

# Healthcare professionals' experiences of the change to telephone consultations in cancer care during the COVID-19 pandemic: An explorative qualitative study

DIGITAL HEALTH Volume 10: 1-9 © The Author(s) 2024 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/20552076241304870 journals.sagepub.com/home/dhj



Katrine Vammen Lindblad<sup>1</sup>, Hanne Bødtcher<sup>1</sup>, Dina Melanie Sørensen<sup>2</sup>, Elizabeth Rosted<sup>2,3</sup>, Eva Kjeldsted<sup>1,2</sup>, Helle Gert Christensen<sup>2</sup>, Mads Nordahl Svendsen<sup>2</sup>, Linda Aagaard Thomsen<sup>1</sup> and Susanne Oksbjerg Dalton<sup>1,2,4</sup>

## Abstract

**Objective:** During the COVID-19 pandemic, changes were made in cancer care including increased use of teleconsultations (TCs) and restrictions for relatives to attend in-person appointments at the outpatient clinics. This study aimed to provide in-depth information on healthcare professionals' experiences of TC and the limited access for relatives during the COVID-19 pandemic in 2020.

**Methods:** This qualitative study was conducted at an oncological department responsible for oncological care of all patients with cancer in one of five health regions in Denmark. Fourteen healthcare professionals participated in three semi-structured focus group interviews with either secretaries and nurses or physicians, and one semi-structured individual interview with a secretary. Data were analyzed by thematic analysis.

**Results:** Four overall themes emerged in the thematic analysis: "Possibilities and limitations in relation to TC," "Information load and timing," "Insecurity" and "Lessons learned for the future." Healthcare professionals missed face-to-face interactions, feared to overlook patients' symptoms and relapse during TC, agreed that TC were not suitable for all types of consultations, and experienced improved work environment due to fewer patients and relatives at the department. Furthermore, patients should be involved in the decision of changing to TC, relatives must be recommended to participate in TC, physicians must meet the patient in-person before TC, and video consultations should be considered.

**Conclusion:** TC may be a valuable supplement to in-person consultations for patients with cancer in the future, and guidelines must be implemented to ensure suitable consultation types for TC, include patients' preferences, and involve relatives.

### **Keywords**

COVID-19, cancer care, teleconsultation, healthcare professionals, qualitative study

Submission date: 5 July 2024; Acceptance date: 19 November 2024

## Introduction

The SARS-CoV-2 (herein called COVID-19) pandemic resulted in worldwide organizational changes in daily clinical practice in many departments of oncology to ensure medical care to patients with cancer and at the same time minimize the risk of COVID-19 infections.<sup>1–6</sup> Patients affected by cancer were especially at risk of being infected and at higher risk of developing serious complications to COVID-19 potentially causing hospitalization, need for intensive care or even

<sup>1</sup>Cancer Survivorship, Danish Cancer Institute, Copenhagen, Denmark <sup>2</sup>Department of Clinical Oncology and Palliative Care, Zealand University Hospital, Roskilde and Naestved, Denmark <sup>3</sup>Department of Regional Health Research, University of Southern Denmark, Odense, Denmark <sup>4</sup>Institute of Clinical Medicine, Faculty of Health, Copenhagen University, Copenhagen, Denmark

Corresponding author:

Hanne Bødtcher, Cancer Survivorship, Danish Cancer Institute, Copenhagen, Denmark.

Email: hab@cancer.dk

Creative Commons NonCommercial-NoDerivs CC BY-NC-ND: This article is distributed under the terms of the Creative Commons Attribution-NoDerivs 4.0 License (https://creativecommons.org/licenses/by-nc-nd/4.0/) which permits any use, reproduction and distribution of the work as published without adaptation or alteration, provided the original work is attributed as specified on the SAGE and Open Access page (https://us.sagepub.com/ en-us/nam/open-access-at-sage). death.<sup>7–9</sup> In Region Zealand, one of the five health regions in Denmark, the Department of Clinical Oncology and Palliative Care at Zealand University Hospital responded to the national regulations on disease control at the start of the pandemic. This by implementing teleconsultations (TCs) offering physicians' consultations by telephone as an alternative to in-person outpatient visits, combined with restrictive access for relatives to reduce the number of visitors and thereby reduce the risk of infection.

Most studies on the implementation of TC in cancer care during the COVID-19 pandemic have focused on the perspectives of patients and relatives and, overall, they showed satisfaction with the change to TC.<sup>2-6</sup> Few studies have explored healthcare professionals' experiences on the change to TC in this context. In a questionnaire study, Darcourt et al. explored satisfaction with TC during the COVID-19 pandemic among both physicians (n = 23) and patients with cancer (n = 1477) in Houston, Texas.<sup>4</sup> Results showed that overall physicians were satisfied with TC (65%), and that their primary concerns were fear of missing clinical findings (52%), lack of meaningful interaction between physician and patient (48%), medical liability (30%), decrease in quality of care (26%) and inability to get adequate data/information (26%). Furthermore, physicians were concerned about inadequate technologic support, complexity of the process and patients not wanting TC. Another American survey investigated physicians' perspectives on telemedicine in radiation oncology and the results showed satisfaction with video consultation.<sup>9,10</sup> In a Dutch qualitative study, patients, and healthcare professionals' perspective on quality of follow-up through TC were evaluated and regarded efficient and accessible if patient and healthcare relationship was established.<sup>11</sup> An Australian interview study explored physician (n = 7) and patient (n = 11) perspectives of TC in cancer care and recommended to identify when and for whom TC is acceptable.<sup>12</sup> Overall, TC for patients with cancer seem to have potential as a less resource demanding and more flexible alternative to in-person consultations both during and in-between pandemics. However, to our knowledge, no studies have explored how healthcare professionals, including both physicians, nurses, and secretaries, experienced the change in work environment and organization during the COVID-19 pandemic, with a particular focus on TC and the reduced in-person patient and relative contacts with the departments of oncology.

The aim of this study was to provide in-depth information on healthcare professionals' experiences and perspectives on TC and the changes in patient and relative contact during the COVID-19 pandemic in a Danish department of oncology.

### Materials and methods

The study was a qualitative study combining semi-structured focus group interviews and one individual interview.

## Setting

This study was conducted at the Department of Clinical Oncology and Palliative Care, Zealand University Hospital, at the outpatient clinics located in Roskilde and Naestved, Denmark. The department provides all oncological care in Region Zealand, of about 0.8 million inhabitants. In this department, from 15 March 2020, and during the COVID-19 pandemic, outpatient appointments with a physician were changed to TC. Exceptions were consultations with newly diagnosed patients, where physical examinations were needed, or situations where the physician considered in-person consultation necessary. The physician decided prior to the consultation whether an in-person consultation was warranted and informed the medical secretaries to schedule either in-person or TC. Furthermore, to limit the number of visitors in the clinic, relatives were not allowed to participate in in-person appointments unless the physician found it necessary. In an electronic survey, 68% of 1160 patients with scheduled consultations in the department between 15 March 2020 and 30 April 2020 reported that they had at least one TC with a physician.<sup>13</sup>

## Study design

This study included three focus group interviews and one individual in-depth interview. The focus group interview makes it possible to study how a group of individuals together define and make sense of a given topic, problem, or social phenomena.<sup>14</sup> During focus group interviews, discussions and potential disagreements between individuals may reveal new perspectives, which contribute with a more nuanced understanding of the chosen topic.

Two semi-structured interview guides were developed (one for secretaries and nurses, and one for physicians) with the following focus areas: "Experiences with TC and the changes related to conducting TC," "Technical challenges in relation to TC," "Contact with patients," "Contact with relatives" and "TC in the future" (Supplementary File 1). Secretaries and nurses did not conduct TC themselves, therefore, questions were focused on their supportive role for patients, relatives, and physicians in relation to the implementation of TC. The Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist <sup>15</sup> is available in Supplementary File 2.

# Data collection and informants

We used convenience sampling to select informants with no exclusion criteria. In June 2020, the department management sends an e-mail with an open invitation and information about the study to all physicians, nurses, and secretaries from the outpatient clinics in Naestved and Roskilde. In total, 14 healthcare professionals volunteered to participate in the study. Characteristics are shown in Table 1. The interviews were held in undisturbed conference rooms at the hospitals in Naestved and Roskilde and lasted from 45 to 90 minutes. After conducting three focus group interviews, one individual interview was carried out due to difficulties in recruiting enough participants for a fourth focus group. No further interviews were conducted, as the same responses repeatedly emerged across the earlier interviews, indicating that data saturation had been reached. The focus group interviews were mediated by two of the authors, one asked question, ensured all informants participated in the discussion, and ended the discussion if it became irrelevant for the research topic, and one served as observer during the interviews. Interviews were audio recorded.

#### Data analysis

Interviews were transcribed verbatim by two of the authors and compared to the audio recordings afterwards. Data were analyzed by thematic analysis as described by Braun and Clarke.<sup>16</sup> The analysis was inductive searching for themes bottom-up, but at the same time deductively guided by the focus areas. The approach consists of six phases: phase 1 "Familiarizing yourself with your data," phase 2 "Generating initial codes," phase 3 "Searching for themes," phase 4 "Reviewing themes," phase 5 "Defining and naming themes" and phase 6 "Producing the report." Two of the authors completed phase 1-3. They listened to the recorded interviews, read the transcripts to get familiar with the data, coded the interviews individually in the software program NVivo 1.3, compared and discussed the coding until consensus was reached, and searched for and discussed initial subthemes. Phase 4-6 were conducted by four of the authors. Subthemes were discussed and checked in relation to the entire data set, twelve subthemes were defined and afterwards merged into four main themes and named. Quotes from the interviews were translated from Danish to English and agreed on by the authors and approved by an external translator. All informants were anonymized (informant a, b, c etc.).

# **Ethics**

All participants received written and oral information of the study. Written informed consent was obtained before each interview. Participants were informed of all data being treated confidentially and anonymously and that they were free to withdraw from the study at any time. The study was registered in Region Zealand in the register for the use of personal data in research (number REG-076-2020) and did not require Ethics Committee approval.

### Results

Four main themes emerged in the thematic analysis: "Possibilities and limitations in relation to TC," "Information load and timing," "Insecurity" and "Lessons learned for the future."

# "Possibilities and limitations in relation to TC"

This theme consists of three subthemes: "When face-to-face interaction is missing," "One model does not fit all" and "Improved work environment."

*"When face-to-face interaction is missing".* The group of physicians were responsible of TC and during the focus group interviews, they described lack of face-to-face interaction as one of the primary limitations related to TC. It made them feel unable to ensure the same quality during TC consultations as in-person consultations. They explained how it was difficult to calm and comfort patients when necessary, during TC:

That is exactly the problem on the phone, you cannot see their body language, and you cannot use your own body language to calm them (...) Recently, we have had a very frustrated patient, and, in that case, you are chanceless. Normally, just by sitting there you change the situation, but you cannot do that on the phone. (Physician)

Especially physicians, who had Danish as their second language, experienced that patients had difficulties understanding them due to their accent. This is a general issue for this group of physicians, but they described it as an even greater challenge during TC:

It is much easier to determine whether patients understand me or not, when I can see them, but on the phone this is difficult. If we talk face-to-face, it is easier to see if the patient is confused or if I should repeat myself, but that is difficult on the phone. (Physician)

The physicians had a feeling that part of the information between patient and healthcare professional were lost during TC. The physicians described how they were unsure if patients fully understood what had been said, as they were not able to see the patients' reaction. This impression was in accordance with the secretaries and nurses who often received follow-up calls from patients or relatives who had questions in relation to information received during TC. The physicians described how they experienced that some patients were reluctant to ask questions during TC, as one explains:

There are also patients who say, 'I had decided that I would prepare some questions for the in-person consultation, so now I will save them until next time.' Therefore, I know that there are patients who are not asking all their questions, because they are not in here (at the department). (Physician)

Interview	Gender	Profession	Position <sup>a</sup>	Cancer team	Years of experience
Focus group 1	Female Female Female Female	Secretary Secretary Nurse Nurse		Lung and urology Mamma Lung Mamma	>10 <5 >10 >10
Focus group 2	Female Male Male Female Female	Physician Physician Physician Physician Physician	Registrar Consultant Registrar Registrar Registrar	Mamma Urology Mamma Lung Lung	5-10 >10 5-10 5-10 5-10
Focus group 3	Female Female Female Female	Physician Physician Physician Physician	Registrar Introductory Introductory Introductory	Gastrointestinal All All All	5-10 <5 <5 <5
Individual interview	Female	Secretary		Gastrointestinal	<5

Table 1. Characteristics of the 14 healthcare professionals participating in qualitative interviews in June 2020.

All were full-time employees.

<sup>a</sup>All physicians were specialists in oncology except for the three in introductory position which is a pre-specialisation position.

Another challenge related to the lack of face-to-face interaction was evaluation of patients' performance status. A common impression among physicians was that some patients tend to overestimate their performance status and neglect symptoms on the phone. It was not always sufficient to talk with the patient on the phone to evaluate performance status, as stated by a physician:

(...) I think it is very difficult to evaluate performance status on the phone. Often when someone enters the door, you already have an idea of whether he or she is ready for treatment. Often, we use a lot of time on the phone talking about 'what are you capable of doing during the day?' (...) However, I am worried, because I have seen patients being hospitalized even though you have talked with them on the phone and according to the medical record, it seems like the patient is able to receive treatment. Then the patient is hospitalized, and you think, 'oh my God it is shocking how sick he or she is'. (Physician)

"One model does not fit all". All healthcare professionals agreed that the implementation of TC was a good attempt to limit the number of patients in the department and reduce the risk of infection during the COVID-19 pandemic. Healthcare professionals also agreed that TC would be relevant for many patients in the future, albeit not for all:

I believe that some consultations can easily be changed to teleconsultations. Especially for those patients who live far away. There are no reasons for them to drive all the way to the hospital just to talk about their pains. This is one of the consultations you could handle by phone. I hope some of the consultations will continue as teleconsultations in the future. Whereas side effects of chemotherapy, treatment evaluation or negative test results, are issues I believe should be discussed in-person. (Physician)

When discussing which consultations were suitable as TC, healthcare professionals distinguished between different groups of patients and their different needs. Important parameters to consider were, for example cancer diagnosis, cancer stage, phase in the cancer trajectory (e.g. newly diagnosed or in follow-up), purpose of the consultation (e.g. introduction of treatment plan or control), patient's age, comorbidity, mental well-being, health literacy, anxiety, whether the patient had relatives or not, and transportation time from patient's home to the hospital. The healthcare professionals agreed that patient involvement is essential when choosing the type of consultation.

"Improved work environment". The group of secretaries and nurses described a normal day at the department before the COVID-19 pandemic as very hectic with many questions from relatives, crowded, and many interruptions. With fewer patients and almost no relatives present at the department due to COVID-19 restrictions, the work environment at the hospital had changed dramatically as the secretaries explained:

We have a much better work environment now.

Definitely. At the end of the day, my head is not that tired anymore.

And the times you were interrupted. One thing is to be interrupted (by colleagues), but when relatives also interrupt you, and people ask you questions, and computers and...

But also physically, it was difficult to move around because there was not room for all the relatives. (Secretaries)

Secretaries and nurses explained how COVID-19 restrictions resulted in better hygiene at the department and more time and improved dialogue with the fewer patients who came for in-person appointments. Especially nurses experienced that patients asked more questions about sensitive subjects and were more active in relation to their own treatment trajectory, when relatives were not present during treatment:

(...) some of the patients think they have had a better contact with us without relatives present. Before, they may have had a friend with whom they were chatting with and forgot paying attention to treatment and asking questions regarding treatment. Now that only the nurse is there, they ask, e.g. more intimate questions. (Nurse)

### "Information load and timing"

The second theme consists of two subthemes: "Information from hospital management and the authorities" and "Information addressed to patients."

"Information from the authorities and hospital management". During the COVID-19 pandemic, all healthcare professionals spent much of their time reading, interpreting, and changing practice in relation to the latest information from authorities and hospital management. This was challenging due to the information load and the time used for reading it:

(...) And you must be updated all the time. Sometimes patients know more than you. Sometimes it can make you a little uncomfortable, when they say something, you do not know. Then you just think, 'well you are right about that'. Because when you are so busy, you do not have time to read information on your own webpage. (...) Usually, we receive an email, but sometimes you receive ten emails, and you try to read them, but sometimes there is just a pile of them. (Secretary)

Because of the ongoing changes in guidelines during the COVID-19 pandemic, healthcare professionals constantly had to keep up with the latest information and they had to change their clinical practices accordingly. In this process, they often became uncertain about which guidelines to follow, and sometimes they experienced doing things differently from their colleagues. The healthcare professionals agreed upon the importance of information from the authorities and hospital management to be relevant, short, precise, and timely.

*"Information addressed to the patients".* All healthcare professionals discussed the need of more precise information to patients during the pandemic:

(...) we would have appreciated if there had been more information in the letters which were sent to the patients. There have been some changes over time, e.g. whether relatives are allowed to visit. I have asked several times if we could agree on a common phrase to write in the letters addressed to patients instead of everyone making up their own. It seems unprofessional. (...) Some patients specifically asked for this. (Secretary)

In general, healthcare professionals explained how insufficient information to the patients in letters or on the hospital webpage resulted in many questions from and uncertainty among patients, which were time-consuming to handle. In these situations, healthcare professionals had to deal with frustrated and dissatisfied patients.

## "Insecurity"

This theme consists of three subthemes: "Supporting patients and relatives," "Fear of missing symptoms or relapse" and "Ethical dilemmas."

*"Supporting patients and relatives".* All healthcare professionals, especially nurses, explained how they spent a lot of time answering questions, giving advice and handling patients and relatives' concerns and frustrations during the COVID-19 pandemic:

We have also experienced patients, who had been in chemotherapy back in 2017 and 2018 who called and asked whether they were at risk of being infected. (...) And many patients have of course been worried, 'can we go grocery shopping', 'is it okay for my children to have play dates', 'can I pick up my children from school'. All such things where they have been searching for an answer of something very specific. (Nurse)

Also, secretaries were uncertain about how to answer patients and relatives' questions and afraid to give wrong answers. The many questions from patients and relatives' express an insecurity regarding the COVID-19 situation, which became an extra task for healthcare professionals to handle. At the same time, the healthcare professionals experienced that many patients might have unmet social needs due to isolation from family and friends during the pandemic and used healthcare professionals to meet their social needs, which was time consuming for healthcare professionals.

*"Fear of missing symptoms or relapse".* The physicians explained how they were afraid to overlook symptoms and potential relapse because of the change from in-person to TC:

When the patients enter the door, it is easy for us to evaluate their performance status. This is not possible on the phone, where we do not see the patient in person. (Physician)

Physicians missed the routine in-person contact with patients, were sometimes afraid of losing connection with patients and ability to evaluate changes in performance status. It was difficult for physicians to determine whether relatives were involved in patients' treatment trajectory and supported the patient because many relatives did not participate in TC. Physicians were afraid of negative treatment outcome for patients receiving treatment during COVID-19 compared with patients treated before the pandemic if symptoms or relapse were not identified in time. Nurses did not have the same concerns because they met patients at treatment appointments.

"Ethical dilemmas". The new procedures and regulations during the COVID-19 pandemic resulted in ethical dilemmas for healthcare professionals, for example was it acceptable to give relatives access to the department, if the patient was terminal or in need of social support? Due to different interpretations of guidelines, healthcare professionals' decisions were not always in line with their colleagues' and disagreements, and uncertainty about how to interpret regulations sometimes created conflicts between healthcare professionals:

(...) when you are in the reception and you tell relatives, they are not welcome. That was difficult, particularly if they later were allowed in. Then you are the bad guy insisting on relatives leaving, but suddenly they were welcome. (...) because when they ask the doctor, he or she said, 'yes off course—come along'. In these situations, you need to have a common agreement and decide what to do and stick to it. In the end, we decided to tell the patients: 'The answer is 'no', but try to talk to the doctor, and if the doctor is okay with it, it is fine'. (Secretary)

# "Lessons learned for the future"

This theme consists of three subthemes: "Involvement of patients and relatives," "The same physician through the patient trajectory" and "Video consultation."

During the focus group interviews, healthcare professionals discussed experiences from the COVID-19 pandemic, which they could transfer to their everyday practice after the pandemic. Overall, they agreed that TC may be relevant as a supplement in the future, but not as a replacement for in-person consultations. All agreed that it was still important to see the patient in-person on a regular basis.

"Involvement of patients and relatives". Healthcare professionals agreed that TCs are not suitable for all patients and all types of consultation, and there is a need to evaluate each patient and consultation separately to decide which could be TC. It is important to ask for the patients' preferences and clarify which information they are comfortable receiving on the phone:

And when you order a scan, it is important to ask the patient in advance whether or not it is fine with him or her to receive the scan result by phone—even though it is negative. (Physician)

Furthermore, the healthcare professionals agreed on the importance of ensuring relatives to attend TC at same extent as in-person consultations to ensure relatives can support the patient during the TC and during the patients' treatment trajectory.

"Same physician throughout the patient trajectory". Physicians expressed that it would be an advantage if the same physician conducts both the initial in-person consultation and the later TCs. When the physician has seen the patient in-person it is easier, for example to have a more personal and informal dialogue during the TC, which is needed, when sensitive topics are discussed:

... and to ensure that the physician seeing the patient in-person is the same attending the teleconsultation. It is not a problem if you had the first consultation, then you have seen the patient and can easily relate to who the patient is. And the patient knows me. (Physician)

*"Video consultation".* One of the mentioned major limitations regarding TC were that physicians could not see the patients. Therefore, video consultations were considered as a future alternative or as a supplement to TC by telephone:

Yes definitely [some of the consultations could be video consultations]. Because there is a special bond between patient and physician and sometimes when you talk on the phone with someone you have never met... And the same for the patients if they have not met their physicians... then your relation is quite formal and sometimes you need it

to be more personal and more confidential. Video consultations could help. (Physician)

Some healthcare professionals expressed that video consultations may be difficult for some patients with limited technical skills. They agreed, video consultations may not be for all, but could be a relevant supplement to TC or in-person consultations depending on the specific consultation and the patient's needs and preferences.

## Discussion

This study showed experiences and perspectives related to change in clinical practice due to the COVID-19 pandemic among healthcare professionals at a regional department of oncology in Denmark. Our findings showed an overall satisfaction with TC as supplement to, but not as a substitute to, in-person consultations. The healthcare professionals' experiences indicated that TC were not for all patients and all types of consultations. These results are in line with an earlier study showing that healthcare professionals were less likely to offer TC to new patients than to established patients.<sup>4</sup> Furthermore, healthcare professionals described difficulties evaluating performance status to decide treatment continuation, and to ensure sufficient communication and involvement of relatives during TC. American Society of Clinical Oncology (ASCO) standards and guidance are provided for which patients are recommended to use TC in cancer care, and how to establish the physician-patient relationship.<sup>17</sup> These topics align with findings in this study and can be useful in practice. Clearly, TC is not relevant in all cases. Kjeldsted et al.<sup>13</sup> concluded, that patients with anxiety and low health literacy were less comfortable and confident with TC during the COVID-19 pandemic. Therefore, it is important to consider for each patient and consultation type whether TC are relevant and involve patients' preferences in the decision to avoid inequality in cancer care. Guidelines about how to educate both patients and relatives in participating in TC and how healthcare professionals should engage in TC are needed.

In our study, healthcare professionals also agreed that a positive side effect of TC and the restricted access for relatives to the department resulted in a better work environment, less hectic and busy, and patients felt freer to ask questions about sensitive topics. However, healthcare professionals were concerned about the lack of involvement from relatives during TC. Relatives are an important resource for cancer patients during their patient trajectory helping them to remember information, watching for treatment side effects, administrating medicine etc., but at the same time they potentially also need emotional support themselves.<sup>18,19</sup> Therefore, it is important to discuss how and when relatives can be a resource both in relation to TC, but also during a time such as the

COVID-19 pandemic where limited access for individuals at the department is essential to avoid spread of infection. In another qualitative study of patients with cancer treated at the same department during the COVID-19 pandemic, patients suggested that relatives could attend on speaker during TC, that the first consultation should be in-person, that they should have the same physician throughout the cancer trajectory, and that TC should primarily be used for follow-up, uncomplicated situations, or for short and practical information.<sup>20</sup> These recommendations mirror to a very high degree the same concerns about TC but also highlight similar positive aspects of use of TC raised by the health professionals. These may be used actively in the planning on how telecommunication may be used in cancer care in the future, ensuring adequate treatment quality, good communication, less treatment burden for the patients and at the same time addressing the need for personal and targeted planning of the balance of in-person and phone/video consultations for the individual patient.

This study showed that a lack of sufficient information about new procedures and restrictions to both healthcare professionals and patients could result in misunderstandings and conflicts. In the beginning of the COVID-19 pandemic, healthcare professionals answered several questions from patients and relatives, who were in doubt and insecure about the change in practice, which was time consuming. During the pandemic or other situations where practices at the oncology department are changed substantially and adjusted multiple times, sufficient information to both healthcare professionals, patients and relatives are important to decrease the risk of unintended events and unmet needs.

This study reported positive experiences but also essential issues with TC in cancer care. Some of these issues have already been included in international guidelines.<sup>17</sup> The findings from this study, along with international recommendations, can be useful in providing guidelines in a Danish setting and ensure implementation across the country.

Using focus group interviews rely on assisted discussions to produce results. In focus group 1 and 2, the mediator was a sociologist, allowing for more open-ended questioning. In contrast, the mediator for focus group 3 was a healthcare professional who needed to be mindful of her own preconceptions and focused on asking neutral, open questions. Both mediators had experience from interviewing from previous qualitative research. The main limitation of our study was the sampling method, where our informants were self-selected. Although this is a common selection method for focus group interviews, only few nurses and secretaries volunteered to participate in our study, which may have resulted in an underrepresentation of these staff groups and their detailed experiences. To ensure space for the experiences and perspectives of these healthcare professionals, we formed a separate focus group for nurses and secretaries.

# Conclusions

TC may be a valuable supplement to in-person consultations for patients with cancer in the future. A change from in-person consultations to TC and restricted access for relatives at the department during the pandemic resulted in improved work conditions for especially nurses and secretaries. Precise and short information to both patients and healthcare professionals is essential when changing clinical practice with short notice as during the COVID-19 pandemic. Video consultations could be an alternative to telephone consultations to improve communication and healthcare professionals' assessments of the patient's health status. Guidelines must be implemented concerning which patients and consultation types that are suitable for TC, ensure patients meet the physician in-person prior to the first TC, include patients and relatives' needs and preferences, and ensure involvement of relatives in relation to TC.

**Acknowledgements:** Authors wish to thank the healthcare professionals who participated in the study.

**Consent to participate:** Written informed consent was obtained prior to the interview.

**Consent for publication:** Healthcare professionals consented to participate in the research project and that the results would be published in an anonymized format.

**Contributorship:** All authors contributed to the study conception and design. Data collection was performed by Katrine Vammen Lindblad and Dina Melanie Sørensen and analysis by Elizabeth Rosted, Hanne Bødtcher, Katrine Vammen Lindblad and Dina Melanie Sørensen. The first draft of the manuscript was written by Katrine Vammen Lindblad, and all authors reviewed and edited the manuscript and approved the final version of the manuscript.

**Data availability:** The data generated and analyzed during this study are not publicly available due to privacy and ethical restrictions but are available from the corresponding author on reasonable request.

**Declaration of conflicting interests:** The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**Ethical approval:** This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Region Zealand Data Protection Agency (number REG-076-2020). According to the National Committee on

Health Research ethics in Denmark, no ethical approval is required for interview studies.

**Funding:** The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The Danish Research Centre for Equality in Cancer (COMPAS) which is funded through The Danish Cancer Society [R223-A13094-18-S68], Changing Cancer Care, which is funded through Interreg Deutschland-Denmark by The European Regional Development Fund [094-1.1-18] and the Department of Clinical Oncology and Palliative Care, Zealand University Hospital. The funding sources were not involved in the design and conduct of the study or manuscript.

**ORCID iD:** Hanne Bødtcher D https://orcid.org/0000-0001-6615-3657

**Supplemental material:** Supplemental material for this article is available online.

#### References

- Elkaddoum R, Haddad FG, Eid R, et al. Telemedicine for cancer patients during COVID-19 pandemic: between threats and opportunities. *Future Oncol* 2020; 16: 1225–1227.
- Boehm K, Ziewers S, Brandt MP, et al. Telemedicine online visits in urology during the COVID-19 pandemic-potential, risk factors, and Patients' perspective. *Eur Urol* 2020; 78: 16–20.
- 3. van de Poll-Franse LV, de Rooij BH, Horevoorts NJE, et al. Perceived care and well-being of patients with cancer and matched norm participants in the COVID-19 crisis: results of a survey of participants in the Dutch PROFILES registry. *JAMA Oncol* 2021; 7: 279–284.
- Darcourt JG, Aparicio K, Dorsey PM, et al. Analysis of the implementation of telehealth visits for care of patients with cancer in Houston during the COVID-19 pandemic. *JCO Oncol Pract* 2021; 17: e36–e43.
- Atreya S, Kumar G, Samal J, et al. Patients'/caregivers' perspectives on telemedicine service for advanced cancer patients during the COVID-19 pandemic: an exploratory survey. *Indian J Palliat Care* 2020; 26: S40–S44.
- Kastrisiou M, Karimi M, Christou EA, et al. Evaluation of the satisfaction and experiences of oncology patients and doctors using teleconsultation during the COVID-19 pandemic. J Telemed Telecare. 2024; 7: 1357633X241229462. DOI: 10. 1177/1357633X241229462.
- WHO. WHO coronavirus disease (COVID-19) dashboard. https://covid19.who.int/(accessed 7 December 2020).
- Al-Shamsi HO, Alhanzzani W, Alhuraiji A, et al. A practical approach to the management of cancer patients during the novel coronavirus disease 2019 (COVID-19) pandemic: an International Collaborative Group. *Oncologist* 2020; 25: e936–e945.
- 9. Yu J, Ouyang W, Chau MLK, et al. SARS-CoV-2 transmission in patients with cancer at a tertiary care hospital in Wuhan, China. *JAMA Oncol* 2020; 6: 1108–1110.

- Maroongroge S, De B, Woodhouse KD, et al. Physician perspectives on telemedicine in radiation oncology. *Adv Radiat Oncol* 2023; 8: 101005.
- 11. Van Erkel FM, Pet MJ, Bossink EHM, et al. Experiences of patients and health care professionals on the quality of telephone follow-up care during the COVID-19 pandemic: a large qualitative study in a multidisciplinary academic setting. *BMJ Open* 2022; 12: e058361.
- 12. Aung E, Pasanen L, LeGautier R, et al. The role of telehealth in oncology care: a qualitative exploration of patient and clinician perspectives. *Eur J Cancer Care* 2022; 31: e13563.
- Kjeldsted E, Lindblad KV, Bødtcher H, et al. A populationbased survey of patients' experiences with teleconsultations in cancer care in Denmark during the COVID-19 pandemic. *Acta Oncol* 2021; 60: 1352–1360.
- Morgan DL. Focus group interviewing. In: Gubrium JF and Holstein JA (eds) *Handbook of interview research: context and method.* Thousand Oaks, CA: Sage Publications, 2002, pp.141–159.

- Tong A, Sainsbury P and Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007; 19: 349–357.
- Braun V and Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006; 3: 77–101.
- Zon RT, Kennedy EB, Adelson K, et al. Telehealth in oncology: ASCO standards and practice recommendations. *JCO Oncol Pract* 2021; 17: 546–564.
- van Ryn M, Sanders S, Kahn K, et al. Objective burden, resources, and other stressors among informal cancer caregivers: a hidden quality issue? *Psychooncology* 2011; 20: 44–52.
- Danish Health Authority. National recommendations for health care professionals' meeting with caregivers of seriously ill people [in Danish] 2012. 2012; 1: 1–67.
- Bødtcher H, Lindblad KV, Sørensen DM, et al. Patients' experiences of the COVID-19 pandemic and the change to telephone consultations in cancer care. *Support Care Cancer* 2022; 30: 9869–9875. DOI: 10.1007/s00520-022-07390-y.