

Satisfaction With Telepsychiatry in Child and Adolescent Psychiatry: A Brief Review of the Literature and the Impact of COVID-19

Alyssa Nielsen, MD, Michael Shapiro, MD

Telepsychiatry use has been increasing over the past two decades and has shown to be a feasible and effective method for psychiatric intervention in pediatric populations.¹ The COVID-19 pandemic resulted in the abrupt cancellation of routine and non-essential services and an urgent transition to telepsychiatry. Reports suggested 45.2%-86% of mental health clinics remained open during the pandemic utilizing telehealth methods,^{2,3} and telepsychiatry use has remained high even after the initial months of the pandemic.⁴

Telepsychiatry has been found in multiple systematic reviews to have comparable efficacy to in-person care in children and adolescents.^{5,6} However, research on telepsychiatry efficacy in the child and adolescent population lags behind the adult population, as does the research on patient/family experiences compared to clinician-perceived effectiveness. Patient and parent satisfaction can serve as supportive evidence for the effectiveness of child and adolescent telepsychiatry.

Review of the Literature on Satisfaction of Child and Adolescent Telepsychiatry

Satisfaction studies concerning children and adolescent patients have found that youth and parent satisfaction of telepsychiatry is high.⁵⁻⁸ Parents report consistently high satisfaction with a variety of telepsychiatry services including diagnostic evaluation, medication management, and individual therapy.^{6,7} Lower or decreased parental satisfaction of telepsychiatry is associated with adolescent age of children as compared to elementary school age.⁷ The same study also found parent satisfaction increased with follow-up visits, due to increased comfort with videoconferencing technology and earlier availability of appointments.⁷

The COVID-19 pandemic exposed underlying health disparities in care and treatment; with this in mind, patients who typically lack access to mental health care may prefer telepsychiatry as a means for delivery of mental health services. However, studies of racial and ethnic differences in satisfaction of child and adolescent telepsychiatry is limited. Studies in primary care settings suggest that when compared to White patients, patients from ethnic minority groups have decreased satisfaction with traditional in-person care, suggesting a possibility that telehealth may be a preferred modality, if available.⁸

Multiple logistical factors have been associated with higher satisfaction levels with telepsychiatry. Travel reduction, decreased parental time off work, and earlier availability of appointments are the factors most commonly reported.^{6,7,9,10} A notable limitation of the available literature is that most study participants are parents or caregivers, with little focus on the preferences of the child or adolescent patient. Higher parent satisfaction with telepsychiatry may be indicative of positive treatment response and convenience, whereas children and adolescents may have different reasons for or against telepsychiatry preference.⁷ Ultimately, more studies and surveys of patient satisfaction in this area need to be done.

Our Experience of Child and Adolescent Telepsychiatry Satisfaction

The authors sought to ascertain patient and/or parent satisfaction with the transition to telepsychiatry at a single university-based child and adolescent psychiatry clinic between March 1, 2020, and June 30, 2020. An anonymous, voluntary electronic survey (Table 1) was sent to patients via their electronic health portal; there-

fore, adolescents ages 12 and above could participate in these surveys and parents could participate on behalf of younger children. After limiting survey distribution to approximately 100 patients who had already consented to be contacted about research opportunities, 15 completed questionnaires were returned.

Telepsychiatry methods were positively rated by parents (mean rating of satisfaction was 4.81 on a 5-point Likert scale). Eleven of 15 respondents indicated they would prefer telepsychiatry for delivery of future care. Surprisingly, geographic location did not appear to be a significant factor, as a greater proportion of respondents who indicated a preference for in-person appointments lived in a different county than the clinic (2 of 4 respondents). Further demographic information of respondents according to telepsychiatry preference/non-preference is presented in Table 2.

Type of insurance was a factor associated with preference, as the vast majority (10 of 11 respondents) who preferred telepsychiatry had a form of private insurance, compared to half (2 of 4 respondents) of those who preferred in-person appointments. No trend in income level was noted among the group that preferred telepsychiatry. However, occupational hardship due to the COVID-19 pandemic was experienced at double the rate in those favoring telepsychiatry (6 of 11 respondents) as compared to those favoring in-person appointments (1 of 4 respondents). The ways in which respondents experienced hardship included: working from home ($n = 7$), reduced work hours ($n = 4$), having an essential worker in the household ($n = 4$), and/or unemployment ($n = 3$). This suggests telepsychiatry may be preferable when families

experience occupational stress or economic hardship, which may be due to difficulties in obtaining childcare.

The low response rate is an obvious limitation of the study in that it limits the generalizability of our findings and the strength of the conclusions that can be drawn. This highlights a challenge of performing patient-centered research through electronic means. A likely reason of the low survey response rate was that recruitment was limited to patients who had previously consented, prior to the COVID-19 pandemic, to receiving electronic notifications about participating in research studies through the patient portal; there were no adjustments made after the pandemic started. As a result, our pool of potential subjects was effectively reduced from 800 patients to 100 patients, and there was no foreseeable method to effectively recruit more participants in consenting.

Another possible cause of the low response rate includes limited understanding or awareness of clinical research disseminated through patient portals, as the health record system gives patients ages 12-years and older full control over their patient portal. If we were to repeat this study, we would make completion of all survey question items required for survey submission, identify the respondents' racial and ethnic backgrounds, and educate patients regarding their options to participate in research through the patient portal, if they choose. Further investigations are warranted via larger-scale studies to continue to identify social, demographic, and financial factors contributing to the satisfaction of telepsychiatry in pediatric populations, which would aid in the development of strategies to assist families in overcoming potential barriers to telepsychiatry.

Table 1. Patient and Parent Responses to Survey on Satisfaction of Telepsychiatry

Survey	Responses
Required items	
1. Who is completing this survey?	Parent = 15 Adolescent patient = 1 Adult Patient = 0
2. When and how was your very first appointment (new evaluation) done in our clinic?	In-person before the pandemic = 14 Telemedicine during the pandemic = 1 In-person during the pandemic = 1
3. How would you rate the effectiveness of telemedicine in providing: • New patient evaluation • Medication management • Psychotherapy	(1-5 Likert Scale, 5 is most effective) New patient evaluation = 5, N = 1 Medication management = 4.86, N = 14 Psychotherapy = 4.57, N = 14
4. After the current COVID-19 crisis is over, would you prefer telemedicine or in-person appointments?	Telemedicine = 11 In-person = 5
5. “Telemedicine” selected in answer to item 4: What is the main reason you would prefer telemedicine? “In-person” selected in answer to item 4: What is the main reason you would prefer in-person appointments?	Telemedicine • Less travel = 4 • Easier to fit in schedule = 3 • All of the above = 2 • Other = 2 In-person • Prefer in-person interaction = 4 • Privacy of office visits = 1
Optional items	
6. Where were you primarily living during the COVID-19 pandemic?	Same city clinic is located = 9 Different city in same county clinic is located = 0 A different county than clinic location = 7
7. What insurance did the patient have for the telemedicine appointments?	BCBS or Hospital-affiliated = 9 Medicaid or Medicaid HMO = 3 Other commercial insurance = 3
8. What was your household income last year in 2019?	Less than \$25,000 = 1 \$25,000-50,000 = 3 \$50,000-75,000 = 5 \$75,000-100,000 = 3 More than \$100,000 = 2

Optional items

9. Did you experience financial hardship or other issues during the COVID-19 crisis that affected your preference for either telemedicine or in-person appointments?	No = 8 Yes = 7
10. Was your household affected in any of the following ways due to the COVID-19 crisis? • Unemployment • Reduced work hours • Work from home • Furloughed/PTO • Essential worker	Work from home = 7 Reduced work hours = 4 Essential worker = 4 Unemployment = 3 (more than one selection possible)

Recommendations

Following a literature review and our own institutional experience, we recommend the following steps to expand access to optimal and equitable care via telepsychiatry for children and adolescents:

- Further investigation to identify patient and caregiver characteristics, particularly in regard to ethnic and socioeconomic background, associated with preference for and satisfaction with telepsychiatry.^{1,5-7,10}
 - Feasibility assessments to evaluate barriers to the uptake of telepsychiatry for children, adolescents, and families.^{3-7,9}
- Develop strategies to mitigate the impact of inadequate internet service on the use of telepsychiatry, including the implementation of telepsychiatry in environments easily accessible to children and their families such as school and primary care physicians’ offices.^{4-7,9}
 - Expansion of insurance coverage for telepsychiatry services including psychotherapy, behavioral therapy, case management, and specialized services for children with neurodevelopmental disorders.^{1,3,4,7}

Table 2. Parent Response to Survey on Satisfaction of Telepsychiatry		
Demographic data	Preferred telemedicine (n=11)	Preferred in-person (n=4)
Lived in same county as clinic	7 out of 11	2 out of 4
Commercial insurance	10 out of 11	2 out of 4
Highest income bracket	1 out of 10 ^a	1 out of 4
Lowest income bracket	0 out of 10 ^a	1 out of 4
Occupational hardship	6 out of 11	2 out of 4

Note: ^aOne of the 11 parent respondents who preferred telepsychiatry elected not to disclose income

Take Home Summary

During the COVID-19 pandemic, a survey of patients and families from a university-based child psychiatry clinic suggested that socioeconomic factors like insurance and parent employment status are associated with preference for telepsychiatry services compared to in person office visits.

References

1. Clinical update: Telepsychiatry with children and adolescents. *J Am Acad Child Adolesc Psychiatry*. 2017;56:875–893. <https://doi.org/10.1016/j.jaac.2017.07.008>
2. Hames JL, Bell DJ, Perez-Lima LM, et al. Navigating uncharted waters: Considerations for training clinics in the rapid transition to telepsychology and telesupervision during COVID-19. *J Psychother Integr*. 2020;30:348–365. <https://doi.org/10.1037/int0000224>
3. Cantor JH, McBrain RK, Kofner A, et al. Availability of outpatient telemental health services in the United States at the outset of the COVID-19 pandemic. *Med Care*. 2021;59:319–323. <https://doi.org/10.1097/MLR.0000000000001512>
4. Yu J, Casalino L, Pincus HA. Telehealth use for mental health conditions among enrollees in commercial insurance. *Psychiatr Serv*. 2021;00:1–2. <https://doi.org/10.1176/appi.ps.202000778>
5. Chakrabarti S. Usefulness of telepsychiatry: a critical evaluation of videoconferencing-based approaches. *World J Psychiatry*. 2015;5(3):286–304. <https://doi.org/10.5498/wjp.v5.i3.286>
6. Pesamaa L, Ebeling H, Kuusimäki M, Winblad I, Isohanni M, Moilanen I. Videoconferencing in child and adolescent telepsychiatry: A systematic review of the literature. *J Telemed Telecare*. 2004;10:187–192. <https://doi.org/10.1258/1357633041424458>
7. Myers KM, Valentine JM, Melzer SM. Child and adolescent telepsychiatry: Utilization and satisfaction. *Telemed J e-Health*. 2008;14(2):131–137. <https://doi.org/10.1089/tmj.2007.0035>
8. Warren FC, Calitri R, Fletcher E, et al. Exploring demographic and lifestyle associations with patient experience following telephone triage by a primary care doctor or nurse: secondary analyses from a cluster randomised controlled trial. *BMJ Qual Saf*. 2015;24:572–582. <https://doi.org/10.1136/bmjqs-2015-003937>
9. Kopel H, Nunn K, Dossetor D. Evaluating satisfaction with a child and adolescent psychological telemedicine outreach service. *J Telemed Telecare*. 2001;7(S2):35–40. <https://doi.org/10.1258/1357633011937074>
10. Plapp JM, Rey JM. Child and adolescent psychiatric services: Case audit and patient satisfaction. *J Qual Clin Pract*. 1994;14(1):51–56. PMID: 8199760

About the Authors

Alyssa Nielsen, MD, is a first year psychiatry resident at Yale School of Medicine.

Michael Shapiro, MD, is an associate professor in the University of Florida Department of Psychiatry.

The authors have reported no funding for this work.

Disclosure: Dr. Nielsen and Dr. Shapiro have reported no biomedical financial interests or potential conflicts of interest.

Correspondence to Alyssa Nielsen, MD; e-mail: alyssa.nielsen@yale.edu

This article was edited by Pascale Chrisphonte, MD.