Mobile Phone Interventions for Reproductive Health (m4RH): Testing the Feasibility of Text Messaging to Improve Family Planning

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Mobile phones are currently used by millions of people around the world. In Africa, mobile phone ownership and use has dispersed at a surprisingly rapid rate across the continent. Recently, there have been multiple and diverse efforts to exploit mobile technologies for purposes of health communication, including collection of health data and provision of health information. Using mobile phones to provide family planning information, however, is a new area that has received almost no attention from health workers. Recognizing this as a gap and an opportunity, the Mobile for Reproductive Health (m4RH) project was born. The m4RH project is conceptualized as an automated, text-based system that is compatible with any and every mobile phone to maximize reach and access to family planning information via mobile phone. Since this is a new project and mobile phones are a novel method of delivering family planning information, formative research to obtain feedback on the project was carried out in countries where the m4RH project will be piloted in 2010.

Methods
To obtain feedback on the feasibility, design, and content of the m4RH project, approximately 40 clients in family planning clinics in Dar es Salaam, Tanzania, and Nairobi, Kenya, were interviewed in May and June 2009. Interviews focused on familiarity with and frequency of text messaging and willingness to receive contraceptive messages via mobile phones. In addition, contraceptive information and messages that were abbreviated to fit within text messaging character limits were tested for comprehension.
Results

Results from the interviews showed that the m4RH text messaging service would be very positively received. Clinic visitors liked the privacy of the service, the mobile phone as a method of communicating family planning information, and the reiteration of messages initially received in a clinical setting. Findings that were utilized in the development of the Mobile4RH text messaging service and research design are summarized below.

Text messaging is very common among mobile phone users, and respondents frequently participated in promotions that were advertised by text message. Respondents also suggested promoting Mobile4RH via unsolicited text messages to their mobile phones, since they pay attention to each and every message they receive. Clinics, pharmacies, and mass media also were frequently mentioned as good points for service promotion.

Almost all respondents said that they would share the service and/or the messages with their partner or family members, and especially with their friends. “Yes, friends, neighbors, relatives. I will advise them to use their phones to get reproductive health information” (female, 38, Tanzania). Other comments were: “This is important information and I would share it with friends so that they do not hear wrong information” (female, 22, Kenya) and “[I will tell about the service] my sisters—the young ones—and I will talk to them about family planning methods and escort their wives to the clinic” (female, 28, Tanzania).

Particularly in Kenya, respondents said they often discussed family planning with their partners, so they would share the text messages and use them for discussion. Some respondents in Tanzania noted: “I will save [the IUD messages] to show to my husband and friends” (female, 37, Tanzania) and “I would tell my fellow women and my husband. I will show them the message so that they can understand” (female, 31, Tanzania). A male respondent said: “My friends and my wife should use the service” (male, 37, Tanzania).

Mobile phones are sometimes shared, particularly in Tanzania, and so we asked how participants would feel it others saw contraceptive information on their phone. Although some respondents said they would be upset, many also said that they could turn this into a positive opportunity to start a conversation about family planning, particularly modern methods, with partners, family, or friends. For example: “[My partner] will react negatively but I have to educate him. No problem!” (female, 28, Tanzania). Respondents also seemed adept enough with their mobile phones that they would read and promptly delete messages they don’t want to be read by others. One respondent reported she would discuss the service with her husband and family “to avoid any misunderstanding” prior to using the service.

Respondents reported they would trust contraceptive information that was received over their mobile phones, and on viewing the contraception messages said they reiterated the counseling information received from providers. For example, “[I would trust the IUD messages] because I have been told this before by my health provider....It is like a
remind me of what I had been told by the provider….I would save the message so that I can keep refreshing myself when I experience any problems” (female, 42, Kenya).

Respondents said they wanted to learn about contraceptive options from the text messaging service. A woman said: “I will [use the service] to learn about contraceptive methods and to be able to decide which method to use when I am need of it” (female, 30, Tanzania) and a male said: “I would like to learn about contraceptive methods and decide which method will be appropriate to me and my wife” (male, 37, Tanzania). Side effects were also frequently mentioned as a preferred topic area. Knowing what to do if a birth control pill or an injection is missed was also mentioned as being helpful information.

The text messaging service was perceived as being private, convenient, and cost-effective, and therefore embraced by potential users.

- “I would use the text message service because it is private and confidential.” (female, 21, Tanzania)
- “[I would use the service] when at home and am relaxed. I can read and meditate more on the information.” (female, 29, Kenya)
- “[I would tell] my friends and family members that the services are available when required and one doesn’t have to go to health care facilities.” (female, 32, Kenya)
- “The service is convenient and can be accessed anytime, anywhere.” (female, 22, Tanzania)
- “[I would pay to use the service] because this information is important. It may cost more when you visit clinics than if it is on your fingertips.” (female, 37, Tanzania)
- “[I would pay to use the service because] it is a very good service and why use money to send messages for nonsense things instead of family planning issues.” (female, 28, Tanzania)
- Interviewer summary of conversation with female, 32, from Kenya: “The respondent had just had an implant put in. She is excited about the whole idea of getting information through the text messaging service. She can’t wait to start using it given that she comes from very far [for her family planning services]. She works in Uganda.”

**Conclusions**

This formative research suggests that providing family planning information via text message is a promising method of reaching women and men with health information. Given these positive results, the m4RH service will be piloted in Kenya and Tanzania to gauge whether the m4RH text messaging project is a feasible and effective way to deliver family planning information.
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