

► Mental health professionals' perspectives of telemental health with remote and rural First Nations communities

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Summary

We conducted an online survey and interviews amongst mental health workers in Canada who reported experience in working with rural and remote First Nations (although not necessarily telemental health). Sixty-three respondents (of the 164) to the online survey reported experience in working with clients in remote and rural First Nations. Only 16 of the online survey respondents with remote and rural First Nations experience reported having received training in videoconferencing use. When asked how frequently they used videoconferencing with clients, 51% reported never using it, 19% used it once every few months and 10% reported using it a few times a month. Approximately 50% of participants reported finding it useful. Approximately 38% found the technology easy or very easy to use, and 15% found it very difficult. Individual in-depth interviews were also conducted with professionals who had First Nations telemental health experience specifically ($n = 5$). A quantitative data analysis was used to explore their perceptions of usefulness and ease of use of telemental health, as well as the relationships among these constructs. Advantages, disadvantages and challenges in using the technology were identified from the qualitative data. Promising ways forward include incorporating traditional practices and the Seven Teachings into telemental health services.

Introduction

Telemental health generally involves videoconferencing for consultations between health professionals and providing care to clients.¹ In addition, educational activities related to mental health often take place via videoconferencing. These activities involve home, community and institutional settings. This is not an exhaustive list of activities or services that might be used as tools in supporting mental health and well-being: using technologies to support mental health and well-being can cover a wide range of activities (from individual counselling to sharing circles, and beyond). The attitudes of mental health professionals to the usefulness of the technology, and its ease of use, will clearly affect their engagement with it. Scott and colleagues have emphasized the importance of user satisfaction and acceptability to users in the sustainability of telehealth.² Also the perceived usefulness (PU) and perceived ease of use (PEU) of information and communications technology (ICT) is important in terms of predicting actual use and satisfaction with using it.³⁻⁵ This is in line with the Technology

Acceptance Model (TAM).³ Specifically, PU is understood to mean the users' perceptions of how useful the technology is for the task, and PEU refers to perceptions of how easy it will be for them to use it. Little is known about how mental health workers in Canada who work with remote and rural First Nations perceive telehealth and much can be learned from those with experience in this area. Finally, there appears to have been no research on using the TAM, and the PU and PEU constructs, for telemental health.

Remote and Rural First Nations and telemental health

Due to the significant challenges stemming from colonization,^{6,7} remote and rural First Nations communities could benefit greatly from culturally-safe and appropriate mental health services and resources, for those individuals and communities who are interested in making changes at the individual level (a discussion of holistic healing in First Nations communities was provided by Hunter *et al.*⁸). Telemental health offers a method of connecting individuals in need of mental health services with professionals and other communities.

Keewaytinook Okimakanak Telemedicine (KOTM) represents an excellent example of a successful

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community-based telemental health initiative in remote and rural First Nations communities. KOTM operates under the Keewatinoook Okimakanak Tribal Council in Northwestern Ontario and has been using videoconferencing for telemental health consultations for 26 rural and remote communities since 2002 (a pilot study was conducted in 2001⁹). KOTM is community-based and community-driven, and uses a variety of mechanisms to support this goal, including regular Chief and Council meetings, Elders' meetings, and connecting the communities and the community telehealth co-ordinators in each community to listen to what the communities want in terms of services.

We do not believe that outside resources and telemental health represent the solution to health and well-being issues caused by colonization and societal structures. Instead telemental health offers a tool to help with access to care and continuity of care at the individual level, when it may not otherwise be possible.

We have examined the following research questions:

- (1) How frequently is telemental health being used by mental health professionals who work with remote and rural First Nations clients?
- (2) What are mental health professionals' perceptions of usefulness and ease of use of telemental health, and what are these factors related to?
- (3) What do mental health professionals identify as the advantages and disadvantages to using telemental health with remote and rural First Nations communities and individuals?

Methods

We conducted an online survey and interviews. The online survey was open to all mental health workers in Canada (clinicians and non-clinicians), and measured attitudes toward the use of ICT for mental health work. However, only individuals who reported working with remote and rural First Nations were included in the analysis for the present paper. Individual interviews were conducted with mental health professionals (clinicians and non-clinicians) who had telemental health experience with rural and remote First Nations individuals and communities.

Online survey

The online survey had 38 items including questions on demographics, personal use of technology, experience working with different populations, attitudes toward using videoconferencing and other forms of ICT for mental health work. There were additional items for free-text qualitative data, such as ideas and comments. The online survey was created and administered through the website, <http://surveymonkey.com>.

Various recruitment methods were employed. These included poster advertisements distributed widely by

partner organizations and by provincial colleges of psychologists and social workers who advertised the study to their members. Participants responded to the survey online. It took approximately 20 min to complete.

Interviews

Interviews were conducted with individuals who considered themselves to be mental health professionals and had experience with telemental health in the remote and rural First Nations context. Questions were asked about successes and challenges with ICT use (with a focus on videoconferencing), experiences and thoughts about using ICT with mental health clients, how traditional First Nations' values and practices can be included in the approach, and what is needed for better support of telemental health use with this population.

Information pertaining to recruitment for interviews was advertised on the online study website. People who identified themselves as being mental health professionals and who reported working with remote and rural First Nations communities in the context of telemental health, were invited to contact us for additional information or for an interview. Poster advertisements were also used to help with recruitment of interview participants, and these were distributed by our partner organizations.

Ethics

The research protocols for this study were reviewed by the National Research Council's Research Ethics Board. All participants were treated in compliance with the ethical guidelines of the American Psychological Association.¹⁰ Further, all participants were assured of anonymity and confidentiality. The study was approved by the appropriate ethics committee.

Results

Online survey

Sixty-three respondents (of the overall 164) to the online survey on ICT for mental health services reported having experience working with clients in remote and rural First Nations. There was a wide age range of participants, from 18 to over 65 years; most were 45–54 years old. One-quarter of the sample were male. Participants were from Newfoundland and Labrador, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon. Their professions were social workers, psychologists, psychiatrists, community workers, nurses, students and others. Participants reported having experience in their field, from less than 1 year to more than 20 years.

Interviews

The interview participants came from Nova Scotia, Ontario and British Columbia. They were employed as a psychiatrist, psychologist, community engagement worker, administrator and program developer. Four of the five interviews were conducted by videoconference and the other was conducted in person. Interviews lasted 45–60 min. The main themes identified during the qualitative content analysis are summarized below.

Use of videoconferencing

Only 16 participants reported having received training on videoconferencing use. Participants in the online survey were asked to report on how frequently they used videoconferencing with clients ($n = 59$). Of these, 51% reported never using videoconferencing, 19% used it once every few months and 10% reported using it a few times a month. A minority (7%) reported using it once a week and two individuals (3%) reported using videoconferencing several times a week.

Perceived usefulness

Participants were asked to rate how useful they found videoconferencing for communicating with clients ($n = 55$, see Table 1). The mean score on the 5-point scale was 3.3. Approximately 50% of participants reported finding it useful. Only 9% reported finding it not useful at all.

Interview participants acknowledged that they found telemental health very useful. An interview participant who was a clinical practitioner described the usefulness of telemental health as invaluable.

Perceived ease of use

Survey participants rated the ease of use of videoconferencing ($n = 52$, see Table 2). The mean score on the 5-point scale was 3.1. Approximately 28% found the technology easy or very easy to use, and 15% reported finding it very difficult.

All interview participants had extensive experience with videoconferencing, and when asked about how easy they found it, all reported finding it easy to use (participants also acknowledged that the more they used it, the easier it became). One participant explained that the high-quality

Table 1 Results for the question: 'On a scale from 1 (= not useful at all) to 5 (= very useful), how useful is videoconferencing for communicating with clients?'

Score	Number	Percent
1	5	9
2	8	15
3	14	26
4	18	33
5	10	18
Total	55	100

Table 2 Results for the question: 'On a scale from 1 (= not easy at all) to 5 (= very easy), how easy would it be for you to use videoconferencing to communicate with a client?'

Score	Number	Percent
1	8	15
2	9	17
3	15	29
4	11	21
5	9	17
Total	52	100

technical support at their organization was an important factor in facilitating the use of the technology.

Frequency of videoconferencing, past training, PU and PEU

A bivariate correlation (using Spearman's rho, for non-parametric data) was conducted to identify the relationships between frequency of videoconferencing with clients, past videoconference training (a dichotomous variable coded as 1 = yes and 2 = no), perceptions of usefulness of telemental health (PU) and perceptions of ease of use (PEU). The frequency of videoconferencing was significantly correlated with PU ($r_s = 0.34$, $P = 0.01$) and PEU ($r_s = 0.44$, $P = 0.001$). This indicates that participants who perceived telemental health to be useful and easy were also likely to use it more often. Frequency of videoconferencing was also significantly correlated with training, $r_s = 0.40$, $P = 0.001$, suggesting that participants who had training also used telemental health more often. Furthermore, perceptions of usefulness were also correlated with perceptions of ease of use ($r_s = 0.72$, $P = 0.01$), indicating that participants who found the technology useful were also likely to find it easy to use. Finally, perceptions of ease of use were significantly correlated with training ($r_s = 0.38$, $P = 0.01$), suggesting that those who had received training found telemental health easier to use.

Advantages

Most respondents viewed telehealth as a way to improve access to services, while allowing community members to remain in their communities while receiving services. The following quotation emphasizes the importance of this:

'We need professional mental health therapy. People would come out of the communities, and it would disrupt their whole lives, their lifestyle ... all the temptation that comes with it, drinking and drugs, and away from their family, away from their spouses. They need all that support from home. And here they're expected to travel away from it – how can you heal under those circumstances?' – Interview participant

Some participants identified the interpersonal distance of telemedicine as a benefit, whereby clients may feel that it is

easier to disclose sensitive matters to people who do not live in their community and who they will not see everyday.

In addition, videoconferencing was identified as a tool that could provide continuity and consistency in therapeutic relationships. In rural and remote communities it is often difficult for the client to see the same counsellor on repeat occasions, because of bad weather preventing travel, holidays or other reasons. Thus the client may have to wait for months between visits, or have to repeat their story to the replacement counsellor/therapist. Telemental health can eliminate these problems.

Challenges

Several participants reported that the infrastructure for videoconferencing was poor, as the broadband network in some isolated communities could not support videoconferencing. We have previously identified broadband connectivity in remote and rural First Nations communities as a limiting factor in telemedicine.¹¹

Sustainable funding was scarce in telemental health service delivery with remote and rural First Nations. We also found that telemental health programmes would benefit from funds allocated for research. First Nations telemental health initiatives often collect valuable data as part of their programme evaluations. Unfortunately, due to a lack of funding for research, the data and findings are often unpublished, and important knowledge contributions are therefore lost.

Communities generally had only a single videoconferencing unit, usually located at the nursing station. This limits the access to one person at a time and the location of the video units compromises their confidentiality and privacy. One respondent said:

'Because this is a programme through [provincial health authority], we can't take the machine off the site. There's no way to connect it anywhere else in the community because of [health authority] security issues. And that's fair enough. It's their equipment. It's their policies ... We're just waiting for the time when we can simply do this on someone's PC, or do it on their laptop. We want the most secure thing, of course, but it will allow for a lot more freedom.' – Interview participant

Many mental health professionals were concerned that telemental health might detract from rapport-building and the therapeutic relationship with the client. One participant raised the specific concern that telemental health might be too impersonal and could potentially conflict with 'cultural expectations.'

Despite this, some participants with experience of videoconferencing with First Nations clients felt that this challenge could be overcome. One person said:

'What's wrong with saying: I can't quite see your face, are you crying? Are those tears? Are you okay? I believe that there's some Kleenex on the table. So we don't have to know everything. We don't have to pretend that we know everything. And in fact, I believe that by me saying those things, makes me more real to my client ... There's an

immediate connection if I ask that question. That intimacy is right there, right now. That person cares.' – Interview participant

Some participants had concerns about not being able to directly intervene during a crisis with a client. Interview participants who had experience with ensuring that there were resources and help available at the client's location highlighted the need for protocols and a safety-net ready for emergencies or crises during telemental health activities. For example, in one First Nations telemedicine programme a community telehealth coordinator was present at the office for all telemental health visits. This individual was responsible for ensuring that all safety protocols were followed and that telemental health clients left all appointments in a safe state.

Other participants raised the concern about the appropriateness of ICT for clients experiencing certain symptoms, such as paranoia, dementia, and visual or hearing challenges. Some survey participants also felt that the first meeting with a client should be face-to-face. Others noted that some types of assessments (i.e. suicide risk) and therapy (i.e. exposure therapy) would be difficult to deliver via telemental health. Nevertheless, there were participants who felt that face-to-face meetings were not always a necessary first step, and would not always be possible. Furthermore, there were interview participants who had experience in conducting a wide range of interventions via videoconferencing, from cognitive-behavioural therapy to sharing circles.

Traditional practices and beliefs

Including traditional First Nations practices (e.g. sharing circles) and beliefs (e.g. the Seven Teachings – sacred First Nations teachings) in telemental health initiatives can potentially facilitate trust, acceptance and use of the technology. In a telepsychiatry evaluation by Keewaytinook Okimakanak, it was concluded that the inclusion of more traditional healers and activities would be beneficial.⁹ An example of this is the Fort Chipewyan project where remote First Nations in Alberta have used videoconferencing for 'tele-spirituality' and traditional medicine.¹²

One interview participant explained that she had been involved in using videoconferencing to facilitate sharing circles (these are talking circles where participants from a community or communities come together to discuss and share their experiences on a certain topic; certain practices like using a special object to designate turns are sometimes integrated).

Discussion

The present study explored the attitudes and experiences of mental health professionals who worked with remote and rural First Nations communities. Sixty-three mental health professionals with First Nations experience completed an

online survey, and five mental health professionals who had specific telemental health experience (in addition to experience with remote and rural First Nations) participated in interviews. Unfortunately, one limitation of the online study was that the response rate was unknown: this makes it difficult to establish how representative our sample was of the larger population (mental health professionals who work with remote and rural First Nations communities). Nevertheless, the information obtained from both methods was complementary and helpful.

Based on the survey data, it was clear that many respondents (51%) did not use telemental health. However 10% used it each week or more frequently. Among interview participants who had telemental health experience, perceptions of usefulness and ease of use were high. To further our understanding we conducted a correlation analysis to identify relationships between the frequency of videoconferencing with clients, past training, PU and PEU. The results are intuitive: mental health professionals who received training on telemental health were also likely to use it more often; those who found it easy to use and useful were also likely to use it more often. In fact, this very line of reasoning can be seen in the experiences of the interview participants – they had high levels of PU and PEU, and were the most experienced and frequent users of the technique. These results are in line with previous research on technology acceptance and attitudes toward using technology³ which found support for the link between PU, PEU and intention to use (and actual use of) the technology. Our findings suggest that if mental health professionals working with First Nations are informed of the benefits (and concerns/disadvantages) of using telemental health, and given the opportunity to be educated and trained on how to use the practice, these service providers will subsequently become more open and likely to use telemental health when appropriate.

All five interview participants saw telemental health as extremely beneficial in extending high-quality mental health services to remote and rural First Nations; most survey participants concurred. Telemental health has allowed clients to remain within their home communities when receiving care, and has contributed to continuity in therapeutic relationships. For instance, KO Telemedicine's approach is that videoconferencing is meant to enhance services, not replace them.

In conclusion, we believe that exploration of the user perspective of telemental health is essential in understanding and promoting appropriate adoption. Many of the concerns (e.g. infrastructure, cultural appropriateness) have been expressed before and indeed some of the challenges of engaging in successful telemental health initiatives with First Nations have been discussed in detail elsewhere.¹ Nevertheless, the present study contributes to the body of knowledge about telemental health in a rural and remote First Nations context, and

knowledge of the experiences and perspectives of mental health professionals who work with this group. Many of the concerns identified by mental health professionals can be addressed. However, at least one essential piece of information is missing. An investigation into the perspectives of rural and remote First Nations community members on technologies for mental health services is much needed. In addition, a critical analysis at the political/economical/social level is required in order to better understand the impact of telemental health on First Nations communities.

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