Patient experiences with videoconferencing as social contact and in follow-up from oncology nurses in primary health care

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Abstract

Patients with various forms of cancer often have unmet psychosocial support needs. By interpretative phenomenological approach, this study aimed to acquire a deeper understanding of home-living patients with cancer's experience and meaning from videoconferencing in oncological nursing follow-up in primary healthcare and contact with networks. Six patients from rural Norway participated. Three themes emerged: (1) From skepticism to videoconferencing-enthusiasm; (2) Oncology nurses ensured tablet mastery and delivered close follow-up; and (3) Oncology nurses helped ensure general social support using videoconferencing. Oncology follow-up care in rural areas using videoconferencing may enhance care availability and provision of psychosocial support meeting patients' needs.

Introduction

Different types of cancer are likely to rise as the population ages and patients may be discharged from hospitals more quickly than they are today. For this reason, a higher degree of effective support for home-living patients may be needed (Gunter et al., 2016; Vidal-Alaball et al., 2020). For patients with cancer in rural and remote areas, videoconferencing on tablets, smartphones, or computers can be an alternative method both in delivery of oncology care from psychologists, oncologists, specialized nurses, or others involved in healthcare (Ignatowicz et al., 2019; Mallow et al., 2016; Nordtug et al., 2018; Powell et al., 2017). Likewise, it can be used to maintain social contact with family and others. This study takes a social psychological perspective and focuses on patients' experiences regarding videoconferencing in municipal oncology nurses' follow-up, and patients' online contact with their networks, using tablets. Tablet videoconferencing differentiates from using a smartphone or computer by providing a good image size, and at the same time being so small that it is portable.

Cancer undermines the human sense of safety and, therefore, the need for information and psychosocial support will be great both during and after cancer treatment (Anguiano et al., 2012; Brataas et al., 2010; Shepherd et al., 2006). Patients may feel threatened regarding their lives and health. They may struggle with an emotional process that aims to abate feelings of threat and fear, while appraisal and coping mediate this emotional process (Lazarus, 1999). In this process, cognitive and affective domains as motivation, appraisal, coping, stress, and emotion will be conjoined (Lazarus, 1999; Solbakken et al., 2017).

General social support may influence this mastery process. General social support has been described as having an impact on people's quality of life in the sense of the

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subjective experience of physical, mental, emotional, and social well-being (Giddens and Sutton, 2013; Padilla et al., 1992; Thoits, 1995). A major source of general social support among patients with cancer, is their informal network (Berterö, 2008). Some research also suggests that patient-patient interaction among peers with cancer may be experienced as providing support, sharing empowering knowledge of illness experience, and helping create new coping strategies (Andersen et al., 2015; Borregaard and Ludvigsen, 2018). This kind of peer support may require that the patients establish primary relationships, marked by mutual understanding and confidence, naturally developed during close informal interactions in a cooperative context (Bø and Schiefloe, 2015; Van Kleef et al., 2010). Further, that they understand each other's roles, support each other, and respond affectively to each other's expression of emotional needs (Bø and Schiefloe, 2015; Van Kleef et al., 2010).

Yet, considerable research suggests that patients with various forms of cancer often have unmet needs of professional support (Moghaddam et al., 2016). Theory about person-centered care take into account patients' desires and values, family situations, social conditions and lifestyles, and emphasize cooperation to develop appropriate solutions (Fix et al., 2018; McCance and McCormack, 2017). Person-centered nursing which includes professional provision of social support, should meet the complex needs of patients with cancer. Such care provides support to increase patients' self-efficacy and self-management in a variety of health situations (Chirico et al., 1017; Fix et al., 2018), and regards people using health and social services as equal partners (McCance and McCormack, 2017). Through person-centered actions, nurses may stimulate the possibility of self-management, which may positively influence patients' intrinsic motivation for engaging in their own care (Lorig and Holman, 2003; Ryan and Deci, 2000).

The use of videoconferencing in person-centered nursing seems plausible in providing social support to patients living at home with cancer (McCance and McCormack, 2017; Nordtug et al., 2018). Videoconferencing relies on an Internet connection and user-friendly equipment. It allows for convenience and efficiency at low cost and accessibility of health-related information and communication (Nordtug et al., 2018; Powell et al., 2017; Shepherd et al., 2006; Vidal-Alaball et al., 2020). Further on, videoconferencing may streamline personnel use, which will prove necessary in the years to come, as public health resources, will be limited and the need for home-based care will increase (Donelan et al., 2019; Fronczek et al., 2017; Vidal-Alaball et al., 2020). In nursing, videoconferencing with patients has been used in many ways, including monitoring, observing their physical and mental state, managing symptoms, instructing, teaching, listening to concerns, and coordinating with other parts of the health care system (Monaqhesh and Alireza, 2020; Nordtug et al., 2018; Rygg et al., 2018).

Videoconferencing provides opportunities for contact with others without having to use energy to meet outside the home. This form of communication protects against infection in cancer patients with weakened immune systems (Centers for Disease Control and Prevention, 2020). Recently, as a result of COVID-19, many cancer patients self-isolate and some perceive a loss of support and in-person social activities (Haase et al., 2020). Using videoconferencing for different kinds of family and peer support as well as for appointments with relevant health personnel, can minimize direct physical contact and provide continuous social contact and oncology care delivery (Haase et al., 2020; Monaqhesh and Alireza, 2020; Vidal-Alaball et al., 2020). Furthermore, after the corona pandemic started, cancer survivors found it difficult to find reliable information about their situation, as many experienced health care delays and withdrawal of supportive and rehabilitative care resources (Haase et al., 2020).

Trends emerging in recent research indicate that patients value videoconferencing follow-ups (Donelan et al., 2019; Haase et al., 2020; Powell et al., 2017). Nevertheless, we know little about cancer patients' experiences of follow-ups using this mode of communication (Haase et al., 2020; Monaqhesh and Alireza, 2020; Webster, 2020). We also have limited knowledge about whether and how patients with cancer experience videoconferencing with their families or with cancer patient peers regarding support of each other.

The aim of this study was to gain knowledge of cancer patients' lived experiences of tablet videoconferencing in municipal oncology nurses' follow-up and in contact with their family and peer network.

Method

This study employed a qualitative design using an interpretative phenomenological approach (IPA) (Biggerstaff and Thompson, 2008; Smith and Osborn, 2008) in order to explore patients' experiences and perceptions of videoconferencing. IPA allows rigorous exploration of idiographic subjective experiences and social cognitions (Alase, 2017; Biggerstaff and Thompson, 2008; Smith and Osborn, 2008). Analysis in this study aimed to acquire a deeper understanding of the ways in which home-living patients with cancer experience and derive meaning from the use of videoconferencing in follow-up care and contact with family and peer networks.

Sample

A purposive sample was used. The inclusion criteria were adult patients living at home, who had a cancer diagnosis and 3 months of experience participating in a videoconference follow-up by oncology nurses through a municipal primary health service. Six patients living in rural area of

Central Norway received the possibility to use videoconferencing on tablets during oncology nurses' follow-up, as well as to stay in contact with family and peer networks of cancer patients. They had various type of cancers, at different stages, and some did not recover from it. All six patients were willing to participate in the study. Each patient in this sample spoke Norwegian and were followed up by one oncology nurse who had trained the patient to use the tablet. Videoconference follow-ups were held during the daytime at a time agreed upon or the patient could call or write a request to the nurse, and the nurse would answer as soon as possible. The participants, four women and two men, had different types of cancer, and ranged in age from 49 to 78 years old (mean=68.5). Five lived with cohabitants. None worked outside the home at the time of the study due to sick leave or retirement.

Informed consent was based on written information from the researchers. The patients were free to participate and free to leave the study at any time. The anonymization of the participants was completed when the researchers transcribed the audio-recorded interviews; then recordings were subsequently deleted. The Regional Committee for Medical and Health Research Ethics in Central Norway (ref. no. 2016/968) and the Norwegian Data Inspectorate (ref. no. 49571) assessed and approved the study. There were no conflicts of interest.

Interviews

Interview data were collected in 2017. Oncology nurses in three municipalities informed the patients about the research and asked them if they would like to voluntarily participate in the study. After 3 months of videoconference experience in follow-up care and informal videoconference contact with family and peers, the researchers conducted interviews in the participants' homes. A thematic interview guide with the main themes about use of the technology, their experience of the contact with the oncology nurse, and their online contact with family and other informal networks was used. Interviews were conducted by two of the authors who were trained in qualitative interviewing. The researchers encouraged the participants to speak freely, asking them to talk about their experiences of videoconferencing and their thoughts on this kind of follow-up. This form of interviewing, often used in IPA research, allows the researcher and participant to engage in a dialogue, and the researcher may ask for more descriptions of interesting and pertinent areas (Biggerstaff and Thompson, 2008; Creswell, 2013; Smith and Osborn, 2008). The interviews lasted from 45 to 80 minutes.

Data analysis

The recorded interviews were transcribed verbatim in Norwegian. These were used to identify emerging themes

and to interpret participants' meanings of what happened and learn about their psychological world (Smith and Osborn, 2008). Two of the authors analyzed the data in the first phases. All three authors contributed to the final phase of the analyses.

The material was read several times to gain an overall impression of the participants' accounts. Statements were marked and commented on for further analyses. The next step involved extracting themes. Beginning with one of the interviews, statements were marked, and a list of significant accounts of the lived experience of the phenomenon were developed. Statements were then grouped into larger meaning units followed by a written structural description of how the experiences occurred (Creswell, 2013). In order to explore and identify themes with relevance to the research question, an additional strategy was added. The researchers looked for narrative turning points of a story about follow-up care, caring needs, and videoconferencing experiences (Brataas et al., 2009; Lieblich et al., 1998). Emerging themes were listed and then analyzed for theoretical underpinnings, named, clustered, and a new table list of themes was created. The following step analyzed the other five interviews for repeating patterns and possible new issues recognizing ways in which accounts from participants were similar but also different. The researchers aimed to respect convergence and divergence in the data (Smith and Osborn, 2008). Analyzing the last interview, no new themes or patterns emerged.

Through the steps of analyses, the interviews were interpreted in a dialectical movement between the whole and the parts. A final table of superordinate themes was constructed. The final description of the results, with quotes illustrating the participants' statements, outlines significance and meaning that was inherent in the participants' experience of videoconferencing in follow-up care and contact with family and peers. The patients' voices are highlighted and illustrated through quotations in the Results section. These quotes statements were translated into English but are characterized using language in the Norwegian culture. Our final interpretations and examinations of theoretical affirmations are described in the Discussion section.

Results

The initial reading and marking of meaning units provided the impression that the participants emphasized the technical use of the tablet and the importance of accessibility, contact and support from the oncology nurse, without saying much about the content of their actual conversations. Likewise, they explained their contact and support among family and peer networks. Lived experiences and meaning explored in the material were interpreted and presented in an interrelated description of the following theme: (1) From skepticism to videoconferencing-enthusiasm; (2) Oncology

nurses ensured tablet mastery and delivered close follow-up; and (3) Oncology nurses helped ensure general social support using videoconferencing.

From skepticism to videoconferencing-enthusiasm

This theme showed use of the technology generated safety feeling, brought visual advantages, liberation, and reassurance when the network functionality was adequate. Subthemes were (1.1) Feeling reassuring contact safety, (1.2) Experiencing visual advantages, (1.3) Experiencing less strain than traveling to meetings, and (1.4) Liberation from own expectations to show off a nice home environment.

Feeling reassuring contact safety. During the initial uploading of the necessary programs on the tablets, barriers appeared. For instance, there were different firewall barriers in the primary health care's Internet system in the municipalities as well as in some of the participants' Internet connections, virus programs, or network systems. The quality of network connections varied, and it was poor in some areas. This was of great importance, because online contact was a prerequisite for the use of videoconferencing in the oncology nurses' follow-ups of the patients. As Participant 3 stated:

> It (videoconferencing) *must work; it must be reliable. Here the network is sometimes out of order. Then it is impossible to use.*

An information technology (IT) technician was available to help the study participants. He solved problems by, inter alia, changing the communication system and installing subscriber identity module (SIM) cards.

The participants' stories revealed that a change from uncertainty to seeing videoconferencing benefits occurred once they had online contact and become accustomed to using the tablet as an aid. They mastered videoconferencing and experienced the tablets as easier than using a phone.

> *Using the tablet videoconferencing is easier than using the mobile. You just make one push and there you are.* (Participant 2)

Describing their experiences of videoconferencing, there was another change in the participants' narratives: The new possibility of contacting the oncology nurses on tablets was essential for their feelings of safety, health, and well-being.

> *First thing in the morning I search the tablet to see if the nurse is on the job, seeing if she is marked as green or yellow on my video screen. Then I can reach her.* (Participant 2)

The first thing this participant did in the morning was to make sure she could contact the oncology nurse. Indeed, she could see on the tablet if the nurse was on the job.

Experiencing visual advantages. At the start, some participants felt uncomfortable seeing themselves on the screen, but over time they became used to it.

> *One sees oneself on the screen – being ugly – but later . . . gets used to it and it's no longer a problem.* (Participant 4)

The look was of minor importance as the participant became used to the technology.

Participant 3 talked about one visual advantage through videoconferencing:

> *I am hard of hearing, so I get tired quicker by using the phone on my ear. I think it is better to see her face in addition.*

Seeing the oncology nurse's face when talking promoted the perception of her messages.

Using videoconferencing also provided the possibility of visually showing the oncology nurse problems like wounds or skin eruptions. Participant 5 explained this as follows:

> *Once I had skin eruptions, and then I showed them to her. It was great* (for getting assistance).

This participant received help with the skin problem after videoconferencing with the oncology nurse about the topic.

Experiencing less strain than traveling to meetings. Tablet videoconferencing offered possibilities to reduce the strain that might be felt during exhausting meetings. The participants were also pleased that they did not need to travel. Participant 5 explained:

> *It takes a lot of energy to travel – it is awful – that noise and people around you. Using tablet videoconferencing, you escape all that. Not being confronted with 'Yeah, yeah, how are things today?' or 'Long time no see'. You escape all that stuff.*

Notably, at the end of the project period, none of the participants wanted to return the tablets or conclude the videoconferencing opportunity with the oncology nurses.

Liberation from own expectations of show off a nice home environment. There was also less expectation with videoconferencing compared to home visits.

> *Using the tablet, you can sit in your chair, while during a visit at home, you must go to the kitchen, find cups and arrange coffee.* (Participant 1)

Real meetings induced more stress compared to videoconferencing. Indeed, some participants deemed it acceptable to videoconference when the house was untidy, as Participant 4 explained; *They do not see the mess.*

When the patients were confident that the technology worked, the possibility of communicating via videoconference and seeing each other without having to meet face-to-face, gave freedom from one's personal desires to prepare the home before oncology nurse visits. For patients in various intensive cancer situations the use of videoconference was experienced as a stress-reducing form of interaction.

Oncology nurses ensured tablet mastery and delivered of close follow-up

This theme showed that the follow-up was experienced as goal-oriented and effective. Collaboration with the oncology nurse promoted motivation for using videoconferencing, although the patients got fewer visits in their own home. The patients experienced a visual proximity to the oncology nurse and found it easy to get reliable information. Subthemes were (2.1) Oncology care as a motivation for learning and use of videoconferencing, (2.2) Loss of visits and small talk, (2.3) Reliable information was easily accessible, and (2.4) Visual proximity.

Oncology care as a motivation for learning and use of videoconferencing. Before the opportunity to videoconference via tablets began, the participants had varied experiences using personal computers. Most of them paid their bills online, and some also connected to social networks. The oncology nurses taught the patients how to use videoconferencing on tablets.

Participant 1 was not motivated about the project, although she had expressed her willingness to participate. She was not accustomed to any Internet use. At first, she kept the tablet in a dresser drawer and avoided using it. She had incurable cancer that had spread and caused her considerable pain. The oncology nurse made home visits, where she guided the patient in using the tablet. The nurse also called on the tablet quite often. This resulted in the participant eventually using the tablet on her own. This was a turning point. Once this patient mastered the practical use of the aid, the tablet provided accessibility to social support and help from an expert in the oncology care field.

> *Apparently, she* (the oncology nurse) *knows a great deal about this disease.* (When videoconferencing) *she cares about me in the same way as if she came to my home to see me.* (Participant 1)

Loss of visits and small talk. After starting to use videoconferencing, the participants experienced fewer home visits from the oncology nurses.

> *Before we got the tablet, she* (the oncology nurse) *made visits more often . . . but now there are fewer visits in our home.* (Participant 6)

Some participants missed the visits from the oncology nurse and their discussions of matters other than those related to cancer. Participant 2 explained:

> *I was looking forward to these visits. The nurse could, for instance, discuss what she did in her free time, like how she shot an elk the day before.*

This participant had been looking forward to the small talk about things other than cancer. She did not gain the same experience through videoconferencing.

Reliable information easily accessible. When help was needed from the oncology nurses, accessibility to contact with them was important in order to feel safe. Easy contact seemed mentally significant for all the participants. Participant 5 explained as follows:

> *To be in touch with the nurse is very easy – that little, quick chat – that meant a lot to my mental state. Just that little talk I noticed meant an enormous amount, as a support all the way. Getting a proper, reliable answer is very good.*

This participant appreciated access to the oncology nurse and enjoyed having both short videoconferencing chats and receiving reliable support when needed.

Sometimes the oncology nurses were not available for videoconferencing at the time the participants called. None of them experienced this as a problem. Participant 5 explained:

> *If she* (the oncology nurse) *is unavailable, I just send her a message, and then she calls me as soon as she finds space for a talk. That is very OK.*

Although the desired answer could come a lite later, they perceived it as valuable information provided within a reasonable time.

Visual proximity. When videoconferencing, participants felt close to the oncology nurse.

> *It is almost as if she* (the oncology nurse) *is coming to my home to me. She does not come here, but she is here all the same* [laughs]. *Then I do not feel so lonely. Virtually I think it is very acceptable to see her when we talk together.* (Participant 1)

The participants felt that videoconferencing enabled them to further develop close relationships with the oncology nurses. In fact, some felt that the visual proximity reduced the experience of loneliness.

Some participants described the nurse's attitude in terms of kindness.

> *She* (the oncology nurse) *is excellent: Sometimes she becomes emotional, and gets tears in her eyes. I have been very ill, you see, and I will never get healthy again. Speaking with those who are kind and true really means the most.* (Participant 3).

Thus, when the oncology nurse seemed emotional, this participant interpreted such feelings as being honest,

compassionate, and kind, which was of considerable personal importance.

Oncology nurses helped ensuring general social support using videoconferencing

This theme showed that oncology nurses helped the patients to maintain their informal network. The possibility of having online contact with their primary network and other patients in similar cancer situations, generated pleasure and a feeling of support. The sub-themes were (3.1) Primary network and (3.2) Peers and others.

Primary network. All the participants were satisfied to be able to videoconference with their informal network. Some people in the informal network were other cancer patients with whom they had established primary relationships. The oncology nurses helped establish online networking.

All the participants used the tablet to connect with their families. This benefit was psychosocially very important to them, as Participant 4 claimed:

> *If I could not talk to them* (children and grandchildren), *then that would be unbearable to me.*

Close contact with the family meant a lot to her, and thus, she appreciated the opportunity to videoconference with them.

The participants did not videoconference about difficulties in their health situation with their children, grandchildren, relatives or others in their networks. Indeed, some indicated that they tried to spare them such concerns, including grave situations.

> *I am afraid of bothering them* (family and friends). *Actually, I think they have enough to handle themselves.* (Participant 1)

Peers and others. Some participants felt that their social networks did not understand what they were going through with their cancer cases.

> *People do not understand what you are going through; it is like a trauma.*
>
> (Participant 3)

On the other hand, they described their own or the other person's situation as meaningful when videoconferencing with patients in similar situations. Some of the oncology nurses helped to establish videoconferencing groups of two or more cancer patients who had met in the hospital. Participant 5 videoconferenced as part of such a group:

> *It is excellent! The others are the same age as me and we have good talks together.*

Helping others with problems, including problems than were not related to cancer, also felt meaningful. Participant 3 chatted with a patient about a "broken heart":

> *And I have been like a father to her: I listened to her. We talked together a long time. I like to be of help.*

Discussion

The study showed patients experienced videoconferencing with municipal oncology nurses as adequate care and suitable to their needs, in addition to providing a feeling of safety. Videoconferencing meant fewer face-to-face meetings, less traveling and preparation for the home visits. Adequate functional technology on the web was a prerequisite, and with that in place, videoconferencing brought more freedom to their everyday lives. Contact whenever needed with the oncology nurse was greatly appreciated, despite fewer visits. The possibility of online contact with their network also meant access to valuable social support. Videoconferencing with family had important emotional significance, while conferencing with informal networks of patients with cancer, was experienced as meaningful mutual support in problematic situations.

Confidence and self-confidence by adequate technology

Commencing videoconferencing via the tablets, some unstable Internet connections became an issue. When such problems emerged, some participants felt uncertain. Secure Internet access for the use of tablet conferencing should be given considerable attention by both managers and oncology nurses in the health service (Direktoratet for e-helse [The Norwegian Directorate of e-Health], 2018). In some areas, video-communication based on Internet access was not possible or was unstable at the best (Nordtug et al., 2018), and one IT-technician ensured network access in this project. Therefore, IT-technicians should provide important technical assistance and instrumental support during the start-up (Okereafor et al., 2020). Technical assistance proved helpful in this project. Developing routines in terms of what to do in the health care service if technical problems occur when the aid is used, is also necessary.

When patients were introduced for tablet videoconferencing with oncology nurses, some seemed motivated for use of this aid. Others felt skepticism and considered use of the aid so demanding that avoidance was the coping strategy. Programmed tablets can prove a challenge for people not used to such media, implying considerable effort to learn. By contrast, participants who are already experienced with web-based programs may find it easy to learn videoconferencing on tablets. In this study, the patients experienced the oncology nurses supporting them when they were leaning, and there were turning points from

uncertainty to signs of intrinsic motivation and mastery (Lorig and Holman, 2003; Ryan and Deci, 2000). Increased age did not represent an obstacle to learn to master the aid, although this may be a critical aspect for those older than 75 (Bluethmann et al., 2018). Mastering a challenge can have a positive impact on self-confidence and feelings of functioning, as well as on the emotional dimension of one's quality of life (Ali et al., 2018; Padilla et al., 1992). The turning to intrinsic motivation for videoconferencing may be further reinforced when participants experience positive benefits from this kind of follow-up and contact with family and peers.

Safety feeling

One psychosocial outcome of the videoconference follow-ups was a feeling of safety. Knowing that there were competent people to help and provide support when needed was crucial to people's sense of safety and well-being (Ali et al., 2018; Padilla et al., 1992; Thoits, 1995). Certainly, it could reduce stress and improve coping strategies. This possibility became a symbol of safety, made visible, for example, when the patients looked for the color of the oncology nurse's sign of availability on the screen (Bolman and Deal, 2017). Knowledge about how to organize and ensure easy and secure access to healthcare professionals for cancer patients in Norway as well as in other countries is important (Bhatt and Bathija, 2018; Thomas et al., 2015). The fact that none of the participants wanted to stop videoconferencing with the oncology nurse illustrates the perceived value and the usefulness of this method of contact. Uncertainty about using this aid quickly changed to uncertainty about losing it.

Meaningful follow-up

The videoconference follow-up phenomenon was experienced as meaningful and reassuring. Patients felt encouraged to call the oncology nurse. Having to sometimes wait a short time for an answer was not perceived as problematic, and this concurs with other research (Rygg et al., 2018). The participants perceived the oncology nurses as "close" and available experts, which is also in line with other studies (Blindheim et al., 2013). Achieving closeness requires availability and compassionate nursing (Gilbert, 2013), and videoconferencing may promote the availability. Participants in this study had an established relationship with the oncology nurses before commencing videoconferencing, which might have served as the foundation for their feelings of closeness. Some of the patients described the oncology nurses' attitudes in terms of kindness and truthfulness. Nurses' emotional and empathic communication may enable patients to feel listened to, valued as individuals, understood, and accepted, potentially leading to self-disclosure and indirectly resulting in improved patient

outcomes (Derksen et al., 2013; Gilbert, 2013; Strandås et al., 2018). Relational communication seems relevant, in addition to health-related, goal-directed communication (Brataas et al., 2010; Moe et al., 2017). Experiencing closeness in nurse-patient relationships through videoconferencing seemed important for the study participants. In face-to-face meetings in home health care, patients' feelings of close relationships are shown to be health-enhancing (Strandås et al., 2018). Similar experiences of the relationship in follow-up via videoconferencing may have corresponding health-enhancing implications.

The patients received fewer home visits from the oncology nurses, and this was seemingly experienced in terms of both a relief and a loss. Some patients felt alone during the day and missed the oncology nurses' home visits. Loneliness and social withdrawal from family and friends are not unusual in illness situations (Holt-Lundstad et al., 2015), especially when cancer patients with weakened immune systems stay at home as a protection against infection (Centers for Disease Control and Prevention, 2020), for example in times of COVID-19. In such cases, contact with the oncology nurses through short video conversations represented moments of psychosocial support. Videoconferencing, more often than traditional home visits, seems to support feelings of close follow-up, which may abate some feelings of loneliness.

The use of videoconferencing seemed to save time and energy. Not having to travel to see the oncology nurse was valued by the patients. They also felt that they did not need to prepare their home when an oncology nurse visit was expected. Home visits also include time- and energy-intensive rituals of general courtesy, taking substantial time before getting to the real purpose of the visit (Bolman and Deal, 2017). Using videoconferencing, these rituals were no longer necessary. Thus, through videoconferencing, the participants' communications became more concise.

Organizing follow-ups in such a way that patients may call the oncology nurses at any time during the day, made it possible for them to ask questions that arose in their everyday lives. This opportunity seemed to provide a feeling of having continuous social support. In demanding cancer situations, the feeling and experience of having constant and informative support may promote patients' health-related quality of life (Ali et al., 2018; Padilla et al., 1992).

Given the ability to call the oncology nurse whenever needed during the day also enabled patients to enjoy the autonomy to define the conversation topics; thus, they felt empowered by videoconferencing (Jørgensen et al., 2018). The care became adapted to the patients' values, situations, and goals, and was thereby highly person-centered (Aasen et al., 2020; Fix et al., 2018; McCance and McCormack, 2017; Nordtug et al., 2018). This appears to be an automatic effect of the possibility to communicate and discuss one's own questions with experts. Such powering seems motivating (Mruk, 2006; Ryan and Deci, 2000). Further, it seems in

line with the consumer-oriented view of citizens, where the individual-oriented discourse is based on a view of users as competent, rational actors (Askheim et al., 2016).

Network contact using the aid

In addition to follow-up, participants in this study used the tablets in videoconferencing with relatives and other patients. When cancer situations become straining, social support from one's network may represent important resources for the confirmation of identity, self-esteem, and self-efficacy, while also helping to handle the pressure (Ali et al., 2018; Giddens and Sutton, 2013). Contact with close family members may be important in maintaining patients' quality of life (Ali et al., 2018; Padilla et al., 1992; Thoits, 1995). However, family and friends did not appear to be those most likely to provide psychosocial support regarding cancer issues. The participants seemed to prefer communication with those in close relationships about the usual things in everyday life and put well-being in foreground instead of problems of the disease. Paterson's (2004) model of changing perspectives indicates that living with illness is a continuously changing process between the perspectives of "well-being in the foreground" and "disease in the foreground" in the patients' world. Videoconferencing with oncology nurses showed an important function when the disease was given priority. However, the study does not provide field study data about face-to-face communication with participants' family and friends. Being a relative can be stressful, and in fact, some next of kin of cancer patients may require professional care themselves (Blindheim et al., 2013). There is a need for further research on the impact of the illness on the ways in which patients and their next of kin communicate (Konradsen et al., 2020).

Supporting others with cancer and providing mutual support among patients seemed to be appreciated and acknowledged by the study participants. Helping others may contribute to one's own self-esteem, as a perception of worthiness and self-respect, especially when others find this worthy and respectable (Giddens and Sutton, 2013; Mruk, 2006). Not all, but some of the participants in this study seemed to develop primary relationship with other patients with cancer, understanding, responding affectively, and supporting each other (Bø and Schiefloe, 2015; Van Kleef et al., 2010). Other research indicates that psychosocial interventions involving online peer-to-peer support groups may provide informational and emotional support and have a positive impact on people's emotional adaptation, coping ability, and quality of life (Coulson, 2018; Enesby et al., 2008).

The oncology nurses helped establishing online contact between patients participating in this study and peers they had met in the hospital with whom they wanted continued contact. However, it is uncertain whether all patients want this type of peer contact. There is a need for more

knowledge about how to organize contacts and establish primary networks of cancer patients supporting each other, while at the same time ensuring patients' safety and self-determination.

Strengths and limitations

Following the IPA method is considered a strength of the study. Two researchers analyzed the material, and thereafter all the three researcher completed the analyses, discussing the credibility of findings. In order to ensure the study's credibility and transparence, many quotations by participants have been included in the article.

As six people living in rural areas in Norway participated in the study, the possibility of bringing out generalized findings across health care systems, cultures, diagnoses, and/or gender differences were not possible.

In future studies, patients living in densely populated areas and towns might provide additional or varied experiences with videoconferencing in follow-up care. Additional research with larger samples and a variety of designs is required.

Conclusions

From a social psychological perspective, oncology follow-up care in rural areas using videoconferencing seems significant to enhance patients' feelings of safety and promote their quality of life. Home-living cancer patients' motivation for tablet follow-up by oncology nurses may be characterized by fear of losing substantial support. That can change after receiving help in securing online contact and mastering the use of videoconferencing. Such follow-up care appears to provide continuous access to support from expert nurses. The care becomes even more person-centered because patients can define the questions to discuss with oncology nurses at times when they feel in need. Furthermore, patients may experience less strain through videoconferencing compared to traveling to meetings or receiving visits from oncology nurses at home. Additionally, the aid was useful maintaining valuable contact with family and for peer-to-peer support.

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