

## Tele-mental health during the coronavirus disease 2019 (COVID-19) pandemic

#### Abstract

This editorial highlights the origin of telemedicine in India, and discusses the present and explores the possibilities in the future in the context of the ongoing coronavirus disease 2019 (COVID-19) pandemic.

Keywords: Quarantine. Tsunamis. Technology.

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#### PANDEMIC TRIGGERED OPPORTUNITIES

The coronavirus disease 2019 (COVID-19) pandemic has hit globally beyond what we could ever have imagined and posed a significant challenge on our health (physical and mental health) and economy. This pandemic has brought a paradigm shift in the way we think, behave, and perceive threat. Unprecedent challenges come with great opportunities and telemedicine has an opportunity to take healthcare to the doorsteps. When the lockdown was declared on 22 March in India, the first author had to quarantine herself along with her daughter because of travel reason. This had a significant impact on her and her daughter. The first author realised that if this unprecedented lockdown can affect an educated population, then what about the common man? This process triggered a series of events that culminated into a constructive contribution to reach the society by means of technology. The first step the authors took was to prepare the guidelines for telepsychology, as there were no such guidelines in India on telepsychology in disasters and more specifically in pandemics. Within two weeks, the Best Practice Guidelines for Telepsychology during Disasters (COVID-19 Pandemic) was prepared, discussed, and published.[1] At the same time, Telemedicine Practice Guidelines was notified on 25 March 2020 by the Ministry of Health and Family Welfare, Government of India.[2]

#### **PRE-EXISTING EXPERIENCE**

The Indian Space Research Organisation (ISRO) took a pioneering step to bridge the gap of rural and urban health sector through an ambitious telemedicine pilot project but for more than two decades, its objectives never seemed to have reached the full potentials.[3] Math and his colleagues[4] had opined that telemedicine had a lot of strengths in matters of delivering healthcare services, being cost-effective, saving time and distance.[5,6] There is no difference of tele- with face-to-face consultation in terms of acceptance by patients, outcome of care and safety, and in the level of satisfaction. But, there were considerable constraints in its implementation, man-power training, attitude, technical knowhow, logistic, legal, and ethical issues, particularly in India.[3,4] Later, telemental health services were experimented in India during the tsunami of 2004 for residents of coastal regions of only Tamil Nadu.[7] There have been significant attempts by the Telemedicine Centre, National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru, Karnataka, India to take 'Health' to the unreached population in various subset of population such as neurology, [8] neuro-rehabilitation, [9] persons with mental illness, [10] prison population, [11] beggar's colony, [12] and rural population, [13] In spite of the above attempts, telemedicine was not accepted or appreciated by all the stakeholders. But today, during the ongoing COVID-19 pandemic, this medium has become the only way

to address the need of the community in education, health, and other sectors in life. Numerous innovations in various sectors of information technology was prevalent; but, adopting it in the health sector has been negligible. The current COVID-19 pandemic had revolutionised the healthcare sector globally. Interestingly, there is a huge alteration observed in the people's mind set in accepting this technology-driven healthcare access. In two weeks, the authors had witnessed more than 200 calls in the psychological helplines wherein people from all socioeconomic strata had approached for help. All were very receptive in the psychological guidance and support provided, with satisfactory outcome. The need of the local people in Assam, a North-Eastern state of India and who were stranded outside the state could be met with no cost from the service users.

### TELE-MENTAL HEALTH SERVICES DURING PANDEMIC

Telepsychology is defined as "provision of psychological services using telecommunication technologies".[14] It encompasses a variety of technology platforms, including telephone, text messaging, videoconferencing, and virtual reality applications.[15] The potential of telemedicine as well as tele-counselling was never applied in emergency situation in India and more specifically in Assam. The role of teleconsultation in mental health during the pandemic reached its epitome not only in developed countries but also in India.[16,17] The authors would like to keep their focus on the role of tele-mental health services in Assam locally during the ongoing crisis of COVID-19 giving some insights about the need of the hour at the national level.

Immediately after the publication of the telepsychology guidelines, training for manpower generation was also done according to the Best Practice Guidelines in both telemedicine and telepsychology in Assam for counsellors in various helplines for psychosocial care and services provided by Assam Police in collaboration with the Department of Psychiatry, Gauhati Medical College Hospital, Guwahati, Assam, 'Dhara' - the global pandemic resource forum, and various organisations. The authors took the help of technologies such as webinar, online seminar, virtual panel discussion, and videoconferencing in sharing knowledge in different forums on various aspects of mental health to healthcare professionals, training of counsellors, giving education to student volunteers in mental health. More than 20 modules were recorded in webinar on topics related to mental illness, COVID-19-related mental health issues, stigma, myths and facts, stress, anger, disability, elderly care, children and adolescent issues, domestic violence during this pandemic as tutorials for the health professionals and others; thus, trying to fill the gap in meeting the need of the population in crisis.

## **TELE-PSYCHOTHERAPY**

With crisis comes new opportunities and in regard to telemental health services, definitely the pandemic proved to be a challenge that sought for new opportunities in healthcare and services to one and all across the globe irrespective of economic and other disparities. After one week from the release of the Best Practice Guidelines, tele-psychotherapy guidelines was also drafted by the Department of Clinical Psychology, NIMHANS. Hence, the biological disaster proved to be a challenge for the mental health professionals in a constructive way. In less than a month, tele-mental health services achieved the desired status to run on its own in India by any trained mental health professional from anywhere across the country. The published guidelines available in the local level can be leveraged to national level as well. Although, there was a huge response from all the stakeholders, still the gap exists between the demand and supply of mental healthcare. Technology will not be able to replace the lack of trained human resources to provide mental healthcare for 1.3 billion population. In order to take the local lessons to national level, the authors observe and recommend few desperate solutions in such desperate circumstances.

# Manpower generation and innovations in technology

De-professionalising the health services through automated training, online seminar, virtual training, and webinar series, the healthcare professionals could increase human resource. National and state level learning management solutions need to be made available across health sector for imparting skills and new knowledge. The healthcare sectors could focus on training the available grass-root workers, i.e. the Accredited Social Health Activist (ASHA), Auxiliary Nurse Midwifery (ANM), Anganwadi workers, lay counsellors, faith healers, local leaders, teachers, any volunteer to help the pandemic survivors to meet the huge burden for mental healthcare.[18] Efforts should be made to de-specialise and de-professionalise the healthcare services especially in remote areas.[18,19] Its always beneficial to empower the service providers like the primary care physicians locally to deal effectively with any kind of disasters including pandemic.[20] To provide clinical care and to upscale the training programmes, there should be dedicated satellites to keep the communication intact for providing health and psychosocial care for any kind of disaster-like situations.

## Investing in public health

This pandemic has shown 'chinks in our armour', the poor public health research and model, inadequate infrastructure and lack of investment in public health model. There needs to be a radical change in our thinking and approach to public health.[21] Health has never been a priority for many states. The need of the hour is to take health to the 'Central list' of the Constitution of India from the 'State list', so that our country is prepared collectively in a federal constitution. There is an urgent need to implement the District Mental Health Programme using innovative digital training, mentoring, and monitoring the programme.[19]

India, the second most populous country in the world with 1.35 billion people, taught an important lesson to the world in the wake of the pandemic. The solidarity and the level of engagement of the public at large is beyond comprehension and unimaginable in such a huge diverse population. The nation came together, exercised remarkable restrain, selfimposed volunteer quarantine (Janta curfew), followed by an administrative nationwide lockdown was successful in bringing down the pandemic spike and technology played a crucial role in all spheres of life. India being a digital hub, has been adequately leveraged in access to healthcare. Telemental health is in the process of evolution in India. This pandemic has given an opportunity to change the way we practice medicine and mental healthcare in any disaster or non-disaster like situations. The only way forward is to adapt and adopt the technology to reach the unreached.

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#### REFERENCES

- Hazarika M, Das B, Das S, Hazarika D. Best practice guidelines for telepsychology during disasters (COVID-19 pandemic) [Internet]. Guwahati: Society for Mental Health in LAMIC (SoMHiL); 2020 [cited 2020 May 1]. ISBN: 978-81-935934-4-8. Available from: https://globalpsychiatry.org/2020/04/11/ best-practice-guidelines/
- Board of Governors in supersession of the Medical Council of India. Telemedicine Practice Guidelines: enabling registered medical practitioners to provide healthcare using telemedicine [Internet]. 2020 Mar 25 [cited 2020 May 7]. Available from: https://www.mohfw.gov.in/pdf/Telemedicine.pdf
- Holla B, Viswanath B, Neelaveni S, Harish T, Kumar CN, Math SB. Karnataka state telemedicine project: utilization pattern, current, and future challenges. Indian J Psychol Med. 2013;35:278-83.
- Math SB, Moirangthem S, Kumar NC. Tele-psychiatry: after mars, can we reach the unreached? Indian J Psychol Med. 2015;37:120-1.
- Morland LA, Raab M, Mackintosh MA, Rosen CS, Dismuke CE, Greene CJ, *et al.* Telemedicine: a cost-reducing means of delivering psychotherapy to rural combat veterans with PTSD. Telemed J E Health. 2013;19:754-9.
- Siminerio L, Ruppert K, Huber K, Toledo FG. Telemedicine for Reach, Education, Access, and Treatment (TREAT): linking telemedicine with diabetes self-management education to improve care in rural communities. Diabetes Educ. 2014;40:797-805.
- Thara R, Sujit J. Mobile telepsychiatry in India. World Psychiatry. 2013;12:84.
- Gowda GS, Manjunatha N, Kulkarni K, Bagewadi VI, Shyam RP, Basavaraju V, *et al.* A collaborative tele-neurology outpatient consultation service in Karnataka: seven years of experience from a tele-medicine center. Neurol India. 2020. doi: 10.4103/0028-3886.280644. [Epub ahead of print]

- Khanna M, Gowda GS, Bagevadi VI, Gupta A, Kulkarni K, S Shyam RP, *et al.* Feasibility and utility of tele-neurorehabilitation service in India: experience from a quaternary center. J Neurosci Rural Pract. 2018;9:541-4.
- Gowda GS, Kulkarni K, Bagewadi V, RPS S, Manjunatha BR, Shashidhara HN, *et al.* A study on collaborative telepsychiatric consultations to outpatients of district hospitals of Karnataka, India. Asian J Psychiatr. 2018;37:161-6.
- Agarwal PP, Manjunatha N, Gowda GS, Kumar MNG, Shanthaveeranna N, Kumar CN, *et al.* Collaborative teleneuropsychiatry consultation services for patients in central prisons. J Neurosci Rural Pract. 2019;10:101-5.
- Moirangthem S, Rao S, Kumar CN, Narayana M, Raviprakash N, Math SB. Telepsychiatry as an economically better model for reaching the unreached: a retrospective report from South India. Indian J Psychol Med. 2017;39:271-5.
- Santhosh KT, Pant MB, Uzzafar F, Manjunatha N, Kumar CN, Math SB. Telemedicine-based tobacco treatment model in primary care from a low-resource setting. J Neurosci Rural Pract. 2019;10:690-2.
- Campbell LF, Millán FA, Martin JN. A telepsychology casebook: using technology ethically and effectively in your professional practice. American Psychological Association; 2018.
- Barnwell SS. A telepsychology primer. J Health Serv Psychol. 2019;45:48-56.
- Zhou X, Snoswell CL, Harding LE, Bambling M, Edirippulige S, Bai X, *et al.* The role of telehealth in reducing the mental health burden from COVID-19. Telemed J E Health. 2020;26:377-9.
- 17. Li W, Yang Y, Liu ZH, Zhao YJ, Zhang Q, Zhang L, *et al.* Progression of mental health services during the COVID-19 outbreak in China. Int J Biol Sci. 2020;16:1732-8.
- Math SB, Nirmala MC, Moirangthem S, Kumar NC. Disaster management: mental health perspective. Indian J Psychol Med. 2015;37:261-71.
- 19. Gangadhar BN. Distance training for the delivery of psychiatric services in primary care. Indian J Psychiatry. 2019;61:115-6.
- Manjunatha N, Kumar CN, Math SB, Thirthalli J. Designing and implementing an innovative digitally driven primary care psychiatry program in India. Indian J Psychiatry. 2018;60:236-4.
- Malathesh BC, Gowda GS, Kumar CN, Narayana M, Math SB. Response to: Rethinking online mental health services in China during the COVID-19 epidemic. Asian J Psychiatr. 2020;51:102105. doi: 10.1016/j.ajp.2020.102105. [Epub ahead of print]

Hazarika M, Bada Math S. Tele-mental health during the coronavirus disease 2019 (COVID-19) pandemic. Open J Psychiatry Allied Sci. 2020;11:77-9. doi: 10.5958/2394-2061.2020.00023.3. Epub 2020 Jun 4.

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