training on MRM [9]. Although the mifepristone–misoprostol combination regimen is available at pharmacies upon prescription, it is well known that the combination pack is still not available through the government system and is not provided routinely in public sector facilities.

Women also face barriers such as unofficial fees, the legal time limit, being underage or having no children at the time of seeking MR services [10]. Moreover, the Demographic & Health Survey of 2014 showed that 55% of ever-married women were not aware of the MR program in Bangladesh [11]. Additionally, even those who are aware of MR often feel ashamed or embarrassed to access it or fear disapproval from family, community members or religious leaders, which may lead them to seek services from unskilled providers [12,13].

Alternatively, many women in low-income populations go to pharmacies as their main source of health care services where self-medication is possible due to the pharmacies' convenience, geographic accessibility and relative anonymity [14]. Pharmacies are especially attractive to people seeking care for stigmatized health needs, including STIs, family planning and abortion. People tend to expect pharmacy workers to provide good quality information and counseling for STIs or family planning methods [15,16]. However, some pharmacy workers with low levels of education and lack of formal training may sell medicines without a prescription or support from a trained health care professional, and this can lead to inaccurate advice and incorrect dispensing [14].

According to drug regulatory law in Bangladesh, no one should sell any medicine without the personal supervision of someone who has attended a training course approved by the Pharmacy Council of Bangladesh. Furthermore, the customer should receive dosing instruction and drug information before he or she leaves the pharmacy [17].

While the correct use of mifepristone–misoprostol for MR offers a safe and effective method, including in a low-resource and legally restrictive setting like Bangladesh, there are a possibility of incorrect provision of the medicines by pharmacy workers who lack training and a likelihood of ineffective use of the medications by women due to a lack of information on correct usage. Evidence from a previous study showed that some pharmacy workers in Bangladesh were providing ineffective regimens of misoprostol for MR in 2011 [18]. We designed this study to assess the provision of the mifepristone–misoprostol combination for MR by pharmacy workers in Bangladesh.

2. Materials and methods

We conducted a cross-sectional survey between July 2014 and December 2015 among pharmacies located in municipalities of three districts of Bangladesh, Dhaka, Gazipur and Sylhet districts, with a range of socioeconomic classes among the population and to include a site with low-performing reproductive health indicators (Sylhet) [11]. The study population was the pharmacy workers of randomly selected pharmacies from the three sites. We included two types of assessment among the pharmacy workers: firstly, face-to-face interviews during a rapid assessment survey and, secondly, indirect interviews through mystery client visit.

2.1. Sampling of pharmacies

First, we marked out a specific geographic boundary of 1 km in radius around the public and private health facilities in each study area. As there was no registry that listed all pharmacies, we created a listing of the 1410 pharmacies manually. Inclusion criteria for the pharmacies were as follows: (a) a fixed physical space that had medicines clearly displayed, (b) being established for at least 6 months, (c) opened regular hours each day and (d) stocked the mifepristone–misoprostol combination pack used for MR. We recorded the pharmacy names, addresses and contact numbers of the owner or pharmacy worker. Among the 1410 pharmacies listed (Dhaka: 335, Gazipur: 312, Sylhet: 763), 553 were randomly selected using a computer-generated sequence which gave 184 pharmacies each in Dhaka and Gazipur and 185 in Sylhet. This process was completed independently by a computer programmer who was not involved with the study. Unique numbers were assigned to the pharmacies for the randomization process. The selected pharmacies in each study area were then invited to participate in the survey. Eight of the pharmacies refused; we then included eight more pharmacies from the initially developed list to fulfill the required sample size.

2.2. Rapid assessment survey

We conducted a rapid assessment survey among the selected 553 pharmacies by undertaking face-to-face interviews at their working place (pharmacy) of a pharmacy worker who had at least 6 months' experience of selling medicines. Where there was more than one eligible respondent in a pharmacy, we interviewed the senior pharmacy worker because they may have been better informed/have more knowledge than others at the same site. All pharmacy workers provided informed written consent prior to interview during the survey. Eight field research assistants were trained to use a structured questionnaire to collect information on pharmacy characteristics, pharmacy workers' backgrounds, and their knowledge and practice with providing the mifepristone–misoprostol combination for MR. Questions on the two types of procedure for MR, legal time limits for MRM, dosage, route of administration, side effects and possible complications of the MR medicines, follow-up visit, referral and post-MR contraceptives were also asked. During the survey,