Exploring the Availability and Use of Medication Abortion Drugs for Menstrual Regulation in Bangladesh: A Scoping Review

Nished Rijal, PhD(c) Population Health, MPH Interdisciplinary School of Health Sciences University of Ottawa





Background

- 8% of all maternal deaths result from unsafe abortion
- 56 million abortions that take place each year: 45.1% are either "unsafe" or "less safe", almost all happen in developing countries
- More than half of girls in Bangladesh get married by their eighteenth birthday, and 80% of them give birth before 20
- High discontinuation (37%) and a high unmet need for family planning in Bangladesh
- Unsafe abortion contributes to 16% maternal deaths in Bangladesh

Background

- Abortion : A criminal offence in Bangladesh
- Menstrual Regulation (MR): "procedure of regulating the menstrual cycle when menstruation is absent for a short duration"
- Loosely termed as a provisional to establish non-pregnancy
- Legacy of the 1971 Bangladesh liberation war and post-conflict scenario
- Part of the national family planning program since 1979
- Menstrual regulation using medication (MRM) introduced in 2013 using the mifepristone/misoprostol combination package permitted through 9 weeks of the last menstrual period.

Methodology: Framework

Scoping review framework published by Arksey and O'Malley and revised by Levac, Colquhoun, and O'Brien. As suggested by the framework, we followed five key steps while conducting this review:

- I. Identifying the research question
- II. Identifying relevant studies
- III. Study selection
- IV. Charting the data and
- V. Collating, summarizing, and reporting results

Identifying research questions:

Research Question: What is known until now on the availability and use of MRM in Bangladesh?

Specific Questions:

- What is the availability of medication abortion drugs for menstrual regulation in community-based settings in Bangladesh?
- What is the availability of medication abortion drugs for menstrual regulation in protracted humanitarian settings (Cox's Bazar) in Bangladesh?
- What are facilitators and barriers to access and use of medication abortion drugs in Bangladesh?
- What are the outcomes associated with the use of medication abortion drugs for menstrual regulation in Bangladesh with specific attention to the modality of service delivery, location, and gestational age?
- What are Bangladeshi women's experiences with medication abortion drugs?

Identifying relevant studies

- Academic literature: Searched the combination of the keywords in CINAHL, OVID Embase, Medline and PubMed. Boolean operators using the keywords to narrow down and filter our search results.
- Grey literature: Guidelines set forth by the Canadian Agency for Drugs and Technologies in Health (CADTH)
- Additionally browsed websites of relevant organizations working to improve MRM in Bangladesh
- Retrieved articles from the academic and grey literature were stored and managed using Zotero software for reference management.

Inclusion and exclusion criteria

Population	All populations included
Included concept	Menstrual regulation with medication
Included context	Bangladesh
Types of evidence source	All source types included
Inclusion of date and languages	1979-2022, English
Exclusion date and languages	Before 1979, any language other than English

Search results:



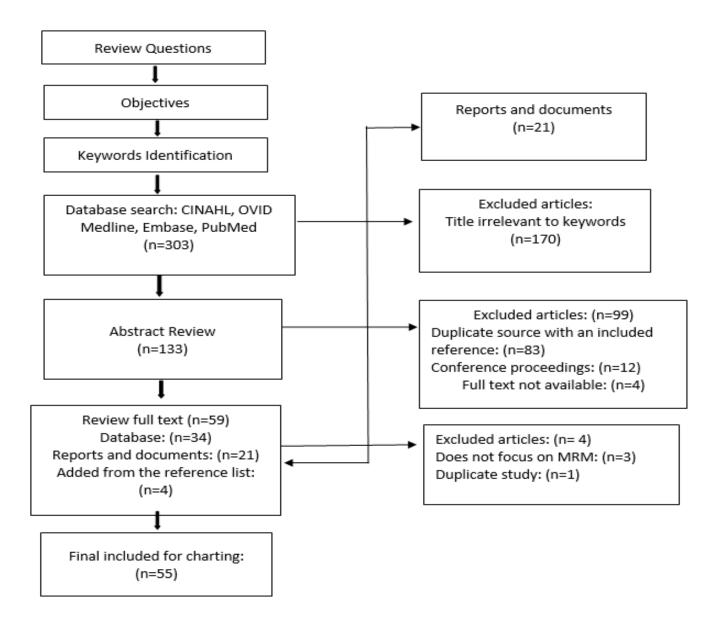


Figure 1: Literature search results, study screened and selection for final synthesis.

Results: Availability and use of MRM in community-based settings

- Only 14% of the government facilities that provide MR services are providing MRM. The rate is about 21% among private facilities.
- DGFP: Responsible for the procurement and distribution of MR commodities to the government health institutions and approved NGO clinics.
- Various local pharmaceutical companies manufacture the mifepristone-misoprostol combinate pack while a few companies manufacture mifepristone alone.
- Mifepristone or the combi-pack are not yet registered as an essential medicine list in Bangladesh.
- Misoprostol listed as the essential medicine in Bangladesh mainly to manage a post-partum hemorrhage.
- The use of misoprostol alone for MR is neither sanctioned nor recommended by the National Family Planning Program.

Results: Availability and use of MRM in community-based settings

- Combi-pack kits for menstrual regulation at the local pharmacies are being sold from 2.72 USD to 3.45 USD.
- 12 tablets of misoprostol tablets which are often recommended as effective regimens for menstrual regulation would cost between 2.07 USD to 2.31 USD in the market, the price cheaper than the combi-pack regimen for MR.
- However, there has been a sharp decrease from 66% to 53% from 2010 to 2014 in the number of government health facilities providing MR services and from 36% to 20% among the private facilities in the same time frame.
- The same period reported a decrease in the 40% of MR rate and an increase in the number of women presenting hemorrhage while seeking treatment for complications.
- This suggests a decrease in the legal provision of MR leads to an increase in the number of clandestine procedures, and women in need continue to terminate pregnancies even if safe methods are not accessible.
- Access to MRM was reduced by more than 40% during the COVID-19 pandemic in Bangladesh.

Results: Availability and use of MRM in community-based settings

- Although not permitted legally, almost all pharmacies sell medications that are intended for menstrual regulation.
- Misoprostol alone is being sold widely in the pharmacies for menstrual regulation and the community widely refers to the use of misoprostol as MR.
- Other abortifacients (other than misoprostol or the misoprostol/mifepristone combi pack) are equally sold over the counter: Gynaecosid, Oral Contraceptive Pill (OCP) and antibiotic analgesics.
- Huge knowledge gap among pharmacy workers related to MRM on the recommended dosage, legally acceptable limits, counselling, follow-up visits, possible complications, and post-abortion contraception.
- Inadequate staffing in pharmacies, lack of basic and refresher training on MRM among those available, no use of counselling tools or Behaviour Change Communication materials and lack of availability of MRM guidelines at the pharmacies

Results: Availability of MRM in protracted humanitarian settings (Cox's Bazar)

- Cox's Bazar: World's largest refugee camp hosting about 900,000 Rohingya refugees, who fled the mass exodus in neighbouring Myanmar since 2017.
- More than half of this refugee population is women and adolescent girls.
- Most of them are either survivors or witnesses of rape, gang rape, sexual assault or murder of close family and friends.

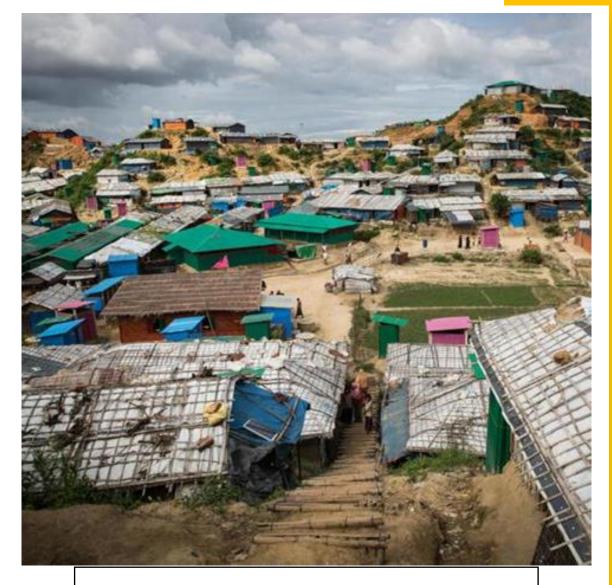


Figure: Cox's Bazar Refugee Camp © Relief Web 2021

Results: Availability of MRM in protracted humanitarian settings (Cox's Bazar)

- Access to safe abortion services is very limited forcing the number of women and adolescent girls into unsafe abortion practices
- Incidences of sexual violence are also high resulting in unintended pregnancy and unsafe abortion.
- Barriers to improving access to MRM services to the Rohingya population: limited training for providers, lack of privacy to provide safe abortion services confidentially, low level of knowledge on the availability of MR among the Rohingya population, lack of prior experience of providers, lack of awareness on existing MR laws among providers, no integration of protection and SRH services, and low level of willingness and/or funding among humanitarian agencies and providers to provide MR services
- NGOs are reluctant to provide access to safe abortion (menstrual regulation) services. Four common reasons: There's no need'; 'Abortion is too complicated to provide in crises'; 'Donors don't fund abortion services'; and 'Abortion is illegal'. Global Gag rule highly restricts humanitarian organizations working in these settings to ease US funding

Outcomes associated with the use of medication abortion drugs for menstrual regulation

- Studies in Bangladesh have proven MRM using a combi-pack to be highly effective (91% to 96%) in complete uterine evacuation up to 9 weeks of pregnancy.
- MRM has proven to be advantageous over other methods of menstrual regulation especially in rural and low resource communities being non-invasive, easy to administer, not requiring equipment or refrigeration, staffing, facilities, and easy to manage and deliver.
- Given the choice, two-thirds of Bangladeshi women prefer MRM over MVA
- 97% of the primary hospitals in Bangladesh are successfully capable to do the MRM procedure.

Bangladeshi women's experiences with MRM

- 90% to 97% women satisfied or highly satisfied indicating women's acceptability and belief in the regimen.
- As compared to the MVA procedure, women found MRM to be safer, able to protect privacy, cheap and not require surgery or other invasive procedures.
- Almost all (97%) of the women who had MRM procedures would recommend the same procedure to their friends and relatives.
- Both women and service providers positively feel the need to expand MRM services to the wider community.
- Rejecting women seeking MR services by both public and private sector providers is as high as 27% in Bangladesh and many of these rejections are due to social or cultural reasons.
- The majority of women who were denied MR in legal settings due to gestational age limit sought abortion services "elsewhere" highlighting the fact that denial of legal termination of pregnancy did not always change their decision in getting MR services, rather they pushed themselves in obtaining unsafe abortion procedures.
- Studies have also shown women in Bangladesh prefer informal providers over formal providers for seeking menstrual regulation services

Discussion

- Bangladesh is the epitome of how a country recovering from a post-conflict situation and at the same time facing a refugee crisis can still protect women's right to access menstrual regulation services
- Policy environment surrounding menstrual regulation is supportive.
- MRM in the context of Bangladesh is still in its infancy and slowly gaining acceptability and popularity among both women and service providers.
- There is an urgent need to improve supply and increase demand for MRM services in the country, especially in rural areas.



References:

- Say L, Chou D, Gemmill A, Tunçalp Ö, Moller AB, Daniels J, et al. Global causes of maternal death: a WHO systematic analysis. The Lancet Global Health. 2014 Jun;2(6):e323–33.
- Ganatra B, Gerdts C, Rossier C, Johnson BR, Tunçalp Ö, Assifi A, et al. Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model. The Lancet. 2017 Nov;390(10110):2372–81.
- Warriner IK, Shah IH. Preventing unsafe abortion and its consequences: priorities for research and action [Internet]. New York: Guttmacher Institute; 2006. Available from: https://www-guttmacher-org.proxy.bib.uottawa.ca/sites/default/files/pdfs/pubs/2006/07/10/PreventingUnsafeAbortion.pdf
- Directorate General of Family Planning. Bangladesh National Menstrual Regulation Services Manual [Internet]. Bangladesh; [cited 2022 Mar 24]. Available from: https://abortion-policies.srhr.org/documents/countries/05-BANGLADESH-NATIONAL-MENSTRUAL-REGULATION-SERVICES-GUIDELINES.pdf
- World Health Organization. Mapping abortion policies, programmes and services in the WHO South-East Asia Region [Internet]. 2013 [cited 2022 Mar 23]. Available from: https://apps.who.int/iris/bitstream/handle/10665/205480/B5034.pdf?sequence=1
- Rashid S, Mahmud I, Hawkins K, Theobald S, Mahfuza R, Chowdhury S, et al. How Menstrual Regulation policy and services were introduced in post-conflict Bangladesh [Internet]. Building Back Better/Research in gender and ethics: Building stronger health systems (RinGs); 2017 [cited 2022 Mar 25]. Available from:
 - https://static1.squarespace.com/static/55acc1f5e4b0ab3015ee3403/t/5a821e47e2c48390bd72a7ec/1518476879895/PAC00335+Building+Better+Back+Menstrual+regulation.pdf
- Mahmud I, Chowdhury S, Siddiqi BA, Theobald S, Ormel H, Biswas S, et al. Supporting the health system to respond to the needs of women in Bangladesh: close-to-community health service providers and menstrual regulation. Hum Resour Health. 2015 Dec;13(1):51.
- Nazneen Akhter. Menstrual Regulation with Medication (MRM) and Increasing Burden of Post- Abortion Complications: A Situational Analysis. 2021 [cited 2022 Jan 23]; Available from: http://rgdoi.net/10.13140/RG.2.2.28461.312
- Hossain A, Maddow-Zimet I, Ingerick M, Bhuiyan HU, Vlassoff M, Singh S. Access to and Quality of Menstrual Regulation and Postabortion Care in Bangladesh: Evidence from a Survey Of Health Facilities, 2014. 2017;28.
- United Nations Children's Fund. Ending Child Marriage: A profile of progress in Bangladesh [Internet]. New York: UNICEF; 2020 [cited 2021 Oct 7]. Available from: https://reliefweb.int/sites/reliefweb.int/files/resources/Bangladesh-Child-Marriage-Final-LR-spreads-10_1.pdf

References:

- Pike V, Kaplan Ramage A, Bhardwaj A, Busch-Hallen J, Roche ML. Family influences on health and nutrition practices of pregnant adolescents in Bangladesh. Matern Child Nutr [Internet]. 2021 Jul [cited 2021 Oct 7];17(S1). Available from: https://onlinelibrary.wiley.com/doi/10.1111/mcn.13159
- World Health Organization. Fact sheet on adolescent pregnancy [Internet]. 2020 [cited 2021 Oct 7]. Available from: https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy
- World Health Organization. Preventing Early Pregnancy and Poor Reproductive Outcomes Among Adolescents in Developing Countries [Internet]. Geneva: World Health Organization; 2011 [cited 2021 Oct 7]. Available from: https://apps.who.int/iris/handle/10665/341327
- National Institute of Population Research and Training (NIPORT), ICF. Bangladesh Demographic and Health Survey 2017-18 [Internet]. Dhaka, Bangladesh, and Rockville, Maryland, USA: NIPORT and ICF; 2020 [cited 2022 Mar 19]. Available from: https://dhsprogram.com/pubs/pdf/FR344/FR344.pdf
- National Institute of Population Research and Training (NIPORT), International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b), MEASURE Evaluation. Bangladesh Maternal Mortality and Health Care Survey 2016: Preliminary Report [Internet]. Dhaka, Bangladesh, and Chapel Hill, NC, USA: NIPORT, icddr,b, and MEASURE Evaluation; 2017 [cited 2022 Mar 19]. Available from: https://www.data4impactproject.org/wp-content/uploads/2021/02/tr-17-218-1.pdf
- Guttmacher Institute. Menstrual Regulation and Unsafe Abortion in Bangladesh [Internet]. 2017 p. 2. Available from: https://www-guttmacher-org.proxy.bib.uottawa.ca/sites/default/files/factsheet/menstrual-regulation-unsafe-abortion-bangladesh.pdf
- LaChance N, Hossain S. Bangladesh: Using strong evidence and strategic collaboration to increase access to menstrual regulation with medication [Internet]. Population Council; 2017 [cited 2022 Mar 25]. Available from: https://knowledgecommons.popcouncil.org/departments_sbsr-rh/242
- Singh, Hossain, Maddow-Zimet, Vlassoff, Bhuiyan, Ingerick. The Incidence of Menstrual Regulation Procedures and Abortion in Bangladesh, 2014. International Perspectives on Sexual and Reproductive Health. 2017;43(1):1.
- World Health Organization. Abortion Policy Landscape Bangladesh [Internet]. Available from: https://apps.who.int/iris/bitstream/handle/10665/338768/factsheet-bangladesh-eng.pdf?sequence=2&isAllowed=y
- Hena I, Rob U, Sultana N, Hossain Md, Yasmin R, Das T, et al. Introducing medical menstrual regulation in Bangladesh: MRM final report [Internet]. Population Council; 2013 [cited 2022 Mar 24]. Available from: https://knowledgecommons.popcouncil.org/departments_sbsr-rh/278
- Asaduzzaman M, Nahar K, Reaz N, Khanam S, Jahan SA, Parvin Z. Comparison of Effectiveness of Menstrual Regulation by Medication up to 6 Weeks of Gestation & 7-9 Weeks of Gestation. 2015;6.