



Research paper

Unidentified communication challenges in the intensive care unit: A qualitative study using multiple triangulations



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ABSTRACT

Background: Communication in the intensive care unit is challenged by patients' inability to speak owing to intubation, treatment, and illness. Research has focused on the use of communication tools or techniques, characteristics of the communication between patients and clinicians, and their experiences of communication challenges. However, few studies have combined the perspectives of patients, family members, and clinicians. We explored communication from different angles and investigated challenges that cannot be explained by ineffective use of aids and communication techniques.

Objectives: The aim of this study was to explore communication between patients, family members, and nurses and to investigate previously unidentified communication challenges.

Methods: This study used a case-oriented design with multiple triangulations. It was conducted in two general intensive care units at a Norwegian university hospital. Participant observations were conducted on nine mechanically ventilated patients while communicating with family members and healthcare personnel. Following the observations, individual interviews were conducted with six patients, six family members, and nine healthcare personnel.

Findings: Communication often seemed uncomplicated at the time of observations, but information from the interviews revealed another picture. We demonstrate what participants emphasised differently when they discussed their experiences, revealing a discrepancy in perceived importance in the situation. Family members had an important role in interpreting signs from the patient, uncovering challenges that would have been unknown to the nurses otherwise.

Conclusions: This study illustrates how communication challenges in the intensive care unit may not be perceptible to an observer or to all of the participants involved at the time of the communication. Nurses need to be aware of these communication challenges and realise that the patient might face issues that cannot be easily solved without extensive involvement of the patient, family, and nurses, and perhaps not even until a later stage in the patient's recovery process.

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1. Introduction

Communication in the intensive care unit (ICU) is challenged by patients' inability to speak owing to intubation, treatment, and illness.¹ While admitted for a variety of reasons, all ICU patients share the need for advanced medical treatment and continuous

monitoring.² For conscious, yet voiceless patients, the ability to express concerns, needs, and symptoms is of utmost importance.

Communication difficulties are among the most widespread stressors for patients receiving mechanical ventilation,^{3,4} and being ventilated is often associated with feelings of panic, fear, and discomfort caused by the tube.^{3,5} It has been shown that being unable to communicate evokes feelings of helplessness^{6,7} and that patient anxiety, frustration, and anger can be triggered by communication difficulties.^{8–10}

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Providing nursing care for voiceless but conscious patients is challenging and often associated with communication difficulties.^{11,12} Yet, less sedated patients also provide the opportunity for more patient involvement and for the nurses to gain insight into patients' experiences and symptoms.^{11,13} The presence of family members often has a positive effect on the patient as they assist with communication and make the patient feel less anxious and more comfortable.^{14,15}

Despite the knowledge and awareness of communication challenges in the ICU, there is still no universally available tool or standard for communication with voiceless patients,¹⁶ and it is worth asking whether the current knowledge provides a sufficiently comprehensive picture of the problem.

Few studies have combined the perspectives of patients, family members, and clinicians,¹⁷ leaving a knowledge gap on communication challenges beyond the patients' inability to speak. We investigated if there are challenges that cannot be explained by ineffective use of aids and communication techniques. The importance of the relational aspect and potential differences in how the communicants may experience the communication require investigation of the different perspectives of all those involved to achieve a comprehensive picture of the communication. By triangulating methods, data, and analysis, we sought to complement existing knowledge on communication in the ICU, choosing a more holistic approach than most previous studies in this field.

In their communication theory, Watzlawick et al. define communication as all behaviours in an interactional situation.¹⁸ The theory consists of five axioms. The first is that 'one cannot not communicate'.^{18 p. 32} The second is that 'every communication has a content and a relational level'. Content refers to the level of the meaning of what is communicated, whereas the relational level refers to meta-communication wherein the message is interpreted.^{18 p. 35} The third axiom posits that 'the nature of a relationship is contingent upon the punctuation of the communicational sequences between the communicants'. This axiom explains the relationship between stimulus, response, and reinforcement and how the communicants may have different perceptions of who provided the stimulus/uttered the first statement and who responded.^{18 p. 40} The fourth axiom elaborates how 'human beings communicate both analogically and digitally'.^{18 p. 48} Digital and analogue communication can be simplified to verbal and nonverbal communication. The fifth and final axiom states that 'all communicational interchanges are either symmetrical or complementary, depending on whether they are based on equality or difference between the communicants'.^{18 p. 51} Watzlawick et al. stated that when a phenomenon such as communication or behaviour is studied, the observation must include the whole context in which the phenomenon occurs. This context includes the background and characteristics of the communicants as well as the relationship in which the communication takes place. For the study of a complex setting such as the ICU, with numerous communicants in different relations to each other and patients who experience impaired ability to communicate both verbally and nonverbally, we found the theory of Watzlawick et al. particularly helpful to understand and describe this complexity. The aim of this study was to explore communication between patients, family members, and nurses and to investigate previously unidentified communication challenges.

2. Methods

2.1. Design

We conducted a case-oriented study in which we applied an explorative, interpretative design using multiple triangulation.¹⁹ We did not aim for the findings from different sources to confirm or contradict each other but rather to complement each other,

achieving a comprehensive answer to the research question. Triangulation of methods was used by conducting both participant observations and individual interviews. Data triangulation in the form of participant triangulation was used by including three groups of participants: patients, family members, and clinicians.²⁰ Investigator triangulation was used in that the investigators all had different backgrounds and knowledge of the field. For instance, the first author had extensive knowledge of and work experience in the ICU but limited experience as a researcher. In contrast, the last author was an experienced qualitative researcher but had no experience in this field and thus provided a more distant perspective. By using different approaches to the data analysis, which was conducted both case by case and across cases, we applied analysis triangulation.

2.2. Setting and participants

The study was conducted between December 2017 and February 2019 in two general ICUs at a Norwegian university hospital. One unit had six beds, and the other had 10. Both accepted medical/surgical critically ill patients.

For participant observations, we recruited patients receiving mechanical ventilation who were sufficiently awake to communicate nonverbally. Patients were eligible if they scored -1 to $+2$ on the Richmond Agitation and Sedation Scale, indicating a sedation level enabling communication.²¹ ICU nurses assisted with identification of eligible candidates and invited patients and family members to participate. If they expressed interest, the researcher approached them for more information and to obtain consent. Patients with permanent cognitive/psychological impairment or who did not understand Norwegian were excluded. Patients' competence to consent was assessed by nurses familiar with the patient, by using the Confusion Assessment Method for the Intensive Care Unit.²² If the patient was unable to sign the consent form, the patient was asked to indicate his/her response and a family member or the researcher with an independent witness signed on the patient's behalf.

Patients, family members, and clinicians who participated in the participant observations were invited to partake in interviews. The patients needed to have regained their ability to speak and breathe spontaneously and be fully alert. A separate consent was obtained by the participants taking part in interviews. Our intention was to interview all the observed patients as well as one family member and one clinician (nurse, doctor, or physical therapist) per patient. However, we experienced dropouts due to death and transfer to other hospitals. The characteristics of the sample are summarised in [Table 1](#).

2.3. Ethical considerations

This study was approved by the regional committee for medical research ethics and the data protection official at the hospital. It was conducted according to the Declaration of Helsinki.²³ Oral and written information was provided, and informed consent was obtained from all participants. ICU patients and their relatives are a vulnerable group of study participants, and particular consideration was taken to meet the appropriate codes of research ethics.²⁴ Before observations, all participants were informed of their right to end the participation in the observation study at any time or to ask the researcher to leave the room at specific situations. It was ensured that the observations did not in any way interfere with treatment or patient care. Before interviews, consent was verified and participants were informed of their right to end or pause the interview at any time and to not answer any questions they might feel uncomfortable with.

Table 1
Characteristics of the participants of all cases.

Case	Patient gender	Patient age	ICU days at observation	Family members present at observations	Clinicians present at observations	Location and time of patient interview	Family members and clinicians participating in interviews
1	M	32	18	Partner	3 nurses, 1 PT, 1 physician	In ICU, 4 months after observations	Partner and one nurse
2	F	32	59	Parent	4 nurses	At the surgical ward, 26 days after observations	Parent and one nurse
3	F	49	12	None	6 nurses, 2 physicians	At the surgical ward, 1 week after observations	One nurse
4	M	54	11	Daughter	5 nurses, 1 physician	No interview. Patient transferred to local hospital before interview could be conducted	Daughter and one nurse
5	M	55	2	Spouse and daughter	2 nurses, 2 PTs, 1 physician	At local hospital, 2 months after observations	Spouse and one nurse
6	F	58	9	Spouse and two adult children	3 nurses, 1 PT	At local hospital, 19 days after observations	Daughter and one physical therapist
7	M	66	26	Spouse	4 nurses, 1 PT, 1 physician	No interview. Patient died before interview could be conducted	Spouse and one nurse
8	F	66	17	Spouse and one adult child	3 nurses, 1 physician	No interview. Patient died before interview could be conducted	One physical therapist
9	M	75	10	Adult grandchild	6 nurses, 1 physician, 1 PT	At the surgical ward, 1.5 months after observations	One nurse. Family member declined interview after patient died
Total				12	50	6 patient interviews conducted	6 interviews with family members, 7 with nurses and 2 with PTs

Overview of the nine cases, the participating patients and family members and clinicians present during observations and interviews.

ICU = intensive care unit; PT = physical therapist.

One PT was present with two of the patients. The first three cases are described in the study, but numbered differently.

2.4. Data collection

2.4.1. Participant observation

Participant observation was conducted by the first author, a PhD student, using an open observational guide for field notes supported by audio recordings. Interactions between the patient, family members, and clinicians were observed, with special attention to the roles of the different participants and the forms and content of communication. The researcher was present in the patient's room without actively taking part in patient care or interactions. She did at times talk briefly to the nurses, patient, or family members and did occasionally assist nurses with simple tasks. Each patient was observed over a span of 1 to 3 days, each observation lasting from 5 min to 2.5 h, with the total observation time per patient varying between 2 and 4.5 h. The durations of the observations were determined by the activities at the time.

2.4.2. Individual interviews

Semistructured individual interviews were conducted by the first author with patients, family members, and clinicians following participant observation. Interview guides with open-ended questions were developed, with slight differences between the guides used for patients, family members, and clinicians. Interviews lasted from 20 min to 2 h and 20 min. Participants were asked about their experiences with the ICU in general and about communication more specifically. They were also asked about certain episodes noted by the researcher during the observations, but not confronted with statements from other participants' interviews. Family members and clinicians were chosen based on their role and the extent of their participation during the observations. The interviews with family members and clinicians were held as soon as possible after the observations but with sufficient time for the researcher to review the field notes. Some of the interviews with clinicians were postponed for up to 4 weeks owing to their work schedule.

2.5. Data analysis

The interviews were transcribed verbatim. The audio recordings from the observations were transcribed and added to the researcher's field notes in the observation guide. Analyses of interviews and observations were carried out using an inductive, open approach at first followed by a more targeted investigation based on the theoretical framework created by Watzlawick et al.¹⁸

First, the text from all the interviews and observations was read to gain an overall impression of the content. The text from interviews was then coded inductively and categorised using NVivo 11 software (QSR International, Burlington, MA, USA). Attention was given to the content of communication and how symptoms and concerns were communicated. The identified codes and categories were investigated case by case and across cases to shed light on differences and similarities between cases and between the patient, family, and clinician groups.

The text from the participant observation notes and transcripts from each case were condensed and organised with the help of Watzlawick's communication theory¹⁸ as shown in Table 2.

2.6. Rigour

The following trustworthiness criteria were applied.²⁵ Credibility was obtained by using well-established research methods and triangulation. Transferability is limited to similar contexts with a similar number of participants involved in the field work. Dependability was obtained by describing the planned and executed research plan. Confirmability was ensured by detailed methodological description. All the phases of the analysis process were discussed amongst the research group for confirmability and transferability.²⁶ A user representative was involved in the creation of the study and the analysis process. We used the consolidated criteria for reporting qualitative research to help report important aspects of the research team, study methods, context of the study, findings, analysis, and interpretations.²⁷

Table 2
Organising of data from participant observations.

Context	Content	Characteristics of communication	Communicants
Which external factors are influencing the communication?	What is the communication about? What is it not about?	How is it communicated? (digital/analogue) What characterises the communication? (metacommunication, symmetrical/complementary)	Who takes the initiative? Who responds? (stimuli and response) Who is central in the communication? What characterises the communicants?

Excerpt of the table used in the analysis of notes and transcripts from participant observations: Following the separate analysis of interviews and observations, the texts from all interviews and observations within each case were investigated as a whole, revealing similarities and differences between the participants' stories and the researcher's observations. Finally, an analysis across cases was done, identifying the main topic of *unidentified communication challenges* to describe the data material.

3. Findings

Participant observations were conducted for nine patients as they interacted with family members and clinicians while mechanically ventilated in the ICU. Individual interviews were conducted with six patients, six family members, seven nurses, and two physical therapists who had all participated in the previous observations.

Triangulation of the data from participant observations and patient, family, and nurse interviews exposed communication challenges that could not have been found by studying the sources on their own. Previously unidentified communication challenges become clear when the different participants told their stories about the events that took place in the ICU. Following Watzlawick's communication theory,¹⁸ which emphasises that communication must be studied in its context and must include all relevant dimensions, we have chosen three cases to represent our findings. The communication challenges illustrated by the three cases are representative for the full data material.

With the cases, we exemplify how communication seemed uncomplicated at the time of observations, while the interviews revealed another picture. We illustrate how family members had an important role in interpreting signs from the patient, uncovering challenges that would have been unknown to the nurses otherwise. We also demonstrate what participants emphasised differently when they discussed their experiences, revealing a discrepancy in perceived importance in the situation.

3.1. Case 1: 49-year-old woman

The following interaction (Table 3) took place between a patient and two nurses. The patient had undergone debridement surgery related to a soft-tissue infection on her neck, and she had a nasotracheal tube. She was awake and alert and communicated by writing with pen and paper.

The patient expressed discomfort or pain related to her breathing. The nurses responded to her concerns by explaining and changing the ventilator settings. They reassured her that her breathing and oxygenation were satisfactory and encouraged her to breathe on her own.

In her interview, the patient described enormous breathing difficulties, but she was unable to be more precise at the time:

I didn't reflect on it on the medical level you are referring to, right. I had no clue about how many tubes or cannulas or things ... cause all this was done while I was in [an] artificial coma. It wasn't like I woke up and was aware.

Nurse 2, on the other hand, believed that the patient did not experience breathing problems, only slight discomfort:

I remember the first time we tried the pressure support setting. She experienced it as strange and unpleasant to breathe with the PEEP [positive end-expiratory pressure]. She felt constant

pressure in her chest. I tried to explain how mechanical ventilation works physiologically, you feel short of breath, and then it is hard to grasp that it [the objective measurements of oxygen saturation] looks good because others tell you so.

The patient's concern, as she described it in the interview, was a feeling of serious breathing difficulties: 'I thought I was going to die. I imagined that with such poor breathing as I experienced, it might go the wrong way'. She talked about how she did not know what was happening to her or why, but that she prepared herself to die.

The patient was awake and alert and able to write full sentences, and she expressed comprehension of what she was told. However, some of the words she used when asking questions revealed that she did not fully understand everything that was going on around her. In the interview, she stated that for several days, she did not understand what was happening to her or why. This sweeping confusion experienced by the patient was not evident to either nurses or the observer during participant observations.

The exchange of messages was not a source of communication challenges as such. However, the interviews revealed that the patient and nurse had different perceptions of the situation, and the patient had serious concerns that were not addressed. Although the exchange of messages was smooth, there were communication challenges that were not obvious to the nurses or the observer. While the nurses focused on practical breathing issues, the patient experienced existential concerns not evident to them.

The patient interview demonstrated that the patient's communication did not suffice to express her confusion and existential fear. The content of the patient's written messages was fairly simple, but on a deeper level, she failed to express her actual thoughts and feelings. These communication challenges were not revealed until the data from the observations and the interviews were triangulated.

3.2. Case 2: 32-year-old man

The following excerpts are from interactions between a patient, his girlfriend, and two different nurses. The patient was awake and alert, tracheotomised and communicating with facial gestures and mouthing. He had a closed suctioning system. The interactions are from the same day but not directly following each other (Table 4).

Although this was a patient who communicated well through mouthing, facial expressions, and gestures, his girlfriend recognised his discomforts and reported them to the nurse before the patient could actively express them himself. The nurse was alert to the girlfriend's observations and inquired about her observations and interpretations. In the interviews, it was brought up by both the girlfriend and nurse that the patient was quiet and only expressed discomfort on request. Still, the girlfriend trusted the nurses to understand the patient even when she was not present:

I think the nurses understand him. But it might take a little longer. I think they are very good, cause [the patient] knows how

Table 3

Field note for case 1.

Nurse 1: Is your breathing okay? [Pauses.] Can you feel that you are more awake now? That you're gradually waking up? [Pauses.] Would you like to try to breathe on your own? [Pauses.] No? Like we did earlier, that the ventilator still assists you, but that you decide when to breathe? [Pauses.] Do you think that you don't get enough support? [Pauses. Patient nods.] It may be a little hard in the beginning when you've been on a ventilator for a while, but it gets easier. It's important that you feel safe and ready. We will slowly turn down the ventilator. We have reduced your oxygen, but your oxygen saturation is very good. So, it's about being able to inhale enough air on your own.

The nurse stands at the bedside, looking at the patient while talking. The patient gives little response to the nurse's explanation.

Nurse 2 enters. The patient signals that she wants to write.

*Nurse 2 hands the writing board to the patient. Taking it back when she has finished, Nurse 2 reads: 'It hurts a lot because we never know where I breathe'.**

Patient looks at the nurse, puts a hand on her chest, on top of the wound dressing on the side of her neck. She signals that she wants the writing board back.

Nurse 2: Hm ... but if you're able to breathe on your own ... [Pauses.] Do you want it the way it is now?

Nurse 2 gives the writing board back to the patient. Patient writes.

Nurse 2: 'Passive breathing'. Your own breathing is not passive. Why? [Patient looks at the nurse, not replying.] Wait. Two concrete questions: Are you up for breathing on your own? Shall we try? Like yesterday. Okay.

Nurse 2 walks around the bed to the ventilator and changes the mode from pressure control to pressure support. He puts a hand on the patient's chest and looks at the patient.

Taking the patient's hand, he strokes it.

Nurse 2: Try to draw your breath now. Right! Does it hurt? More than when we breathe? [Pauses, observing the patient's facial expression.] The same? [Observing patient's facial expression.] So it hurts more?

Patient nods.

*Her sentence does not make sense.

to make himself understood. If there's anything he doesn't like, in a way, I trust that he'll tell them right away. I think so.

One of the nurses also perceived the communication with the patient as unproblematic:

The girlfriend is good at telling about him. Explain what he was like before and how he in a way thinks and interprets feelings and such. But I don't think I have used her a lot, cause I've felt I've had a very good communication with the patient.

The girlfriend took an active role as an intermediary, talking on behalf of the patient, encouraging him to express his needs, and supporting the nurses by encouraging the patient to follow their advice. In the interviews, the patient explained how his girlfriend usually knew what was bothering him and was able to read his signals and understand his mouthing:

It has been particularly difficult when she hasn't been here. She's helped me a lot. If they didn't understand, or ... if she was here, I told her first, and she passed it on. So ... yes, as I said, if it wasn't for her, I don't know if I would have made it.

The girlfriend explained how she interpreted subtle signs such as facial expressions, gestures, or lack of gestures. Even when the patient did not consciously send a message, and the nurses failed to recognise any signs, the girlfriend interpreted and acted on what she saw.

Although both the interviewed nurse and the girlfriend acknowledged that the girlfriend was of value to the patient, they did not realise how important she was to the communication between the patient and the nurses. They both seemed to think that the patient could have managed just as well without the girlfriend present, but the patient stated otherwise. The communication challenges the patient experienced were invisible to others.

3.3. Case 3: 32-year-old woman

The following excerpt is from an interaction between the patient, her mother, and a nurse (Table 5). The patient had undergone major abdominal surgery and was tracheotomised. She was awake, but she could barely move and had very limited facial expressions.

In the patient's story, her pain was the main theme. She spoke about excruciating pain not being acted on by the nurses: 'I

Table 4

Field note for case 2.

Girlfriend: [To patient] Do you have more secretions?

Patient responds with grimaces and frowning.

Nurse: It is more?

Girlfriend: [To nurse] I can see that he is checking for it and sensing something, you see. He's just lying there.

Nurse: You see it in his eyes?

Girlfriend: Yes.

Nurse prepares for suctioning.

Nurse: [To patient] Are you ready? Shall I try to remove your secretions? Good. Try to cough! I can feel something rattling. I can't quite reach it.

Nurse puts her hand on the patient's chest, then she performs the suctioning procedure.

Girlfriend: [To patient] Would you like her to try once more?

Nurse 2: [To girlfriend, softly] Is it better now? [To patient, louder] Do your lungs feel better now?

Girlfriend: A little bit of secretions? A little bit down there?

Girlfriend: Would you like for me to leave while you rest for a while? [Pauses] Or what do you want me to do? You'll tell me if you want me to stay. I don't have anything else to do. It's all up to you. I can go out for a while and come back around five thirty maybe?

Patient makes a big grimace and raises his eyebrows.

Girlfriend: Was that long? Do you want me to wait?

Patient nods.

Nurse 2: Would you like to lie on your side for a while? No?

Patient frowns at the idea of lying on his side.

Girlfriend: It could be good for your pressure sore to change positions.

Nurse 2: Not least is it important to your lungs. Does it hurt when you lie on your side? Where does it hurt? Your stomach?

Table 5
Field note for case 3.

The patient's mother shows the patient and nurse photos of the patient's dog on her phone.

Mother: This is [the patient's] dog!

Nurse: Oh, how cute!

The mother and nurse have a conversation about dogs.

The patient looks at the photo and follows the conversation with her eyes. She responds with lifted eyebrows and small nods when addressed. She does not move her mouth.

Mother: Is your stomach aching today?

Patient nods.

Mother: Very, or just a little bit?

Patient mouths 'very'.

Mother: You have a lot of gas. I could hear that earlier. It rumbled a lot in there.

communicated repeatedly how much pain I was in, but they never really made an effort to do anything about it'. The nurse and the mother also brought up the issue of pain in their interviews, but not in an all-encompassing way like the patient. The nurse described it as difficult to assess the patient's pain: 'What I find challenging is that her experience of the pain is stronger than what I can see on the outside. I cannot see as obvious signs of pain as she reports'. The mother also mentioned that the patient was in great pain but did not elaborate. The mother's story mainly focused on the big picture – that her daughter would survive – and everything else was less important: 'I think I love the hospital. They have saved her before, and have again. So I trust this hospital 100%'.

The nurse found it difficult to believe that the patient's pain was as intense as she reported. The mother did not focus on the patient's pain but on her survival. In the course of the interviews, the patient focused on pharmacological solutions to her pain, whereas the mother and nurse emphasised nonpharmacological solutions, such as diverting her attention towards something else (e.g., talking about the dog).

In this case, the main communicational challenge for the patient was to make those around her understand the extent of her agony. Her ability to communicate did not extend to being able to elaborate about her pain. Both the nurses and her mother knew that she was in pain, but the discrepancy in the perceptions of her pain was never addressed. The different views on pain management were also left unaddressed. Although the mother could interpret the daughter's signals and body language, she did not disclose whether she was aware of the communication difficulties and the difficulty the patient experienced with having her pain taken seriously.

In none of the presented cases, communication challenges were obvious at the time of the communication. It was only during the later interviews that the challenges the patients experienced were revealed.

4. Discussion

The presented cases illustrate how communication challenges are not always obvious to an observer or to all parties involved in the communication. The first patient expressed herself clearly through writing but experienced confusion and anxiety that she was not able to express. The second patient tended to hold back on what he said and was more dependent on his girlfriend than those around him were aware of. The third patient lacked both facial expressions and body language to elaborate on her feelings and concerns, leaving the nurses and family members unaware of her agony. These were unidentified challenges at the time of the communication, which shows the importance of being aware of the complexity of communication and challenges that are not easily detected.

Obvious communication difficulties were not observed in any of the aforementioned cases during observation. However, the interviews revealed a discrepancy in what was important for the different participants. As described by Watzlawick et al.,¹⁸ because each person creates his or her version of a situation based on background and personal characteristics, communication about an issue may be perceived differently by each of the participants. Discrepancy in communication is one of the most common characteristics affecting nurse–patient communication. Holm et al.²⁸ demonstrated that neither the background for this discrepancy nor the relevance of relationships and perspectives has been adequately explored.

When communicative abilities are impaired, as when the patient in the third case lacked both facial expressions and gestures, it makes it difficult for the nurse to grasp the dimensions of the patient's pain or for the patient and nurse to form a common understanding. The extent of the discrepancy in perception between the participants was illuminated through triangulation of the observations and the interviews. Awareness of the likeliness of discrepancy, and how this makes it difficult to recognise the patient's needs, may be a first step to identify previously unknown communication challenges.

A study on the communication needs of nonvocal postoperative patients found an incongruence in what patients perceived as difficult to communicate compared to what family members and nurses thought was difficult for the patients, although family members' perceptions better matched the patients' than nurses' did.²⁹ When the participants in our study shared their experiences about communication in the ICU, it illustrated the relevance of background and relationship as explained by Watzlawick et al.¹⁸ Patient preferences and concerns are often rooted in their personality or previous experiences, which are known by their family members but not by the nurses. According to Watzlawick et al.,¹⁸ the content of communication is responded to in the context of the relationship between the communicants. Although the participants interacted in the same environment, experienced the same events, and shared concern for the patient, their different backgrounds and roles gave them different perspectives that determined what was important to them and shaped how they saw and interpreted events.

Nurse–patient communication would benefit from nurses familiarising themselves with the patient and understanding the patient perspective. An exploratory study of hospital patients found that the majority wanted clinicians to have some knowledge about them as a person, as they believed this could improve communication.³⁰ However, patients' restricted ability to communicate often hinders any communication outside the most necessary messages and limits the possibilities for nurses and patients to develop a therapeutic relationship. Additionally, nurses and patients forge their relationship in a situation in which the patient may be experiencing an existential crisis or have impaired consciousness or physical status. In the interview for Case 1, the nurse presented extensive knowledge about the patient's social and work situation and explained how he considered this knowledge when assessing the patient's concerns and preferences. Still, our findings show that he did not succeed in addressing the patient's major concern.

The family members' roles were perceived differently by the participants. While patients and family both mentioned the function family members served and how they assisted with communication, some of the nurses seemed to view the presence of family members merely as pleasant company for the patient. The second case exemplifies how a family member can contribute by using knowledge of the patient to interpret nonverbal communication. A qualitative study exploring experiences of patients, families, and nurses highlighted the inclusion of family members in patient care

as a precursor to successful communication.³¹ The study found that family members experienced a close relationship with the nurse and played an important role in the communication between nurses and patients.

While other studies have shown similar examples of family contribution in the ICU,^{14,15} Farrier et al.³² concluded in their review that further exploration is needed to encourage more extensive family involvement in patient communication. Nurses' curiosity may help them adapt family members' knowledge, enabling a better understanding of the challenges the patient is facing. If nurses lack understanding of the family's importance to the patient, they might fail to see some of the communication challenges the patient experiences.

A patient-centred approach is crucial to achieve effective communication, but a scoping review of nurse–patient and nurse–relative interactions found that the extent of patient participation was far from ideal, partly due to the asymmetry of the relationship in favour of the nurse.³³ Watzlawick et al.²⁰ stated that complimentary communication occurs naturally in a patient–clinician relation, where the relationship is asymmetrical. Mayor and Biatti³⁴ found that this asymmetry was reversed when the interaction took place in a home care setting. This might suggest that when the patient's identity as a person, not just as a patient, is at the forefront of the interaction, the patient's perspective gains a more central role. The ICU is likely as far from a home care setting as one can get, with hi-tech surroundings and little room for personalisation. Treatment is often specialised to a level that makes it difficult for patients to offer informed participation, as the patient in Case 1 illustrated when talking about her breathing difficulties in her interview.

Participation of relatives could even out the asymmetry in nurse–patient interactions.³⁴ The nurse is often recognised as both initiating the communication and controlling its content and form.³⁴ This often results in brief, task-oriented interactions that might not give space for patients to voice their concerns, as our study shows. In Cases 2 and 3, when a family member was present, they took an active role, talking about the patient's situation and focusing the conversation around the patients' personal preferences and private life. Knowledge of the natural asymmetry or complimentary communication between patient and nurse is essential to acknowledge the challenges that might occur.

4.1. Limitations

Participant recruitment was difficult owing to the serious conditions of the patients admitted to the study sites. This resulted in a relatively small sample size and dropouts, as illustrated in Table 1. However, the unique design using multiple triangulations ensured a richness of data and unearthed communication challenges that would not have been exposed by the use of a single method or single participant group.

The patients were interviewed between 1 week and 4 months after the time of the observations owing to their serious conditions. Although most of the patients had clear recollections of at least parts of their stay in the ICU, it cannot be verified to what extent their memories were consistent with their experiences at the time. The symptoms that caused the most agony at the time are not necessarily the symptoms most clearly remembered. Nevertheless, the findings from the patient interviews provide insight into issues of importance to the patients, even if they cannot be used to reconstruct specific episodes.

The first author was employed at one of the study sites. This may have influenced some of the participants being observed and interviewed, but it also ensured that she could easily adapt to the activities and blend in. Several of the clinicians mentioned that

being observed by a colleague was less stressful than it would have been with an outsider.

5. Conclusion

This study illustrates how communication challenges in the ICU may not be perceptible to an observer or to all of the participants involved at the time of the communication. Nurses need to be aware of the likelihood that patients and nurses have different perceptions of importance in the situation, how this may cause discrepancy in communication and thus make it difficult to recognise patients' needs. Extensive involvement of patient and family as a means for nurses to familiarise themselves with the patients could help nurses better understand patients' needs. All challenges may not be solvable when the patient is still in the ICU. The patient's memories may be more intense than the situation itself and call for long-term processing. More extensive and systematic follow-up of patients after discharge from the ICU could benefit the individual patients as well as contribute to improved future care and communication. Communication research needs to cover the perspectives of all those involved in the communication to paint a full picture of the complexity of communication.

Conflict of interest

We declare no conflicts of interest.

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CRediT authorship contribution statement

Ragnhild Nyhagen: Conceptualisation, Methodology, Formal analysis, Investigation, Writing – original draft, Writing – review & editing, Visualisation, Project administration. **Ingrid Egerod:** Formal analysis, Writing – review & editing, Visualisation, Supervision. **Tone Rustøen:** Conceptualisation, Methodology, Writing – review & editing, Visualisation, Supervision, Project administration. **Anners Lerdal:** Writing – review & editing, Visualisation, Supervision. **Marit Kirkevold:** Conceptualisation, Methodology, Formal analysis, Writing – original draft, Writing – review & editing, Visualisation, Supervision.

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