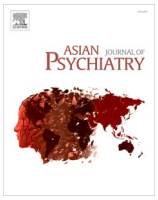
Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Asian Journal of Psychiatry 75 (2022) 103207

Contents lists available at ScienceDirect

Asian Journal of Psychiatry

journal homepage: www.elsevier.com/locate/ajp



Clinician's experience of telepsychiatry consultations

ARTICLE INFO

Keywords
Teleconsultations
Telepsychiatry
Satisfaction

Use of technology to provide teleconsultations is well known for decades now (Chellaiyan et al., 2019). However, it was not very popular, till the recent times. The Corona Virus Disease- 2019 (COVID-19) pandemic led to widespread lockdown in many countries, including India. During the lockdown period, the routine outpatient services were suspended and patients requiring urgent medical care were seen in the emergency settings (Grover et al., 2020). In view of lack of routine outpatient services across the globe there was expansion of the teleconsultations services (Li et al., 2022). Government of India also issued the Telemedicine Guidelines on 24th March 2020, which provided a legal framework for providing Teleconsultation services.

A few studies across the world have evaluated the clinicians experience with teleconsultations (Donelan et al., 2019; Sharma et al., 2021; Olwill et al., 2021; Indria et al., 2020; Haimi et al., 2020). However, only few of these studies have specifically focused on the experience of the psychiatrist in providing teleconsultations. Accordingly, this study aimed to assess the experience and satisfaction of the clinician in providing telepsychiatry consultations.

This study was conducted in a tertiary care hospital in North India. The study was approved by the Ethics Committee of the institute. A verbal consent was obtained from the patient and/or patients side for the clinicians to do so. The study was conducted during the period of April 2021 to December, 2021.

During the COVID-19 pandemic telepsychiatric services were utilised the most, and were used as a substitute of the routine outpatient services from mid of April 2020. Following the pattern of the routine outpatient services, the telepsychiatry services were organised into walk-in clinic, follow-up clinics and the detailed work-ups. All these services were managed online by using audio and video calls. The video links were established by using the Zoom-link or the WhatsApp calls.

As detailed work-up involved the maximum amount of time spent by the faculty and involved video communications except for occasional exceptions, this was chosen to assess the satisfaction of the clinicians and the patients/caregivers.

For this study, a study specific questionnaire was developed. The questionnaire included questions to assess satisfaction in providing online clinical care, their perception of the rapport and the therapeutic alliance with the patient and caregiver. The rapport and therapeutic alliance questions were adapted from the clinician version of the Scale to assess therapeutic relationship (STAR) (McGuire-Snieckus et al., 2007). This information was completed by the faculty members on the Google forms platform, immediately after the conclusion of the interview. The clinicians also made assessment of level of functioning (from 0 to 100) of the patients by using General Assessment of Functioning (GAF) Scale (Hall, 1995).

The questionnaire was evaluated for the face validity by sending it to 5 psychiatrists and their suggestions were included. The satisfaction and therapeutic relationship by the clinicians was rated as a single unit, irrespective of number of people involved (patient along or patient and caregivers) in a specific interview. The clinicians (3 in number) were instructed to rate this aspect towards the higher side, based on the best behaviour of any of the participants on the other side.

The data collected via the Google form were analysed using the SPSS-14version.

The study included 430 patients, with the mean age of 43 years, with about one-fourth (22.3%) of the patients being aged 60 years or above. Most of them were male, married, at least educated up to 10th standard, employed and belonged to urban joint families. The average distance of the patient's location from the hospital was 190 Kilometres, with the farthest connected location being 3500 Kilometres away. The most common diagnosis of the patients was mood disorders, followed by psychotic disorders. About half of the patients had at least one medical comorbidity as per the available history. The mean GAF score for the patients was 41, with a range of 8–98 and a median of 38.

Details of the teleconsultation are given in Table 1. The satisfaction of clinicians with various aspects of consultations is given in Table 2.

1. Discussion

The present study evaluated the experience and the satisfaction of the clinicians in providing teleconsultations. The previous studies that have evaluated the experience and satisfaction of the clinicians have assessed the same in general, rather than for the specific visits. In contrast to these studies, the present study directly evaluated the experience and the satisfaction of the clinicians which was recorded immediately after each visit.

For only one-third (34.2%) of the consultations the clinicians rated the connectivity to be 'very good' and for another 42.3% of the

https://doi.org/10.1016/j.ajp.2022.103207
Received 3 May 2022; Received in revised form 2 July 2022; Accepted 11 July 2022
Available online 14 July 2022

Table 1
Details of the Teleconsultation [as assessed by the clinician providing same].

Variable	Mean (SD)[range]/ Frequency (%)[N = 430]
Mode of connection:	255(59.3)
WhatsApp Video Call	153(35.6)
Zoom Call	14(3.3)
Voice Call	
Hardware used by the psychiatrist:	295(68.6)
Mobile	126(29.3)
Computer	9(2.0)
Tablet	
Amount of time spent(minutes)	25(9.2)[5–90]
Time categories	110(25.5)
Upto 20 min	320(74.5)
≥ 21 min	
Number of informants (other than patient) attending the call	92(21.3) 277(64.4)
None	61(14.3)
One	
More than one	
Nature of Relation with the patient:	103(30.5)
Spouse	97(28.6)
Children	83(24.6)
Parents	35(10.4)
Siblings	20(5.9)
Others	
Connectivity (rated based on major part of the interview)	147(34.2) 182(42.3)
Very Good	69(16.0)
Good	32(7.4)
Fair	
Poor	
Clarity of voice (rated based on major part of the interview)	91(21.1) 232(54.0)
Very good	90(20.9)
Good	17(4.0)
Fair	
Poor	
Clarity of video (rated based on major part of the interview)	145(33.7) 178(41.4)
Very good	68(15.8)
Good	24(5.6)
Fair	15(3.5)
Poor	
Video not available	
Technological issues during the call (rated based on major part of the interview)	236(54.8) 19(4.4)
No difficulties	104(24.1)
Connectivity issue from clinician side	28(6.5)
Connectivity issue from patient side	0(0)
Problem in joining from patient side	25(5.8)
Problem in joining from clinician side	74(17.2)
Other issues from clinician side[a]	
Other issues from patient side[a]	

[a] Need for changing from one device to another, Need for changing from Zoom to WhatsApp/ voice call, Difficulty in muting and unmuting, Echo and background noise disrupting communication etc.

consultations the connectivity was rated as 'good'. These findings suggest that connectivity problems can affect about one-fourth of the teleconsultations. This finding is similar to the finding of the previous studies and surveys in which clinicians have raised their concern with regard to connectivity (Crotty et al., 2021; Lopez et al., 2021; Kludacz-Alessandri et al., 2021). Further, when we look at the information about the audio and video, for higher proportion of the teleconsultations the quality of video was rated as 'very good', suggesting that there is a need to improve the audio clarity.

For only half (54.8%) of the consultations clinician did not encounter any technological difficulties, and another half of the consultations there were problems involving connectivity issues from either the patient or clinician side, or disturbance in some or the other form such as patients having difficulty in joining the call, need for changing from one platform to the other, difficulty in muting and unmuting, echo and background

Table 2
Satisfaction of clinicians in providing Teleconsultation.

Variable	Mean (SD)[range]/ Frequency (%)[N = 430]
Amount of time spent in the consultation	6(1.2)
Dissatisfied to large extent	10(2.3)
Dissatisfied to some extent	21(4.9)
Satisfied to some extent	250(58.1)
Satisfied to large extent	143(33.3)
Very satisfied	
Amount of information that you were able to collect to reach a diagnosis and identify the relevant clinical issues	6(1.2) 3(0.7) 41(9.5)
Dissatisfied to large extent	267(62.1)
Dissatisfied to some extent	101(23.5)
Satisfied to some extent	
Satisfied to large extent	
Very satisfied	
Behaviour of patient during consultation	16(3.7)
Dissatisfied to large extent	31(7.2)
Dissatisfied to some extent	48(11.2)
Satisfied to some extent	224(52.1)
Satisfied to large extent	105(24.4)
Very satisfied	
Behaviour of caregiver during consultation	7(2.0)
Dissatisfied to large extent	29(8.5)
Dissatisfied to some extent	39(11.5)
Satisfied to some extent	197(58.2)
Satisfied to large extent	92(27.2)
Very satisfied	92(21.4)
Not applicable	
Amount of freedom you had in expressing yourself	3(0.6) 9(2.1)
Dissatisfied to large extent	74(17.2)
Dissatisfied to some extent	275(64.0)
Satisfied to some extent	69(16.0)
Satisfied to large extent	
Very satisfied	
Information that you could provide to the patient/caregiver about their illness	5(1.1) 6(1.4)
Dissatisfied to large extent	89(20.7)
Dissatisfied to some extent	274(63.7)
Satisfied to some extent	56(13.0)
Satisfied to large extent	
Very satisfied	
Usefulness of the consultation for the patient and family	4(1.0) 1(0.2)
Dissatisfied to large extent	37(8.6)
Dissatisfied to some extent	295(68.6)
Satisfied to some extent	92(21.4)
Satisfied to large extent	
Very satisfied	
Information that you could provide about the prescribed medication	6(1.2) 9(2.1)
Dissatisfied to large extent	67(15.6)
Dissatisfied to some extent	290(67.4)
Satisfied to some extent	58(13.5)
Satisfied to large extent	
Very satisfied	
Quality of care (Overall quality of care considering the time spent, able to clarify the things, and provide information to the patient and/or caregivers) provided	3(0.6) 7(1.6) 40(9.3) 307(71.4)
Dissatisfied to large extent	73(17.0)
Dissatisfied to some extent	
Satisfied to some extent	
Satisfied to large extent	
Very satisfied	
Overall satisfaction (i.e., satisfaction as a clinician in terms of care provided) in providing services	5(1.1) 10(2.3) 42(9.8)
Dissatisfied to large extent	295(68.6)
Dissatisfied to some extent	78(18.2)
Satisfied to some extent	
Satisfied to large extent	
Very satisfied	

(*continued on next page*)

Table 2 (*continued*)

Variable	Mean (SD)[range]/ Frequency (%)[N = 430]
Cooperation of patient and caregiver during the call:	362(84.2)
Throughout the call	55(12.8)
To some extent for major part of the call	13(3.1)
Did not cooperate, largely	
Did the patient and caregiver sit still during the call:	338(78.6)
Yes, throughout the call	71(16.5)
To some extent	7(1.6)
Did not cooperate, largely	14(3.3)
Not applicable(voice call)	
Did the patient and caregiver appear serious and involved during the call:	372(86.5)
Yes, throughout the call	48(11.2)
To some extent	10(2.3)
Did not seem serious, largely	
Comparison of experience of teleconsultation to previous in-person consultation:	4(0.9)
Much Better	37(8.6)
Better	283(65.8)
Same	92(21.4)
Worse	14(3.3)
Much worse	
Mood of clinician during the call:	274(63.7)
Neutral	141(32.8)
Good	14(3.3)
Bad	
Clinician felt irritated by the quality of the call:	53(12.3)
Yes	377(87.7)
No	

With respect to the therapeutic alliance, for majority of the consultations, the clinicians rated their experience as either 'to a large extent' or 'to be the best possible extent', indicating development of good therapeutic alliance (Table 3).

noise disrupting communication. These findings provide the real life experience of difficulties during the teleconsultations. There is no data to compare these findings with the existing literature. These findings suggest that there is a need to improve the connectivity and devices used in the country to make the teleconsultations more feasible. Other issues to be addressed include educating the patients/caregivers about the technological aspects of teleconsultations.

In terms of satisfaction with providing teleconsultations, on more than half of the occasions clinicians were satisfied to a 'large extent' or 'very satisfied' in terms of amount of time spent in consultation, amount of information they were able to collect, behaviour of the patient and the caregiver during the interview, freedom in expressing self, providing information to the patient/caregivers about the illness and prescription, useful of the consultation for the patient's and the family, quality of care provided. Existing literature on the experience of clinicians have not assessed these issues, hence, it is not possible to compare the findings of the present study with the existing literature. In only about 10% of the consultations, the clinicians were 'satisfied to some extent or dissatisfied' with the amount of information they were able to collect during the interview. These findings suggest that in general there is no difficulty in collecting information about the diagnosis and relevant clinical issues during the teleconsultations. These findings are in contrast to previous surveys in which psychiatrists have reported facing diagnostic challenges during the teleconsultations (Olwill et al., 2021).

For about 10% of the consultations, the clinicians were not satisfied with the behaviour of the patients and caregivers. These involved, either of them not sitting still during the consultation, or not seated at appropriate place for a tele-consultation, thereby violating the basic etiquettes of teleconsultations. These findings suggest that there is a need to improve the awareness of the patients/caregivers about the basic etiquettes related to teleconsultations. In terms of information which the clinicians could provide to the patient/caregivers, and overall perception of the clinicians about usefulness of the teleconsultation for

Table 3
Therapeutic relationship during the teleconsultations as rated by the clinicians providing Teleconsultation.

Variable	Frequency (%)[N = 430]
The extent to which I got along well with my patient/ patient's caregiver:	144(33.5)
Totally	250(58.9)
To a large extent	27(6.3)
To some extent	5(1.2)
To a very little extent	1(0.2)
Not at all	
The extent to which I shared a good rapport with my patient/ patient's caregiver:	111(25.9)
Totally	265(61.6)
To a large extent	46(10.7)
To some extent	6(1.4)
To a very little extent	2(0.4)
Not at all	
The extent to which I listened to my patient/patient's caregiver:	156(35.8)
Totally	265(61.7)
To a large extent	9(2.1)
To some extent	0
To a very little extent	1(0.2)
Not at all	
The extent to which I felt that my patient/patient's caregiver rejected me as a clinician:	4(0.9)
Totally	6(1.4)
To a large extent	28(6.5)
To some extent	72(16.7)
To a very little extent	320(74.4)
Not at all	
The extent to which I believe my patient/patient's caregiver and I shared a good relationship:	72(16.7)
Totally	304(70.7)
To a large extent	46(10.7)
To some extent	5(1.2)
To a very little extent	3(0.7)
Not at all	
The extent to which I felt inferior to my patient/patient's caregiver:	5(1.2)
Totally	8(1.9)
To a large extent	3(0.7)
To some extent	24(5.6)
To a very little extent	389(90.5)
Not at all	
The extent to which my patient/patient's caregiver and I shared similar expectations regarding the treatment progress:	31(7.2)
Totally	223(51.8)
To a large extent	141(32.8)
To some extent	28(6.5)
To a very little extent	7(1.6)
Not at all	
The extent to which I felt that I was supportive of my patient/ patient's caregiver:	69(16.1)
Totally	320(74.5)
To a large extent	33(7.7)
To some extent	4(0.9)
To a very little extent	4(0.9)
Not at all	
The extent to which it was difficult for me to empathise with or relate to my patient:	17(4.0)
Totally	45(10.5)
To a large extent	65(14.9)
To some extent	111(25.8)
To a very little extent	192(44.8)
Not at all	
The extent to which my patient/patient's caregiver and I are open to one another:	44(10.2)
Totally	310(72.1)
To a large extent	68(15.8)
To some extent	4(0.9)
To a very little extent	4(0.9)
Not at all	

(*continued on next page*)

Table 3 (*continued*)

Variable	Frequency (%)[N = 430]
The extent to which I was able to take my patient/ patient's caregiver's perspective when working with him/her:	53(12.3) 320(74.4) 52(12.1)
Totally	3(0.7)
To a large extent	2(0.5)
To some extent	
To a very little extent	
Not at all	
The extent to which my patient/patient's caregiver and I shared a trusting relationship:	54(12.6) 319(74.2)
Totally	49(11.4)
To a large extent	7(1.6)
To some extent	1(0.2)
To a very little extent	
Not at all	

the patient/caregivers, for > 85% of the consultations, these were rated by clinicians as 'satisfied to large extent' or 'very satisfied'. Further, overall level of satisfaction was rated as 'satisfied to large extent' or 'very satisfied' for 86.7% of the consultations. In only 12.3% of the tele-consultations, clinicians got irritated due to the poor quality of the call. These findings suggest that clinicians are in general satisfied with providing teleconsultations, despite the technical difficulties encountered in about half of the teleconsultations. The improvement in the connectivity can possibly lead to further improvement in the satisfaction of the clinicians.

When asked to compare the tele-consultation experience to their in-person or face to face consultation, for two-third (65.8%) of the consultations, clinicians rated it as same and for one-fourth rated it as worse or much worse. For only 10% of the consultations the experience was rated as better than the in-person consultation. These findings are similar to the findings of the previous study from United States, which compared the experience of the clinicians for in-person and the tele-consultation, in which 59% of clinicians reported lack of significant difference in the experience between the two types of consultations (Donelan et al., 2019).

In terms of therapeutic alliance, previous studies suggest that clinicians are concerned about this aspect. The qualitative and mixed methodology suggest that a higher proportion of the clinicians feel that there is adverse impact on the therapeutic alliance in teleconsultations (add references). The study from United States that compared the experience of teleconsultations and the face to face consultations found that about half of the clinicians reported no significant difference in the personal connection felt with the patient and for another 46% clinicians considered it to be better for the in person visits (Donelan et al., 2019). In the present study, in general, clinicians rated their perception about several of therapeutic alliance positively (totally or to large extent for positively worded items) for at least 80% of the consultations, except for the item assessing empathy. These findings suggest that therapeutic alliance is impacted in not affected much for majority of the teleconsultations.

We are aware about limitations of our study. First, we did not include a comparison group of in-person consultations. This was not feasible in the time frame in which this study was done. Second, the questionnaire used to assess the experience, satisfaction and therapeutic alliance was not validated beyond face validity. It being an exploratory study, we did not control for the multiple comparisons.

To conclude, the present study suggest that in general clinicians perceive providing teleconsultations as a satisfactory experience, despite encountering technical difficulties.

Conflict of interest

None.

Funding

None.

Acknowledgement

None.

References

Chellaiyan, V.G., Nirupama, A.Y., Taneja, N., 2019. Telemedicine in India: where do we stand. J. Fam. Med. Prim. Care 8, 1872–1876. https://doi.org/10.4103/jfmpc.jfmpc_264_19.

Crotty, B.H., Hyun, N., Polovneff, A., Dong, Y., Decker, M.C., Mortensen, N., Holt, J.M., Winn, A.N., Laud, P.W., Somai, M.M., 2021. Analysis of clinician and patient factors and completion of telemedicine appointments using video. JAMA Netw. Open 4, e2132917. https://doi.org/10.1001/jamanetworkopen.2021.32917.

Donelan, K., Barreto, E.A., Sossong, S., Michael, C., Estrada, J.J., Cohen, A.B., Wozniak, J., Schwamm, L.H., 2019. Patient and clinician experiences with telehealth for patient follow-up care. Am. J. Manag. Care 25, 40–44.

Grover, S., Mehra, A., Sahoo, S., Avasthi, A., Tripathi, A., D'Souza, A., Saha, G., Jagadhisha, A., Gowda, M., Vaishnav, M., Singh, O., Dalal, P.K., Kumar, P., 2020. State of mental health services in various training centers in India during the lock-down and COVID-19 pandemic. Indian J. Psychiatry 62, 363–369. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_567_20.

Hall, R.C.W., 1995. Global assessment of functioning: a modified scale. Psychosomatics 36, 267–275. https://doi.org/10.1016/S0033-3182(95)71666-8.

Haimi, M., Brammli-Greenberg, S., Baron-Epel, O., Waisman, Y., 2020. Assessing patient safety in a pediatric telemedicine setting: a multi-methods study. BMC Med. Inform. Decis. Mak. 20, 63. https://doi.org/10.1186/s12911-020-1074-7.

Indria, D., Alajlani, M., Fraser, H.S.F., 2020. Clinicians perceptions of a telemedicine system: a mixed method study of Makassar City, Indonesia. BMC Med. Inform. Decis. Mak. 20, 233. https://doi.org/10.1186/s12911-020-01234-7.

Kludacz-Alessandri, M., Hawrysz, L., Korneta, P., Gierszewska, G., Pomaranik, W., Walczak, R., 2021. The impact of medical teleconsultations on general practitioner-patient communication during COVID- 19: a case study from Poland. PLOS ONE 16, e0254960. https://doi.org/10.1371/journal.pone.0254960.

Li, H., Glecia, A., Kent-Wilkinson, A., Leidl, D., Kleib, M., Risling, T., 2022. Transition of mental health service delivery to telepsychiatry in response to COVID-19: a literature review. Psychiatr. Q 93, 181–197. https://doi.org/10.1007/s11126-021-09926-7.

Lopez, A.M., Lam, K., Thota, R., 2021. Barriers and Facilitators to Telemedicine: Can You Hear Me Now? American Society of Clinical Oncology Educational Book, pp. 25–36. https://doi.org/10.1200/EDBK_320827.

McGuire-Snieckus, R., McCabe, R., Catty, J., Hansson, L., Priebe, S., 2007. A new scale to assess the therapeutic relationship in community mental health care: STAR. Psychol. Med. 37, 85–95. https://doi.org/10.1017/S0033291706009299.

Olwill, C., Mc Nally, D., Douglas, L., 2021. Psychiatrist experience of remote consultations by telephone in an outpatient psychiatric department during the COVID-19 pandemic. Ir. J. Psychol. Med. 38, 132–139. https://doi.org/10.1017/ipm.2020.51.

Sharma, D., Garg, S., Sharma, A., Dutta Sharma, D., Sharma, N., Gupta, S., Sharma, S., 2021. Assessment and comparison of the mental health status of patients seeking psychiatry facilities in prelockdown and postlockdown period of the COVID-19 Pandemic: an ambispective study in a tertiary care center in a Hilly Region of North India. Arch. Med. Health Sci. 9, 95–100.

Sandeep Grover*, Chandrima Naskar, Swapnajeet Sahoo, Aseem Mehra
Department of Psychiatry, Post Graduate Institute of Medical Education and Research, Chandigarh, India

* Corresponding author.
E-mail address: drsandeepg2002@yahoo.com (S. Grover).