COLUMN: EDUCATIONAL RESOURCE

Resident Evaluation of a Required Telepsychiatry Clinical Experience

John Teshima^{1,2} • Michael Hodgins³ • Katherine M. Boydell^{1,4} • Antonio Pignatiello^{1,4}

Received: 4 July 2014 / Accepted: 14 May 2015 / Published online: 30 June 2015 © Academic Psychiatry 2015

Abstract

Objective The authors explored resident experiences of telepsychiatry clinical training. This paper describes an analysis of evaluation forms completed by psychiatry residents following a required training experience in telepsychiatry.

Methods Retrospective numeric and narrative data were collected from 2005 to 2012. Using a five-point Likert-type scale (1=strongly disagree and 5=strongly agree), residents ranked the session based on the following characteristics: the overall experience, interest in participating in telepsychiatry in the future, understanding service provision to underserved areas, telepsychiatry as mode of service delivery, and the unique aspects of telepsychiatry work. The authors also conducted a content analysis of narrative comments in response to openended questions about the positive and negative aspects of the training experience.

Results In all, 88 % of residents completed (n=335) an anonymous evaluation following their participation in telepsychiatry consultation sessions. Numeric results were mostly positive and indicated that the experience was interesting and enjoyable, enhanced interest in participating in telepsychiatry in the future, and increased understanding of providing psychiatric services to underserved communities. Narrative data demonstrated that the most valuable aspects of training included the knowledge acquired in terms of

John Teshima john.teshima@utoronto.ca

- ¹ University of Toronto, Toronto, ON, Canada
- ² Sunnybrook Health Sciences Centre, Toronto, ON, Canada
- ³ University of Sydney, Sydney, NSW, Australia
- ⁴ The Hospital for Sick Children, Toronto, ON, Canada

establishing rapport and engaging with patients, using the technology, working collaboratively, identifying different approaches used, and awareness of the complexity of cases. Resident desire for more training of this nature was prevalent, specifically a wish for more detail, additional time for discussion and debriefing, and further explanation of the unique aspects of telepsychiatry as mode of delivery.

Conclusions More evaluation of telepsychiatry training, elective or required, is needed. The context of this training offered potential side benefits of learning about interprofessional and collaborative care for the underserved.

Keywords Telepsychiatry · Resident · Training · Evaluation

Telepsychiatry, the provision of psychiatric services via videoconferencing, has been demonstrated to be feasible in a wide range of settings and capable of delivering a variety of clinical services to a wide range of patient populations [1, 2]. Telepsychiatry can be particularly useful in the delivery of psychiatric care to rural and remote areas [3, 4]. Thus, it is increasingly important for psychiatrists to become familiar and comfortable with the practice of telepsychiatry [5]. Two programs have published details about their residency curricula in telepsychiatry [6, 7], and a third has published on a curriculum for psychiatrists, residents, and medical students [8].

Providing exposure to telepsychiatry during training may influence psychiatrists to continue this work upon graduation [6, 9]. However, a national US survey found that only 18 % of resident respondents had this exposure, despite 72 % indicating an interest in telepsychiatry [10]. Of the 18 % who had exposure, only a quarter of them were required to have this exposure in their training programs. Another recent survey found that 46 % of US residency programs involve residents in telepsychiatry either through formal curriculum or informal exposure [11]. Only two published reports evaluated resident experience in a telepsychiatry program. Dzara et al. reported on involving residents in a telepsychiatry clinic, supervised directly by staff psychiatrists [12]. They found that residents felt the experience was positive, and 80 % would be comfortable using telepsychiatry in the future. Szeftel and colleagues (2008) reported on a similar supervision model in a telepsychiatry clinic [13]. Their evaluation focused on knowledge, skills, and attitudes residents developed with the clinical population, rather than on knowledge, skills, and attitudes related to telepsychiatry.

The TeleLink Mental Health Program, based at The Hospital for Sick Children in Toronto, Canada, offers a comprehensive, collaborative model of care using videoconferencing technology [4]. Since 2005, all psychiatry residents at the University of Toronto were required to participate in at least two telepsychiatry consultations during their child psychiatry rotation. Residents observed a staff psychiatrist conduct a consultation and subsequently participated in the interview during a second consultation. This required training presents an opportunity to explore resident experiences of engaging in telepsychiatry training. This paper focuses on feedback from over 300 resident experiences in telepsychiatry training over an 8-year period, the largest sample published to date.

Method

Each consultation ranged from 1 to 2 h, depending on the psychiatrist, and involved one case. Consultations were primarily to rural communities, but some were to larger communities that were at a significant distance from larger centers with child psychiatry services. The majority of experiences were first consultations, but there were some that were follow-ups. All consultations involved at very least a case manager and a parent/guardian in addition to the child/adolescent. Many consultations involved multiple professionals. Consultations were comprehensive and resulted in a wide variety of recommendations, including for medication treatment, psychotherapy, family therapy, and school interventions.

Each resident attending a telepsychiatry session was given an anonymous evaluation form that included six questions utilizing a Likert-type scale. In addition, open-ended questions were included in order to allow residents to provide more detailed comments. The evaluation form asked trainees to evaluate their experience of in vivo telepsychiatry training and to provide narrative feedback on the positive and negative aspects of the training. Data was obtained for residents from 2005 to 2012 who completed the evaluation form post training. Overall response rate was 88 %, with a total of 335 responses over the 8-year period. The narrative feedback was optional within the evaluation survey itself, and the response rate was 74 %, with a total of 247 narrative responses. The open-ended responses were collated, and content analysis was used to identify the key themes in the narratives [14]. The Research Ethics Board of the Hospital for Sick Children deemed that this analysis of evaluation forms was exempt from their approval.

Results

As indicated in Fig. 1, the majority of trainees were positive in their ratings of the telepsychiatry training experience. These positive ratings were seen across the time span from a high of 96 % agreeing/strongly agreeing to the six items to a low of 88 % agreeing/strongly agreeing. Close to 100 % indicated (strongly agreed or agreed) that the experience was interesting and enjoyable. Ninety percent agreed or strongly agreed with the statement "the experience made me more interested in participating in telepsychiatry in the future" and 97 % with the statement "the experience helped me understand more about providing psychiatric services to underserved areas." When asked whether "the supervisor provided a clear explanation of telepsychiatry as a mode of service delivery," 87 % agreed or strongly agreed. Eighty-five agreed or strongly agreed that the supervisor highlighted some of the unique aspects of telepsychiatry work. Ninety-six percent agreed or strongly agreed that they would recommend this experience to others.

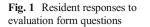
Narrative Data

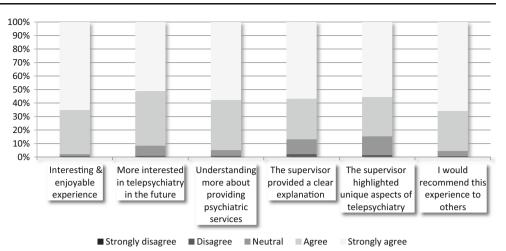
Learning About Service Delivery to Underserviced Areas

Residents highlighted benefits of learning about services available in remote areas. They felt "rewarded" in the knowledge about opportunities to provide support to areas with limited access to mental health care. Residents also found it helpful learning about working with a team that was not present in the room with them and acquiring insights into those communities and the "cultural issues that arise in [them]." Residents also identified the cost savings in terms of travel. While many residents reported enhanced awareness of the services available to remote communities, some felt that there could have been more discussion around accessibility, with residents questioning the "availability of services elsewhere."

Observing Differing Styles/Approaches to Interviewing

Another positive aspect of the telepsychiatry experience was the opportunity to learn about different approaches to interviewing clients. To watch experienced psychiatrists conduct an interview, which included assessing and screening





clients, providing feedback and support to stakeholders and interacting with the technology was seen as highly valuable. Residents found it helpful to be given an chance to see a supervisor demonstrate some of the advantages/difficulties of conducting interviews as well as observing how they were able to establish "rapport and a therapeutic relationship" with clients. Further, the experience of learning how to "manage a number of people/consultants during session" was seen as constructive.

Getting Accustomed to the Technology and Increasing Comfort Level

Becoming accustomed to the technology and the style of interaction required to engage with telepsychiatry was seen as a benefit. Residents found the technology a "bit unnatural" at the beginning of the session and realized that it was "challenging to interview [patients] at a distance." However, the experience enabled them to see that one could still successfully "get at non-verbal cues" and "understand some of the technological aspects of doing telepsychiatry." The experience also gave them an opportunity to be exposed to the "ethical issues that arise in telepsychiatry."

Collaborating with a Team of Stakeholders

The ability to consult with a variety of stakeholders involved in individual cases was viewed as a beneficial aspect of the experience. Residents responded positively to having the opportunity to include the client and their caseworker as well as parents and caregivers, school personnel, and others who would benefit from the consultation. Residents expressed their interest in further exploring possibilities for collaborating with other key stakeholders in the lives of children and youth.

Preparation (Pre and Post)

Residents appreciated the support offered to them by supervisors and acknowledged that having information about telepsychiatry and the particular client before the experience as well as an opportunity to debrief afterwards was helpful. Valuable information included "previous consultation notes," "collateral information," and other background materials. Residents also appreciated the opportunity to debrief following the experience whether that involved a discussion of the diagnosis plan or a focus on being made aware of the related literature in the field that was available to them.

Recommendations for Improvement

The preparation offered, while perceived as sufficient by many residents, was also seen as insufficient by others. There were four issues that emerged: a perceived lack of background information presented on the technology and a suitably intense opportunity for debrief, a desire for more "handson" involvement, desire for more experiences or a follow up of the experience, and technical difficulties.

Respondents indicated a strong desire for more support including background information provided before the session and an opportunity for discussion and debriefing following. As background information, the residents requested "a better introduction to telepsychiatry," information regarding the "key issues associated with technology," information about the patient and case and details on remuneration and availability of the service in various communities. In addition to background information before the experience, residents also desired more opportunities "for discussion" before or following the videoconference in order to "enrich [their] learning experience."

A concern for some residents was perceived lack of involvement in the experience. They felt that "some resident participation" could be included as "some of the interviews were a bit long" causing a "decreased attention span towards the end." Desired involvement included the ability to be involved in a "hands-on" manner, the opportunity to actually conduct part of the interview or given time to practice interview skills.

While some residents desired more involvement in the experience, others indicated an engaging level of inclusivity and resident participation. Residents that had the opportunity to conduct part of the interview or be an "active participant" found the experience useful, highlighting the importance of active inclusion of residents. Other residents appreciated the ability to "be able to watch a comprehensive interview and not feel pressured for service (i.e., doing the interview or write-up)."

While not a dominant theme stemming from the resident evaluations, technical difficulties were sometimes experienced. A desire for better video contact, and the experience of poor connection and disconnection represented technical difficulties outlined.

Some residents indicated a desire not only to have more exposure to individual consultations but also to follow specific cases further. Residents also requested the opportunity to "actually [visit] some of the communities," albeit acknowledging that it would be a "big undertaking".

Discussion

This analysis involved the largest number of residents and evaluations that has been published to date. Conducted over 8 years with a high completion rate of evaluations (88 %), this is a detailed assessment of residents' exposure to telepsychiatry training. The high response rate may be due to the fact that the evaluations were completed before residents left the session. Psychiatry residents indicated via numeric and narrative data that the opportunity to actively participate in telepsychiatry consultations was exciting and strengthened their interest in this model of psychiatric work. These results support previous research, which suggests that exposure to positive training opportunities, and participation in psychiatry electives may enhance recruitment into psychiatry [9, 15] and more specifically telepsychiatry [6]. Consequently, it is critical that telepsychiatry programs work with medical schools and psychiatric recruitment officers, given the downward trend in psychiatric recruitment [16]. Accordingly, the Canadian Mental Health Commission has encouraged inclusion of telemental health instruction in medical schools [17]. In a recent survey of the extent of telepsychiatry in US training programs, it was indicated that residency programs are interested in having a dedicated telepsychiatry curriculum for trainees [18]. This

evaluation of resident perspectives indicates that early exposure is conducive to enhanced interest in this career path and should be considered for any training program in psychiatry.

In addition, this evaluation suggests that resident learning extended beyond the technology aspects of the training to more general knowledge and skills. Residents learned about models of care to underserviced rural and remote communities, aboriginal issues, collaborative care, various diagnostic and formulation situations, and exposure to interprofessional practice models. Residents also appreciated the opportunity to observe staff psychiatrists conducting assessments. The direct observation of staff psychiatrists by residents is a highly valued but underutilized experience in training [19].

Several suggestions were made that would further enhance the training program. Residents were eager to have more exposure to such in vivo sessions and felt that they would benefit further from the opportunity to be more actively involved in client sessions. They desired further details about each case and were keen to be involved in the preparatory work both pre and post session. Thus, it would be important to consider modification of the current curriculum to enhance the training program accordingly, allowing for more exposure in the form of access to relevant information, follow up consultations to create a more longitudinal experience, and increase the opportunities for residents to be active participants in the session.

While survey response rates were ample, there was a lack of other relevant sources of data such as interviews or focus groups, which would have provided more indepth richly textured information on the positive and negative experiences of such specialty training. In addition, it is important to note that this data was based on participation in only two telepsychiatry consultations. There were also several areas of note that went relatively unexplored, such as the lack of a significant followup to determine how many residents who experience telepsychiatry training went on to incorporate the provision of telepsychiatry services in their future careers.

This evaluation offers insights into the perspectives of psychiatry residents regarding their involvement in an in vivo training session in telepsychiatry. Exposure to telepsychiatry during the training process has the potential to attract a number of residents to use technology to deliver mental health services to people in rural and remote communities. Overall, exposure to training in telepsychiatry enhanced resident interest and experience in this model of practice. Future research should focus on further exploring resident experiences of training, particularly, the impact it has on future recruitment into doing telepsychiatry work in their subsequent careers. Implications for Educators

- Telepsychiatry training is a helpful and clinically relevant educational tool
- Residents desire more exposure to in vivo telepsychiatry sessions and state they would benefit further from the opportunity to be more actively involved in client sessions
- Telepsychiatry training has the potential to enhance future recruitment to the subspecialty

Acknowledgments Michael Hodges was funded by the Central Hub, Ontario Child and Youth Telepsychiatry Program to analyze the data for this article. The other authors did not receive any funding. The authors thank Cristina Vlad for her contribution to the preparation of the figure for this manuscript.

Disclosures On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

- Grady B, Myers KM, Nelson EL, Beltz N, Bennett L, Carnahan L, et al. Evidence-based practice for telemental health. Telemed J E Health. 2011;17(2):131–48.
- Hilty DM, Alverson DC, Alpert JE, Tong L, Saqduyu K, Boland RJ, et al. Virtual reality, telemedicine, web and data processing innovations in medical and psychiatric education and clinical care. Acad Psychiatry. 2006;30(6):528–33.
- Chung-Do J, Helm S, Fukuda M, Alicata D, Nishimura S, Else I. Rural mental health: implications for telepsychiatry in clinical service, workforce development, and organizational capacity. Telemed J E Health. 2012;18(3):244–6.
- Pignatiello A, Boydell KM, Teshima J, Volpe T, Braunberger P, Minden D. Transforming child and youth mental health via innovative technical solutions. Healthc Q. 2011;14(2):92–102.
- Shore JH. Telepsychiatry: videoconferencing in the delivery of psychiatric care. Am J Psychiatry. 2013;170:256–62.

- Shore JH, Thurman MT, Fujinami L, Brooks E, Nagamoto H. A resident, rural telepsychiatry service: training and improving care for rural populations. Acad Psychiatry. 2011;35(4): 252–5.
- Oesterheld JR, Travers HP, Kofoed L, Hacking DM. An introductory curriculum on telepsychiatry for psychiatric residents. Acad Psychiatry. 1999;23(3):165–7.
- Godleski L. A comprehensive national telemental health training program. Acad Psychiatry. 2012;36(5):408–10.
- Volpe T, Boydell KM, Pignatiello A. Attracting child psychiatrists to a televideo consultation service: the TeleLink experience. Int J Telemed Appl. 2013;Article ID 146858, 8 pages. doi:10.1155/ 2013/146858.
- Glover JA, Williams E, Hazlett LJ, Campbell N. Connecting to the future: telepsychiatry in postgraduate medical education. Telemed e-Health. 2013;19(6):1–6.
- Hoffman P, Kane JM. Telepsychiatry education and curriculum development in residency training. Acad Psychiatry. 2014. doi:10. 1007/s40596-013-0006-6.
- Dzara K, Sarver J, Bennett JI, Basnet P. Resident and medical student viewpoints on their participation in a telepsychiatry rotation. Acad Psychiatry. 2013;37(3):214–5.
- Szeftel R, Hakak R, Meyer S, Naqvi S, Sulman-Smith H, Delrahim K, et al. Training psychiatric residents and fellows in a telepsychiatry clinic: a supervision model. Acad Psychiatry. 2008;32:393–9.
- Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3:77–101.
- Manassis K, Katz M, Lofchy J, Wiesenthal S. Choosing a career in psychiatry: influential factors within a medical school program. Acad Psychiatry. 2006;30(4):325–9.
- Katschnig H. Are psychiatrists an endangered species? Observations on internal and external challenges to the profession. World Psychiatry. 2010;9(1):21–8.
- Kirby MJL, Keon WJ. Out of the shadows at last: transforming mental health, mental illness and addiction services in Canada. Standing Committee on Social Affairs, Science and Technology; 2006.
- de Groot J, Tiberius R, Sinai J, Brunet A, Voore P, Sackin D, et al. Psychiatric residency: an analysis of training activities with recommendations. Acad Psychiatry. 2000;24(3):139–46.