Patients' Attitudes Towards Telepsychiatry: Results of a Nationwide, Multisite Survey During the COVID-19 Pandemic

Daniel Guinart, Patricia Marcy, Marta Hauser, Michael Dwyer, John M Kane

Submitted to: JMIR Mental Health
on: October 04, 2020

Table of Contents

Patients' Attitudes Towards Telepsychiatry: Results of a Nationwide, Multisite Survey During the COVID-19 Pandemic

Daniel Guinart[1, 2, 3] MD; Patricia Marcy[4]; Marta Hauser[4] PhD; Michael Dwyer[5]; John M Kane[1, 2, 3] MD

[1]Department of Psychiatry The Zucker Hillside Hospital Northwell Health New York US
[2]Center for Psychiatric Neuroscience Feinstein Institutes for Medical Research Manhasset US
[3]The Donald and Barbara Zucker School of Medicine at Hofstra/Northwell Manhasset US
[4]Vanguard Research Group Glen Oaks US
[5]Ambulatory Care Division The Zucker Hillside Hospital Glen Oaks US

Corresponding Author:
Daniel Guinart MD
Department of Psychiatry
The Zucker Hillside Hospital
Northwell Health
7559 263rd St
New York
US

Abstract

Background: The COVID-19 pandemic and its associated movement restrictions forced a rapid and massive transition to telepsychiatry to successfully maintain care continuity, providing a unique opportunity for implementation research.

Objective: To examine a large number of patients' experiences, use of and attitudes towards telepsychiatry.

Methods: An anonymous survey was delivered electronically to 14,000 patients receiving telepsychiatry care at 18 participating centers across 11 US states, including questions about their experience and satisfaction on a 5-point Likert scale. Descriptive statistics were used to analyze and report data.

Results: 3,070 patients with different age ranges participated. The overall experience using telepsychiatry was either excellent or good for 82.2% using video, and 81.5% using telephone. 1,922 (63.6%) patients either agreed or strongly agreed that remote treatment sessions (telephone or video) have been just as helpful as in person treatment. Lack of commute (n=1,406, 46.1%) and flexible scheduling/rescheduling (n=1,389, 45.5%), were frequently reported advantages of telepsychiatry, whereas missing the clinic/hospital (n=936, 30.7%) and not feeling as connected to their doctor/nurse/therapist (n=752, 24.6%) were the most frequently reported challenges. After the current pandemic resolves, 1,937 (64.2%) respondents either agreed or strongly agreed that they would consider using remote treatment sessions in the future.

Conclusions: Telepsychiatry is very well perceived among a large sample of patients. After the current pandemic resolves, some patients may benefit from continued telepsychiatry.

(JMIR Preprints 04/10/2020:24761)
DOI: https://doi.org/10.2196/preprints.24761

Preprint Settings

1) Would you like to publish your submitted manuscript as preprint?

✓ **Please make my preprint PDF available to anyone at any time (recommended).**
Please make my preprint PDF available only to logged-in users; I understand that my title and abstract will remain visible to all users.
Only make the preprint title and abstract visible.
No, I do not wish to publish my submitted manuscript as a preprint.

2) If accepted for publication in a JMIR journal, would you like the PDF to be visible to the public?

✓ **Yes, please make my accepted manuscript PDF available to anyone at any time (Recommended).**
Yes, but please make my accepted manuscript PDF available only to logged-in users; I understand that the title and abstract will remain v

Yes, but only make the title and abstract visible (see Important note, above). I understand that if I later pay to participate in <a href="http

Original Manuscript

JMIR Mental Health
Article type: Short Paper
Words: 1499/1500
Tables/Figures: 4
References: 29

Patients' Attitudes Towards Telepsychiatry: Results of a Nationwide, Multisite Survey During the COVID-19 Pandemic

Daniel Guinart MD[1,2,3], Patricia Marcy[4], Marta Hauser PhD[4], Michael Dwyer[5], John M Kane MD[1,2,3]

Affiliations

[1] Department of Psychiatry Research, The Zucker Hillside Hospital, New York, USA
[2]Center for Psychiatric Neuroscience, Feinstein Institute for Medical Research, Manhasset, NY, USA
[3]The Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, Manhasset, New York
[4]Vanguard Research Group, Glen Oaks, New York, USA
[5]Ambulatory Care Division, The Zucker Hillside Hospital, New York, USA

Short Title:

Patient's Attitudes Towards Telepsychiatry

Corresponding author:

Daniel Guinart, MD
The Zucker Hillside Hospital
Department of Psychiatry Research
7559 263rd St, Glen Oaks
11004 NY, USA
Email: dguinart@northwell.edu
Phone: 718-470-4139
Fax: (718) 343-1659

Keywords:

Telehealth; Telepsychiatry; Telemedicine; Attitudes; Patients; Survey

Abstract

Background:

The COVID-19 pandemic and its associated movement restrictions forced a rapid and massive transition to telepsychiatry to successfully maintain care continuity.

Objective:

To examine a large number of patients' experiences, use of and attitudes towards telepsychiatry.

Methods:

An anonymous 11-question survey was delivered electronically to 14,000 patients receiving telepsychiatry care at 18 participating centers across 11 US states between the months of April and June of 2020, including questions about their age and length of service use, as well as experience and satisfaction with telepsychiatry on a 5-point Likert scale. Descriptive statistics were used to analyze and report data.

Results:

3,070 patients with different age ranges participated. The overall experience using telepsychiatry was either excellent or good for 82.2% using video, and 81.5% using telephone. 1,922 (63.6%) patients either agreed or strongly agreed that remote treatment sessions (telephone or video) have been just as helpful as in person treatment. Lack of commute (n=1,406, 46.1%) and flexible scheduling/rescheduling (n=1,389, 45.5%), were frequently reported advantages of telepsychiatry, whereas missing the clinic/hospital (n=936, 30.7%) and not feeling as connected to their doctor/nurse/therapist (n=752, 24.6%) were the most frequently reported challenges. After the current pandemic resolves, 1,937 (64.2%) respondents either agreed or strongly agreed that they would consider using remote treatment sessions in the future**.**

Conclusions:

Telepsychiatry is very well perceived among a large sample of patients. After the current pandemic resolves, some patients may benefit from continued telepsychiatry, but longitudinal studies are needed to assess impact on clinical outcomes.

Introduction

Outcomes and cost-effectiveness of telepsychiatry are overall comparable to in-person care across multiple treatment modalities, disorders, and patient groups[1-11]. However, widespread implementation of telepsychiatry has been challenging[12–14] partially driven by mental healthcare professionals' concerns about patient's ability to use conferencing devices, lack of sense of closeness/connection, technical problems and reimbursement and privacy concerns[15][16]. However, barriers related to patient's preference are also possible, and the patient's perspective is crucial to further characterize implementation challenges. Previous studies show positive patient

satisfaction[17–19] but potential limitations including relatively small sample sizes and/or selection biases in the context of pilot programs or specific services, may have limited their generalizability.

Due to the COVID-19 crisis our healthcare system, and others around the world, rapidly transitioned all or almost all in-person visits to remote assessments[20], in an unprecedented context of mental healthcare professional stress and increased need for mental health services [21][22]. This revolution in telepsychiatry provided a unique opportunity to assess how patents -that may not have initially opted for telepsychiatry - feel about it. Hence, the aim of this study was to qualitatively assess opinions and attitudes of a large sample of U.S. patients about telepsychiatry.

Materials and Methods

An anonymous survey was distributed to patients utilizing telepsychiatry in 18 hospitals and community centers located in rural, suburban, small urban and large urban areas in 11 different states across the United States (Connecticut, Florida, Maine, Michigan, New Hampshire, New York, Oregon, Rhode Island, South Carolina, Texas and Utah) working with the Vanguard Research Group (VRG), a research consortium specializing in behavioral health. Surveys were distributed through email and/or embedded into the video platform scheduling invitations between the months of April and June of 2020 and could be completed electronically, with computers, tablets, or smartphones. Study procedures were deemed exempt by the local Institutional Review Board (IRB#20-0397). Further details can be found on the Checklist for Reporting Results of Internet E-Surveys (CHERRIES)[23] listed in Supplement 1.

The survey included 11 questions about telepsychiatry use and satisfaction using a 5-point Likert scale, as well as inquiries about both potential challenges and positive experiences. (See survey in Supplement 2). Descriptive statistics were used to report qualitative survey results. Chi-Square tests were used to compare categorical variables. First, omnibus comparisons were conducted by age range and length of care at the same institution. If statistically significant differences were detected, we then tested the individual interactions of interest post-hoc. All analyses were conducted using JMP®, Version *13*, SAS Institute Inc.,

1989-2019.

Results

The survey was distributed to approximately 14,000 patients, of which 3,070 (22%) completed it. 18 surveys were excluded due to the subject disclosing not having used telemedicine. Hence, 3052 surveys were included in the analysis. Patient characteristics are listed in Table 1.

Table1. Characteristics of the patients included in the study

	Total	**Percentage (%)**
Age Range		
<25	304	10.0
25-34	494	16.3
35-44	576	18.9
45-54	680	22.4
55-64	721	23.7
65-74	232	7.6
>74	33	1.1
Total responses	3040	100
Duration of care		
Less than one year	793	26.5
One to five years	1335	44.6
Five to ten years	493	16.4
More than ten years	373	12.5
Total responses	2994	100

Briefly, 55% of the sample (n=1,666) were older than 45 and the majority of survey-takers (n=2128, 71.1%), had been under care at the institution where the survey took place for five years or less (Table 1). Survey takers were mostly using telephone (n=1,924, 63.7%), followed by video (n=708, 23.4%) or a combination of telephone and video (n=390, 12.9%). When asked about their preferred method for receiving care, respondents to this survey would rather use telephone over video (n=1908, 64.1% vs 1066, 35.9%).

The overall experience was either good or excellent for 81.5% when asked about telephone only and 82.2% when asked about video (Figure 1). Only 4.5% rated their experience as “poor” or “very poor” for telephone and 5.1% for video (Figure 1).

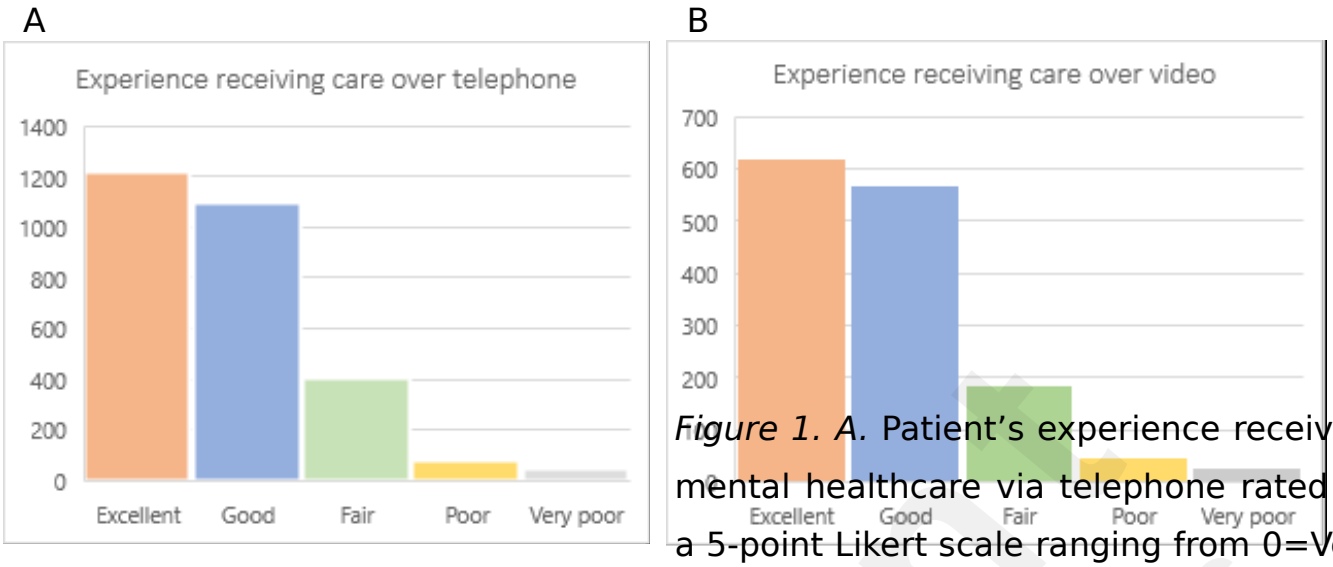
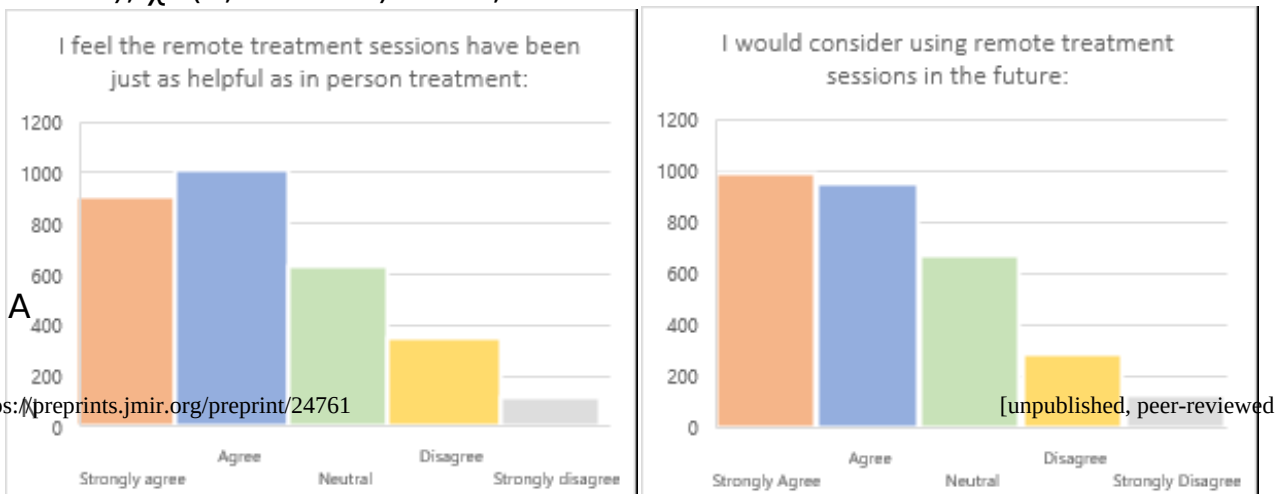


Figure 1. A. Patient's experience receiving mental healthcare via telephone rated on a 5-point Likert scale ranging from 0=Very Poor to 5= Excellent. *B.* Patient's experience receiving mental healthcare via video rated on a 5-point Likert scale ranging from 0=Very Poor to 5= Excellent.

We detected differences in the overall experience by age range in the case of telephone, χ^2 (24, n=2831)=46.3, *P*=.004- a lower proportion of patients aged 55-64 years declaring their experience as excellent compared to other age groups (38.2 vs 44.3%); χ^2 (4, n=2840)=12.8, *P*=.01, and a higher proportion of patients aged 45-54 years rating their experience as poor compared to other age groups (4.2% vs 2.5%); χ^2 (4, n=2840)=10.5, *P* =.03.

Further, 1922 (63.6%) patients either agreed or strongly agreed with the statement that remote treatment sessions (telephone or video) have been just as helpful as in person treatment (Figure 2A), whereas 64.2% of respondents either agreed or strongly agreed with the statement that they would consider using remote treatment sessions in the future(Figure 2B). Patients using video were more likely to strongly agree than those using telephone (38.9% vs 29.9%), χ^2 (4, n=2605)=29.6, *P* <.001.



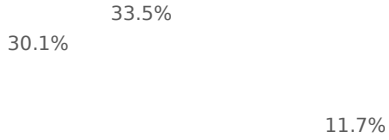


Figure 2. A. Patient's degree of agreement with the statement "I feel the remote treatment sessions have been just as helpful as in person treatment" rated on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree". *B.* Patient's degree of agreement with the statement "I would consider using remote treatment sessions in the future" rated on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree".

Patients endorsed lack of commute (n=1406, 46.1%), flexible scheduling/rescheduling (n=1389, 45.5%), reduced likelihood of missing appointments (n=1064, 39.9%) and feeling more confidence/comfort than in person (n=601, 19.7%) as positive elements/advantages of telepsychiatry (Table 2), which did not vary by age, χ^2 (18, n=4447)=15.4, P =.64 or length of time under care, χ^2 (9, n=4413)=10.7, P =.30. Some of the challenges that patients endorsed were related to missing the clinic/hospital (n=936, 30.7%) and not feeling as connected to their doctor/nurse/therapist (n=752, 24.6%), among others (Table 2). Patients under care for less than one year endorsed missing the clinic and feeling connected to it less frequently than other age groups (21.6% vs 28%), χ^2 (6, n=3550)=21.5, P =.002.

Table 2. Patient-reported advantages and challenges related to the use of telepsychiatry

	Total	**Percentage**
Positive elements of telepsychiatry		
I like not having to commute to the clinic	1406	46.1

Flexible scheduling/rescheduling	1389	45.5
I am less likely to miss appointments	1064	34.9
I felt more confident/comfortable than in person	601	19.7
Total respondents	3052	100
Difficulties and challenges of telepsychiatry		
I miss visiting the clinic/hospital and feeling connected to it	936	30.7
I do not feel as connected to my doctor/nurse/therapist	752	24.6
I am concerned that my doctor/nurse/therapist might miss something because they do not see me in person (for example, a side effect of the medicine)	593	19.4
I do not feel as comfortable talking about my problems as I do in person	471	15.4
I have had technical problems establishing/maintaining the connection	375	12.3
I am concerned about confidentiality/privacy	273	8.9
I do not feel that my doctor/nurse/therapist is as engaged in the conversation	150	4.9
Total respondents	3052	100

Table 2. Percentages represent proportion of responders who endorsed a given option and are calculated in relation to the total number of respondents, since more than one positive element and/or challenge or difficulty could be selected. Responses are listed in the order of most frequently endorsed items.

In the free text comment section, patients generally found telepsychiatry to be safe and convenient, and expressed their gratitude to mental healthcare professionals for providing uninterrupted care during a very challenging time. Many suggested remote assessments should be maintained, mentioning that they feel more comfortable at home, can express themselves more freely, save transportation time and costs, and/or request less time off work. Others expressed feeling disengaged, frustration with technical difficulties and lack of resources to address them (e.g.: not owning a laptop or smartphone), difficulty finding a quiet setting (e.g.: children interruptions, shared housing), getting tests done or filling out forms.

Discussion

In this study we report highly favorable attitudes towards telepsychiatry in its diverse forms, across a large sample of patients across the US. To our knowledge, this is the largest evaluation of patient attitudes towards

telepsychiatry to date, by at least an order of magnitude, which is timely in the context of the current COVID-19 pandemic and the widespread stay-home and travel restriction orders, the duration of which is unclear.

Our results are aligned with other surveys very recently validated based on quality of care domains[24], showing high levels of satisfaction with telepsychiatry services. Other recent studies in older[25][26] and younger[27] adults show similar results, all in smaller samples. Further, most of our respondents would like to continue using telepsychiatry. This finding is highly relevant given the diversity and size of our sample drawn from a large network of community, real world but also academic mental health centers, and should encourage allowing telepsychiatry for some patient populations after the current pandemic is resolved. However, some respondents expressed desires to resume usual in-person care as soon as possible and/or lean towards hybrid models. The option of telepsychiatry should remain tailored to individual patient needs and be the result of shared decision making.

Interestingly, subjects were more likely to strongly agree to consider using telepsychiatry in the future when using video. Concerns raised about lack of closeness and fear of a reduction in the doctor's ability to detect subtle signs of body language, nonverbal cues and/or physical signs of disease could be some of the reasons behind this preference[16]. Whereas the widespread use of telephone may be probably the result of an abrupt transition related to COVID-19, access to technology may have been a potential barrier for the implementation of telepsychiatry that will need to be considered. Videoconferencing should be preferred over telephone whenever possible, particularly given the technology available currently, allowing for encrypted private communications[15]. Further, patients with sensory and/or cognitive limitations such as mutism, hearing difficulty, visual or cognitive impairment would potentially require deployment of additional technologies and/or human resources.

This study has some limitations. First, this study was conducted during the COVID-19 pandemic and associated movement restrictions, which made have made a visit to the hospital/doctor less appealing, adding safety as a confounder, possibly overestimating real user satisfaction. Second, our survey is

short, completion rate is relatively low, and our sample was not random, so selection, but also nonresponse and response biases are possible[28]. Third, the influence of additional sociodemographic factors as well as symptom severity and/or previous telepsychiatry experience could not be ascertained. Longitudinal studies will be needed to assess impact on clinical outcomes and determine whether patients' perceptions change over time.

Mental health professionals were already implementing digital technologies and advocating for more widespread use of telehealth[29], and the current scenario has accelerated its use.. Thus, even after the COVID-19 pandemic ends, telepsychiatry is here to stay. However, patient's concerns need to be heard and addressed, and positive experiences need to be acknowledged and echoed.

Conclusion

Patients show a generally positive attitude towards telepsychiatry and many would like to continue using it after the COVID-19 restrictions recede. Longitudinal studies are needed to assess whether patients' perceptions change over time. However, some patients may benefit from continuous use of telepsychiatry. Results of this study should help shape policies regarding its use.

Acknowledgements

We thank the patients that took the time to participate in our study in such challenging times.

Disclosure statement

Dr. Guinart has been a consultant for and/or has received speaker honoraria from Otsuka America Pharmaceuticals and Janssen Pharmaceuticals.

Dr. Kane has been a consultant and/or advisor for or has received honoraria from Alkermes, Allergan , LB Pharmaceuticals, H. Lundbeck, Intracellular Therapies, Janssen Pharmaceuticals, Johnson and Johnson, Merck, Minerva, Neurocrine, Newron, Otsuka, Pierre Fabre, Reviva, Roche, Sumitomo Dainippon, Sunovion, Takeda, Teva and UpToDate and is a shareholder in LB Pharmaceuticals and Vanguard Research Group.

Ms. Marcy has been a consultant to Otsuka and has received research funding from Alkermes, Boehringer-Ingelheim, Janssen, Lundbeck, NeuroRx, Otsuka, Takeda, and

Roche.

Funding:

None

References

[1] D. M. Hilty, D. C. Ferrer, M. B. Parish, B. Johnston, E. J. Callahan, and P. M. Yellowlees, “The effectiveness of telemental health: a 2013 review.,” *Telemed. J. E. Health.*, vol. 19, no. 6, pp. 444–454, Jun. 2013, doi: 10.1089/tmj.2013.0075.

[2] D. M. Hilty, N. Sunderji, S. Suo, S. Chan, and R. M. McCarron, “Telepsychiatry and other technologies for integrated care: evidence base, best practice models and competencies.,” *Int. Rev. Psychiatry*, vol. 30, no. 6, pp. 292–309, Dec. 2018, doi: 10.1080/09540261.2019.1571483.

[3] A. P. Sunjaya, A. Chris, and D. Novianti, “Efficacy, patient-doctor relationship, costs and benefits of utilizing telepsychiatry for the management of post-traumatic stress disorder (PTSD): a systematic review.,” *Trends psychiatry Psychother.*, vol. 42, no. 1, pp. 102–110, 2020, doi: 10.1590/2237-6089-2019-0024.

[4] A. Salmoiraghi and S. Hussain, “A Systematic Review of the Use of Telepsychiatry in Acute Settings.,” *J. Psychiatr. Pract.*, vol. 21, no. 5, pp. 389–393, Sep. 2015, doi: 10.1097/PRA.0000000000000103.

[5] J. H. Shore, D. Savin, H. Orton, J. Beals, and S. M. Manson, “Diagnostic reliability of telepsychiatry in American Indian veterans.,” *Am. J. Psychiatry*, vol. 164, no. 1, pp. 115–118, Jan. 2007, doi: 10.1176/ajp.2007.164.1.115.

[6] R. W. Seidel and M. D. Kilgus, “Agreement between telepsychiatry assessment and face-to-face assessment for Emergency Department psychiatry patients.,” *J. Telemed. Telecare*, vol. 20, no. 2, pp. 59–62, Mar. 2014, doi: 10.1177/1357633X13519902.

[7] R. Johansson *et al.*, “Affect-focused psychodynamic psychotherapy for depression and anxiety through the Internet: a randomized controlled trial,” *PeerJ*, vol. 1, pp. e102–e102, Jul. 2013, doi: 10.7717/peerj.102.

[8] S. Hubley, S. B. Lynch, C. Schneck, M. Thomas, and J. Shore, “Review of key telepsychiatry outcomes,” *World J. psychiatry*, vol. 6, no. 2, pp. 269–282, Jun. 2016, doi: 10.5498/wjp.v6.i2.269.

[9] J. F. Thomas *et al.*, “The Use of Telepsychiatry to Provide Cost-Efficient Care During Pediatric Mental Health Emergencies.,” *Psychiatr. Serv.*, vol. 69, no. 2, pp. 161–168, Feb. 2018, doi: 10.1176/appi.ps.201700140.

[10] L. K. Richardson, B. C. Frueh, A. L. Grubaugh, L. Egede, and J. D. Elhai, “Current Directions in Videoconferencing Tele-Mental Health Research.,” *Clin. Psychol. (New. York).*, vol. 16, no. 3, pp. 323–338, Sep. 2009, doi: 10.1111/j.1468-2850.2009.01170.x.

[11] M. T. Gentry, M. I. Lapid, and T. A. Rummans, “Geriatric Telepsychiatry: Systematic Review and Policy Considerations.,” *Am. J. Geriatr. psychiatry Off. J. Am. Assoc. Geriatr. Psychiatry*, vol. 27, no. 2, pp. 109–127, Feb.

2019, doi: 10.1016/j.jagp.2018.10.009.
[12] M. L. Barnett, K. N. Ray, J. Souza, and A. Mehrotra, “Trends in Telemedicine Use in a Large Commercially Insured Population, 2005-2017.,” *JAMA*, vol. 320, no. 20, pp. 2147–2149, Nov. 2018, doi: 10.1001/jama.2018.12354.
[13] J. S. Thiele, C. R. Doarn, and J. H. Shore, “Locum tenens and telepsychiatry: trends in psychiatric care.,” *Telemed. J. E. Health.*, vol. 21, no. 6, pp. 510–513, Jun. 2015, doi: 10.1089/tmj.2014.0159.
[14] P. Yellowlees and N. Nafiz, “The psychiatrist-patient relationship of the future: anytime, anywhere?,” *Harv. Rev. Psychiatry*, vol. 18, no. 2, pp. 96–102, 2010, doi: 10.3109/10673221003683952.
[15] D. Guinart, P. Marcy, M. Hauser, M. Dwyer, and J. M. Kane, “Mental Healthcare Providers’ Attitudes Towards Telepsychiatry: A Systemwide, Multisite Survey during the COVID-19 pandemic,” *Psychiatr. Serv.*, no. In Press, 2020.
[16] K. E. Cowan, A. J. McKean, M. T. Gentry, and D. M. Hilty, “Barriers to Use of Telepsychiatry: Clinicians as Gatekeepers.,” *Mayo Clin. Proc.*, vol. 94, no. 12, pp. 2510–2523, Dec. 2019, doi: 10.1016/j.mayocp.2019.04.018.
[17] D. M. Hilty, T. S. Nesbitt, C. A. Kuenneth, G. M. Cruz, and R. E. Hales, “Rural versus suburban primary care needs, utilization, and satisfaction with telepsychiatric consultation.,” *J. Rural Heal. Off. J. Am. Rural Heal. Assoc. Natl. Rural Heal. Care Assoc.*, vol. 23, no. 2, pp. 163–165, 2007, doi: 10.1111/j.1748-0361.2007.00084.x.
[18] N. J. Schubert, P. J. Backman, R. Bhatla, and K. M. Corace, “Telepsychiatry and patient-provider concordance.,” *Can. J. Rural Med. Off. J. Soc. Rural Physicians Canada = J. Can. la Med. Rural. le J. Off. la Soc. Med. Rural. du Canada*, vol. 24, no. 3, pp. 75–82, 2019, doi: 10.4103/CJRM.CJRM_9_18.
[19] C. S. Kruse, N. Krowski, B. Rodriguez, L. Tran, J. Vela, and M. Brooks, “Telehealth and patient satisfaction: a systematic review and narrative analysis.,” *BMJ Open*, vol. 7, no. 8, p. e016242, Aug. 2017, doi: 10.1136/bmjopen-2017-016242.
[20] R. Ohannessian, T. A. Duong, and A. Odone, “Global Telemedicine Implementation and Integration Within Health Systems to Fight the COVID-19 Pandemic: A Call to Action.,” *JMIR public Heal. Surveill.*, vol. 6, no. 2, p. e18810, Apr. 2020, doi: 10.2196/18810.
[21] K. Smith, E. Ostinelli, O. Macdonald, and A. Cipriani, “COVID-19 and Telepsychiatry: Development of Evidence-Based Guidance for Clinicians.,” *JMIR Ment. Heal.*, vol. 7, no. 8, p. e21108, Aug. 2020, doi: 10.2196/21108.
[22] J. Torous, K. Jän Myrick, N. Rauseo-Ricupero, and J. Firth, “Digital Mental Health and COVID-19: Using Technology Today to Accelerate the Curve on Access and Quality Tomorrow.,” *JMIR mental health*, vol. 7, no. 3. p. e18848, Mar-2020, doi: 10.2196/18848.
[23] G. Eysenbach, “Improving the quality of Web surveys: the Checklist for Reporting Results of Internet E-Surveys (CHERRIES),” *J. Med. Internet Res.*, vol. 6, no. 3, pp. e34–e34, Sep. 2004, doi: 10.2196/jmir.6.3.e34.
[24] E. Serhal, A. Kirvan, M. Sanches, and A. Crawford, “Client Satisfaction and Experience with Telepsychiatry: Development and Validation of a Survey using Clinical Quality Domains.,” *J. Med. Internet Res.*, Jul. 2020, doi: 10.2196/19198.
[25] P. Dham, N. Gupta, J. Alexander, W. Black, T. Rajji, and E. Skinner,

"Community based telepsychiatry service for older adults residing in a rural and remote region- utilization pattern and satisfaction among stakeholders.," *BMC Psychiatry*, vol. 18, no. 1, p. 316, Sep. 2018, doi: 10.1186/s12888-018-1896-3.

[26] N. Hantke *et al.*, "Patient Satisfaction With Geriatric Psychiatry Services via Video Teleconference.," *Am. J. Geriatr. psychiatry Off. J. Am. Assoc. Geriatr. Psychiatry*, vol. 28, no. 4, pp. 491–494, Apr. 2020, doi: 10.1016/j.jagp.2019.08.020.

[27] A. M. Mayworm, N. Lever, N. Gloff, J. Cox, K. Willis, and S. A. Hoover, "School-Based Telepsychiatry in an Urban Setting: Efficiency and Satisfaction with Care.," *Telemed. J. e-health Off. J. Am. Telemed. Assoc.*, vol. 26, no. 4, pp. 446–454, Apr. 2020, doi: 10.1089/tmj.2019.0038.

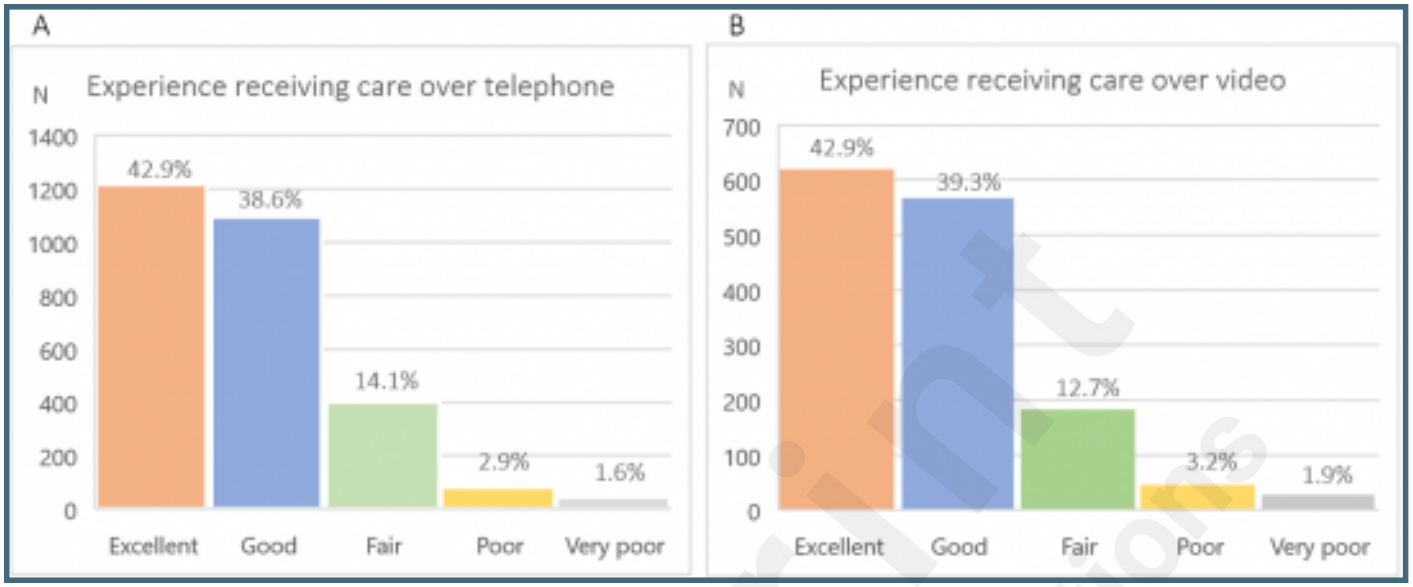
[28] T. L. Williams, C. R. May, and A. Esmail, "Limitations of patient satisfaction studies in telehealthcare: a systematic review of the literature.," *Telemed. J. e-health Off. J. Am. Telemed. Assoc.*, vol. 7, no. 4, pp. 293–316, 2001, doi: 10.1089/15305620152814700.

[29] J. H. Shore, C. D. Schneck, and M. C. Mishkind, "Telepsychiatry and the Coronavirus Disease 2019 Pandemic-Current and Future Outcomes of the Rapid Virtualization of Psychiatric Care.," *JAMA psychiatry*, May 2020, doi: 10.1001/jamapsychiatry.2020.1643.

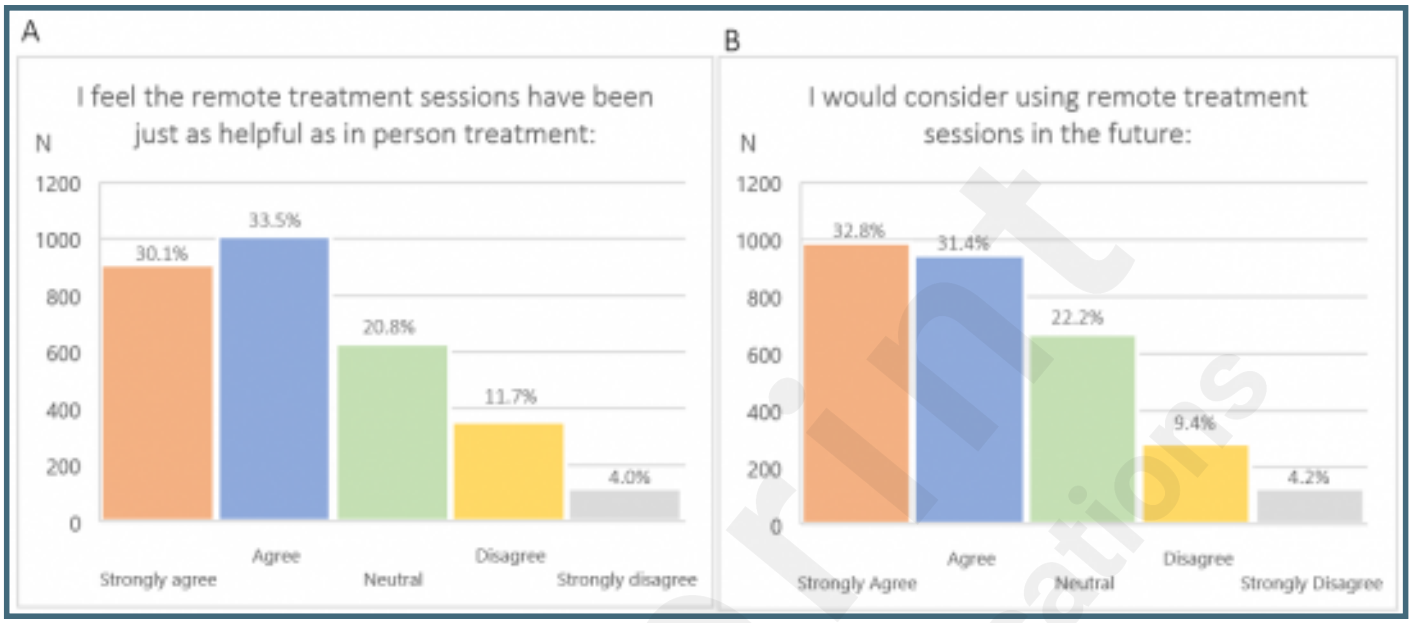
Supplementary Files

Figures

A. Patient's experience receiving mental healthcare via telephone rated on a 5-point Likert scale ranging from 0=Very Poor to 5= Excellent. B. Patient's experience receiving mental healthcare via video rated on a 5-point Likert scale ranging from 0=Very Poor to 5= Excellent.



A. Patient's degree of agreement with the statement "I feel the remote treatment sessions have been just as helpful as in person treatment" rated on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree". B. Patient's degree of agreement with the statement "I would consider using remote treatment sessions in the future" rated on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree".



Multimedia Appendixes

Checklist for Reporting Results of Internet E-Surveys (CHERRIES).
URL: https://asset.jmir.pub/assets/6733ebccecf526c2a353f0bc01556844.pdf

Telepsychiatry Patient Satisfaction Survey.
URL: https://asset.jmir.pub/assets/04a3b8ec3ce78f16c337a3d49a2ae0d7.pdf