

Chapter 4.5

Providing Telemental Health Services after Disasters: A Case Based on the Post-Tsunami Experience

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ABSTRACT

The role of information technology (IT) in managing disasters is increasingly being recognized. The Healing Touch project was started after the tsunami disaster in Tamilnadu to address the healthcare needs of the survivors through IT. Specifically, it provided mental health support to the victims near their place of residence. This project has been different from other telemedicine projects because:

- It was sponsored and managed entirely by NGOs.
- The local community and local NGOs were directly trained to manage their own health problems after the natural disaster.
- Success was linked to the intensive pre and post execution work done.

We believe that preparation and involvement of people is the key to success in most IT projects.

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Some problems we faced were related to a general lack of awareness and nonpenetration of IT in the community we served. If people are using IT in their day to day work, adoption of telemedicine and other e-services will be far simpler after a disaster.

BACKGROUND

“E-Health will completely change health care,” says Kendall Ho, who heads the U21 committee (http://www.innovations-report.com/html/reports/medicine_health/report-50033.html) for e-health. “It is one of the fastest-growing fields of health care today, giving undreamt-of opportunities for us to spread our medical knowledge to the whole world.”

SATHI is a nongovernment organization (NGO) based in New Delhi and consists of experts from the fields of health, IT, and telecommunications. They provide consultancy services in the fields of telemedicine and healthcare informatics. Their members (see Acknowledgments for a list of the

key persons) contribute to the projects on a voluntary basis, whereby SATHI tries to reimburse the actual costs incurred in managing the project. The idea of such varied professionals joining together was mooted in the realization that, at least in India, current practices and efforts in promoting telehealth and related services had not been very successful. SATHI felt that such technology showed great promise, but was providing less than desired outcomes. Important related aspects to this technology such as change management and capacity building and so forth were lacking. Probably a different approach was required.

SATHI was registered in 2004. The current report pertains to the very first project assignment of SATHI. It was named Healing Touch (Gogia & Surwade, 2006)

The Technology

The dictionary definition of *telemedicine* is the use of telecommunications technology to provide, enhance, or expedite healthcare services, as by accessing off-site databases, linking clinics or physicians' offices to central hospitals, or transmitting x-rays or other diagnostic images for examination at another site. *E-health*, however is a much more encompassing term. This has been defined by World Health Organization (WHO) as:

The delivery of healthcare services, where distance is a critical factor, by all healthcare professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of healthcare providers, all in the interests of advancing the health of individuals and their communities.

Telemedicine was initially conceived to provide healthcare to space travelers, thereafter to extending healthcare facilities for the geographically hard-to-reach and the underserved, literally

providing a virtual doctor to places where a physical presence is a problem. With time, telemedicine is becoming more widespread, less costly, and new applications are emerging. The technology has moved from expensive room-sized systems to the desktop personal computer, and now further to the Internet, as well as mobile phones and palm tops.

Healthcare in India

India, with its large population (1029 million in 2001), has vastly varied terrains. The range consists of deserts, coastal regions, tropical jungles, islands, and mountains (CIA, 2001). Roads and physical reach are a problem in many areas. 72.2% of India's population is rural (United Nations Economic and Social Commission for Asia and the Pacific, 2000), and this population is supplied by less than 30% of medical professionals. The ratio for specialized medical care is worse with less than 4% of specialists serving in rural areas.

Even while healthcare in India is free and the responsibility of the state, over 70% of the population prefers to pay for treatment as the actual availability of the facilities leaves much to be desired. To service this demand, rural areas are filled with healthcare workers without adequate training as most doctors having better qualification are unwilling to work in such places. There is a lack of adequate facilities for them to satisfactorily practice to the level of training imparted to them. Good schools for their children as well as social and entertainment facilities matching the standards of living which they are used to are also lacking.

While actual healthcare expenditure in India constitutes 5.2% of GDP (gross development product), as compared with 2.7% in China (WHO World Health Report, 2000), it is widely believed that it can go up to 15% of the budget of most families. In rural areas, much of the expenditure is wasted on the transportation to the nearest healthcare facility. Bringing down transportation costs,

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