Synchronized Communication Using Interpersonal and Mobile Phone Technology for Health Behavioral Change

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Introduction
Somali women and children face more health challenges than almost any other country in the world. The under-five mortality rate, at 137 per 1,000 live births, is the third worst in the world, with one in seven Somali children dying before they reach their fifth birthday.

The maternal mortality rate is 137 per 100,000 live births, also one of the highest in the world, and is partly attributable to low utilization of antenatal care (ANC) and facility deliveries.

A number of factors are responsible for the low ANC and skilled delivery rates, including caregiver preference for traditional health providers, a lack of accessible services outside urban areas, perceived low quality of services provided through public facilities, cost of accessing health services (perceived or otherwise), and above all high levels of illiteracy. Available health system tools to monitor and follow up patients to provide required care are limited at the primary health care level.

Aim of the Intervention
Under the DFID-funded Somali Advocates for Health and Nutrition (SAHAN) programme, PSI Somalia seeks to address demand for and utilization of health services, with specific attention to maternal and child health services.

The expected impact of this intervention of synchronized communication tools for SBCC of IPC and mHealth is to increase uptake of healthy behaviors and increased utilization of health services by women of reproductive age, with the overall goal of reduced maternal and child mortality. It also aims to easily reach mothers to adopt utilization of health services at health facilities.

Program and Methodology
PSI has applied human centred design (HCD) to develop a novel approach that combines short code messaging through mobile technology with interpersonal communication using trusted women from the community. This approach has undergone iterative testing based on user feedback.

The novel intervention was built on a PSI mHealth platform, powered by a growing Somali telecommunication market with high mobile phone penetration. This was combined with a mother-to-mother (M2M) interpersonal delivery format using trusted women from the community to meet with pregnant or lactating mothers near or within their homes to engage in dialogue about key maternal, neonatal, and child health practices.

Interpersonal communication was reinforced through mobile phone messages, which also provided appointment reminders.

Greetings mother, this is your health reminder during the pregnancy period. We would like to remind you that it's essential for you to visit the MCH for your next ANC visit dated October 19th, 2018, to receive important advice, guidance and healthcare. This is very necessary for you and your fetus. Please visit the MCH on this date next week. Thanks.

Results
The ‘synchronized’ IPC and mHealth intervention was built upon insights from mothers.

While there was regional variation, mothers identified health care worker professionalism as a significant barrier for utilizing delivery services, due the lack of empathy and care for mothers during delivery. Mothers also said they were not familiar with the danger signs of pregnancy and they did not see any threat to delivering at home. In addition, based on their life and home caring burden and circumstances, they tend to forget to attend ANC unless they are physically ill. Mothers are not given a reminder card for their next ANC appointment. As such, they noted they would prefer to receive an appointment reminder that is simple and accessible. To make the reminder simple, and because most mothers are illiterate or may easily lose a reminder card, a reminder in the form of a call was valued by all mothers and as well as husbands.

Mothers are busy and want information delivered in an accessible and convenient format.

A key learning from the intervention based on feedback from mothers was that they are happy to receive information at or near their homes, as it is more tailored/personalized and is less time consuming for them given household responsibilities. Other mothers liked the peer format, as agents were mothers from the same village. Women also noted they felt uncertain about the privacy of their information. They expressed concerns that health providers, who are often younger, would share their FP product information with others. They preferred to receive FP information from a more trusted, secure source such as peers.

Conclusion
PSI plans to bundle the synchronized communication approach with other prototypes such as the ANC visit IVR reminder call into a platform that provides information about a range of maternal and reproductive health topics.

Acknowledgement
• PSI, SAHAN program approach document (March 2018)

References
• Ministry of Health Development (MoHD) Somaliland for their support and allowed us public facilities to work with us for prove this intervention
• TELECOM Company Somaliland, for their assistance in supporting setting and testing the system
• Altai Consulting, whom let us to refer their report about Mobile Money Ecosystem in Somalia, World Bank, June 2017

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