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Trust and distrust toward online health information in nurse–patient communication and implications for eHealth literacy

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ABSTRACT

Background: In Norwegian hospitals, patients with newly diagnosed inflammatory joint disease are offered consultations with nurses, to address health issues related to their diagnosis and treatment. This study examines how issues of trust manifest in the communication between nurses and patients in clinical encounters; of particular interest are the accounts of trust and distrust toward online health information (OHI) linked to patients' eHealth literacy.

Methods: Video-recorded observational data were collected from 16 primary nurse–patient consultations and 10 follow up consultations in a Norwegian hospital setting. Rhetorical discourse analysis was applied to examine the conversations, focusing on the rhetorical devices that were expressed by the nurses and the patients, such as justifications, contrasting, character work, and reported speech.

Results: The nurses acknowledged patients' references to online search activities related to health information while expressing their own reservations about OHI. The nurses explicitly and implicitly advised patients on specific eHealth literacy strategies, namely, to consult trustworthy sources, such as patient organizations; to trust the medical knowledge conveyed by health personnel; to distrust non-professional health advice online; and to avoid self-diagnosis based on health information sought on the Internet.

Conclusions: Through the use of rhetorical devices, the nurses implicitly addressed eHealth literacy strategies in their communication with patients, including the importance of critically assessing the trustworthiness of health information. This complex communicative task requires a sensitivity toward patients' eHealth literacy levels.

KEYWORDS
Health communication; information literacy; health literacy; eHealth; trust

Introduction

Health information is increasingly available through online health sites, social media, and discussion forums; consequently, patients have unlimited sources of both helpful and misleading information when communicating about health issues or making health decisions. Patients have become active consumers of health information [1]. Consequently, healthcare professionals are often confronted with issues related to trust in health information obtained by Internet-informed patients [2], in addition to addressing patients' biomedical issues. Health communication in a clinical environment is focused on helping patients make informed health choices, as well as finding and managing eHealth systems and trustworthy online health information (OHI).

The concept of eHealth literacy refers to competencies in understanding and appraising OHI and eHealth solutions [3]. The term is often associated with patient empowerment and patients' ability to participate and take responsibility when dealing with health-related issues [4]. Patient empowerment is also achieved through health communication between healthcare professionals and patients, including discussions about OHI [5]. Trust is important when patients seek to take responsibility for their own health; however, unlimited access to various sources of information, conflicting opinions, and sometimes misinformation can lead to uncertainty about the information sources, and what to trust.

Guided by insights from applied linguistics and professional discourse studies, this qualitative discourse study examined how nurses and patients in a rheumatology outpatient clinic in Norway communicated about OHI. Our data included video recordings of nurse–patient consultations for patients with newly diagnosed inflammatory joint disease. Specifically, this study examined how the participants dealt with trust issues concerning OHI based on the

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following research question: How do issues of trust and distrust toward OHI manifest in communication between nurses and patients in clinical consultations?

Online health information (OHI) and patient–practitioner communication

Patient-practitioner communication is increasingly informed by OHI. An observational study from 2021 found that patients skillfully made use of and translated online information during consultations to support requests or prompt actions from their doctors, despite disclosing in interviews that they did not share their online health searches with their doctors [6]. The reasons for patients seeking OHI are typically linked to a medical visit, either before the medical visit to establish whether their problem needs medical attention or afterward to fill in knowledge gaps after the consultation [7–9]. How practitioners respond to patients' online searches can influence both how patients perceive the practitioner–patient relationship and how well they can utilize OHI [2]. Practitioners who are open to discuss or guide the use of online information, are reported to initiate a more trusting relationship in which patients share their knowledge. This is beneficial in terms of patient participation, self-management, and shared decision-making [10].

McMullan (2006) found that practitioners tend to adopt three main strategies in communication with online-informed patients: some practitioners respond defensively and feel threatened by the information; some collaborate with the patient in obtaining and analyzing the information; some guide their patients to reliable sites for OHI [1]. In an interview-based study, Caiata-Zufferey and Schulz (2012) identified four communicative strategies by practitioners: resisting online information (neutralizing information reported by patients); repairing online information (guiding patients appropriately and aligning the information with their point of view); constructing alongside online information (building a shared reality using the online information as a springboard); and enhancing online information (empowering patients by providing relevant instruments to obtain quality information) [11]. Interviews with practitioners in Norway and Sweden revealed that how patients presented their online information made a difference in how healthcare professionals responded to their inquiries [12,13]. In other words, depending on the communication between the health practitioner and the patient, online information can either provide information and increase patient knowledge or cause uncertainty in terms of the patient's diagnosis, treatment, and living with a potentially chronic disease.

Trust and distrust in health communication

Trust and distrust are linked to interaction and discourse and are both a premise and an outcome of human communication within a specific context [14]. However, it also reflects the complex, relational aspects that manifest either on an interpersonal level or on a societal level through language and communication [15]. On an interpersonal level, trust and distrust are linked to roles, competencies, and identities and are expressed and interpreted in communication situations. The issue of trust and distrust can also manifest consciously or unconsciously depending on the relationships and the context. As Schiavo (2022) pointed out, 'Trust is built on relationships and presumably associated with the quality of our interactions' [16]. Trust is also linked to societal and relational dimensions. How it is realized discursively depends on individual disposition as well as institutional and organizational contexts [17]. It can also be perceived as a cultural phenomenon as trust or distrust in social, political, and economic entities [18].

As an example of how trust and distrust in medical consultation can be discursively realized, we look further at how Arribas-Ayollon and Sarangi (2014) examined how trust and distrust are established using accounts in interviews obtained from genetic counseling professionals. In a genetic counseling setting, a delicate balance is needed between acknowledging uncertainty and not simply giving advice while simultaneously affirming professional expertise. This approach has been referred to as 'non-directiveness,' a communication form where direct advice is generally avoided to allow the patient or client to reach their own decisions [19]. However, much professional talk involving knowledge exchange involves discourse types such as information-giving and advice-giving [19]. While information-giving tends to be a more nonspecific and nonpersonal communication of information with no expectation of a response [20], direct advice-giving tends to be normative [21] and personal, and thus more designed for the patient [20]. However, for information or advice to be taken into consideration, the patient needs to trust the addresser and the content.

Methods

In exploring the complexity of trust and distrust in dialogue an ethnographic approach is important to maintain a broad understanding of the context in which the data is collected [22]. This ethnographic study focuses on observational and interview-based data from a rheumatology clinic in a Norwegian hospital. In this article, we focus more specifically on OHI. The complete dataset included observational data from 16 primary nurse–patient consultations and 10 follow-up

consultations. Semi structured interviews of the patients were conducted after each consultation. Additionally, the primary author spent time in the clinic, participating in meetings and learning about the dynamics and culture within the clinic for a broader understanding of the context. Sixteen patients aged 29–75 years were enrolled in the study. Only one patient declined to participate. Consultations lasted 30–70 min. The nurses who conducted the consultations were also included for observational data.

The inclusion criteria were: participants who were eligible for the *Patient Pathway* for newly diagnosed inflammatory joint disease, that could understand the written and oral information provided, and consented to participate. The *Patient Pathway* is a standardized patient pathway which all patient diagnosed with inflammatory joint disease in Norway will be enrolled in as a part of their treatment plan. It includes a yearlong follow-up plan with clinical consultations in which several healthcare professionals are involved. The *Patient Pathway* helps patients become self-sufficient and empowered to engage actively in their own disease and treatment plans [23,24]. Inflammatory joint disease often requires life-long treatment and good adherence to medications and possible lifestyle changes to achieve good treatment and increased life quality. For this to be possible it requires good communication and trust between the health care providers and the patients.

In this study, we focused on the data from the first consultation that patients have with a nurse after their diagnosis before they start their treatment plan, narrowing the focus to OHI. Through an inductive approach inspired by a step-by-step thematic analysis, and driven by the research question and theoretical perspectives, we first familiarized ourselves with the data [25]. The first author generated multimodal video transcriptions in accordance with those undertaken by Mondada (2018) [26]. For the preliminary analysis, we used NVIVO [27] to categorize the material based on both emerging topics (treatment, side effects, internet information, disease, lifestyle, etc.) and themes (types of talk: giving information, taking medical history, giving advice, etc.) [28]. Next, we focused on patients' and nurses' discussions on OHI.

In the preliminary phases of the study, we analyzed the 16 primary consultations to map out emerging themes and topics. We found that most of the consultations were constructed around nurses giving instructions, information, and advice. Some of the topics that emerged included disease, health status, medications, lifestyle, various eHealth solutions, and OHI.

Next, we extracted 21 occurrences in which participants spoke about OHI. The following themes emerged: (1) Information-giving about trustworthy online health information; (2) Advicing on being critical toward online health sources; (3) Referring to multiple sources to ensure quality and trust. To understand how participants accounted for trust and distrust when talking about OHI, we proceeded with a rhetorical discourse analysis [29].

Rhetorical discourse analysis

Rhetorical discourse analysis is a discourse analytical approach within applied linguistics to study the rhetorical and interactional dimensions of communicative activities [29–31]. Arribas-Ayllon, Sarangi, and Clarke proposed a novel approach to the study of accounts in interaction by combining perspectives from discourse analysis and rhetorical analysis. They studied health communication, more specifically conversations between experts in genetic counseling and patients/next-of-kin [29]. In communication situations, participants account for both their own opinions, experiences, and knowledge and those of others [32] and use language to construct the meaning of reality [33]. Accounting is a sense-making practice but also involves correction when common sense or normative rules are disrupted. Through the analytical lenses of rhetorical devices, rhetorical phenomena can be analyzed on a micro-level in health communication (spoken or written), which may provide significant insights into the dynamics of eHealth literacy in conversations. The goal is not to quantitatively count the occurrences of the rhetorical devices in the data but, rather, to look for discursive patterns in communication.

Previous studies have included different types of rhetorical devices, for example, excuses (ways of lessening blame; [31,34]), justifications (defending and accepting responsibility for actions but denying pejorative effects; [34], character work (presentation of self and others [29–31,34]), event work (description of events), framing (contextualizing an activity [35]), footing (positioning according to topic and context [34]), contrasting (making dichotomies, explaining categorization and particularization [35]), categorization work (membership-categorization [nurse, patient, mother, older adult, younger person] associated with certain attributes, activities, and obligations [36]), and reported speech (lending authenticity and credibility to a person's account [37]). Several of these rhetorical devices, such as justifications, contrasting, character work, and reported speech, recurred in our analysis as ways of promoting the eHealth literacy of the patients.

Table 1 shows examples of rhetorical devices identified in relation to the emerging themes.

Analysis

We used rhetorical discourse analysis to look at a selection of representative excerpts from the transcribed

Table 1. Typical examples of rhetorical devices.

Emerging theme	Rhetorical devices	Typical example
Information-giving about trustworthy online health information	Contrasting	'The Rheumatic Association has a lot of good stuff [information]. It is better to go to good sources than to start looking at the web.'
	Reported speech	(Excerpt P114-N11. Similar examples occur in the data: P107 -N11, P115 -N17, P104 - N12, P101 -N11, P102 - N18)
Advicing on being critical toward online health sources	Contrasting Explicit advice	'...good to be a bit critical of sources (...) where one reads information because (...) We have many cards up our sleeves.' (Excerpt P110-N17. Similar examples in the data: P105 -N15, P115 -N17, P116 -N11
	Justification	
Referring to multiple sources to ensure quality and trust	Reported speech Contrasting Justification	'...it has been assessed by the doctor, everything on your medicine list. And it's also possible to go in yourself and check out the analysis of interactions on felleskatalogen.no.' (Excerpt P107-N11. Similar examples in the data: P102 -N18)

material to see how the participants addressed the topic of OHI. We chose three examples based on the following themes: information-giving about trustworthy OHI, advicing on being critical toward online health sources, and referring to multiple sources to ensure quality and trust.

In the first excerpt, the nurse and the patient discuss the trustworthiness of online users. In the second excerpt, the nurse responds to the patient, who is sharing experiences about their internet searches. In the third excerpt, the nurse promotes a reliable online information site (https:/felleskatalogen.no) to foster patient participation.

Example 1: information-giving about trustworthy online health information

In this excerpt, the nurse informs the patient, a middle-aged man with a primary education, of trustworthy online information and encourages the patient to be critical of online content. Early in the dialogue (Table 2), the nurse provides information about the Norwegian Rheumatic Association (https://revmatiker.no) as a reliable source of information for a newly diagnosed patient. The topic is brought up on two occasions in the dialogue, firstly initiated by the nurse, and later in response to the patient's inquiry.

The nurse informs the patient of a website to read about diagnosis and disease, the Rheumatic Association (lines 1–2), signalling the trustworthyness of this information source, and supports this with an advice to consult 'good sources' (line 2). The 'good source' is *contrasted by* the risk of being misguided by 'strange things' online (line 5). Applying the rhetorical device of reported speech, the patient refers to 'people who speak out who should not' (line 6), signalling that non-professionals express non-qualified advice about health issues. This is in contrast to health professionals' expert knowledge. The nurse categorizes the 'people who live on the web' (line 8) as non-experts, suggesting that some online utterances are more (or less) trustworthy than others. The patient positions himself as a trustworthy online user. He admits that he frequents online resources but doesn´t look at it (line 9). He thus *positions* himself as a responsible patient, *justifying* his own online behavior. Through *character work*, he presents himself as a person who behaves in a trustworthy manner.

When the nurse continues with the *instruction* that the patient should be critical about what he reads (line 10), the patient immediately confirms this with a 'Yes' (line 11), thus aligning with the nurse's expectations of responsibility. The nurse repeats the instruction (line 12), emphasizing it by being explicit about what she thinks, thus again *positioning* herself as a professional who has the authority and knowledge to advise about online behavior. Based on her expert role and knowledge, she gives explicit advice on how the patient should approach online information.

Together, the participants define what is 'good' and 'bad' online behavior. The trustworthiness of both online health information 'lots of strange things'

Table 2. Example 1: Patient114 - Nurse11.

1	Nurse: Yes, and not least when it comes to diagnosis and rheumatic disease,
2	the Rheumatic Association has a lot of good stuff [information]. It is better to go to good sources than to start
3	looking at …
4	Patient: The web?
5	Nurse: Yes, there are a lot of strange things there.
6	Patient: There are many people who speak out—who perhaps shouldn't speak out—online, as it
7	were.
8	Nurse: Yes, absolutely. There are people who live on the web, you know. So, yes …
9	Patient: I'm also online a lot, but I don't look at it.
10	Nurse: No, it can get very strange; you have to be a bit critical of what you read.
11	Patient: Yes.
12	Nurse: I think that's a good idea.

(nurse, line 5) and the purveyors of the information 'people who speak out who should not speak out' (patient, line 6) are thematized, after which the participants continuously build on each other's descriptions of poor online behavior (lines 8–12). They seem to agree on what is trustworthy OHI without going into specifics and generate mutual trust. In line 10, the nurse explicitly positions herself as knowledgeable when advising the patient 'to be a bit critical of what you read.' Here, she potentially positions the patient as less knowledgeable or without the ability to critically assess information, which may threaten the relationship. She highlights the importance of her own utterance while doing character work by confirming that being critical is a good idea (line 12).

Example 2: advising on being critical toward online health sources

This example involves a middle-aged man with a high level of education who is still active in his work. He has a history of being healthy and has had some experience with the healthcare system through his relatives. The total encounter lasts about 30 minutes. Toward the end of the encounter, the nurse and the patient discuss alternative treatment options, and the patient shares that he has done some online research (Table 3).

The nurse and patient discuss the trustworthiness of OHI and compare it with other sources of information. The patient admits that he has been searching health information in line 1: 'So, I have, uhm, looked into it a bit, and uh, uhm, Googled a bit, and … .' (line 1). The hedging 'a bit' can be an attempt to excuse himself, positioning himself as aware of the importance of being critical to OHI. The nurse *justifies* the patients' googling in the form of *reported speech* as something most people do (line 4). The nurse acknowledges the patient's information sources and provides confirmatory support. The patient again demonstrates that he has some knowledge of how to use online information. He presents this experience in the form of justifications: 'I try not to self-diagnose' (line 7) and 'I have been warned against that' (line 9). Through indirect reported speech, the patient admits that he has been warned against using OHI for self-diagnosis. The nurse responds with advice on the importance of being critical (line 12). This utterance is an explicit advice and is followed by metaphorically expressed reassurance regarding health services encompassing other treatment methods ('cards up our sleeves'). She thus shifts the focus, *contrasting* the information offered by the 'uncertain' Internet with what a more trustworthy medical institution has to offer.

Table 3. Example 2: Patient110 -Nurse17.

1	Patient: So, I have, uhm, looked into it a bit, and uh, uhm, googled a bit and [yes].
2	Nurse: … .[Yes].
3	Patient: So it … [nods sideways].
4	Nurse: Yes, but one does tend to do that … uh.
5	Patient: … uh-huh
6	Nurse: So it … uhm …
7	Patient: Try not to self-diagnose.
8	Nurse: uhu.
9	Patient: I have been warned against that, so …
10	Nurse: Hehe yes, it is.
11	Patient: So, it …
12	Nurse: But good to be a bit critical of sources, at least, then …
13	Patient: Yes.
14	Nurse: Where one reads information because [that] …
15	Patient: … [Yes].
16	Nurse: But that … it … uhm. We have many cards up our sleeves.
17	Patient: [Nods].

Example 3: referring to multiple sources to ensure quality and trust

Example 3 involves a conversation with a patient in her 30s who is a healthcare professional and familiar with digital tools. The nurse is aware of the patient's professional background and advises her early in the conversation to be critical of online sources. Prior to the following sequence, they discuss the patient's other medication and possible side effects due to comorbidity. The nurse answers the patient's questions by suggesting an online site for future information (Table 4).

The patient inquires about the risks of combining two types of medication (line 1). Through *character work* she positions herself as a person who knows that there might be risks in combining medications and presents herself as a knowledgeable and responsible patient. Being a patient in this setting, she also

Table 4. Example 3: Patient 107 - Nurse 11.

1	Patient: But there's no danger in combining ehm the two medicines?
2	Nurse: No.
3	Patient: No.
4	Nurse: No, it has been assessed by the doctor, everything on your medicine list.
5	Patient: Mm.
6	Nurse: And it's also possible to go in yourself and check out the analysis of interactions on
7	felleskatalogen.no.
8	Patient: Yeah.
9	Nurse: Just go in there, type in all your medicines, and then some, like, alarms will pop up if something
10	is really wrong.
11	Patient: Yes.
12	Nurse: They will.
13	Patient: Yes.
14	Nurse: So, like, kind of your own separate safety measure then.
15	Patient: Yes.
16	Nurse: And also if you get new ones later …
17	Patient: Mm.
18	Nurse: Then it's easy to go in there to check.
19	Patient: Yes.
20	Nurse: That is always a good idea because some can reinforce each other, others can cancel each
21	other's effects, and so on.
22	Patient: Yes.

draws on her expert knowledge as a health professional.

The nurse assures that there is no risk in combining the medication (line 2), and supports the assurance with reported speech: 'No, it has been assessed by the doctor, along with everything on your medicine list,' (line 4). She thus directs the patient's attention to the doctor, who is professionally responsible for checking medication interaction. The nurse also suggests an option (line 6-7) for the patient to find firsthand information on her medications herself. She gives explicit advice on using an interactional analysis on felleskatalogen.no as a source to find the trustworthy information, and she supports the trustworthyness of the website by explaining that it alerts the patient with 'alarms' (line 9) if the medications are conflicting (line 10). The nurse ensures the trustworthyness by encouraging the patient to try it out herself (line 14): 'So, like, kind of your own separate safety measure then.' The encouragement continues (line 20), with explicit advice: 'That is always a good idea because some can reinforce each other, others can cancel each other's effects, and so on,' thus highlighting the importance of why this will be a useful approach in the future.

By posing a thoughtful question, the patient demonstrates a capacity for critical thinking [38]. In response, the nurse chooses to go beyond a quick reply and encourages the patient to use her skills and do some online searching. The nurse trusts the patient's ability to think critically and rationally when seeking trustworthy OHI and presents her with an opportunity to double-check information (increasing trust) and take on more responsibility in her treatment, which enhances the patient's online information capacity [11].

Discussion

In this paper, we have examined the nurses' and patients' accounts of trust and distrust toward OHI. Three themes were examined: information-giving about trustworthy online health information, advicing on being critical toward online health sources, and referringmultiple sources to ensure quality and build trust. Through representative excerpts from a larger dataset we analysed how trust and distrust toward OHI is manifesting in the communication between the nurse and the patient. In the analysis we saw that the nurses acknowledged patients' references to online search activities related to health information while expressing their own reservations about OHI. The nurses explicitly and implicitly advised patients on specific eHealth literacy strategies, namely, to consult trustworthy sources, such as patient organizations; to trust the medical knowledge conveyed by health personnel; to distrust non-professional health advice online; and to avoid self-diagnosis based on health information sought on the Internet. In the excerpts, we saw that the nurses and the patients aligned with each other througout the communication, particularly concerning knowledge and critical thinking toward online health information, and what sources to trust.

An information-giving strategy used by the nurses was to direct the patients to webpages of organizations for rheumatic disease (https://revmatiker.no) or other relevant websites (https://felleskatalogen.no and https://helsenorge.no) as trustworthy sources of information. This occurred as typical information-giving sequences in which the nurse informed the patient about the webpage, and the patient gave a short response ('Yes' or a nod of the head), with no further dialogue on the topic, similar to the findings of Silverman et al. (2016) [20]. The patients' specific question would also prompt the nurse to inform about specific, trustworthy sources. In other cases, the patients initiated the topic of OHI by sharing some of their own experiences of what ssources to trus or not.

Healthcare professionals have to balance the infomation-need of the patients with how explicit they can be on giving advice about OHI and online behavior. Diviani [7] and Silver (2015) [39] found that some patients find it difficult to discuss OHI with their healthcare professionals. Similarly, healthcare professionals have reported that their responses to OHI are influenced by how patients present this information [11–13]. In the context of a nurse–patient relationship, the institutional context implies that there might be some initial imbalance in trust [17]. The nurse as the professional holds a dimension of trustworthiness, while the patient might have to prove their trustworthiness [15]. In this study, the authorothy and expert knowledge from nursing allowed the nurses to express advice on literacy aspects of the patients. This included for example advice that the patients had to be critical to OHI sources and not to trust lay persons who were expressing themselves about health online. The literacy aspects mentioned are beyond the traditional expert knoledge of the nursing, but illustrate that the communicative tasks of the healthcare professionals are exteding along with the digitalisation of health. Healthcare professionals take a pedagogical role towards the patients, explaining and often advicing what information to trust and not.

The nurses try to establish trust in the nurse–patient interactions by establishing common ground [40], for example when the nurse and the patient discuss 'people online.' They agree that they are not themselves 'Some people live online' (example 1, line 8), thus establishing a distinction between 'us' (the nurse and the patient) and 'them' (the other people online). This can be a helpful strategy when guiding

patients to trustworthy versus non-trustworthy online information and online behavior [11].

By engaging with patients' stories, attitudess and experiences with OHI, nurses can help the patient think critically about OHI and enhance their eHealth literacy [3].

Healhcare professionals' attitudes toward the patients knowledge influence how practitioners respond to patients questions [11]. Referring to multiple sources, (doctor, felleskatalogen.no) the nurse in excerpt 3 proposed a specific online solution as a trustworthy future reference to empower the patient to take responsibility for her own health [4]. The nurse used her professional experience and expertise to assesss what information and advice would be helpful for the particular patient.

Limitations of the study

The study is limited to a few excerpts from a larger dataset. The communication situations took place in a specific context. The insights from this study are not generalizable to fit any other context. More material and bigger studies across various cultures and contexts will be necessary to provide a true understanding of online health behavior in health care communication.

Conclusion

The study showed how nurses and patients discursively dealt with trust in OHI through accounts of their and others' behavior online by using contrasting, reported speech, justifications, and excuses. Through the use of rhetorical devices, the nurses implicitly addressed eHealth literacy strategies in their communication with patients, including the importance of critically assessing the trustworthiness of health information. The nurses aligned with the patients' accounts before giving information about trustworthy OHI. The nurses also gave advice, which varied from very general information ('You find information on this page' or 'It is wise to be source-critical') to more personal advice tailored to the patient's needs and to empower the patient in their use of OHI. This ethnographic study provides an insight into how nurses and patients deal with OHI in their communication, in a specific context. It can provide helpful insights for practitioners to understand or reflect upon their own attitudes in their conversation with patients, and how various behaviors from the patients can reflect different needs of discussing online health information. Further research on the topic is needed and will be beneficial to understand more of how various communicative and contextual aspects influence trust toward online health information in healthcare communication.

Declarations and ethics statements

Not applicable.

Ethical approval

The project has been approved by Norwegian Social Science Data Services (NSD/SIKT), and data were stored encrypted on a university server in accordance with NSD/SIKT recommendations. Reference number: 501612; Approval date: 10.02.2020.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Informed consent

The nurses were given information orally in several meetings, and they completed a written consent form, which they were required to sign prior to participation. Patients were given oral and written information two weeks prior to data collection. They were asked again before turning on the camera and recording the consultation, in addition to providing their written consent.

Authors' contributions

The authorship is in accordance with the Vancouver Recommendations. C.B.L. was responsible for editing the entire manuscript, including the background, methods, analysis, and discussion. H.G. contributed substantially to all parts of the manuscript. All the authors have read and agreed to the published version of the manuscript.

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