



Learning from telepsychiatry during COVID-19 pandemic in India: Boon for public mental health in low- & middle-income countries

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Novel coronavirus disease (COVID-19) pandemic has affected the mental well-being of the population and posed many challenges in availing mental healthcare. Telepsychiatry has been proven to be an effective route for the delivery of mental healthcare. We share our experience of using the telemedicine approach in providing mental health services at a tertiary care hospital in India during the COVID-19 pandemic, following the break in routine outpatient services during the national lockdown. The telepsychiatry approach helped in ensuring the maintenance of mental healthcare. The utility of telepsychiatry as an option for such future situations and for its use in routine follow up care in indicated cases, have also been discussed.

Key words COVID-19 - mental health - pandemic - psychiatry - telepsychiatry

Delivery of mental healthcare services during the novel coronavirus disease (COVID-19) pandemic was challenging, particularly in the low- and middle-income (LAMI) countries¹. Telemedicine services or more precisely telepsychiatry services proved to be a practical alternative for providing mental healthcare globally, especially during periods of travel restrictions, physical distancing, lockdown and physical isolation². Mental health professionals (MHPs) used technology to assess and treat the patients without increasing the risk of infection to service providers or the patients. This is also inclusive of providing assistance to non-psychiatric clinicians in managing matters related to mental health issues.

As an approach to prevent the spread of COVID-19 infection, nationwide lockdown was implemented on March 24, 2020 by the Government of India. To adhere to the physical distancing mandate, routine non-emergency services were stopped by most of the hospitals. Telemedicine Practice Guidelines were issued by the Ministry of Health and Family Welfare, Government of India, on March 25, 2020³, enabling healthcare practitioners to manage patients who could not reach to the hospitals.

Even before COVID-19 pandemic, telepsychiatry services were being provided in various parts of India. The SCARF telepsychiatry in Pudukottai by Schizophrenia Research Foundation used internet and

mobile bus services to connect patients with mental illness in the villages to the psychiatrists in the central hub⁴. Telepsychiatry after care was successfully provided through video-based consultation services by the National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru⁵. The Maharashtra State Telemedicine Project also shown feasibility of using telepsychiatry services in Maharashtra, India⁶.

During COVID-19, various institutions in India used novel telepsychiatry strategies to maintain continuum of care, such as tele-triaging⁷ and telemedicine-assisted stepwise approach⁸. Telepsychiatry operational guidelines by the Telemedicine Society of India and the Indian Psychiatric Society in association with NIMHANS assisted further in implementing telepsychiatry services throughout the country⁹. At All India Institute of Medical Sciences, New Delhi, after the closure of routine outpatient services following the national lockdown, telemedicine services were started in this 2500-bedded multidisciplinary teaching hospital.

Telepsychiatry services for outpatients

Standard operative procedures (SOPs) were developed for providing telepsychiatry services in the institute. The previously registered patients were contacted through smartphone devices and enquired regarding their willingness for telepsychiatry consultation. Patient's identification was verified before tele-consultation using the unique identification number linked with the registered mobile number. The patient's current health needs, ability to use technology, availability of mobile phone, type of mobile device and the access to internet were evaluated. Audio or video calls and short message services were used to communicate as per the feasibility of the patient for assessment, and thereafter, digital prescriptions were sent through text messages. The telepsychiatry services were provided only for the management of follow up cases and were not used to initiate treatment of new cases. The patients who were deemed to require in-person evaluation were advised to visit the emergency services of the hospital, and those having travel difficulty were referred to nearby health services in their respective local vicinity.

During the four months of regular outpatient service closure (March 30 to July 31, 2020) a total of 2401 tele-consultations were provided¹⁰. This covered 64 per cent of the booked appointments during this period. The reasons for the remaining 36 per cent

unsuccessful consultations included unavailability of mobile numbers (3.7%), incorrect phone numbers (4.8%), inability to reach the number (14.4%) and unattended calls (12.8%). The percentage of successful tele-consultations improved from 51.4 per cent in April to 81.9 per cent in July 2020.

After the re-initiation of routine outpatient services post-lockdown, telepsychiatry was continued as an alternate service for follow up patients. Patients needing in-person assessment were opined to visit the hospital. Further, patients with hesitation about getting COVID-19 infection, living in distant areas and having trouble in travelling continued telepsychiatry services¹⁰. Tele-consultation was introduced in routine services by redesigning the interview rooms in outpatient clinics to maintain physical distancing while interviewing the patient. Two separate rooms with computers having video call facility were linked through local area network facilitating the interview of the patient and the informant by the clinician.

A systematic review of studies has shown that telepsychiatry can be reliably used for assessing and making the diagnosis in patients with mental illness¹¹. In India, 1140.71 million people are connected by wireless mobile phones with a teledensity of 84.38 per cent. Internet penetration in India is also increasing, with a quarterly growth rate of 0.79 per cent¹². In view of the diverse digital resources in the country, multiple choices of telepsychiatry services were offered to patients. With the internet penetration in both urban and rural parts of the country, telepsychiatry services ensured the continuity of mental healthcare to patients living in the far corners of the country. Various models of telepsychiatry services have been used previously in India primarily to enable access to mental health professionals (MHPs) in remote and underserved areas¹³. Earlier models were largely restricted to specialist psychiatrist input to primary care physicians, but recent work enabled the use of such services in routine patient care¹⁴.

Das *et al*⁵ found that most (96%) of the patients perceived telepsychiatry as an acceptable form of follow up psychiatric consultation. The most important factor for acceptability of telepsychiatry could be easy access to mental health services. Telepsychiatry is also a cost-effective approach by bringing a reduction of indirect costs such as loss of time in visiting the hospital, travel time and travel expenses. Moirangthem *et al*¹⁵ showed that telepsychiatry was economically better in

comparison with in-person tertiary care services. Thara and Sujit¹⁶ have highlighted the difficulty in obtaining psychotropic medications from rural pharmacies in India. However, telepsychiatry services can be better implemented if peripheral centres such as primary health centres can ensure availability of medications by maintaining the stocks of all essential psychotropic medications.

Though suggested as a tool of use in the scenario of sudden lockdown of healthcare services, telepsychiatry still faces certain challenges that need to be addressed in future such as technology acceptability instead of a conventional in-person visit, virtual completeness of physical/mental examination, competency, prescription validity and non-uniform network connectivity. Future research in this field needs to encompass capacity building apart from expanding its clinical utility. The telemedicine approach for mental healthcare services has the potential to be used in LAMI countries across the world, especially those with limited mental health resources and places where patients have to travel long distances for in-person consultation.

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