

# Designing an m-health intervention to promote post-menstrual regulation contraceptive uptake and continuation in Bangladesh

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# Background

## Menstrual regulation (MR)

Permitted up to 12 weeks from the last period

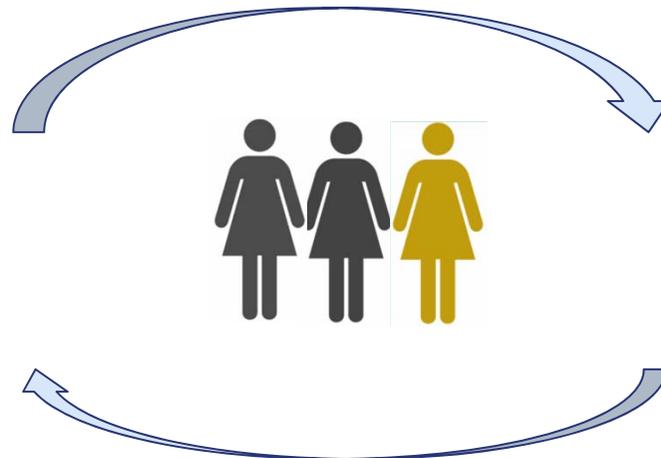
Barriers to quality services → high rates of unsafe procedures

## Post MR contraceptive uptake

Public sector: 73% day of procedure

80% select short term contraceptive methods

## At the Facility Level



## Beyond the Facility



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## Study aims

1. To explore the feasibility of using an mhealth intervention to support contraceptive uptake among clinic based menstrual regulation (MR) clients in Bangladesh

2. To develop an intervention to support contraceptive uptake among this population

3. To evaluate the effect of the intervention on use of long acting reversible contraceptive (LARC) and any modern method at 4 and 12 months post MR



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# Study Methods

## **Feasibility study (Ipas 2013)**

### **Methods:**

120 MR clients recruited from 4 urban NGO clinics

Allocated at random to control or intervention

Participants interviewed at baseline and 4 months post intervention

Part of a larger survey n=498

### **Intervention:**

Regular, one way SMS/text messages for 4 months post MR

Method specific reminders to use method

Free of charge

## **Intervention design phase (2015)**

Literature review

24 in-depth interviews with MR clients

Development of intervention structure

Development of message content using behaviour change theories

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# Feasibility study: Findings

## Parent study: n=498

✓74% of MR clients have mobile phones

## Intervention arm: n=60

### ✓Support for the intervention

**76%** of participants said they would sign up to intervention again

### ✓Demand for call centre counselling

**13%** called the study number with questions

**96%** reported interest in a hotline service

### ?Privacy

**96%** told their husband about their family planning method

**91%** told their husband they were participating in study

**53%** said that someone she did not want to know about the messages found out

**93%** were satisfied with the confidentiality of the text message reminders

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# In Depth Interviews: Findings

✓ Demand for the intervention

✓ Privacy

If a member of family sees this message, will there be any problem?

***“No, what problem? There will be no problem.”***

## Modality

Demand for call centre support

Preference for voice messages over SMS

***“In my opinion, it is better to listen.”***

Support for interactive messages

## Content

Personalised information (about contraceptive methods they're using)

Information about other contraceptive methods

What contraceptive methods can be used?

***“I would like to know what methods can I use after MR.”***

***“After MR, what type of method should be used before intercourse?”***

Recovery from MR and long term health effects

## Intervention design: Structure



### **10 Interactive voice messages over 4 months**

Support for method chosen

Support with switching if not happy with method

Increase awareness of and address barriers to LARC use

### **Each message will end with the following options:**

Press 1 to hear the message again

Press 2 to listen to recorded information about contraception

Press 3 to speak to a counsellor

Press 4 to tell us you are fine

Press 5 to stop receiving these messages

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# Intervention design: Content

## Using behaviour change models

COM-B Behaviour Change Wheel (Michie et al)  
 Socio-ecological model, (Panter-brick et al)  
 Transtheoretical model (Prochaska&Di-Clemente)

		Barriers	Advantages
Capability	Physical		
	Psychological	Can forget to take it	
Opportunity	Physical	Can be difficult to access if health worker not available Side effects (weight gain, headache)	Easily and widely available Can stop or start easily Other people can purchase it/supply it If forget one can take two the next day Can be taken in secret Free of cost Can store pills to use for a long time
	Social		People recommend it
Motivation	Automatic		
	Reflective	Fear of risk of pregnancy Fear of infertility (for newly married and women who have used the pill for a long time)	Can control menstruation Safe Feel comfortable

**Select key advantages to reinforce and barriers to address**

- Fear of infertility
- Fear weakness
- Can stop and start easily
- Free from fear of unwanted pregnancy

**Identify relevant behaviour change techniques e.g.**

- Feedback on behaviour
- Persuasion about capability
- Instruction on how to perform a behaviour
- Support to plan a behaviour

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# Intervention design: Content

## **Pill users - Message 3**

*“Hello! This is your doctor apa speaking. I hope you are well. Congratulations, contraceptive pill is a method that can be used either for a short time or for many years. Long-time usage lets you save your fertility for the right time: you can stop taking the pill at any time to become pregnant. If you need more information about this or if you want to learn about other methods we are here to help. Press 1.....”*

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# Privacy

- ✓ No information or reference to MR in messages
- ✓ Support participation of husband and/or others during recruitment
- ✓ Check for potential problems during recruitment

*“What would happen if your husband answered the phone and heard this message?”*

*“What would happen if your mother in law, other family member or friend answered the phone and heard the message?”*



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# Conclusions

## **Mhealth offers a possible platform for supporting post-MR contraceptive use in Bangladesh**

High mobile phone ownership in target population

Demand for information on contraception post MR procedure

Strong interest in an intervention expressed

## **Through the trial we will:**

Examine effects on use of LARC and any method at 4 and 12 months

Monitor negative or unintended consequences

Undertake a process evaluation

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