Exploring the Views of Emergency Department Staff on the Use of Videoconferencing for Mental Health Emergencies in Southwestern Ontario

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Abstract. Patients presenting to a rural emergency department (ED) with mental health symptoms have difficulty accessing services of mental health professionals [1,2]. Videoconferencing (VC) has been found to improve patient access to health services that require specialist care in rural EDs [3,4,5]. Although previous studies highlight the benefit of using VC for patients presenting with mental health emergencies, no study has investigated the current views and use of VC for mental health emergencies in EDs in Southwestern Ontario [3,5,6]. To explore the views of ED staff regarding the use of VC in mental health emergencies, structured telephone interviews were conducted with representatives from EDs in the Erie St. Clair and Southwest Local Health Integration Networks (LHIN). Participants noted that using VC for mental health emergencies may improve patient experience and benefit crisis response teams. VC was perceived by some participants as a means to expedite the direct assessment of a patient presenting with a mental health emergency by a mental health specialist. However several participants stated that using VC for mental health emergencies strains ED resources. Lack of use and difficulty accessing a psychiatrist were identified as potential barriers to implementing the use of VC for mental health emergencies.

Keywords. Telehealth, Videoconferencing, Mental Health, Rural, Emergency Department, Psychiatry, Telepsychiatry, Emergency Medicine

Introduction

Telepsychiatry in the form of videoconferencing (VC) has been found to improve patient access to psychiatric services in rural or remote regions [3,4,5]. VC is occasionally used in emergency departments (EDs) to connect patients presenting with a mental health emergency to off-site mental health specialists, such as mental health nurses, crisis workers, or psychiatrists. Yellowlees *et al* have described cases involving the use of VC in the emergency management of depression with suicidal ideation, acute psychosis, post-traumatic stress disorder, and child abuse [7].

   Programs incorporating VC in mental health emergencies have been implemented in Australia and Norway to improve patient access to mental health specialists in rural

areas [5,8,9,10,11,12]. The Mental Health Emergency Care Rural Access Program (MHEC-RAP) in New South Wales utilizes mental health nurses to assess and triage patients by phone or through VC [10]. The program also involves 24/7 support from psychiatrists at either the central site, or on-call [10]. The MHEC-RAP services a population of approximately 300 000 and from 2008 to 2011 the program averaged 208 emergency telephone triages and 65 VC assessments per month [10].

The University Hospital of North Norway (UNN) introduced a program in which VC studios were installed in remote regional psychiatric centers and in the homes of psychiatrists participating in a 24/7 on-call service to enable psychiatrists to take part in patient consultations by VC [11,12]. A study of the program by Trondsen *et al* found VC had a positive effect on patient and healthcare worker experience: Patients valued direct communication with psychiatrists through VC and the use of VC increased the confidence of the healthcare workers involved in making decisions about patient care [12].

In this study we explore the perspectives and experiences of ED staff in Southwestern Ontario on the use or potential use of VC in mental health emergencies. This study aims to uncover ideas related to the use of VC in mental health emergencies from an ED standpoint.
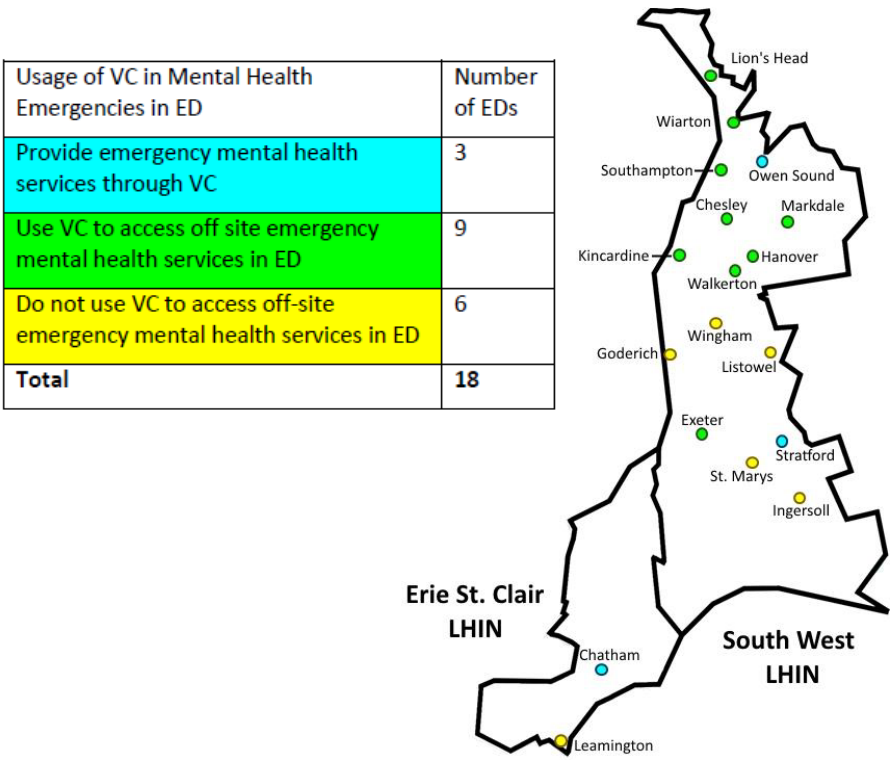
1. Methodology

Interview questions were designed to explore the potential or current use of VC to connect patients with an off-site mental health worker in the setting of a mental health emergency in the ED. All 35 EDs across the Erie St. Clair and Southwest LHINs were invited to participate. It was requested that information about the study be forwarded to ED chiefs, ED program managers, and ED managers of psychiatric care. Purposeful sampling was used to recruit participants. Ultimately 17 participants, representing 18 EDs, were recruited (See Table 1 and Figure 1).

Structured telephone interviews, approximately 15 minutes in length, were conducted with participants. The interviews were audio recorded and transcribed verbatim. The transcripts were analyzed using coding and categorization to identify underlying themes. The transcripts and analysis were independently reviewed by Dr. Wijeratne who verified the analytic process and provided feedback.

Table 1. The positions held by study participants.

Position	Participants
ED Program Manager	9
EM Physician	2
ED Director of Patient Care	2
EM Nurse	2
Psychiatric Assessment Nurse	1
Crisis Team Coordinator	1
Total	**17**

Usage of VC in Mental Health Emergencies in ED	Number of EDs
Provide emergency mental health services through VC	3
Use VC to access off site emergency mental health services in ED	9
Do not use VC to access off-site emergency mental health services in ED	6
Total	18

Figure 1. The usage of VC by EDs included in the study and their location.

2. Results

2.1. VC Use Was Seen as Beneficial to Patients and Crisis Teams

The majority of ideas relating to the effect of using VC in mental health emergencies on patient experience were positive:

Once we explain the process, that it isn't videotaped, that no one else is listening to this, that this is strictly confidential, they become…-they're happy with it and they don't need to travel an hour and a half. They get the care they need. - ED Nurse 1

The majority of participants from EDs that use VC for mental health emergencies believed that the use of VC expedites treatment:

It's faster and it's more convenient because of our geographic area. A lot of these patients can't get transportation. [Later in interview] If it's appropriate they can have their follow up with videoconferencing. – ED Director of Patient Care 1

It's immediate access, especially in the winter time. It allows for direct contact with a mental health professional, because otherwise they would be transported. – ED Program Manager 4

A few (4) participants speculated that using videoconferencing for mental health emergencies can better connect patients with mental health resources:

I believe we are getting help for these people so that they don't advance to that. So they don't advance to needing a form 1--they are getting support and connected with a psychiatrist sooner than if we send a consult. – ED Nurse 1

Our clients have all responded pretty positively for an emergency. We do see some of our clients for videoconferencing not really in an emergency situation—I know you're not asking about that, but they're very positive about it. – Crisis Team Coordinator

Four participants noted the option of using VC is beneficial to crisis response workers:

The roads are closed sometimes for a couple days so in the event that something happens, this gives us an option of being able to see somebody through videoconference, as opposed to putting somebody in danger on the road. – Crisis Team Coordinator

2.2. VC Use was Perceived to Place Additional Strain on ED Resources

A number of participants (6) thought using VC for mental health emergencies has a negative impact on ED resources:

It's adding something onto the nursing plate, because they'd be the ones organizing the computer, getting things going...and already we're in a bit of a situation where it can be sink or swim. – ED Physician 2

I would see some of the barriers as resources for us, with only two nurses. So it may not be their first thing to think of and a telephone call might be what they feel is more appropriate. – ED Program Manager 6

The need for patient supervision and set up time were deterrents to using VC in the setting of a mental health emergency.

2.3. There are Barriers to Implementing the Use of VC for Mental Health Emergencies

Three participants noted that VC was *rarely used* for mental health emergencies at their ED workplace. Lack of staff support, resistance to change, and trouble remembering were mentioned as reasons for this:

I think our biggest barrier is our physicians aren't big supporters of it. […] I don't think they often think about it. Certainly our ER staff is aware that it's available to them, but I think there's a perception that it's going to take longer and there's the perception that 'what if it makes the patient worse?' – ED Program Manager 8

I think from a physician and nursing perspective it's tough remembering you have access to that service. I don't know if that's a downfall or one of the challenges? – ED Program Manager 3

Three participants described lack of access to a psychiatrist as a barrier to implementing the use of VC in mental health emergencies:

We really don't have any barriers. Our only thing would be having a psychiatrist to be available on the other end. – ED Program Manager 6

My personal feeling with it is that it was always a problem of getting somebody with access at the other facility to do the videoconferencing. **–** ED Nurse 2

3. Discussion

Several participants commented that patients responded positively to use of VC in mental health emergencies to connect them with an off-site mental health specialist. Trondsen *et al* found that patients valued direct communication with a psychiatrist over VC and associated the use of VC with their case being taken seriously **[**12].

The majority of participants who stated their ED site uses VC in mental health emergencies felt the use of VC to connect with an off-site mental health specialist expedited patient treatment. Although off-site mental health specialists may provide support over the phone to ED staff in rural or remote communities, VC offers a means of immediate and *direct* interaction between the mental health specialist and patient. VC may expedite the assessment of a patient by a mental health specialist in situations where an in person meeting is either not possible, or associated with considerable delays. Geographic isolation of the remote site, unsafe weather conditions, or lack of bed availability at the second site, may make VC the most efficient way for a patient to be assessed by a mental health specialist. A few participants pointed out that crisis response workers also benefit from this application of VC as it may decrease the need for them to travel to distant sites.

A few participants speculated that using VC in mental health emergencies may better connect patients to mental health resources. It was noted by participants that patients could be followed-up after their initial presentation by a mental health worker in their home community using VC. This idea is noteworthy from an ED standpoint, as connecting patients with accessible and appropriate follow up prevents revisits to the ED [13].

It should be noted that several participants felt the use of VC in the setting of a mental health emergency places additional strain on ED resources. Participants believed that tasks such as equipment set up and patient supervision during the VC session added to ED nursing duties. One participant explained that having a nurse assigned to set up the VC equipment and participate in a VC session may be detrimental in a rural or remote ED with limited nursing staff.

Lack of routine use of VC and difficulty accessing a psychiatrist through VC were identified as potential barriers to implementing the use of VC in mental health emergencies. A lack of routine use of VC may lead to ED staff to feel uncomfortable with setting up the VC equipment or a decreased awareness of the option of using VC.

It is reasonable to believe that if there are repeat instances where the VC equipment is set-up in vain, or where waiting to connect with an off-site mental health worker delays patient care, ED staff may be discouraged from using VC for mental health emergencies.

4. Study Limitations

The absolute number of participants (17) in this study is arguably low. Furthermore, the positions held by the participants and the stated usage of VC in their ED workplace were not equal in number, which may have disproportionately affected how prominent certain views were in our data.

Purposeful sampling was used to select participants that had a role in the ED and were perceived by researchers as potentially knowledgeable regarding their ED workplace. However, it is possible that in some cases participants may not have provided a true or representative picture of experiences at their ED site.

We felt structured interviews to be appropriate for gathering data as they allowed responses to be compared between participants. It was easier to recognize overall ideas when respondents had the same questions as a starting point.

With these limitations, it is important to note that this is a purely qualitative exploratory study and that our results should not be interpreted with a quantitative approach. Though not generalizable, the findings of our study give a sense of the perceived advantages, disadvantages, and barriers to the use of VC for mental health emergencies from an ED standpoint.

Conclusion

VC is perceived by some ED staff as a means to expedite the direct assessment of a patient by a mental health specialist. Several ED staff participating in this study saw VC as a method to better connect patients with mental health resources.

A number of participants believed the use of VC for mental health emergencies placed additional strain on ED nursing staff. Lack of use and difficulty accessing a psychiatrist were identified as potential barriers to the implementation of VC use for mental health emergencies.

Our study explored the perspectives of ED staff on the potential use or current use of VC in mental health emergencies in Southwestern Ontario. Our conclusions add to the understanding and lively discussion regarding this application of VC and emphasizes the need for quantitative data to further our knowledge of advantages and drawbacks of using VC for patients presenting with a mental health emergency to the ED.

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