



Patient perspectives and experiences of the rapid implementation of digital consultations during COVID-19 — a qualitative study among women with gynecological cancer

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Abstract

Purpose Due to the first COVID-19 outbreak and subsequent restrictions, standard practice for gynecological cancer quickly evolved to include additional digital consultations. Women with gynecological cancer have a high need for information and experience a high symptom burden. We aimed to explore the experiences and perspectives of the rapid implementation of digital consultations during COVID-19.

Methods We conducted individual telephone interviews with patients with gynecological cancer 1–4 days after a telephone or video consultation during the COVID-19 outbreak in April and May 2020. We applied Braun and Clarke's thematic analysis to analyze the qualitative data.

Results Thirty-two patients with ovarian (50%), cervical (35%), vulvar (12%), and vaginal cancer (3%) participated in the study. The patients experienced that, combined, cancer and COVID-19 restrictions made their situation twice as challenging. In general, the patients valued face-to-face consultations, recommending that they were ideal for the initial appointment to build trust. Overall, there was a willingness to participate in digital consultations because of the restrictions, but the results also showed varying degrees of openness and that individual solutions were favored.

Conclusion The findings of this study show that digital consultations were an accepted alternative during COVID-19. Even though this temporary solution was deemed to be beneficial for practical reasons, patients also experienced digital consultations to be impersonal. A key message is that face-to-face encounters create the foundation to establish a trusting relationship from where a valuable dialogue arises. Digital consultations should therefore be implemented with caution since no one-size-fits-all model is recommended. Among patients with gynecological cancer, however, digital technologies represent a promising and flexible method depending on the purpose of consultations, patient preferences, and needs.

Keywords Video consultation · Telephone consultation · Digital consultations · COVID-19 · Gynecological cancer · Patient perspective

Background

The outbreak of the global COVID-19 pandemic resulted in behavioral restrictions worldwide, such as social distancing and self-quarantine for vulnerable groups, including patients with cancer. To reduce the risk of COVID-19 contagion among patients, Danish hospitals reorganized treatment and follow-up procedures to minimize the number of face-to-face, outpatient appointments while still maintaining correct, high-quality delivery of health services [1–3]. Patients and clinicians rapidly adapted to these new behavioral adjustments; however, quarantining has been shown to have a negative psychological impact involving feelings of loneliness and stigmatization

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[4]. A primary concern of women with gynecological cancer during COVID-19 is that their disease will progress because of treatment disruption [5]. These women experience a high level of symptom distress and have psychological concerns and unmet information needs [6–9]. It is known that appropriate information enables patients to identify and use self-management strategies to improve their well-being [9]. Telehealth interventions have the potential to reduce treatment burden and increase convenience among cancer patients [10].

In recent years, various ways of administering telehealth have been established, especially utilizing telephone, text messages, wearable technology, video consultations, or a combination of these [11]. As an alternative to traditional face-to-face consultations, digital consultations (e.g., telephone or video) provide a promising service model for patients or clinicians who are self-isolated or live far away from the hospital [12]. Video consultations improve access to care but there is the risk that patients and clinicians find them less acceptable due to technical, logistical, and regulatory challenges [13, 14]. However, a recent study among hematological patients showed that they facilitate intimacy and improve flexibility, freedom, and patient involvement [15]. Telephone consultations often take less time compared to face-to-face consultations, cover fewer issues, involve fewer data gathering and advice, and are mostly suitable for delivering uncomplicated results and messages [11, 16]. Video consultations may take longer, but compared to telephone consultations, may result in fewer medication errors, greater diagnostic accuracy, and improve accuracy of decision making [11]. Some argue that video consultations might not be the most appropriate medium when discussing serious personal issues or when receiving/delivering bad news [17]. Digital contexts are not considered in the conceptualization of compassionate care, and there is no guidance on how compassionate care is to be applied when using digital health technologies [18]. Before the first COVID-19 outbreak in 2020, the standard practice in Denmark included face-to-face telephone consultations and minimal use of video consultations among oncological patients. To our knowledge, the use of telephone and video consultations in an outpatient gynecological oncological setting has not yet been investigated. This study aims to explore the experiences and perspectives of patients with gynecological cancer whose outpatient appointments were re-scheduled from face-to-face to digital consultations during the COVID-19 pandemic.

Material and methods

Design

A qualitative descriptive study was used to gain an in-depth understanding of the perspectives and experiences of women with gynecological cancer toward digital consultations. This

study was based on semi-structured, individual telephone interviews with thirty-two women with gynecological cancers.

Participants and procedures

Due to the COVID-19 pandemic and the rules of social distancing, most patient appointments at the Department of Oncology were re-scheduled in April and May 2020. Patients were individually screened by an oncologist to decide whether the planned face-to-face consultation could be changed to a telephone or video consultation according to patients' preferences and the guidelines outlined by the Danish Health Authorities. Patients with a re-scheduled appointment were then informed by a clinician about the aim of this study and if accepted, the primary researcher (MGC) or the research assistant (CP) contacted the patients with further information. If patients agreed to participate, written informed consent was obtained by email. The eligibility criteria for this study were adults ≥ 18 years; diagnosed with ovarian, cervical, endometrial, vaginal, or vulvar cancer; undergoing active oncological treatment (e.g., chemotherapy or radiation) or during follow-up; having an email address; and fluently speak and understand Danish. Patients whose first appointment involved a physical examination or who had cognitive or psychiatric impairments were ineligible for this study. At the Department of Oncology, it was a new opportunity due to COVID-19 to offer video consultation, accelerating the transition to digital technologies. Patients were encouraged to invite their relatives to participate in the digital consultation either on the speaker by phone or via a link to the video consultation. A purposeful sampling strategy was applied to ensure diversity regarding gynecological diagnosis, age, and oncological status (e.g., active treatment or follow-up). The sample size estimation was guided by information power as described by Malterud [19] and was continually discussed within the research team during data collection.

Data collection

Semi-structured individual telephone interviews also containing demographic questions were carried out within 1–4 days after the telephone or video consultation. The interview guide (Table 1) was developed and inspired by similar research on digital technologies [16, 17] and covered experiences regarding technicalities, the consultation, and the consequences of the COVID-19 situation. An experienced oncology nurse and research assistant (CP) without previous knowledge of the participants and not involved in patient care conducted the interviews. All interviews were digitally recorded and transcribed verbatim by two research assistants

Table 1 Semi-structured interview guide

Introduction	Presentation of the project and the purpose Framing the interview, refer to informed consent and anonymization
Technicalities	Did you join a VC or a TC? For VC: What was your experience in general and when using the MyChart application? Did you find MyChart guide useful and easy to understand? Did you experience any technical difficulties/challenges? Did you receive any support? From whom? How would you describe your technical skills?
The consultation	Where were you while the consultation was held? What was the purpose(s) of your consultation? Was a sufficient amount of time available for the consultation? How did you prepare for your consultation? What was your general experience from participating in a VC/TC? Was the VC/TC appropriate for you? Why? Why not? What would you highlight as being most important to you in relation to a TC/VC? Did it help you? Did you experience any disadvantages? How would you describe the quality of the dialogue with the clinician(s)?
Patient and relative	Did you get the opportunity to ask further questions? Describe how. Did you have any unresolved questions or concerns after the consultation? How did that affect you? Did you feel you were involved in your consultation? Describe how? How would you describe the atmosphere? Did your family participate in the consultation? Were they involved? How do you think they experienced the consultation? How did you feel after the consultation? Do you believe that TCs/VCs can replace face-to-face consultations in the future? Were you satisfied with the outcome of the consultation under the given COVID-19 circumstances?
COVID-19 situation	Have you been tested for COVID-19? How did the COVID-19 pandemic affect your everyday life as a patient? Did you need support to manage any symptoms (or other healthcare issues) during this period? Did you have any special needs or requirement during COVID-19? Did you take any special precautions to minimize contamination? Did you change your behavior in any way? How? Did you feel that the clinicians were able to address/meet your needs/requests? What kind of consultation would you prefer if things were back to normal everyday life? Please explain.
Concluding the interview	Do you believe that there are topics that would be inappropriate for you to discuss at a TC/VC? Would you recommend TC or VC to other patients? Why? Why not? If you would like to give us any advice to improve TC/VC, what would that be? Thank you for your time and participation in this study.

VC video consultation, TC telephone consultation

(CP and TB) who controlled the transcripts back against the interviews to assure accuracy [20].

Data analysis

Thematic analysis as described by Braun and Clarke [20] was used to analyze data following six steps:

1. Familiarization with the data, the transcripts were read repeatedly and data were transferred to NVivo qualitative data analysis software, QSR International Pty Ltd, version 12 (United Kingdom), to search for meanings and patterns and notes were made
2. Generating initial codes, this was done data-driven line by line as a systematic procedure relevant to the study aim

3. Searching for themes, the codes were sorted and combined to conduct the potential individual themes
4. Reviewing the themes, the themes were refined
5. Defining and naming the themes, by capturing the essence of each theme
6. Producing the report, a final consensus was reached providing the study with valuable research triangulation

After finishing all the interviews, CP initially conducted steps 1 and 2, afterward, MGC and KP did the same procedure to ensure agreement. The three authors (MGC, CP, and KP) developed themes based on the codings and reviewed and named the themes as an inductive process. In a case of incongruity, the process was continued until an agreement was reached. MGC and KP, who are experienced qualitative researchers within clinical oncology, wrote the final report

based on the analysis and discussed the findings continuously within the research team.

Ethical considerations

The study was carried out following the Declaration of Helsinki and approved by the Danish Data Protection Agency (file. No.: P219-201). All study participants were informed of the aim of this study and provided written informed consent.

Results

Thirty-five patients were eligible to be included in this study; however, three did not provide informed consent, leaving a total of 32 included participants for interviews. Out of the total of 32 patients, 16 patients were interviewed after a telephone consultation and 16 after a video consultation. Due to technical challenges, a few video consultations ($n = 3$) were converted to a combination of video and telephone, while some ($n = 8$) had to be switched to a telephone only. Table 2 outlines the medical and demographic characteristics of patients. The average age of the patients was 53 years (range 28–75 years). The patients were mainly at home when the interviews were conducted and lasted 9 to 52 min, or 17 min on average.

The thematic analysis identified four themes: tackling the dual challenge of cancer and COVID-19, pros and cons of digital consultations, the value of face-to-face consultations, and the favorability of individual solutions for consultations.

Tackling the dual challenge of cancer and COVID-19

The patients generally adhered to the restrictions recommended by the Danish government, including self-isolation but also took additional precautions to minimize the risk of contamination, postponing some hospital appointments that could not be carried out online.

“I choose not to go to the hospital for my scan -- to maintain my isolation strategy.” (Patient 9)

According to hospital regulations, relatives were not permitted to attend hospital appointments with the patient. Some accepted this as a natural restriction, given the circumstances. Others found it upsetting not to have the support and care of their closest relatives.

“I’m not allowed to bring any family [to the hospital]. I can’t have any visitors at home, and I can’t visit others [crying].” (Patient 28)

The women said that the combination of having cancer and the fear of the coronavirus, including restrictions, meant

Table 2 Medical and demographic characteristics of patients

	Participants ($n = 32$)	Percent (%)
Average age (range)	53 (28–75)	
20–29	1	3
30–39	3	9
40–49	10	32
50–59	8	25
60–69	8	25
70–79	2	6
Primary site of cancer		
Ovary	16	50
Cervix	11	35
Vulva	4	12
Vagina	1	3
Treatment status		
Active oncological	18	56
Follow-up	14	44
Relationship status		
In a relationship (living together)	6	19
Married	14	43
Single	12	38
Highest completed education*		
Primary school	1	3
High school	1	3
Short education (<3 years)	7	23
Medium education	13	42
Higher education	9	29
Employment status		
Employee	8	25
Self-employed	1	3
Unemployed	2	6
Sick leave	10	32
Other (partial sick leave)	4	12
Early pension	2	6
Retirement	5	16

*Data missing ($n = 1$)

they had to manage a dual challenge, which was especially true at critical events, such as being diagnosed, resulting in feelings of vulnerability and loneliness.

“And that day [the day after diagnosis] my world completely fell apart; I cried all day. I was inconsolable, and I didn’t see any people because I didn’t dare to take that risk.” (Patient 28)

Moreover, their situation and isolation caused worries and self-blame since they were forced to prioritize themselves and consequently leaving their caring responsibilities for others, e.g. caring for children or parents. Being in a vulnerable high-risk group related to COVID-19, as defined by

the government, was taken very literally, and they did not deviate from it.

“We don’t see our kids or grandchildren. I can’t take care of my mother because we are both vulnerable and in the high-risk group. It has changed a lot in my life, there are so many considerations.” (Patient 2)

Pros and cons of digital consultations

Overall, there was a willingness to accept the delivery of healthcare services via telephone or video due to COVID-19 restrictions. The sudden change in clinical practice resulted in a transformation to digital consultations, resulting in both pros and cons. Since video consultation was a new option, patients received written guides on how to log on to the platform. These written instructions were easy to understand; however, the functionality could depend on the individual patients’ attitudes, age, and constraints.

“The platform was very easy to access, it could hardly go wrong. In terms of function, it was right up my street. Of course, it depends on the individual’s ability, and maybe age is a factor....and whether you feel comfortable with digital solutions or not.” (Patient 18)

Patients did, however, need a minimum of digital competence to download the right application or identify the right browser. The patients who accepted video consultations described themselves as experienced IT users as they often used the internet and applications such as Facetime or Skype.

“I hardly do anything else at work than video meetings, so I’m used to it.” (Patient 17)

Digital consultations were perceived as less time-consuming, minimized the disruption of daily life by reducing transportation, parking, and waiting time at the hospital.

“Normally, I would take the day off, but this time it was planned during my break.” (Patient 19)

One of the advantages of video consultations was the possibility for healthcare professionals to examine the eyes, skin rashes, or to see distinct parts of the body. Unfortunately, technical difficulties due to the video platform appeared, and patients had negative experiences, and they were very disappointed with the health care service. A woman with ovarian cancer expressed how disappointed she was and how her uncertainty, anxiety, and loneliness were further reinforced by technical challenges.

“I wished that I could have pointed out and asked the physician where the metastases are located. I would have liked to get that clarified while seeing each other or clarified while face to face. I’m so afraid of

dying from this [crying] and especially now when it’s not all gone.... And now I just sit here alone.” (Patient 22)

In contrast, others appreciated the video consultations as a temporary response to COVID-19.

“I don’t want all consultations to be by video, but as an emergency solution it is brilliant.” (Patient 24).

The patients were divided regarding video as some explained how they felt there could still be physical distance when having video consultations and that face-to-face consultations still were preferred, while others described that video consultations could cover their needs because of the ability to see each other virtually, as long as the conversations were not serious like results of CT scans.

“I’m satisfied with the video. But not for the serious talks. I’d be sorry to be told I had cancer on the video.” (Patient 12)

According to the patients, telephone consultations were appropriate for the delivery of short messages and convenient if patients were exhausted or burdened with side effects.

“It’s much easier to lie on the couch, and just stay there and talk ... it’s a way to avoid unnecessary fatigue.” (Patient 14)

Some explained that telephone consultations sometimes could be a bit rushed, impersonal, and superficial, and some felt that they, therefore, forgot to ask the physician, which was a drawback. The feeling of having sufficient available time was important and the patients appreciated when they felt listened to. Overall, telephone consultations could be satisfactory but should be used thoughtfully. A patient with ovarian cancer described how she did not find telephone consultation suitable in her situation, and she lacked physical interaction when receiving results of her CT scan:

“I don’t think it [telephone consultation] was appropriate for me, not being able to look people directly in their eyes, seeing their body language. I like to see how they [health care professionals] appear. When you are planned to receive a result, then you are very nervous in advance. And then when you can’t see the other person, it is just not the same as being able to see a human being across from you.” (Patient 7)

One of the advantages of digital consultations was that relatives were able to participate more easily and thereby could provide the patients with essential support.

“I received the result over the phone and my family listened in ... As long as my family can participate, then it’s good for me.” (Patient 26)

The patients described how waiting for a digital consultation caused worry and uncertainty when time slots were pushed ahead or delayed. Being away from the department triggered doubt, anxiety, and unfounded assumptions since the patients feared being overlooked or that a delay meant their health had deteriorated. Patients requested more specific information from the clinicians on what to expect.

“You become more nervous when waiting for a clinician to call you than you do when you sit in a waiting room at the hospital waiting for your turn.” (Patient 24).

On the other hand, some experienced that the clinicians called them earlier than their planned schedule, and that could also be a stressor.

“The clinician called earlier than scheduled. I believe she [the clinician] would call me again if I didn’t answer. Still, I would be anxious if she [the clinician] would not call me again.” (Patient 6)

Value of face-to-face consultations

During interviews, patients clearly highlighted that a well-established professional relationship is based on a physical consultation. The initial consultation established a sense of trust and respect, creating a trusting professional-clinician interaction. Another valuable aspect of the face-to-face consultation was that the communication occurred at a pace that permitted reflection. Overall, the patients emphasized that face-to-face consultations made them feel comfortable and safe, preferring them as superior to digital ones due to the ability to be physically present.

“You feel that you’re in someone’s hands when there’s physical interaction.” (Patient 28)

According to the patients, the backside of digital consultation was the absence of the well-known familiar atmosphere at the oncological department. Being met by the kindness of a helpful secretary and greeting the recognizable faces of empathic healthcare professionals on the way to the consultation room created a feeling of confidence, adding extra value to the professional patient-clinician relationship.

In addition to the human touch, visual emotional cues, eye contact, staying focused, and concentrating were easier.

“I feel safer being in the same room as the doctor and the nurse -- compared to when I’m at a distance.” (Patient 16)

What is more, face-to-face consultations were perceived as more favorable when it came to conversations about more complicated issues, e.g., changing treatment modalities due to tumor progression.

“When it’s time to discuss serious issues, then it’s like when the police have bad news; they just show up, they don’t call.” (Patient 15)

Individual solutions for consultations favored

The patients expressed diverse attitudes toward digital consultations, some valuing the opportunity to be at home for the digital consultations, while others preferred highly familiar face-to-face consultations. One woman with cervical cancer explained that she normally experienced distress and anxiety when entering the hospital environment.

“... as I get closer to the hospital, I start having palpitations. I don’t like doing all these face-to-face consultations. Just being in the waiting room with everyone else ... preparing for the consultation makes me a bit anxious ... Today, I was a lot more relaxed before the consultation because I was at home.” (Patient 26)

Gynecological exams were postponed, however, causing worry, which the patients accepted due to the specific time interval given. Their gynecological cancer diagnosis and location of the disease resulted in a changed perception of intimate topics and forced them to talk freely about personal subjects. Some patients stated that, consequently, talking about sensitive topics digitally was not a challenge.

“I’m not at all embarrassed to talk about intimate topics. Having cervical cancer is intimate.” (Patient 2)

In general, the patients stated that they would prefer individualized, flexible solutions for consultations, with the choice based on the purpose of the consultation and their individual preferences and needs.

“I would prefer a mixture of video and face-to-face consultations because it makes things easier. The transportation back and forth eases some mental and practical issues for me. At the same time, occasional in-person contact is good, but I would prefer if most of the consultations were video-based, combined with a few face-to-face consultations.” (Patient 26)

The move to digital consultations was valued given the circumstances but also raised concerns and skepticism. Accordingly, patients wondered about how to determine whether a consultation should be face-to-face or digital. The issue of rescheduling also risked causing greater concern.

“I appreciate the flexibility and the greater use of video, but you become wary when you’re scheduled for a video if the results are positive. If you’re suddenly rescheduled for a face-to-face consultation, you fear that the news is bad.” (Patient 24)

Discussion

This study contributes to a broader understanding of patient perspectives and experiences on digital consultations during COVID-19 as a method for providing oncological healthcare services to patients with gynecological cancer. Following existing research [21–23], our results show that telephone and video consultations are valued and effective as a temporary response to COVID-19. Similar to other studies [17, 24] our results suggest that digital consultation for first-time appointments might be inappropriate as a trusting relationship has not yet been established. Another concern is that digital consultations seem to be impersonal and inadequate in addressing certain healthcare issues, especially when they elicit strong emotional reactions in patients and/or their relatives. A survey by Hasson et al. [12], however, found that the majority of patients who experienced direct eye contact with the physician felt acknowledged and had their needs met during digital consultations. This underscores the need for investigating this area further since our study finds that creating empathy seems to have better terms in physical meetings compared to digital.

Hence, our results highlight the need for offering face-to-face consultations because physical care is still coveted. Patients with gynecological cancer require a flexible solution that allows them to individually decide if the consultation should be virtual or face-to-face. Increased use of technology requires a mental shift among clinicians to establish a new relationship with patients, since touching them or handing them a tissue is impossible, for example [13, 24]. The best way to carry out a sensitive and skillful virtual consultation that ensures that the patient feels confident and safe during the process remains to be determined [25]. Furthermore, as we find, health care professionals must adhere to and prioritize the planned time schedules when conducting digital consultation, as patients are more sensitive to changes when being on distance.

Donaghy et al. [17] found that video consultations may not be recommendable for complex or sensitive problems. Their conclusion, however, does not appear to be definitive as our results show that, for some, having gynecological cancer removes barriers, such as embarrassment, when discussing emotionally challenging topics, making digital consultations a viable option. Verhoeks et al.'s [26] systematic review exploring women's expectations found that E-health may reduce feelings of shame when seeking healthcare. It is well known that patients are unlikely to discuss symptoms, specifically psychological symptoms, and sexual difficulties, with their healthcare provider, particularly women with gynecological cancer [7, 27, 28].

Nevertheless, our results indicate that digital consultations have several advantages and disadvantages and may not be suitable as a medium for the delivery of serious messages, e.g., CT response or disease progression unless the patient prefers it based on their need, and therefore should be implemented with caution in the post-pandemic future.

With the rapid spread of more and new technologies in cancer care, there is a risk of health disparity [12]. Patients who are uncomfortable using technology or who do not have internet access are at risk of becoming even more distressed, perhaps leading to a downgrade in care. That is a concern also raised by Bultz and Watson [29] who finds that patients receiving virtual care tended to be less satisfied with the emotional support and received fewer resources and referrals to supportive care. According to the European Digital Competence Framework [30], around 40% of the population in the European Union has a lack of digital competencies, and 22%, comprising mainly the elderly and individuals with a low socioeconomic status, have none. Technical incompetence is a central concern when implementing digital consultations as the elderly are more likely to have a greater need for guidance and to feel more insecure about using digital technologies [31]. This is in line with this study where older women are underrepresented since we only included two women in the 70–79 age group, and this finding must therefore be seen in the light of the general trend that smartphones, devices, and gadgets play an essential role in daily living in Denmark [32, 33].

We found that the women in our study had to manage the dual challenge of cancer and COVID-19, which is in line with the results by Hanghøj et al. [34]. Furthermore, Frey et al. [35], found that women with ovarian cancer reported high levels of cancer worry, anxiety, and depression. Corresponding to our study, a recent study [36] found that patients with cancer (36.6%) felt lonelier than before the COVID-19 pandemic, felt isolated, and missed their families. Caregivers, who often provide fundamental physical, emotional, and practical support, are at high risk of developing depression, anxiety, and having poor sleep quality [37–39]. Therefore, the increased use of digital consultations is promising due to their ability to concurrently involve and meet the care needs of patients and caregivers. Research indicates that telehealth solutions, such as applications, can be educational, interactive, and increase quality of life [40].

A limitation of digital consultations is the lack of physical examinations, and for women with gynecological cancer, that may be a major concern. The patients in our study, however, accepted the changes as emergency measures but not as a lasting solution since physical and gynecological examinations are necessary to identify cancer and its recurrence. To be successful, rethinking the digital care model must acknowledge the benefits of the meaningful patient-clinician relationship. To the best of our knowledge, this

study is the first to explore the patient perspectives and experiences among women with gynecological cancer in terms of the swift implementation of digital consultations during COVID-19.

COVID-19 resulted in a rapid change in clinical oncological practice, the number of telephone consultations more than doubling in our clinic. Before COVID-19, telephone consultations were a highly familiar solution used to address various uncomplicated healthcare issues. Video consultations, in contrast, were a new and, so far, unexplored area. Because the recommended thorough testing before implementation was not possible because of COVID-19, a fast solution was necessary. Due to unforeseen technical difficulties, some video consultations had to be converted to telephone consultations, which was not satisfactory. We recommend further improving digital consultations by incorporating, e.g., a pop-up feature that guides users on workarounds or missing camera or audio settings. Furthermore, it is crucial that with various international guidelines available, clinicians have adequate qualifications and training in the use of digital solutions and virtual communication [22, 41, 42].

One of the limitations of this study is that a selected group of patients with gynecological cancer was scheduled for a telephone or video consultation during the first outbreak of COVID-19, which means that no patients with endometrial cancer were included. Even though the sample in this study represents a broad group of women with gynecological cancer, there is a risk of selection bias since it was a selected group of patients willing to participate in digital consultations. This resulted in a sample of younger patients with good IT competencies and with women of older age being underrepresented. Moreover, the majority (> 96%) of patients in this study are Caucasian, and more patients from minority groups could have strengthened the generalizability. In addition, the fact that most of the patients in this study were well educated may affect the transferability of the results. Researcher triangulation and the rich participant descriptions represent the strengths of this study. We suggest establishing additional evidence that involves other patient populations, patients in diverse treatment courses, e.g., active treatment versus follow-up, and the perspectives of relatives, and healthcare professionals.

Conclusion

The findings of this study show that telephone and video consultations were a good alternative to face-to-face consultations as a temporary response to COVID-19, but both have advantages and disadvantages. This study underlines that a professional, trusting relationship provides a foundation for establishing good communication. Digital

consultations should be implemented with caution since no one-size-fits-all model for digital technologies is available. Among patients with gynecological cancer, however, digital technologies represent a promising and flexible method depending on the purpose of consultations, patient preferences, and needs. Finally, this study contributes by describing the diverse attitudes toward digital consultations among women with gynecological cancer, providing a basis for the further development of a post-pandemic model for digital consultations.

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Availability of data and material Interview transcripts can be made available upon reasonable request to the corresponding author (MGC).

Code availability Not applicable.

Author contribution All authors contributed to the study's conception and design. Material preparation, data collection, and analysis were performed by Mille Guldager Christiansen, Charlotte Pedersen, Mary Jarden, Helle Pappot, and Karin Piil. Mille Guldager Christiansen and Karin Piil wrote the initial manuscript, and all the authors commented on previous versions of the manuscript. All the authors read, approved, and contributed to the final manuscript.

Declarations

Ethics approval This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Danish Data Protection Agency (file no.: P219-201).

Consent to participate Informed consent was obtained from all individual participants included in the study.

Consent for publication The authors affirm that human research participants provided informed consent for publication.

Conflict of interest The authors declare no competing interests.

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