# *A feasibility study of home health care for geriatric patients*

*S.K. MEHER, D.V KUMAR, B.K RATHA.* ***A feasibility study of home health care for geriatric patients in developing countries like India using 3G mobile technology.*** *Gerontechnology 2014;13(2):263;* doi:10.4017/gt.2014.13.02.385.00 **Purpose** India's population aged 60 years or more was approximately 96 million, or around 8% of total population, as of 2010; according to a UN survey, aged people will make up around 20% of the total population by 2050. The population of senior citizens in India has increased due to a 60% increase in life expectancy over the last 60 years, from 42 years in 1950 to 69 years in 2009. Today, India has the second largest number of elderly people in the world, and every 7th senior citizen in the world is from India. Now is the time to address senior citizens' health care needs, and emerging mobile technologies can be used effectively to provide health care at home. **Methods** An online survey in the form of questionnaire was conducted by the Silver Inning Foundation (SIF) to assess the requirements of senior citizens from 1st Feb 2011 to 31st March 2011. A total of 646 persons viewed the questionnaire; however only 231 ventured to answer, 4 dropped out half way and their responses were ignored. The survey was made to understand how senior citizens and the elderly use Internet and 3G mobile technologies for different purposes. **Results** Only 227 persons (98.3%)[1] completed their responses. 42.0% belonged to the 60-69 year old age group, and the rest were over 80 years of age. Among those 227 respondents, 31.6% has various health problems requiring regular medical attention. 29.4% of respondents use the Internet 1-2 hours per day, 29.4% use email, 19.1% use computer/Internet as hobbies, and 22.2% are occasional computer users (*Figure 1*). In addition, 198 (87.2%) respondents use mobile networks (3G) on a regular basis. Among these 198 mobile users, 134 (67.7%) were comfortable taking appointments via mobile, 110 (55.6%) were ready to accept emergency help from doctors via mobile until they reached a hospital, and 66 (33.3%) were comfortable with regular follow up care via mobile so long as there was no medical emergency- when having any medical emergency, this figure went down to 22 (11.1%) (*Figure 2*). **Discussion** In India, there is shortage of 600,000 doctors and 1 million nurses. The doctor-patient ratio in India is one doctor for every 10,000 citizens against 1:1000 as recommended by expert groups. Due to age related diseases and changes in social structure, it is often not possible for elderly citizens to visit crowed health care centers for treatment or follow up care. 3G mobile technology is now available in India, and, using 3G mobile technology, the dream of home based health care for the elderly can be achieved. More than 87% of senior citizens have a mobile connection (*Figure 1*). In India, 3G mobile technology will change the face of geriatric health care system and will have tremendous benefits. Some of the benefits attained will be: (i) senior and elderly patients developing a better understanding of their own health; (ii) self-management of essential health data on patients' own cell phones or other mobile devices (mDevice); (iii) improved health through regular communication with wellness and care providers, as and when needed; (iv) participation in an open and transparent decision process regarding health, health care, and wellness efforts (*Figure 2*); (v) participation in financial decisions related to their health; (vi) more efficient care (e.g., easier appointments, reduced waiting time) and reduced travel burdens; (vii) data provision for further research work in the field of geriatric care; and (viii) reduced chances of hospital acquired infections and overcrowding in the hospital.

**Reference**

1. Liebig P, Rajan SI. An Aging India: Perspectives, Prospects and Policies. Philadelphia: Haworth Press 2003

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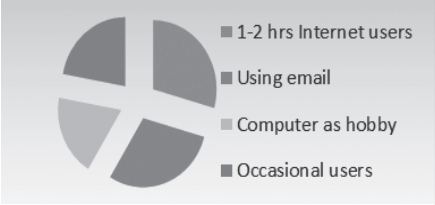


*Figure 1. Diagram of computer/Internet usage by elderly in India*

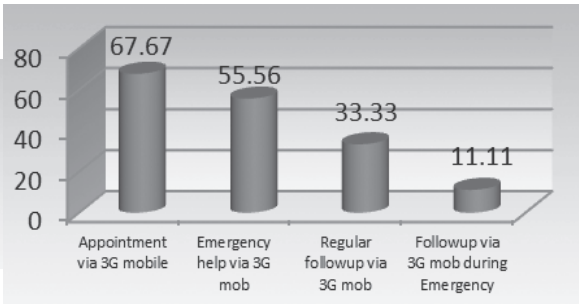


*Figure 2. 3G mobile acceptability by elderly for health consultation in India (%)*