Letter to The Editor

mHealth: A Newer Perspective in Healthcare through Mobile Technology

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The rapid spread of mobile technologies as well as advancements in their innovative applications to address the health issues has resulted in the development of a new field in healthcare known as mHealth. As of now close to 5 billion mobile phone subscriptions are in the world, with 85% of the world's population are being covered by a commercial wireless signal. [1] The growing sophistication of these mobile networks which offer very high speeds of data transmission are transforming the way health services and information are accessed, delivered, and managed.[2]

The motivation behind the development of the mHealth field arose from two factors. The first factor concerns with the constraints felt by healthcare systems of developing nations which include high population growth, a high burden of disease prevalence, low health care workforce, large numbers of rural inhabitants and limited financial resources to support healthcare infrastructure and health information systems. The second factor is the recent rapid rise in mobile phone penetration in developing countries to large segments of the healthcare workforce, as well as the population of a country as a whole.[3]

Governments are expressing interest in mHealth as a complementary strategy for strengthening health systems and achieving the health-related Millennium Development Goals in low and middle income countries. mHealth is being applied in maternal and child health, and programmes reducing the burden of the diseases linked with poverty, including AIDS, malaria, and tuberculosis. mHealth applications are being tested in such diverse scenarios as improving timely access to emergency and general health services and information, managing patient care, reducing drug shortages at health clinics, enhancing clinical diagnosis and treatment adherence, among others.2 Mobile healthcare enables the caregivers to have a ubiquitous and uninterrupted access to patient's clinical data and the latest medical knowledge; concurrently, it allows patients to remain under constant observation without needing to be physically present at the clinic.[4]

The increased use of mobile phones also raises concerns about risks they pose to health and quality of life. Perhaps the most substantial risk is the use of mobile phones while driving. Concern about the habitual use of mobile phones and risk of brain tumors, present for many years, has yet to be validated. The majority of mobile phones on the market today are sophisticated devices with relatively complicated user interfaces, often requiring high levels of manual dexterity and visual acuity which are difficult to be handled by elderly, illiterates and those with disability.[5]

The growing use of mobile phones by essentially all segments of the population provides an opportunity for greater personalization and citizen-focused public health and medical care.[2] Many mobile applications have been already put into use by the Indian government such as Nikshay (to track Tuberculosis patients), Kilkari (free audio messages about pregnancy, child birth and child care), etc. for better healthcare, as well as applications like ANMOL (app-based data entry by Auxiliary Nurse Midwives) to improve the health system.[6-8] To conclude, the technologies that underlie mobile phones are becoming more powerful and cheaper, and evidence is beginning to emerge about the value of mobile phones for the delivery of healthcare services and the promotion of personal health.[5]

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