

Telemedicine — The need of time

Madam, the definition of the term telemedicine as accepted by World Health Organization is, "The delivery of health care services, where distance is a critical factor, by all health care 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 health care providers, all in the interests of advancing the health of individuals and their communities".¹

The application of telemedicine can be either asynchronous or synchronous. Asynchronous telemedicine involves the exchange of pre-recorded data between two or more individuals at different times, while synchronous telemedicine involves individuals that are required to be simultaneously present for immediate exchange of information.² Both asynchronous and synchronous telemedicine involve the transmission of relevant information in a variety of media, such as text, audio, video, or still images.³ In regions with limited infrastructure, telemedicine services primarily focus on forming a link between health-care providers and specialists, and providing medical education.⁴

Some patients and health care workers resist adopting service models that differ from traditional approaches or indigenous practices partly due to the idea that physical

examination in person is better than mere sight at the findings, and partly to lack of adequate financial support, while others lack Information and Communication technology literacy to use telemedicine approaches effectively. Most challenging problems of all are linguistic and cultural differences between patients (particularly those underserved) and the service providers. Another challenge is shortage of studies that document economic benefit of telemedicine application. In addition major obstacle to telemedicine uptake are legal considerations which include a lack of policies that govern patient privacy and confidentiality, absence of an international legal framework to permit health professionals to provide services in different jurisdictions and countries.⁴

Although information and computer technology is being used to provide healthcare via telemedicine worldwide, the situation is quite alarming in Pakistan. According to a survey conducted by World Health Organization,⁵ no national telemedicine and e-health policy frameworks have been designed in Pakistan, in contrast to which, 55% of states worldwide have a proper e-health policy designed. In addition to this, there is no legislation to ensure the confidentiality of personally identifiable data especially the electronic medical records. Globally, 70% of the states have made legislation to protect patient records. Pakistan has no legislation that either allows or prohibits Internet pharmacy

purchases from other countries. The government has not made any legislation to assure the quality of health related internet content. However, it has been found that internet content providers take measures to maintain the quality of health related internet content which is in accordance to 56% states worldwide. The barriers to implementation of telemedicine found in Pakistan are non-supportive organizational culture, lack of policy framework, competing priorities and lack of knowledge of application. The information most needed to support the establishment of telemedicine in Pakistan cost and cost effectiveness, clinical possibilities, infrastructure and most important of all, patients' perception.⁵

In order to reduce morbidity and mortality and to improve the quality of life of the patients, especially those in remote areas, it is indeed high time to look into the measures which are supposed to be taken to implement telemedicine. If

not all, the major barriers need to be broken immediately, because health is the birthright of each and every human being.

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