Reducing maternal mortality in nepal

Technology, Mobile Phone



Reducing high maternal mortality is a priority agenda of the national and International community, as evidenced by the great interest in the Millennium Development goal (MDG). Regardless, attaining millennium development goal-5 still remains a challenge to the world. Maternal health has received specific attention from the developing countries of Africa and Asia region.

For country like Nepal, it has made extraordinary walks in enhancing maternal wellbeing over the most recent couple of decades, and is one of only a handful couple of nations set to meet its Millennium Development Goal (MDG) focus of decreasing maternal mortality (WHO Trends, 2014). Many women in Nepal still deliver with no one present or with an untrained family or friend and they don't have access to proper maternal health care, which can lead to deaths of women. To reduce these deaths, enhancements in access to care are required, especially for poor woman in rural zones.

In the year 2017, the latest Nepal demographic and health survey (NDHS) was distributed with information from 2016. The 2016 NDHS is a standout amongst the most thorough demographic and public health reports discharged by the Nepalese Ministry of Health over the last recent 5 years. The maternal mortality ratio in Nepal diminished from 539 maternal passing's for each 100, 000 live births to 239 maternal passing's for each 100, 000 live births to 239 maternal passing's for each 100, 000 live births in the vicinity of 1996 and 2016 (NDHS, 2016). Sixty-nine % of women had at least four ANC visits for their most recent births in the past 5 years but this proportion differed between urban (76%) and rural (62%) women (NDHS, 2016). Fifty-seven percent of births were delivered in

health facility. Likewise, the percentage of women who received a postnatal care within two days following delivery were 57% (NDHS, 2016).

The expanded entrance of cellphone over late years has brought the potential for flexible prosperity to enhance addressing issues, for instance, low literacy level, substantial geographical separations to services, marginalization in the society, incompetent human resource, and poor money related assets (Feroz, Perveen, & Aftab, 2017). The utilitarian and essential properties of mobile phone make them striking to the health sector in LMICs. The mobile phone's most striking component is its ability to convey and exchange data inside both literate and illiterate society (Mechael, 2009). The expansion of mobile technology is raising new chances to allow sheltered, open, facilitated and effective maternal health care. There are various models of mHealth mediations being utilized to help pregnant mothers through safe pregnancy in LMICs. Mobile health or mHealth, alludes to the utilization of mobile phones and Information and Communication Technologies (ICT) to help in variety of purposes, including health promotions and disease prevention, health care delivery, training and supervision.

With Mobile technologies being accessible to 95. 5 percent of the total populace, a platform for advancing and delivering health services has risen (Srivastava, Pant, Abraham & Agrawal, 2015). The fundamental element of cell phones that has been most altogether recorded with regards to health is text messaging, which has collected expanding consideration in the United Kingdom, the United States, Norway, and Sweden as a method for reminding

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outbreak of Ebola epidemic in West Africa, cell phones were being utilized by different health workers for work such as collecting health data, monitoring implementation of health interventions and also informing local communities about the possibility of an outbreak.

Similarly, a study in rural western Kenya showed that mobile phone based strategies is potentially useful platform to deliver messages about immunization schedule to mothers with young children ages 0 -5 (Atnafu, Otto, & Herbst, 2017). Also a recent study done in the state of Uttar Pradesh in India showed positive effects of mhealth as it has increased the knowledge about the number of ANC visits in the rural community by 10 to 37% after the introduction of text messages (Pinjaet al., 2018)

A study done in rural Ethiopia on role of mhealth on maternal and child health service delivery, demonstrated that SMS based intervention could enhance the viability of frontline Health workers, principally in the area of improving access to ANC, delivery services, and PNC. Number of ANC visit, percentage of delivery attended by health workers improved and it also facilitated in the work procedure of frontline health workers. Also a recent study done in the state of Uttar Pradesh in India showed positive effects of mhealth as it has increased the knowledge about the number of ANC visits in the rural community by 10 to 37% after the introduction of text messages (Pinjaet al., 2018)

On the other hand, there were few issues experienced with the mobile phone and mobile network. It was also discovered that there was failure at the server end, which effected the level of utilization. Additionally, it was also discovered that there was problem encountered in the logistics in assisting timely project phones to the health workers which reduced the rate of utilization of the mobile system which significantly limited the expected benefits of the intervention, this contributed to data not being submitted regularly, which decreased the effectiveness of the program.

For the most part, there is an absence of evidence on the effectiveness of scalable mhealth services. There are few peer reviewed studies on implementation and analysis of mhealth programmes in low and middle income countries around the world. Though randomized trial elsewhere show that mobile phone based reminders increase maternal attendance at hospitals, skilled birth attendance in delivery, exclusive breastfeeding, immunization, acquaintance with family planning methods and other best practices (Alam, D'Este, Banwell, & Lokuge, 2017).

The fate of mobile phone for health or mhealth will rely upon the foundation of basic information and evidence base that will empower health overseers and policymakers to settle on better informed choices about how to invest limited health resources to technology. To get this going, project activities should be executed at a sufficiently expansive scale to produce results, utilizing research protocols that can exhibit where, how and why mhealth works best (Mechael, 2009).