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Commentary

Telepsychiatry: Reaching the unreached

The rural and geographically isolated areas are challenges for the health systems in India. It is not practical for a doctor to travel long distances to treat a few patients in remote areas. Likewise, it is not financially viable and feasible for the people living in rural areas to travel to urban areas for psychiatric care. Telepsychiatry or interactive videoconferencing can be a solution to this problem. The people in rural areas suffering from mental illness can be treated in a cost-effective way[1].

The article by Malhotra *et al*[2] in this issue effectively describes that diagnostic tool used here has adequate diagnostic validity and reliability when the telepsychiatry application-based diagnostic interview was conducted by general physicians and other non-specialist professionals. The study successfully takes into account the concerns regarding sensitivity, specificity, inter-rater reliability and precision of diagnosis making by including factors such as age, sex and other medical conditions. Things which were not kept in consideration for this study were cost-effectiveness, feasibility of the whole setup at a larger level.

Telepsychiatry can be used not only for diagnosing the patients and prescribing them medications, but also for providing therapies such as cognitive behavioural therapy, family therapy and supportive therapy. Thus, it has a therapeutic value as well. Patients suffering from panic disorder with agoraphobia and major depressive disorder have been treated with sessions of cognitive behavioural therapy, and they have reported improvement in anxiety and depressive symptoms and also in functioning[3,4]. Similarly, in patients suffering from attention-deficit hyperactivity disorder and oppositional defiant disorder and depressive disorder, improvement has been reported after sessions of supportive therapy and family therapy delivered with the help of telepsychiatry[5]. A patient awaiting liver transplant found that monthly telepsychiatry for six months helped him recover from depression and psychological adjustment to the illness[6]. Telepsychiatry can also be used for prison populations effectively, because of high risk involved in transporting the patients out of prison. Furthermore, the risk to doctor is also reduced, as they do not have to see the inmate face to face[7]. Telepsychiatry can be 'the wave of the future' in psychiatric care in correctional facilities.

Due to the limited number of psychiatrists available in military services, telepsychiatry can be used effectively for military patients also. The U.S. military at the National Naval Medical Centre has developed telepsychiatry services to the remote military medical clinic. It was also found to be cost-effective in terms of costs of health-care services, equipment, patient travel and lost work time[8].

Overall, clinicians and patients have reported high satisfaction and acceptability to the use of telepsychiatry for assessment and treatment. Sometimes, patients also prefer telepsychiatry over in-person appointments because the time of travel is saved, they do not have to skip their work for the visit and child care is not an issue with telepsychiatry. Vulnerable populations such as the prison population, rural residents, child and adolescent patients, geriatric patients and patients with limited access to health-care services also reported improvement after being treated with the help of telepsychiatry[7,9-11] has been reported. It is still debatable whether all patients would like to use telepsychiatry services over in-person services. Studies need to be done to clarify this issue.

Gender difference in satisfaction has also been seen, with females being more satisfied than males with telepsychiatry than in-person interviews[12]. Some patients also reported that they were shy and nervous during the interview, and also expressed concerns about confidentiality[12,13].

There can be some legal issues associated with telepsychiatry. There have been issues deciding when a proper doctor-patient relationship is established during the interview, when a telepsychiatry provider becomes liable for the harm to the patient; whether the treatment delivery is at the patient's site or the telepsychiatry provider site, as licence issues are there. There are no defined standards for telepsychiatry; this may increase the chances of the provider to be charged with complaints of malpractice.

The issue of cost-effectiveness remains complex, as the literature available in this area is in conclusive, with one study reporting that telepsychiatry was found to be 10 per cent less expensive than face-to-face treatment[14], while another study reported that telepsychiatry was more expensive than face-to-face assessment[15]. In a review that included a summary of 21 studies of telepsychiatry cost-effectiveness also noted that techniques providing high volumes of service are more likely to demonstrate cost savings[16]. The adoption of more convenient and efficient approaches such as utilizing personal computers and tablets and asynchronous store-and-forward models are also likely to grow and help reduce the overall cost of the setup. With the decreasing costs of available systems and the wider availability of increasingly secure technologies, psychiatrists and patients may find this mode of service more acceptable.

In developing nations like ours, where there is already a lack of mental health professionals, burdening the existing workforce to provide such services might prove to be detrimental. Moreover, the issues of duty of care and handling of emergency situations remain unresolved. On the other hand, integration of mental health care in the existing system of primary health care might be more gainful without overburdening the resources. Such an objective has been depicted in the National Mental Health Programme[17].

Telepsychiatry holds the potential to solve the massive and intertwined problems of underdiagnosing and undertreating persons with mental illness and the lack of trained workforce at grassroots level. Furthermore, initiatives must be taken to set up procedural guidelines and recommendations as the field advances. As telepsychiatry gains momentum, well-planned comparative studies like the one by Malhotra *et al*[2] assessing diagnostic reliability, efficacy and cost-effectiveness should be carried out more extensively in developing countries to further the progress of the field tailored to the specific needs and resources of the developing world. As this is a new area for developing countries, it needs further well planned future research.

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