

Videoconferencing in Mental Health Care

Professional Dilemmas in a Changing Health Care Practice

Ruud Janssen, Hilco Prins, Annemarie van Hout,
Jan Nauta, Marike Hettinga
Research Group ICT-innovations in Health Care
Windesheim University of Applied Sciences
Zwolle, The Netherlands
tjwm.janssen@windesheim.nl

Lian van der Krieke, Sjoerd Sytema
University Center for Psychiatry
University Medical Center Groningen
University of Groningen
Groningen, The Netherlands
j.a.j.van.der.krieke@umcg.nl

Abstract—This paper presents the findings of an exploratory study into challenges and dilemmas faced by mental health care professionals when implementing and applying videoconferencing with their clients. Focus was on two different forms of outreaching mental health care: intensive psychiatric family therapy (IPFT) and flexible assertive community treatment (FACT). During four focus group sessions with 19 mental health care professionals, issues, challenges and dilemmas were identified and discussed. Among the issues uncovered are: feelings of missing intangible, nonverbal but nevertheless important cues in the conversation with a client; an increased psychological ‘distance’ towards the client, making the communication more to-the-point but also superficial; and (for IPFT) difficulties in overseeing and interpreting interactions between family members. The mental health care professionals interviewed realize that, due to ongoing health care budget cuts, they will need to rely more frequently on videoconferencing with clients. This raises the following professional challenges and dilemmas: (1) how to integrate videoconferencing into treatment programs and individual treatment plans while maintaining quality of care; (2) what to take into account when applying videoconferencing in specific situations, such that it is safe and responsible; and (3) how to make their colleagues aware of the potential benefits of using videoconferencing with clients. Based on these findings, an in-depth ethnographic study is currently being prepared.

Keywords—*e-mental health; challenges; ethnography.*

I. INTRODUCTION

Like any other domain in the Dutch health care sector, mental health care is under constant pressure by society, government and health insurance companies to save costs and work more efficiently. In response, professionals and organizations in mental health care are increasingly turning towards telecare solutions such as e-mental health and videoconferencing. However, effect studies into the application of videoconferencing in mental health care show a mixed picture: large scale quantitative studies such as randomized controlled trials still leave many questions unanswered, and the effects found are open for interpretation [1][2][3]. Qualitative research has shown that innovation processes, such as the introduction of telecare technologies, typically proceed in rather ‘messy’ and unpredictable ways, obfuscating quantitative analysis [4]. Qualitative research has

also shown that the introduction of telecare technology can influence daily care practice in subtle and unexpected ways [4][5]. Some researchers have therefore argued to use a qualitative, ethnographic approach when studying the effects of introducing telecare and establishing its potential for health care practice [4][6]. These findings have been the starting points for the exploratory study discussed in this paper. The aims of this study were to uncover challenges and dilemmas faced by mental health care professionals when implementing and applying videoconferencing with their clients, and to determine the research questions for a two year long, in-depth ethnographic follow-up study.

The remainder of this paper is structured as follows: Section II describes the method used, and Section III reports the preliminary results. Section IV summarizes the challenges and dilemmas identified and concludes with the aim of the follow-up study.

II. METHOD

To make an inventory of the issues encountered by mental health care professionals when implementing and using videoconferencing with their clients, four focus group sessions were organized in March 2014. Two sessions were held with professionals working in intensive psychiatric family therapy (IPFT) and two with professionals working in flexible assertive community treatment (FACT) teams.

A. IPFT and FACT

IPFT [7] and FACT [8] represent two very different forms of outreaching mental care. IPFT is an intervention aimed at counseling families with children where family members are having multiple and serious psychiatric problems. It consists of clearly outlined phases and takes about six months to complete. During this time, the professional visits the family twice a week at their own home. FACT, on the other hand, is aimed at people with serious and ongoing psychiatric problems. FACT-teams are multidisciplinary and provide coaching and support to their clients which is both flexible (depending on what is momentarily required) and assertive (the professionals taking the initiative, sometimes using coercion). Team members frequently visit clients in their own homes, in day centers or on the streets. In the IPFT and FACT teams that participated in the focus groups, videoconferencing

had been introduced earlier to partly supplant visits to clients ('blended care').

B. Focus group setup

Focus group sessions were scheduled to last one hour and were structured as follows. After a brief introduction, professionals were first asked to describe their work and how videoconferencing played a role in it. Participants were asked to recollect positive and negative experiences with videoconferencing that they recently had; these recollections were then briefly discussed. Next, a series of more specific questions were asked about videoconferencing, e.g., "What are the benefits and disadvantages of using videoconferencing?", "Does videoconferencing influence what you try to achieve with clients?", "Can it be used with all clients and in all situations?", "How do you decide between face-to-face visits and videoconferencing?", and "What advice would you give to colleagues less experienced with videoconferencing?". Sessions were concluded with a brief wrap-up. During all sessions two researchers were present: one moderating the discussion, and the other taking notes. Interview notes were analyzed by bottom-up clustering (affinity diagramming, [9]).

III. RESULTS

In total, 19 professionals were interviewed: 6 working in IPFT teams, and 13 working in FACT teams. In the IPFT and FACT teams that participated in the focus groups, videoconferencing had been introduced several months to several years earlier, as part of small-scale pilots. In one case (focus group no. 4), the organization was preparing for a wider implementation of videoconferencing. The professionals interviewed therefore had varying degrees of experience with videoconferencing; see Table I for more details.

TABLE I. FOCUS GROUP PARTICIPANTS

Focus Group	Participants		
	IPFT / FACT	Male / Female	Experience with videoconferencing
1	IPFT	0 / 3	one year
2	IPFT	1 / 2	one year
3	FACT	0 / 4	several months
4	FACT	4 / 5	several months to several years

A. The role of videoconferencing in IPFT

IPFT as practiced by the focus group participants, consists of three phases. In the first phase (a six-week period during which home visits are made twice a week) the professional establishes a working relation with the family, explores their problems and strengths, and drafts a plan with them. During this phase videoconferencing is not yet used, but if both parties consent it will become part of the plan. During the second phase (which can last anywhere from six weeks to four months) the professional counsels the family in working towards the goals set out in the plan. When professional and family have agreed to use videoconferencing, home visits are

reduced to once a week and alternated with video calls. The third phase starts when the goals have been reached and counseling comes to an end. The frequency of home visits and video calls is then further reduced, to bi-weekly. This phase usually lasts another two months. After the third phase, families can still contact the professional (they receive vouchers to do so), but only through videoconferencing.

The IPFT professionals in our focus groups emphasized that they had made deliberate choices regarding the use of videoconferencing when they designed the IPFT program. They felt strongly that visiting families, and observing family members in their own homes, was a strength of IPFT that should be preserved. Videoconferencing was considered less suitable for the first phase, when the professional is still in the process of getting to know a family and their problems. In contrast, the participants did see specific benefits of videoconferencing in the later phases, such as more flexibility in planning appointments during evening hours – a time preferred by many families.

B. The role of videoconferencing in FACT

In the FACT teams we interviewed, videoconferencing was also used in scheduled appointments, but more frequently it was the client who took the initiative for a video call. In some cases, videoconferencing at a client's initiative was limited to the professionals' desk hours; in other cases, it was possible throughout the day and team members took turns in answering calls. To further facilitate this, clients could view who was online, and during evening hours their calls were automatically forwarded to a professional at a clinic. Another notable difference is that instant messaging ('chat') was also used. Communication via chat typically happened throughout the day, which allowed for an easily accessible and continuous line of communication between client and professional.

The FACT teams we interviewed did not use predetermined guidelines pertaining to videoconferencing. Instead, during the team meeting at the start of each day, team members would discuss clients' situations and whether or not to use videoconferencing with them. Videoconferencing would only be used with a client if a suitable therapeutic relationship had been established first. Video calls were used to save travel time and to reduce the invasion of a client's privacy. Furthermore, video calls were often used instead of regular phone calls, making these contacts more personal. Last, videoconferencing was considered a first step towards reduced frequency of contact and increased independence of a client.

C. Differences between video and face-to-face contact

When participants were asked to describe the differences between face-to-face visits and videoconferencing, they stressed the importance of face-to-face visits for observing social interactions, getting to know the client and their situation, building up trust, and interpreting what is going on. On the other hand, videoconferencing had its own uses, for instance to quickly check up with a client on their current situation or their progress. The participants agreed that videoconferencing could not fully supplant face-to-face visits, but that it could supplement these visits very well.

1) *Videoconferencing is brief and to-the-point*

Focus group participants frequently mentioned that, compared to face-to-face contact, videoconferencing is brief, concrete, and to-the-point. There are fewer opportunities to get distracted during a video call, making the conversation more focused. Questions asked are pertinent and short, and the conversation solution-oriented and aimed at reaching agreement (“*Okay, so how will we go about that?*”). There are certain advantages to this conversation style: it sometimes allows for asking ‘tough’ questions, offering the professional an opportunity to get more quickly to the bottom of a difficult situation. Furthermore, the professional is literally ‘at a distance’ from the client, forcing the latter in a more active role. Videoconferencing can thus stimulate a client’s self-reliance, especially near the end of an intervention. However, all this comes at a price: due to their intensity, video calls require more concentration and effort, and a more thorough preparation by the professional.

2) *Videoconferencing improves approachability*

Members of FACT teams mentioned that videoconferencing and chat improve the approachability of professionals and clients. Videoconferencing is used to briefly check up on a client without creating the disturbance associated with a regular visit. To some contact-averse or care-averse clients, videoconferencing is less threatening than a visit. Chat, in particular, can be used to maintain a continuous line of communication with a client throughout the day, allowing the professional to gradually coach a client towards a particular goal.

FACT teams explicitly compared videoconferencing to ordinary phone calls. Contact with a client over the phone is common, but videoconferencing adds a personal touch to these contacts. This more quickly creates a bond between professional and client, which in turn helps to reduce the number of ‘no shows’ at scheduled appointments. An additional advantage of videoconferencing compared to phone calls is that the professional can observe facial expressions and some of the nonverbal behavior of a client.

3) *Videoconferencing remains at the surface*

During all focus group sessions, participants quickly acknowledged that videoconferencing creates a certain distance to a client, with the conversation itself remaining somewhat at the surface. The focus and intensity of a video call are clearly beneficial for a pertinent conversation, but they make videoconferencing unsuited for situations where the professional needs to get acquainted with a client, or explore what might be going on in a family (‘the deeper layer’, in the words of one of the participants). Some of the reasons mentioned were that nonverbal signals are easily missed during videoconferencing, and that video calls typically lack the atmosphere and leeway needed to stimulate a more open conversation. As one participant explained, “*In a video call, you continuously have to stay focused. When you visit people at home, there is always a moment when you can lean back and just look around*”.

4) *Home visits reveal more about a client*

Focus group participants agreed that visiting clients at home reveals more about them and their situations. They

mentioned examples such as seeing the interactions between family members (“*Where they sit, how they look, whether the living room looks tidy, and what the teenage daughter is doing in the background.*”), clients being more at ease and more ‘themselves’ (“*People tell different stories when you see them at home.*”), ‘rituals’ that establish trust and maintain a personal relationship (“*Small-talk while hanging your coat or drinking a cup of coffee together.*”), brief interruptions that reveal something about daily life (“*The telephone rings, the neighbor steps in.*”). As one participant explained, “*Entering someone’s house gives you the clues to start a conversation, to build up a relationship. During a video call there is no neighbor who’s got something to say, your only clue is to notice that your client is still wearing their pajamas. The atmosphere is very different when someone is making you a cup of tea; you enter a conversation completely different then. Sensing the atmosphere is important; it contains clues about how someone is doing.*” Intangible and nonverbal signals, such as these, are absent (or will at least more easily be missed) during a videoconference.

D. *Issues in using videoconferencing*

The differences between face-to-face contact and videoconferencing lead to certain issues that professionals need to cope with. In the current situation, where videoconferencing still plays a relatively minor role, these issues do not seem to be of great urgency. However, the professionals interviewed expect that they will need to rely more heavily on videoconferencing in the near future: using it more frequently, but also in more complex situations.

1) *Situations where videoconferencing is not suited*

The participants all work in secondary care. Clients and families with relatively straightforward problems are increasingly taken care of in primary care, hence, only complex cases (e.g., clients with multiple disorders, or families with alcohol or drug abuse) remain. The participants are skeptical about the suitability of videoconferencing for these situations (“*When a family is in chaos, it is going to be very difficult to use videoconferencing for a to-the-point discussion of goals.*” and “*When the communication in a family is breaking down, or in fact each time when you need to know what is really going on, videoconferencing just won’t do it.*”). One of the IPFT team members wondered what to do in situations where there is a suspicion of ill-treatment: “*I might easily miss out on certain signals, yet I have a responsibility. Sometimes you have this feeling that something else is going on, and in such cases home visits are extremely important.*” FACT team members also expressed concerns: “*You need to build up a relation first; there must first be a solid foundation before you can rely on videoconferencing, and in cases where coercion is needed, videoconferencing may not be suitable at all*”.

2) *Consequences for the profession*

All focus group participants had become experienced with videoconferencing in the context of small-scale pilots, making them the pioneers in their respective organizations. And although they had experienced the drawbacks themselves, they had also learned that videoconferencing, if properly used, can bring some advantages. During the focus group

discussions some of them expressed concerns that they were unable to convince their colleagues, who had not partaken in these pilots, of these potential benefits: *“Videoconferencing is primarily regarded as a means to save costs; as something that deteriorates the care we provide. It would help if both the positive effects and the contraindications could be substantiated, to better inform our colleagues and to reduce the resistance they feel towards videoconferencing.”* With regard to the professional competences required for properly using videoconferencing, most participants agreed that any mental health care professional should be able to use videoconferencing: *“It may require extra skills to assess whether or not to use videoconferencing with a client the next time. This is a matter of experience, of knowing which signals are important. But this is not new: when you visit a client at home, you also have to make such decisions.”* Nevertheless, some participants expressed concerns: *“What will it do to our role as professional caregivers? If I find myself sitting behind a screen most of the time, will I still have the same professional attitude? I will miss visiting clients at home, or going over a conversation when I am cycling back home.”*

IV. DISCUSSION

A. The challenges and dilemmas identified

Among the issues uncovered in this exploratory study are, briefly summarized: feelings of missing intangible, nonverbal but nevertheless important cues in the conversation with a client; an increased psychological ‘distance’ towards the client, which makes the communication more to-the-point in some cases, and somewhat superficial in others; and difficulties in overseeing and interpreting interactions between family members. These issues need to be investigated before recommendations can be given regarding the proper use of videoconferencing. The shared expectation among the participating health care professionals that they will need to rely more frequently on videoconferencing with clients, raises a few important professional challenges and dilemmas. These are: (1) how to integrate videoconferencing into treatment programs and individual treatment plans while maintaining a good quality of care; (2) what factors to take into account when applying videoconferencing in specific situations, or with specific clients, such that it is safe and responsible to do so; and (3) how to make colleagues inexperienced in the use of videoconferencing more aware of the potential benefits of using videoconferencing with clients.

B. Follow-up study

Reviewing the results of this exploratory study, we can conclude that videoconferencing affects the conversation and relation between client and professional, and hence the care that is being provided. Other researchers have drawn similar conclusions [10][11]. Turner [10], for instance, interprets these effects in terms of differences in presence, in particular differences in the available primary, secondary, and tertiary context. Primary context refers to what appears salient to both participants; in face-to-face contact this refers to the immediate surroundings of the participants. Secondary context refers to what is available within the primary context

but which is outside the focus of the participants. For instance, the room in which the participants meet, and the objects and other people inside it. Tertiary context refers to ancillary context. This may, for instance, include the walk up to the house and through the hall, or a brief encounter with a neighbor. In videoconferences, these three contexts are very different: the primary context is represented by the viewable image. Within this image, limited secondary context is available: in the background, or as background sounds that give information on what is going on outside of the displayed image. Tertiary context, however, is unavailable in a videoconference, as are the cues that this context may provide. Problems arise when participants fail to realize these effects of mediated communication. Turner illustrates this by a striking example where a telepsychiatrist prescribed physical exercise (bicycle riding) to an imprisoned patient, not realizing that this patient was bound to a wheelchair.

Based on the findings of this study, and informed by the research of Pols [4], Oudshoorn [5], and Turner [9], an in-depth ethnographic study is currently being prepared. The aim of this study is to investigate the sometimes subtle ways in which videoconferencing affects the conversation between a client and a professional. Building upon on the acquired insights, we further aim to develop instruments (e.g., a storybook, an online course, or a serious game) to better equip mental health care professionals, and make them more aware of the benefits and pitfalls of videoconferencing.

ACKNOWLEDGMENT

We would like to thank the professionals who participated in our study and their respective organizations: Dimence, GGZ Drenthe, and GGZ Noord-Holland-Noord.

REFERENCES

- [1] J. H. Shore, “Telepsychiatry: videoconferencing in the delivery of psychiatric care”, *Am J Psychiatry*, vol. 170, no. 3, March 2013, pp. 256-262.
- [2] R. O’Reilly, J. Bishop, K. Maddox, L. Hutchinson, M. Fisman, and J. Takhar, “Is telepsychiatry equivalent to face-to-face psychiatry? Results from a randomized controlled equivalence trial”, *Psychiatr Serv*, vol. 58, no. 6, June 2007, pp. 836-843.
- [3] L. Hulbosch, P. Tamis-Ten Cate, A. Nugter, and H. Kroon, *Zorg op afstand in de langdurende geestelijke gezondheidszorg: een randomised controlled trial naar telezorg bij GGZ Noord-Holland-Noord*. Utrecht, The Netherlands: Trimbos Instituut, 2011. (Telecare in long term mental health care: a randomised controlled trial. In Dutch.)
- [4] J. Pols, *Care at a Distance: On the Closeness of Technology*. Amsterdam, The Netherlands: Amsterdam University Press, 2012.
- [5] N. Oudshoorn, *Telecare Technologies and the Transformation of Healthcare*, New York, NY: Palgrave Macmillan, 2011.
- [6] S. Reeves, A. Kuper, and B. D. Hodges, “Qualitative research methodologies: ethnography”, *BMJ*, vol. 337, August 2008, pp. 512-514.
- [7] G. H. F. van der Most and A. H. Roosma, “Intensieve psychiatrische gezinsbehandeling”, *Tijdschrift voor Psychiatrie*, vol. 43, no. 8, 2001, pp. 579-583. (Intensive psychiatric family therapy. In Dutch, with English summary.)
- [8] J. R. van Veldhuizen, “FACT: a Dutch version of ACT”, *Community Ment Health J*, vol. 43, no. 4, August 2007, pp. 421-433.

- [9] J. Hackos and J. Redish, "User and task analysis for interface design," New York: Wiley, 1998.
- [10] J. W. Turner, "Telepsychiatry as a case study of presence: do you know what you are missing?", *J Comput-Mediat Comm*, vol. 6, no. 4, June 2006.
- [11] C. May, L. Gask, T. Atkinson, N. Ellis, F. Mair, and A. Esmail, "Resisting and promoting new technologies in clinical practice: the case of telepsychiatry", *Soc Sci Med*, vol. 52, no. 12, June 2001, pp. 1889-1901.