Research report

PERCEPTION OF DOCTORS AND PATIENTS REGARDING TELEPSYCHIATRY SERVICES DURING THE COVID-19 PANDEMIC: EXPERIENCE FROM THE STATE OF KERALA, INDIA

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Abstract

Introduction: The present article aims to describe the experience of organizing a telepsychiatry program to ensure continuity of care during the COVID-19 pandemic from the doctors' as well as the patients' perspectives. **Methods:** We initiated a synchronous telepsychiatry program for continuity of care using a Government-sponsored online platform with facilities for consulting a psychiatrist and e-prescription. Three months later we conducted a Video Focus Group discussion (VFGD) among the doctors involved in the program and telephonic interviews with randomly selected patients and caretakers to evaluate the merits and demerits of the program and to elicit suggestions for improvement. **Results:** The online services were availed by 120 patients (55% males) with the majority in the 19-60 years age group; 47.5% of them were availing psychiatry consultation for the first time. Overall, depression and anxiety were the common diagnoses. Both doctors and patients felt that online services are feasible and acceptable, ensure adequate privacy and provide the opportunity to avail of mental health services without stigma. **Conclusions:** Telepsychiatry has the potential to develop into an alternate model of mental health service delivery and it is more advantageous to women, the elderly, and those with travel difficulties. Mental health support to people in prisons, government residential facilities, and geographically isolated areas through online platforms is a feasible and cost-effective option. Definite legal and ethical guidelines on telepsychiatry should be formulated with facilities for training for professionals. Online platforms should be more user-friendly and tailor-made to provide psychotherapy and counseling services in addition to pharmacotherapy.

Keywords: COVID 19 pandemic, telepsychiatry, mental health care delivery

INTRODUCTION

The COVID-19 pandemic has disrupted the care of patients with mental illness globally due to lockdowns, inadequate public transport, conversion of government hospitals into exclusive COVID hospitals, and hesitance to access care due to fear of getting infected.[1] On the other hand, the pandemic has resulted in a

humanitarian crisis with increased psychiatric morbidity in the general population.[2]

A World Health Organization survey among 130 countries found that more than 80% of high-income countries use telemedicine and teletherapy to bridge the gaps in mental health services, while these services were available in only less than half of the low-income countries.[1]

In Kerala, along with other states in India, a complete lockdown was in effect from March 25, 2020, through May 31, 2020,[3] and had caused near-total disruption of the outpatient services at our hospital. During the first week of the lockdown, we designed a module titled "A therapist at Home" for home-based care of children with developmental disorders and also started online consultations through WhatsApp along with tele-counseling services through mobile phones.[4] There were several hurdles like difficulty in procuring drugs since WhatsApp prescriptions were not legally acceptable. The search for better telemedicine services prompted us to join the eSanjeevani program of the Ministry of Health and Family Welfare, Govt. of India.[5]

eSanjeevani stay-home OPD was developed by the Centre for Development of Advanced Computing (C-DAC) in Mohali, India to provide National Teleconsultation Services and the salient features include free audio-video consultation with a doctor and the facility for e-Prescription. The services are provided through a user-friendly mobile app/website. In a state-level administrative meeting with the concerned authorities, it was decided to use the eSanjeevani platform to provide teleconsultation services for non-communicable diseases, including cancer and mental health problems. Accordingly, online mental health services are being provided by the Institute of Mental Health and Neurosciences, Kozhikode, two days a week for fixed hours from June 2020 onwards.[6]

Before the COVID-19 pandemic, only a few centres in India had been using telepsychiatry for mental health service delivery, mainly through asynchronous methods.[7,8,9] Synchronous telepsychiatry is a novelty for most doctors, as well as patients and their caregivers in our country.[10] There are many issues to be considered, including the assurance of confidentiality and privacy, obtaining consent, and ensuring compliance with legal and ethical guidelines while organizing online mental health services.[11] During the COVID - 19 pandemic, many centres initiated online mental health services in India, which are likely to continue even beyond the pandemic and develop into a cost-effective service delivery model in the future.[12] Refining and upgrading the quality of services is imperative for patients to obtain optimum benefits. Hence, we feel that sharing our experience, including the challenges faced and strategies to overcome them, will help to improve the functioning of online mental health services in similar settings.

The present study was conceived in this context to document our experience of organizing a telepsychiatry program to ensure continuity of care during the COVID-19 pandemic from both the doctors' as well as the patients' perspectives.

METHODS

Details regarding the organization of the online services, self-evaluation, and beneficiary details were obtained from the hospital records.

Organization of online mental health services

Procedure to use the online platform: The online services of eSanjeevani could be availed either through the eSanjeevani app on a mobile phone or through the eSanjeevani website. A two-step procedure is to be undertaken for online consultation, viz. patient registration and patient login. Patient registration involves the following steps: Enter the mobile phone number first and then the OTP received in the

mobile number on the site. Then details like name, age, gender, address, email ID, and details of previous health records are entered. Once these details are entered, a token and patient ID will be generated. Once the registration process is concluded, the patient can log in to the site by entering the login ID or mobile number. Once the token number is entered, the patient will enter the online waiting room. The website will show the name of the doctor who is ready to take a call and consult. Then the patient has to make a video call by clicking on the 'call now' option on the website within 30 seconds. If he fails to do so in the stipulated time, he has to re-login. The patient can see the doctor and after consultation, can download the prescription signed by the doctor. The doctors involved in the teleconsultations were given online training in using the eSanjeevani platform by C-DAC, Government of India. Three hours of online hands-on training were conducted to understand the technical details of the platform. The trained doctors were then registered on the platform.

Psychiatry consultation: This is done on Tuesdays and Wednesdays from 9 am to 12 pm by four consultants in Psychiatry and one medical officer-in-charge of the child development services of the institute. Each day, the concerned doctor has to log in to the website or app by providing their registered mobile numbers. Consultants took turns in providing online services on the stipulated days.

The program was started in June 2020 and continued over June, July, August, and September. After three months of the program, we conducted a Video Focus Group Discussion (VFGD) among the doctors involved and telephonic interviews with the patients and caretakers to identify the lacunae. We had previously used VFGD to assess the merits and demerits of a community-based intervention program and was found to be feasible and effective.[13]

Self-evaluation for improvement: The VFGD among the doctors was organized in the latter part of September using the Zoom platform version 5.0. The participants included the four psychiatrists who had provided online consultation, one medical officer-in-charge of the child development clinic, one faculty from the department of psychiatric social work, and the director of the institute from the administrative side.

The VFGD lasted 75 minutes and was recorded. The interview transcript was prepared and a manual thematic analysis was done in which similar statements were brought together to form categories. The themes and categories identified through the VFGD were used to identify the merits and demerits of the program from the doctors' perspective.

Subsequently, five patients and six caretakers who attended the program regularly were randomly selected and interviewed using open-ended questions about their opinion of the program including merits, demerits, immediate reaction, and suggestions for improvement. The interview was done by a psychiatrist trained in qualitative methods who was involved in the program (KRR). Each interview lasted around 15 minutes. The interviews were not audio recorded. The responses of the patients were written down. The content analysis of the telephonic interview with the patients was done to identify the barriers and also to describe the merits and demerits of the program from the patients'/ caretakers' perspective.

We have collected the data from the hospital records and approval from the institutional ethics committee was obtained to publish the data.

Statistics: The qualitative data were analyzed using qualitative methods and the quantitative data using SPSS V.16 statistical package and results were expressed as frequency and percentage.

RESULTS

The online services were availed by 120 patients during the 3 months. They included 66 (55%) males and 54 (45%) females with 5 (4.2%) children and 4 (3.3%) adolescents. The majority were in the 19-60 years age group with 22 (18.3%) patients above the age of 60 years. Overall, depression and anxiety were the common diagnoses (Table 1).

Among patients aged above 60 years, dementia (8, 36.4%) followed by depression and psychotic disorder (4, 18% each) were the common diagnoses. Insomnia (2, 9%), anxiety disorders, bipolar affective disorder (BPAD) and intellectual disability (1, 4.5% each) were other diagnoses.

Among women, the diagnoses included depression (15, 27.8%), dementia (7, 13%), adjustment disorder (6, 11%), anxiety disorder (5, 9%), psychotic disorder (5, 9%), BPAD (4, 7.4%), obsessive compulsive disorder (3, 5.6%) and personality disorder (2, 3.7%). Insomnia and intellectual disability occurred in 1 (1.9%) patient each.

Among the patients who were seeking mental health support for the first time, the diagnoses included anxiety disorder (13, 22.8%), adjustment disorder (8, 14%), depression (8, 14%), dementia (6, 10.5%), insomnia (5, 8.8%) and psychotic disorder (2, 3.5%). Bipolar disorder, substance use disorder, attention deficit hyperactivity disorder, and developmental delay were the reasons for consultation in 1 (1.8%) patient each.

The information gained from the VFGD and the telephonic interviews are described in Tables 2 and 3. Verbatim comments by patients are given in Box 1.

DISCUSSION

We found that telepsychiatry is feasible and acceptable to patients despite the network connectivity issues and low technological know-how. The fact that as many as 120

Table 1. Clinical profile of patients who utilized online services

Variable	Frequency (N=120)	%
Age in years		
Below 12	5	4.2
12-18	4	3,3
19-60	89	74.2
Above 60	22	18.3
Gender		
Male	66	55
Female	54	45
First-time consultations	57	47.5
Diagnosis		
Depression	28	23.3
Anxiety disorders	19	15.8
Psychotic disorders	12	10
Adjustment disorders	11	9.2
Bipolar disorder	9	7.5
Dementia	8	6.7
Insomnia	6	5
Obsessive compulsive disorder	4	3.3
Substance abuse	3	2.5
Intellectual disability	2	1.7
ADHD	2	1.7
Delayed language	2	1.7
Personality disorders	2	1.7
Not yet diagnosed	12	10

patients utilized the online services during a short period of three months is a pointer to the immense potential for telepsychiatry in our country with limited manpower and resources.

We started the program to provide continuity of care to patients who were on regular follow-up at our institute, during the COVID pandemic. But we found that around 50% of the patients were consulting a psychiatrist for the first time. The national mental health survey-2016 reported that the treatment gap for mental illnesses was more than 60% in India.[14] One of the reasons for not seeking help for mental health problems is the social stigma associated with mental illnesses. Online services ensure adequate privacy and provide

Table 2. Perceptions of doctors and patients/caretakers on telepsychiatry services

Perceptions of patients/caretakers
Immediate Reaction
Online consultation was a good experience
Online services are helpful during COVID
Didn't expect that medicines prescribed in online consultation will be obtained from pharmacies
Perceived advantages of telepsychiatry
Ensures privacy
No need to travel to hospitals
No need to give up one day of work to see the doctor
Helpful for old people
All hospitals are now COVID hospitals and difficult to access
No expense for consultation
No need for men to accompany women
Good for old people, pregnant and lactating women who can't travel
Good if the patient is not willing to go to the hospital
Online consultation gives information about treatment facilities
Stigma is less, so do not hesitate to see the psychiatrist online
Perceived Challenges
Difficulty in getting consultations for children (For e.g., a restless child refusing to sit in front of the computer)
No provision for psychotherapy and counseling
Net connectivity is an issue
As net connectivity varies in different rooms in homes, private conversation with the psychiatrist is difficult
Waiting time is more on the online platform
Doctors are changing during follow up
Role of Telepsychiatry after the COVID pandemic
Prefer online consultation even after the COVID pandemic is over
More comfortable seeing doctors face to face
Perceptions of Doctors involved in telepsychiatry program
Immediate reaction
Telepsychiatry is needed since mental health problems may increase after COVID and there will be more need for mental health interventions
Useful during travel restrictions
Perceived advantages of telepsychiatry
Online consultations ensure better privacy
Reduce stigma
Useful for the elderly and those with incapacitating physical illness
Reduce family financial burden and reduce the need for travel
Availability of medicines with online prescription is good
Good compliance in the online consultation
More interaction from those who are normally less interactive
Perceived challenges during the telepsychiatry process
Patient-related challenges
Ability to use online platforms
Need for good articulation skills
Availability of smartphones/computers and good net connectivity

Physician-related challenges
No option for physical examination
Need more effort from doctors
Diagnosis-related challenges
Difficulty in getting corroborative evidence as patients usually come alone
Less time to think and arrive at a diagnosis in case of new cases
Case management-related challenges
Managing psychiatric emergencies
Fear of drug side effects
No facility for services of clinical psychologists and psychiatric social workers
Online platform-related challenges
The format is not conducive to psychiatry evaluation
Patients cannot opt for a particular doctor
Legal challenges
Legal and ethical issues in prescribing medicines without physical examination
Worry about future lawsuits
Available guidelines are not clear about the prescription of certain classes of drugs like benzodiazepines.
Risk of drug misuse using fake identities
Legal aspects of the online consultation in patients with suicidal or homicidal intentions
Legal aspects of marital conflicts
Role of Telepsychiatry after the COVID pandemic
New challenges are likely in patient care after the pandemic since the profile of patients may change
Online services will be of help to deal with new challenges
Online may not substitute for real clinics – may be used as an adjunct to face-to-face interaction

Table 3. Suggestions from doctors and patients/caretakers for improving telepsychiatry services

Suggestions from patients/caretakers
Reduce waiting time on the online platform
Facilities to see the same doctor during follow up
To include facilities for psychotherapy and counseling services
Even after COVID, will prefer online consultation with facilities for face-to-face interaction in between
Suggestions from the doctors who were involved in the telepsychiatry program
Training of mental health professionals to face technical issues
Training to adhere to ethical and legal guidelines
Changing the existing legal framework to include online consultations to protect doctors from litigation
Tailor-made e-platforms for mental health services
To include the facility for services of psychologists and psychiatric social workers in the online platform.
Improvement in the online platform to facilitate child psychiatry services.
Specific guidelines for the type of drugs that can be used and the duration of drug therapy
Need dos and don'ts for online services
Integration of online services with the primary health care system
Extension of telepsychiatry services to prisons, residential centres for children, and remote areas where mental health services are lacking or inadequate

the opportunity to avail of mental health services without stigma. This was one of the advantages of telepsychiatry, agreed upon by both patients and doctors.

The doctors were concerned about the legal and ethical issues that may arise from prescribing drugs without proper physical examination. The problem could be tackled to a

Box 1. Verbatim comments by patients and doctors

Patients

"Whenever I have to visit a hospital I need my husband/brother to accompany me. Online services have helped me to consult doctors without an accompanying male."

"Earlier whenever I visited I psychiatrist people used to stare at me and call me 'mental.' I did not have to face such problems in online consultations."

"My daughter has a 6-month-old child. We did not visit the psychiatrist since the onset of the lockdown because of fear of getting infected. We don't have such fears while seeing a doctor online."

"'Skilled doctors' are few in psychiatry. This helps me to choose 'skilled doctors' in big hospitals."

Feelings of a senior doctor:

"I am happy that I could use the new technology like my younger colleagues."

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certain extent if telepsychiatry services were integrated with primary health care services. The local PHC doctor could do the physical examination and relevant investigations and discuss it with the psychiatrist. This is possible in states like Kerala, with a robust public health system, and integrating telepsychiatry with primary care has the potential to overcome the shortage of mental health professionals in the country. The doctors stressed the importance of formulating definite legal and ethical guidelines for the program and also imparting adequate training to mental health professionals. The Telepsychiatry operational guidelines prepared in May 2020 by the Indian Psychiatric Society (IPS) and Telemedicine Society of India (TSI) in collaboration with the National Institute of Mental Health and Neurosciences (NIMHANS) is the right step in this direction and are expected to provide legitimacy to telepsychiatry services in India.[11]

Only five (4%) children availed of the online services, probably because of the lack of awareness and practical issues, as indicated by one mother that children with hyperactivity would find it difficult to sit in front of the video. The doctors had opined that the online platform should be modified to accommodate children. Considering the increasing mental health problems and the shortage of child psychiatrists in India, telepsychiatry has the potential to bridge the gaps in mental health support for children and adolescents. Telepsychiatry services can be improved to provide mental health support to children in childcare institutions and for assessment and parental counseling in children with developmental and behaviour disorders.[15]

At the same time, patients above the age of 60 comprised 18% of the sample, and the common diseases in this age group were depression, dementia, and psychotic disorders. Both doctors and patients felt that the telepsychiatry program would benefit the elderly with mobility issues and those who require support from a relative to attend the hospital.

The large proportion of women among the patients who utilized online services needs special mention. In traditional Indian society, women are accompanied by their husbands or relatives during hospital consultations. They often face economic and social barriers to seeking professional help for mental health issues.[16] Telepsychiatry services help to overcome these barriers and facilitate better access to mental health services for women.

One of the advantages of telepsychiatry, pointed out by both the doctors and the patients, was that it was cost-effective. It helped them avoid long-distance travel for consultation, giving up a day's job. The economic advantages of telepsychiatry were previously reported.[17,18] There was also the added advantage of avoiding the risk of

exposure to infection during the COVID pandemic, especially in the elderly, pregnant, and lactating women.

First-time consultations were mainly for depression, anxiety disorders, and adjustment disorders, probably a reflection of the COVID-related psychological issues comparable to those reported in the previous studies.[19] Many of the patients with adjustment disorders had worries about exposure to infection, loss of job, and personal finance, and required psychological and psychosocial interventions. The need to broaden the online platform to include counseling and psychotherapy services was stressed by both patients and doctors.

Conclusions

Telepsychiatry is feasible and acceptable to patients and doctors in our country, despite the network connectivity issues and low technological know-how. Online services have the advantage of ensuring adequate privacy and providing the opportunity to avail of mental health services without stigma. Telepsychiatry is cost-effective since it helps to avoid long-distance travel and is more advantageous to women, older adults, and those with travel difficulties. There is a need to formulate definite legal and ethical guidelines for telepsychiatry practice, and the mental health professionals involved in online services should be imparted proper training. Online platforms should be more user-friendly and tailor-made to provide psychotherapy and counseling services in addition to pharmacotherapy. Telepsychiatry has the potential to develop into an alternate model of mental health service delivery. Mental health support to people in prisons, government residential facilities and geographically isolated areas through online platforms is a feasible and cost-effective option in our country.

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