Mobile phone ownership and widespread mHealth use in 168,231 women of reproductive age in rural Bangladesh

Abstract

As part of a rapid cross-sectional assessment of vital and health status among a cohort of approximately 650,000 people tracked under surveillance in a decades-long community research population, we sought to collect data on two critical mHealth indicators, in a typical rural South Asian setting. Between January and May 2012, field workers visited 143,239 households and interviewed 168,231 women of reproductive age. Of this, data on 37,979 has been entered, and is presented here. Women aged 15 to 45 were asked about household working phone ownership and their use of mobile phones during an emergency health situation (such as to call for medical advice, call a health provider, arrange transport, or ask for financial support). We found that 71% of surveyed women (n=25,577) reported household ownership of at least one working mobile phone, while 29% (n=10,577) of women reported none. Irrespective of phone ownership, 20% of all women surveyed (n=7,244) reported using a mobile phone for an emergency health situation. Of these women who used a phone for emergencies, 85% (n=6,169) owned a household phone. Women who owned phones were 2.8 times more likely (95%CI: 2.6 – 3.0) to use a phone for an emergency health situation than those who did not own phones. Surprisingly, household electricity was not a barrier to phone ownership or use, as only 23% (n=8,720) of surveyed women reported having electricity. In the absence of formal mHealth systems, nearly a quarter of women reported using a phone during an emergency health situation. This reflects a promising opportunity to harness these ubiquitous systems to inform, educate, and connect vulnerable women in rural populations to advice and care, when and where needed. mHealth interventions should still consider equity gaps that may persist in access to mobile phones in rural communities in South Asia, although ownership should not be a pre-requisite for access, given the current degree of penetration of mobile technology.