Registered nurse–patient communication research: an integrative review for future directions in nursing research

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Abstract

Aim: To explore communication research in nursing by investigating the theoretical approaches, methods, content and perspectives in research on real-time registered nurse (RN)–patient communication.
Design: An integrative review of real-time communication between RNs and patients.
Data Sources: Empirical research papers were searched in PubMed, CINAHL Plus and Medline. The results from the database searches were supplemented with results from manual searches in reference lists.
Review Methods: A total of 1369 articles published between January 1996 and December 2021 were screened, which resulted in the inclusion of 52 articles.
Results: The integration of various theories, such as nursing or communication theories, is weak in most of the included studies. RN–patient communication appears to influence relationship building. Even when nurses strive to meet patients' needs, they often focus primarily on nursing routines and physical care. The topic of the communication varies depending on the situation and different communication styles are used. When a patient-centred approach is adopted, the interpersonal communication becomes quite symmetrical, with complementary roles of nurses and patients. Within a more asymmetric communication context, nurses dominate communication, choose topics...
and function as instructors. How the nurses communicated subsequently influenced the patients’ communication styles and strategies.

**Conclusion:** Communication is multifaceted, contains different strategies and is important for building trust and facilitating patient-centred care. The importance of RNs’ communication for interaction and relationship-building seems to be well established within research, but few studies focused on patients’ communication with RNs.

**Impact:** This integrative review gives an overview of the width and depth of observational studies on RN–patient communication research. The variety of studies indicates that this area is a less well-grounded field of research. Future research is warranted to support nurses in their communication, especially regarding the exploration of patients’ communication and desired communication skills in nurse–patient interactions.

**Patient or Public Contribution:** No patient or public contribution was included in this integrative review.

1. **Introduction**

Communication is considered a core principle of nursing practice (Casey & Wallis, 2011). The importance of communication and a well-functioning nurse–patient relationship to provide high-quality care is well known (Caris-Verhallen et al., 1997; Fleischer et al., 2009; Shattell, 2004; Street et al., 2009). The ability to provide effective communication is also emphasized as central for assuring high-quality care and patient safety, as well as detecting important needs, providing support and information and enhancing patient learning (Kwame & Petrucka, 2022). There has also been a strong trend for patient-centred care, which highlights patients’ rights to autonomy, information and shared decision-making, in which communication is a key element (Håkansson Eklund et al., 2019). Furthermore, Sundler et al. (2020) have stressed the importance of acknowledging communication skills that can facilitate person-centred care. However, less is known about the actual communication, hereafter called real-time communication, between registered nurses (RNs) and patients. To the best of the authors’ knowledge, there is no recent review on the real-time RN–patient communication, and how such studies are guided by theory.

2. **Background**

Communication and interaction are complex processes that are central to the exploration and understanding of patients’ health conditions (Parker et al., 2020). The terms communication and interaction are often used interchangeably in nursing research and are seldom clearly described or explained (Fleischer et al., 2009). Both interaction and communication are processes and situations involving behaviours that are communicative and convey messages. However, interaction can be seen as a superior term characterized by a mutual and dynamic process, while communication can be seen as a special type of interaction linked to the exchange of information and experiences with the aim of reaching understanding and building a relationship. Communication includes both verbal and non-verbal expressions and is described as something that always happens when people meet, making it a prerequisite for constructive interactions (Fleischer et al., 2009; Watzlawick et al., 1967/2014). Communication is a core element of nursing care used as a promoter or tool for interaction and relationship-building, and nursing communication also influences patients’ health and well-being (Fleischer et al., 2009). For instance, communication can instil trust, support well-being or self-care actions and strengthen the patient’s autonomy.

Interaction and communication are critical for assessing the needs and outcomes of patients, such as increased knowledge, self-care skills, adherence to treatment, trust, high-quality medical decisions, social support and empowerment (Street et al., 2009). Until now, the number of RN–patient communication studies and reviews in this field is sparse, compared to the number of studies
and reviews on physician–patient communication, see, for instance, Beck et al. (2002), Laidsaar-Powell et al. (2013), Zill et al. (2014), Cohen et al. (2017) and Ghosh et al. (2020). There are some previous reviews in nursing, but no recent literature review with a focus on studies using observations (in person, or by audio or video recording) of communication between RNs and patients. Previous reviews have focused on theoretical nursing models and care for older people (Caris-Verhallen et al., 1997); additionally, reviews have observed a unidirectional focus in nurses’ communication (Shattell, 2004) or have noted that the concepts of interaction and communication were used interchangeably (Fleischer et al., 2009). In addition, a theoretical perspective was often lacking, except for the use of the cognitive model of social information processing (Sheldon & Ellington, 2008).

Nurses’ communication with patients is commonly embedded in everyday activities (Macdonald, 2016; Sundler et al., 2016) and can occur while performing nursing tasks (Fleischer et al., 2009; Shattell, 2004). Nursing care requires an understanding and sensitivity to patients’ experiences and emotional concerns. Nurses’ relationship-building and communication with patients include the confirmation of emotions (McCabe, 2004). The communication is also important for addressing patients’ needs and worries (Höglander et al., 2017; Sundler et al., 2016). Thus, communication and interaction are imperative and can reflect humanistic values of respect, self-determination and empathy (McCormack et al., 2011).

The present review focuses on studies of real-time RN–patient communication. Methods and approaches used to investigate real-time communication vary. To date, observational methods seem to have been less frequently used than other methods when describing or investigating communication. Most studies used retrospective qualitative interviews of nurses and/or patients concerning their communication (Amoah et al., 2019; Chan et al., 2019; Fleischer et al., 2009). It has been suggested that further research using real-time observations in nursing research is needed (Liu et al., 2021; Williams et al., 2017). However, research using real-time observations like audio or video recordings for data collection may be challenging. For instance, data collection involving nurses tends to invade the normal workflow more compared to doctors, while nurses tend to walk around much more, doctors most often meet patients while sitting down. Thus, nursing encounters are more complicated to record with an unmanned camera during ordinary nursing care. There may also be difficulties to manage data collection when the researcher must engage nurses in the recruitment of patients (Sundler et al., 2017). As stressed by Liu et al. (2021) recordings may influence the actual situation as participants being aware of the recording may act in a different way when being recorded. Although no huge differences are being observed (Arborelius & Timpka, 1990; Penner et al. 2007; Pringle & Stewart-Evans, 1990). There may also be challenges to obtain access to the field when recruiting participants, and when obtaining ethical approval concerning the intrusiveness of using recordings in, for instance, home care services when data are collected in a person’s own home and with respect to their integrity (Sundler et al., 2017).

RN–patient communication is a hallmark of professional competence in nursing that is sometimes undervalued. There is a need for a current assessment of the state-of-the-art research on real-time communication between RNs and patients to identify what is known in this area and what has not yet been researched. More knowledge is needed on real-time communication and on how to apply the best communication practices.
3. The Review

3.1 Aim
The aim of this review was to explore communication research in nursing by investigating the theoretical approaches, methods, content and perspectives in research on real-time RN–patient communication.

3.2 Design
An integrative review was conducted to assess nursing research on real-time communication between RNs and patients. An integrative review is a broad research review that allows the researcher to combine both theoretical and empirical literature and to include a variety of data types and diverse methodologies (Whittemore & Knafl, 2005). The present review followed the process described by Whittemore and Knafl (2005), encompassing problem identification, a literature search, data evaluation, data analysis and the presentation of results. The sources of data were empirical research papers, and no theoretical literature was used.

3.3 Search methods
A systematic literature search strategy was undertaken to identify relevant studies. Article retrieval was performed via database searches and manual searching. The latter involved searching for articles in the reference lists. First, we conducted computerized database searches in PubMed, CINAHL Plus, and Medline with assistance from a librarian. Keywords (based on MeSH terms) of “nurse” and “patient” or “person” and “communication” or “observation” were used in the searches. When scanning the search results, the following inclusion criteria were used: (1) observational studies of real-time RN–patient communication, (2) peer-reviewed studies, (3) studies that were written in English and (4) studies that were published between January 1996 and December 2021. The limitation in the years was based on a previously published literature review that covered articles published before 1996 (Caris-Verhallen et al., 1997). Articles not available in full text (n = 6) were excluded.

Unpublished manuscripts, abstracts, and dissertations were excluded, as well as studies involving participants younger than 18 years of age. Furthermore, we excluded studies with participants from different professions when it was impossible to distinguish the results on RN–patient communication from other healthcare professional–patient communication. This exclusion ensured that the focus on RN–patient communication was maintained. Articles were excluded if they lacked descriptions of methods (e.g. data collection, analysis or participants) or the study did not include real-time communication; for example, studies with indirect methods used to assess communication, such as interviews.

3.4 Search outcome
An initial broad search of the literature yielded a total of 1369 references. All the references from the search were screened for duplicates. The references were screened by title, after which they were screened by abstract. A second screening of the methods section was performed to verify whether the articles complied with the inclusion criteria. A total of 128 references were read in their entirety by four of the authors. Each author screened a fourth of the references, and joint discussions were enacted to resolve any doubts and to maintain compliance with the inclusion and exclusion criteria. The second screening was comprehensive, with multiple checks to verify the accuracy of the screenings and to validate that all the inclusion and exclusion criteria were met. After the second screening, additional articles were included through an additional hand search and from the screening of the reference lists (n = 16), which finally resulted in the inclusion of 52 references. The literature search was documented as a Prisma flow diagram, see Figure 1.
3.5 Quality appraisal
For the quality appraisal, we used the Mixed Methods Appraisal Tool (MMAT) version 2018. The MMAT was designed to appraise the quality of empirical studies and permits for appraisal of qualitative research, randomized controlled trials, non-randomized studies, quantitative descriptive studies and mixed methods studies. The MMAT checklist contains two screening questions, and five questions for each of the five different study designs included in the appraisal (Hong et al., 2018). Each study was screened and rated in accordance with MMAT. To ensure consistency among the researchers we discussed our appraisal based on the methodological quality criteria. All the included articles demonstrated high quality (based on the MMAT) and met 75%–100% of the evaluated criteria in the MMAT checklist.

[Figure 1]

3.6 Data abstraction and synthesis
The following data were extracted from the studies and organized as follows: theoretical approach, aim, methods and design, setting, participants, data collection, analysis and results. The extracted data were compared and analysed for differences and similarities, and similar data were grouped. The analysis followed a constant comparison method, as suggested by Whittemore and Knafli (2005). With constant comparison patterns, variations and similarities are established. This method is preferable when using a variety of data that are obtained with different methodologies (Whittemore & Knafli, 2005), as was done in the present study.

4 Results
The results are presented in three main sections: theoretical approaches used in studies on real-time RN–patient communication, methods, and approaches used for examining RN–patient communication, and the meaning and nature of RN–patient communication.

4.1 Theoretical approaches used in studies on real-time RN–patient communication
In general, the theoretical perspectives related to RN–patient communication were implicit. None of the studies used a nursing theory or theorist, and most of the studies had no clear theoretical underpinnings for communication. In some studies, a patient-or person-centred perspective was described as a conceptual framework underlying RN–patient communication and interaction, thus demonstrating an interactional and relationship-based view on communication (Bolster & Manias, 2010; de Leeuw et al., 2014; Ellington et al., 2018; Ernesäter et al., 2016; Hakimnia et al., 2014; James et al., 2020; Sundler et al., 2020). There were also theoretical views on empathy described in relation to RN–patient communication (de Leeuw et al., 2014; Eide, Sibbern, Egeland, et al., 2011; Eide, Sibbern, & Johannessen, 2011) and a social constructionist perspective (Barrere, 2007; Gordon et al., 2009).

4.2 Methods and approaches used for examining RN–patient communication
The characteristics of the 52 included studies are summarized in Table 1. Altogether, these included 739 RNs and 3317 patients. Data collection of real-time RN–patient communication was mainly conducted through audio or video recordings (n = 43) or participatory observations (n = 9). The most commonly used methods for coding data were the Verona coding definition of emotional sequences [VR-CoDES] (n = 8), the Roter interaction analysis system [RIAS] (n = 6) and conversational analysis [CA] (n = 4).

Most papers originated from Nordic countries (e.g. Sweden, Norway, Finland and Denmark, n = 22), and some papers were from the United States (n = 8), the Netherlands (n = 5), England/UK (n = 5), Australia (n = 5), and Canada (n = 2). Single papers were from Iran, Indonesia, New Zealand, China
and Switzerland. Hospitals and primary care settings were the prevailing settings, followed by home care, hospice and telenursing settings. In most studies, participants were commonly and solely comprised of RNs and patients (n = 41).

### 4.3 The meaning and nature of RN–patient communication

The meaning and nature of RN–patient communication were categorized as (1) the focus and impact of communication, (2) various, more or less person-centred communication styles and (3) the content of patient communication, further described below.

#### 4.3.1 The focus and impact of communication

The focus of communication was found to influence the relationship-building and interaction between RNs and patients. The focus of the communication could both point to and result from a power imbalance between RNs and patients.

The interaction between RNs and patients changes during encounters and might signify both symmetry and asymmetry (Barrere, 2007). When building a relationship, the roles of RNs and patients could be complementary and facilitate symmetry through a social exchange in the communication such as humour and trust (Lotzkar & Bottorff, 2001) or by including the patient's family members (Reblin et al., 2016). However, psychosocial issues, positive emotions and partner statements usually receive much less attention than physical care information (Ellington et al., 2018). RNs were found to dominate the communication and interaction when they initiated the contact, decided on the topic, or had an instructor role (Duxbury et al., 2010; Ellington et al., 2018, 2012; Höglander et al., 2017; Kettunen et al., 2000; Pettersson et al., 2018). RNs’ dominance was also observed in consultations in which they talked more than their patients (Ellington et al., 2018, 2012). RNs’ contributions to the interaction and communication with patients were sometimes minor compared to other professionals such as physicians (Weber et al., 2007).

A dominant discourse of communication was also described as nonpatient centred (Siouta et al., 2019). The dominant role could increase or decrease, depending on the RN’s interaction with the patient (Barrere, 2007; Ellington et al., 2018, 2012). If the RNs instead invited the patient to participate in his or her care, it could decrease the asymmetry in the relationship (Bolster & Manias, 2010).

Even if the RNs strived to meet patients’ needs, they often focused on nursing routines, for example, tasks regarding nutrition, hygiene, physical examinations or medication administration (Gordon et al., 2009; Macdonald et al., 2013; Prip et al., 2019) as well as on patients’ medical conditions and questions (Johnsson, Wagman, et al., 2018; Prip et al., 2019). RNs were often the ones who initiated the gathering of patient information (Duxbury et al., 2010), and the communication became characterized by a focus on treatment, which seldom explored patients’ existential and psychosocial concerns (Prip et al., 2019). RNs were reported to be more confident and efficient in communication on medical or physical aspects, rather than in communication on emotional aspects (O’Baugh et al., 2009). Some studies reported that RNs exhibit poor skills in answering patients’ questions (Carlsson & Pettersson, 2018; Collins, 2005; Roche & Jones, 2021), clarifying their doubts or exploring their comments (de Leeuw et al., 2014; Duxbury et al., 2010; Eide, Sibbern, Egeland, et al., 2011; Eide, Sibbern, & Johannessen, 2011; Ernesäter et al., 2014; Ernesäter et al., 2016; O’Baugh et al., 2009).

[Table 1]
4.3.2 Various, more or less person-centred communication styles

RN's communication with patients was multifaceted. In some situations, communication became more focused on the RNs’ agenda; compared to when RNs used a more patient-centred approach.

RN also used different communication styles and strategies. There were also differences in how communication was expressed, that is, verbal or non-verbal communication.

The topic for the communication varied, often depending on the situation or context of care. RN's communication could also be influenced by structural and sociocultural factors (Fakhri Movahedi et al., 2011). The communication could have a wide range of topics, for instance, related to information regarding illnesses or procedures (Efraimsson et al., 2015; O'Baugh et al., 2009; Pettersson et al., 2018; Roche & Jones, 2021), medical or therapeutic regimens (Carlsson & Pettersson, 2018; Drevenhorn et al., 2001; Duxbury et al., 2010; Hakimnia et al., 2014; Johnsson, Boman, et al., 2018; Kim et al., 2001; Manias & Williams, 2007; Mulder et al., 2014; Pettersson et al., 2018; Sandhu et al., 2009; Sayah et al., 2014) or non-pharmacological topics, such as diet and physical activity (Drevenhorn et al., 2001; Mulder et al., 2014; Sayah et al., 2014) and health behaviours (Mulder et al., 2014). Psychosocial or socioemotional content was also common (Drevenhorn et al., 2001; Pettersson et al., 2018) involving small talk (de Leeuw et al., 2014; Sundler et al., 2020) and building relationships with the patients (Sandhu et al., 2009).

Different communication styles were used when talking with patients, such as medical, nursing, pedagogical or power styles (Johnsson, Boman, et al., 2018). RNs also used attentive and conforming communication, with active listening and open-ended questions (Oliver et al., 2019; Pettersson et al., 2018; Sundler et al., 2020). When asking open-ended questions, RNs received more detailed descriptions and information from patients (Ernesäter et al., 2014). In addition, communication loops were used as a strategy for clarifying and repeating information while checking for understanding (Sayah et al., 2014). Giving more space for further exploration was another strategy to explore the specific patient's needs and problems (Collins, 2005; Duxbury et al., 2010; Finset et al., 2013; Heyn et al., 2013, 2011; Högländer et al., 2017; Oguchi et al., 2011). Other communication strategies involved the use of back channelling, friendly jokes, checks for understanding, compliments and partnership building (Johnsson, Boman, et al., 2018; Kim et al., 2001; Oliver et al., 2019; Wakefield et al., 2008). RNs also validated the patient's expression by showing understanding (Eide, Sibbern, Egeland, et al., 2011; Eide, Sibbern, & Johannessen, 2011; Kettunen et al., 2003; Oliver et al., 2019).

Non-verbal communication, such as eye contact, touching, movements, affirming nods, attitude and showing emotions, were often used (Duxbury et al., 2010; Eide, Sibbern, Egeland, et al., 2011; Eide, Sibbern, & Johannessen, 2011; James et al., 2020; Johnsson, Boman, et al., 2018; Lam et al., 2020; O'Baugh et al., 2009). RNs' non-verbal communication with patients can aid in communicating care and concern, such as demonstrating friendship (Johnsson, Boman, et al., 2018; O'Baugh et al., 2009; Sundler et al., 2020), warmth and empathy (Duxbury et al., 2010; Eide, Sibbern, Egeland, et al., 2011; Eide, Sibbern, & Johannessen, 2011).

Patient-centred communication strategies were also reported (Berry, 2009; Pettersson et al., 2018; Sundler et al., 2020), with RNs inviting, involving and recognizing patients during communication, and encouraging them to narrate their experiences (Pettersson et al., 2018; Sundler et al., 2020), focusing on their emotions (Hafskjold et al., 2017) and facilitating a mutual interaction (Sundler et al., 2020). Patient-centred communication was more personal and focused on the individual patient's perspective of their situation and everyday life (Johnsson, Wagman, et al., 2018; Collins, 2005). However, social conversation and partnership building were sometimes less frequently used (Berry, 2009).

There were examples of communication that did not include active listening or confirming the patient (Kettunen et al., 2006; Pettersson et al., 2018), with these examples focusing on closed-ended questions and providing information (Duxbury et al., 2010; Efraimsson et al., 2015; Ernesäter et al., 2014, 2016; Pettersson et al., 2018), or RNs not asking for the patient's view or acceptance (Duxbury et al., 2010). Sometimes, RNs also ignored topics posed by the patient (Eide, Sibbern,
Egeland, et al., 2011; Eide, Sibbern, & Johannessen, 2011; Johnsson, Boman, et al., 2018) or distanced themselves during communication (de Leeuw et al., 2014; Jansen et al., 2009; Johnsson, Boman, et al., 2018; Uitterhoeve et al., 2009). RNs sometimes used one-way communication and provided instructions, often based on themselves as experts on the topic (Carlsson & Pettersson, 2018) and restricted the speech of the patient (Kettunen et al., 2006, 2000). Sometimes RNs used medical jargon with the risk that RN–patient communication became unclear (Sayah et al., 2014).

4.3.3 The content of patient communication

Fewer studies were reporting on patients' communication, with a focus on patients' expressions of concerns and the content of the patient communication. Patients used different communication styles and their communication were affected by the RNs' communication.

Studies showed that the content of patients' communication with RNs included questions regarding medical issues, such as medications, medical examinations or symptoms (Drevenhorn et al., 2001; Kim et al., 2001), lifestyle issues (Wakefield et al., 2008), social talk (Kim et al., 2001), emotional cues (Eide, Sibbern, Egeland, et al., 2011; Finset et al., 2013; Heyn et al., 2011, 2013; Kettunen et al., 2000; Oguchi et al., 2011) or informational cues (Jansen et al., 2009).

Similar to RNs, the patients also used different communication styles, such as storyteller, quiet confirmer, stoic observer, emotional expressor, detail-oriented inquisitor, dominant participator or critical self-observer (Kettunen et al., 2000). Patients' participation during communication and their choice of communicative content or communication style were often affected by how the RNs communicated with them (Eide, Sibbern, Egeland, et al., 2011; Kettunen et al., 2000; Kim et al., 2001); for example, patient participation was affected by how RNs responded (Eide, Sibbern, Egeland, et al., 2011; Kettunen et al., 2000) or if they used professional terminology (Kettunen et al., 2000). Patients became more active when RNs expressed positive emotions, understanding or agreement and used small talk (Kim et al., 2001).

Patients often took the initiative to talk about emotional concerns (Eide, Sibbern, Egeland, et al., 2011; Heyn et al., 2013; Linn et al., 2020), and they sometimes used non-verbal cues (Heyn et al., 2013; Lam et al., 2020) and strategies, such as humour, when expressing difficulties or concerns (Mallett & A'Hern, 1996). However, some studies reported that patients avoided being explicit about their concerns with RNs (de Leeuw et al., 2014; Eide, Sibbern, Egeland, et al., 2011; Kettunen et al., 2000), whereas one study revealed that patients uttered more explicit concerns when talking to RNs who provided empathic responses, compared to RNs who did not (Eide, Sibbern, Egeland, et al., 2011).

5 Discussion

This study provides a state-of-the-art review, focused on empirical observational studies describing RN–patient real-time communication. This is considered an important area of research since a current review revealed relatively few articles on real-time RN–patient communication. The ecological validity in observational studies is considered high. Studies on real-time communication can contribute to knowledge gained directly from observations of communication and interactions, instead of retellings of experiences, for example, through interviews. Asking patients and RNs how they evaluate communication may not always reflect what happens in real life.

Although most of the studies focused on RN communication, including content and style, fewer studies focused on patient communication. The results further point to RN communication as being significant for interaction and relationship-building with patients, but few studies have revealed the influence of RN–patient communication on patient outcomes or patient safety. However, there are important differences between immediate, intermediate and long-term outcomes. The RN–patient communication is significant for immediate outcomes, for example, what happens in the interaction,
which can be achieved by communication, and so do intermediate outcomes, such as medication adherence.

No explicit challenges regarding RNs’ communication skills were reported in the results, which was surprising because, as previously stated, RNs are frontline healthcare professionals (Kaminsky et al., 2017) who often work independently and care for patients with complex conditions. Hence, it was expected that RNs would face high demands on their communication skills. Communication processes are also described as being complex (Parker et al., 2020), which would also be expected to challenge RNs’ communication skills. However, it was observed that RNs could have poor abilities in answering questions or further exploring patients’ doubts. There were also examples of RNs using a mixture of task-oriented and socioemotional communication, as well as RNs using different communication strategies based on situation or context, which may hint at some challenges and complexity of RN–patient communication. Research could benefit by making communication challenges more explicit or emphasizing the knowledge or skills needed by RNs to improve RN–patient communication. This may be related to the complex nature of nursing, where challenges and shortcomings in communication and interaction may be related to how these phenomena often occur naturally during interventions and tasks, in contrast to physician–patient communication in, for example, consultations allowing for information exchanges under different circumstances.

The communication practice of nurses is still developing, and the studies in this review had a descriptive or exploratory nature to explore RN–patient communication. However, the results revealed no clear picture of the theoretical underpinnings of RN communication, and the integration of theories in the empirical studies was weak. Similar results were found by Fleischer et al. (2009), concluding that nursing theories were rarely used in studies on RN–patient communication. We propose the need for future utilization of empirical RN–patient communication research that is integrated with theory development of RNs’ communication, the centring of patients’ needs and communication as a core competence for nurses.

It was also found that communication and interaction were used interchangeably similar to the review by Fleischer et al. (2009). This is further supported by the communication theory provided by Watzlawick et al. (1967/2014), which states that all communication includes interaction and is described as a reciprocal and dyadic process that goes beyond a mere sender–receiver relationship.

The agenda for communication appears to be primarily set by RNs. The patients’ communication styles were affected by how the RNs communicated. For example, patients used a more active communication style if RNs were positive, empathetic or prosocial. Moreover, the patient became more implicit and avoided explicit utterances when nurses were perceived as being less empathic in their communication. It is critical to provide space for patients to address their concerns and ask questions (Höglander et al., 2017). Communication is fundamental in nursing care; specifically, it is a critical starting point for understanding patients’ needs and expectations (Caris-Verhallen et al., 1997). Proper and effective communication could demonstrate symmetry and build trust, which may help to facilitate patient-centred care. When integrating nursing tasks with the patients’ views, more patient-centred styles of communication could be beneficial. Effective communication is emphasized to ensure high-quality care that supports and meets the patients’ needs (Kwame & Petrucka, 2022).

RNs’ communication with patients is often embedded in everyday activities (Höglander et al., 2020; McCabe, 2004; Sundler et al., 2016). Communication was closely linked to relationship building and socializing, and it must focus on more than just instrumental nursing tasks. Routinely, nurses may use more task-oriented communication, which may result in RNs missing opportunities for active listening and patient-initiated topics. However, patients may be vague or unclear in expressions of their concerns. Thus, the communication skills of RNs, such as active listening, being attentive and responding to implicit and explicit expressions during conversations with patients, are important in nursing.

This review focused on empirical studies of real-time RN–patient communication. Studies using, for instance, interviews were excluded. Some of the included studies used participatory
observations, even if most of the studies used direct observations, such as audio or video recordings. We argue that more studies of real-time communication using audio and video recordings are needed, as there may be gaps between what people report and recall in interviews about nursing care and how this care was delivered. There is a need for studies about RNs’ real-time communication and how communication may hinder or facilitate quality and patient-centred care. Some of the included studies used participatory observations, even if most of the studies used direct observations, such as audio or video recordings. We argue that more studies of real-time communication using audio and video recordings are needed, as there may be gaps between what people report and recall in interviews about nursing care and how this care was delivered. There is a need for studies about RNs’ real-time communication and how communication may hinder or facilitate quality and patient-centred care.

5.1 Strengths and limitations

A strength of this review is the clearly defined inclusion of studies on RNs. Thus, this review adds to what is currently known about RN–patient communication and the methods and approaches that have been used within this field. However, the low number of articles that matched our inclusion criteria led to the decision to analyse articles regardless of context or situation, which made the analysis complex and the results broad. The results give an overview of the width and depth of observational research in nursing care and finding such a miscellaneous set of studies was an outcome in itself, which might indicate a less well-grounded field of research. A narrower inclusion could instead have resulted in an even fewer number of articles and risked excluding important research within this relatively unexplored research area.

The search strategy may have led to a limitation in eligible articles. Even if databases are perceived as being effective and efficient sources for literature searches, Whittemore and Knafl (2005) point out that an inconsistent search terminology or indexing problem may yield only a 50% search result. This became evident through the addition of articles from other sources that were not found in the initial database searches. However, the addition of articles through additional sources may be considered a strength that allowed for a more comprehensive literature search.

6 Conclusion

This review gives an overview of the width and depth of observational studies on RN–patient communication research. The various set of studies in this area might indicate a less well-grounded field of research, with a need for further research. The relationship between RNs and patients is intertwined with communication, and communication will influence how an interaction develops. Hence, communication is a critical starting point for interaction and its development. It is important that RNs become aware of their communication styles and how their behaviour can affect the communication, otherwise, insensible and unreflective communication can lead to misunderstandings. RNs should understand the significance and meaning of the communication skills that they use, as well as how to facilitate patient-centred communication. The content and styles of communication revealed the use of different communication styles, as well as the fact that communication was multifaceted. Future research is needed on what communication skills are required for RNs to adapt to different situations and circumstances. Further empirical studies and literature on RN–patient communication are also needed concerning how communication influences quality care, as well as common themes and phenomena within this research field that can be useful for the development of theoretical underpinnings of RN communication. There was a shortage of theoretical underpinnings for nursing-based communication in the reviewed articles, and few studies about patients’ communication with RNs were found when conducting this review, thus indicating that further research is needed within these areas.
Author contributions
JH: Methodology, Investigation and Writing (preparation of the original draft, as well as reviewing and editing). IKH: Conceptualization, Methodology, Investigation and Writing (reviewing and editing). AL: Investigation and Writing (reviewing and editing). SVD: Writing (reviewing and editing). HE: Writing (reviewing and editing). AJS: Conceptualization, Methodology, Investigation and Writing (preparation of the original draft, as well as Reviewing and Editing). All authors have agreed on the final version and meet at least one of the following criteria (recommended by the ICMJE [http://www.icmje.org/recommendations/]):

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2. drafting the article or revising it critically for important intellectual content.

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References


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Figures and tables

Figure 1  Flow diagram of the literature search.
## Table 1  Characteristics and summary of included studies

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<thead>
<tr>
<th>Author/year/country</th>
<th>Aim</th>
<th>Methods/study design</th>
<th>Setting and sample</th>
<th>Findings/Conclusion</th>
</tr>
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<tbody>
<tr>
<td>Barrero et al. (2021), USA</td>
<td>To examine nurse–patient communication and identify interactions of symmetry and asymmetry</td>
<td>Qualitative ethnographic study with a cross-sectional design using discourse analysis</td>
<td>Data gathered from 340 audio-taped nurse–patient conversations from 20 nurses (10 female/10 male) and 20 patients (10 female/10 male)</td>
<td>The nurse–patient interactions demonstrated both symmetry and asymmetry, and this changed during conversations. The nurses were found to be dominant and had an instructor role; they initiated the interaction and introduced new topics, while the patients mostly responded to questions. Patient education occurred and nurses provided more support than in previous studies. The interaction role varied more in the nurses than in the patients. The findings suggest that the nurse–patient dyad is more balanced than previously suggested.</td>
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<tr>
<td>Berry et al. (2012), UK</td>
<td>To investigate nurse–patient communication styles in clinical practice</td>
<td>Quantitative cross-sectional design using statistical analysis</td>
<td>Data were gathered from 32 audio-taped interactions between 11 nurses (7 female/4 male) and 30 patients (24 female/6 male)</td>
<td>Some nurse–patient interactions were more frequent than others. The nurses were found to be more dominant than the patients, and the patients were more likely to ask questions. The nurses used more open-ended questions than the patients. The findings suggest that the nurse–patient dyad is more balanced than previously suggested.</td>
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<tr>
<td>Carini and Pettersson (2018), Sweden</td>
<td>To describe the structure, content and the communication of nurse–patient consultations in oncology</td>
<td>Exploratory study using both quantitative and qualitative design</td>
<td>Data gathered from 23 audio-taped nurse–patient consultations with 9 nurses (6 female/3 male) and 24 patients (11 female/13 male)</td>
<td>The communication was found to be mostly one-sided, with the nurses being the primary communicators. Both nurses and patients were found to ask more questions than was expected. The findings suggest that the nurse–patient dyad is more balanced than previously suggested.</td>
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<tr>
<td>Höglander, J, Holmström, I.K., Lövenmark, Dulmen, S. van, Eide, H, Sundler, A.J.</td>
<td>Registered nurse–patient communication research: an integrative review for future directions in nursing research. Journal of Advanced Nursing: 2022</td>
<td>To describe communication in home hospital nurse visits and relate patient-caregiver dyads to assess change in communication related to domains of care over the course of visits</td>
<td>Multi-site prospective observational longitudinal study using quantitative methods to analyze data coded with RAS</td>
<td>Changes in 24% of the utterances were made by the patient, and 9% by the nurse. The conversations were predominantly focused on physical care. Home hospital conversations were predominantly focused on physical care, maintaining a relatively stable focus on physical and psychological health. A small decrease in emotional expressions was observed over time. Nurses often failed to recognize the critical role of caregivers and to address their concerns about patient care. The study suggests that nurse-communication strategies could be developed to better support the patient.</td>
</tr>
<tr>
<td>Efremova et al. (2019)</td>
<td>A comparison of calls subjected to a mobile clinic versus a “normal cell” within the Swedish healthcare direct care clinics. A control study</td>
<td>To compare communication patterns in calls subjected to a mobile hospital clinic with matched controls.</td>
<td>Cross-sectional design using quantitative methods to analyze data coded with RAS</td>
<td>In all calls and contrasts, the communication was slightly more positive, with a rate of talk unison at 0.31 and 0.24 in the mobile clinic versus a rate of 0.28 and 0.24 in the control group (p = 0.624). Statistically significant differences were found between the two groups. The mobile clinic nurses used fewer open-ended medical questions in the cases compared with controls (callers provided talk-hospitals) with more medical information in the controls compared with the cases and talk nurses used more facilitation and patient activation activities in controls, e.g., when answering questions in the mobile clinic. In the control calls, the nurses used closed-ended questions to a larger extent than in the control calls. More open-ended questions and closed-ended questions were used. Such questions, e.g., open-ended questions of chat-channeling allowed for richer medical descriptions and more information from callers. The study concludes that these communication techniques are important.</td>
</tr>
<tr>
<td>Falah Mansourf et al. (2019)</td>
<td>A qualitative content analysis of nurse–patient communication in emergency nursing</td>
<td>To explore cultural and contextual factors influencing nurse–patient communication and identify factors affecting human nurses and patients</td>
<td>Qualitative study using grounded theory</td>
<td>Hospital data gathered from interviews and observations.</td>
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<tr>
<td>Höglander et al. (2018), Norway</td>
<td>To investigate older cancer patients’ reactions to healthcare communication</td>
<td>Observational study data collected with VR-CAES</td>
<td>213 home care visits; 210 audiotaped home care visits, 56 home care visits (2 female/male)</td>
<td>A total of 475 nurses and 169 cancer patients were coded with more attention to nurses’ emotions/cancer patients’ concerns</td>
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<td>Johnson, Roman, et al. (2009)</td>
<td>To describe how nurses communicate with their patients and their relatives in a department of medicine for elderly people.</td>
<td>Ethnographic and qualitative design informed by the structural perspective.</td>
<td>Data collected from 139 patients who were outpatients or inpatients, and their relatives from 20 departments of medicine for elderly people.</td>
<td>The results describe how nurses communicate with their patients and their relatives. The nurses use professional language and skillful communication techniques.</td>
</tr>
<tr>
<td>Johnson, Nygård, et al. (2009)</td>
<td>To explore and describe the content of the communication exchanges between nurses and patients and their relatives in a department of medicine.</td>
<td>Ethnographic and qualitative design informed by the structural perspective.</td>
<td>Data collected from 129 patients and 35 nurses.</td>
<td>Three categories of communication were identified: emotional support, information exchange, and decision-making.</td>
</tr>
<tr>
<td>Keitunen et al. (2009)</td>
<td>Finland. Communication styles of hospital patients during nurse-patient counselling.</td>
<td>Qualitative case study.</td>
<td>Data collected from 18 hospital patients and 12 nurses.</td>
<td>The study described seven communication styles used by patients.</td>
</tr>
<tr>
<td>Keitunen et al. (2009)</td>
<td>To assess the communication behaviours of nurses and patients in a hospital setting.</td>
<td>Qualitative study.</td>
<td>Data collected from 18 nurses and 10 patients.</td>
<td>Affective questions and narrative speech, together with statements that facilitated active participation by patients.</td>
</tr>
<tr>
<td>Keitunen et al. (2009)</td>
<td>To investigate the communication behaviors of nurses and patients in a hospital setting.</td>
<td>Qualitative study.</td>
<td>Data collected from 18 nurses and 10 patients.</td>
<td>Change talk was described based on three categories: suggested, resisted, and unchallenged.</td>
</tr>
<tr>
<td>Kim et al. (2009)</td>
<td>Indonesia. Client communication behaviors with health care providers in Indonesia.</td>
<td>Descriptive cross-sectional study.</td>
<td>Data collected from 120 patients.</td>
<td>Results describe culturally acceptable ways for the clients to express their communication needs.</td>
</tr>
<tr>
<td>Lee et al. (2009)</td>
<td>To investigate the factors influencing the level of satisfaction with nurse-patient communication among oncology patients.</td>
<td>Observational design.</td>
<td>Data collected from 100 patients.</td>
<td>The most common positive nonverbal cues used by nurses during routine care were visual contact (90.7%) and proxemics (75.7%), and for patients: visual contact (82.7%) and maintaining attention (83.4%) were common.</td>
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<td>Lim et al. (2015), the Netherlands</td>
<td>To explore how patients with inflammatory bowel disease (IBD) and nurse–patient interactions (NPI) in the Netherlands communicate about online health information seeking.</td>
<td>Qualitative descriptive design using a grounded theory method</td>
<td>Data gathered from 56 consultations, including 67 relevant themes/segments 8 Nurse Practitioners 8 Female 9 Male 55 Participants (53 Female/2 Male)</td>
<td>The findings suggest that it is important to integrate digital communication during consultations with patients. However, the use of an open question can contribute to patients’ participation and the process of knowledge sharing.</td>
</tr>
<tr>
<td>Luttorf and Bottroff (2008), Canada</td>
<td>To identify features of nurse–patient interactions (NPI) in the development of a nurse–patient relationship</td>
<td>Narrative study using qualitative method</td>
<td>Data gathered from 270 nurse–patient interactions involving 80 patients, with an average consultation duration of 72.5 minutes.</td>
<td>The findings describe the active and complementary roles of nurses and patients when developing a nurse–patient relationship. More research is needed on the impact of nurses’ roles in the relationship building.</td>
</tr>
<tr>
<td>Macdonald et al. (2017), New Zealand</td>
<td>To examine the nature and perspectives of nurse–patient interactions (NPI) and nurses’ contraceptive knowledge and competencies</td>
<td>Descriptive case study using qualitative content analysis</td>
<td>Data gathered from 55 interviews with 69 nurses.</td>
<td>This study describes the nature and perspectives of nurse–patient interactions and provides insights into nurses’ knowledge and competencies.</td>
</tr>
<tr>
<td>Maltz-Perl and An-Tur (1995), England</td>
<td>To describe the frequency, duration, and use of humour in nurse–patient communication.</td>
<td>Ethnographic methodology using conversation analysis</td>
<td>Data gathered from 250 tapes of recorded consultations with 120 patients.</td>
<td>The findings indicate that humour is an important tool for nurse–patient communication.</td>
</tr>
<tr>
<td>Holmes and Wilkins (2007), Australia</td>
<td>Communication between patients with chronic illness and nurses about managing pain in the acute hospital setting.</td>
<td>A single group, non-randomised design using qualitative data analysis</td>
<td>Data gathered from 200 patients with chronic pain.</td>
<td>The findings describe the nature and frequency of nurse–patient communication about managing pain.</td>
</tr>
<tr>
<td>Mulder et al. (2016), the Netherlands</td>
<td>To assess if, and how, nurses applied the five key elements of self-care management support in chronic care</td>
<td>An observational study</td>
<td>Data gathered from 99 nurse–patient consultations with 33 patients.</td>
<td>Nurses usually used assessed current health behaviours and follow-up consultations. The nurses described the importance of patient education and the need for ongoing support.</td>
</tr>
<tr>
<td>O’Shaughnessy et al. (2017), Australia</td>
<td>To explore the development of human–nurse communication that takes place between nurse and patient during chemotherapy</td>
<td>Qualitative, descriptive approach</td>
<td>Data gathered from 60 tapes of recorded nurse–patient consultations with 30 patients.</td>
<td>It was common for conversations to focus on the information provided and the nurse’s role during chemotherapy.</td>
</tr>
<tr>
<td>Occhipinti et al. (2016), Australia</td>
<td>To assess the impact of nurse–patient communication on patients’ emotional well-being</td>
<td>Quantitative, Exploratory and Comparative</td>
<td>Data gathered from 150 nurse–patient consultations with 100 patients.</td>
<td>Both patients and family members were observed to express concerns and document consultations, if needed. More research is needed to evaluate the impact of nurse–patient communication on emotional well-being.</td>
</tr>
<tr>
<td>Oliver et al. (2007, USA)</td>
<td>To examine the methods of nurse–patient communication in non-home hospice care</td>
<td>Qualitative content analysis</td>
<td>Data gathered from 60 home visits to 30 patients and their family caregivers.</td>
<td>The nurse’s role in communication was found to be significant in the patient’s family caregivers.</td>
</tr>
<tr>
<td>Peperstraete et al. (2016), France</td>
<td>To describe preparedness for surgery—Communication between preoperative consultations with patients undergoing surgery for colorectal cancer after a person–centred intervention.</td>
<td>An interpretative qualitative design</td>
<td>Data gathered from 20 nurse–patient consultations with 10 patients.</td>
<td>The nurses provided detailed information about the surgery and its implications, which was valued by patients.</td>
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<tr>
<td>Phan et al. (2016), Vietnam</td>
<td>To describe preparation for surgery—Communication between nurse patient consultations with patients undergoing surgery for colorectal cancer after a person–centred intervention.</td>
<td>An interpretative qualitative design</td>
<td>Data gathered from 15 nurse–patient consultations with 10 patients.</td>
<td>The nurses provided comprehensive information about the surgery, which was valued by patients.</td>
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<tr>
<td>Prins et al. (2015), Denmark</td>
<td>To describe nurse–patient communication during consultations with patients undergoing surgery for colorectal cancer after a person–centred intervention.</td>
<td>An interpretative qualitative design</td>
<td>Data gathered from 10 nurse–patient consultations with 5 patients.</td>
<td>The nurses provided detailed information about the surgery, which was valued by patients.</td>
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<td>Prig et al. (2019)</td>
<td>To explore communication between nurses and patients during chemotherapy in an outpatient clinic to gain insights into how patients are supported</td>
<td>Qualitative, in-depth interviews</td>
<td>Oncology outpatient clinic</td>
<td>Three main themes were identified: treatment-centered communication, efficient communication and especially bound communication. The communication was characterized by the context that was focused on the treatment. The aspects of existential, psychosocial and sexual concerns were rarely explored.</td>
</tr>
<tr>
<td>Roche and Jones (2012)</td>
<td>To explore patient and nurse perspectives of information provision in the pre-admission phase of an acute surgical admission and to increase the quality of surgical care</td>
<td>Qualitative</td>
<td>Outpatient clinics and hospital wards for surgery</td>
<td>Six communication patterns occurred in two perspectives: (1) when the nurse interacts most with the patient (nurse-centered) and (2) when the patient engages in low or high levels of dialogue during the care. The results contributed to the ongoing efforts to improve patient communication patterns in care.</td>
</tr>
<tr>
<td>Reblin et al. (2018)</td>
<td>To identify common patterns of communication in home hospital nurse–patient and caregiver–patient communication patterns</td>
<td>Qualitative, data-coded with RAS</td>
<td>Hospital</td>
<td>The nurses focused on patient education and promotional activities. The majority of RNs had a significant degree of satisfaction with the communication pattern in the hospital.</td>
</tr>
<tr>
<td>Sundler et al. (2018)</td>
<td>To explore the relationship between nurse–patient communication and nurse satisfaction</td>
<td>Qualitative</td>
<td>Home health care</td>
<td>The major discourse was non-person-centered oriented. This alternative discourse was un-linked related to the patient’s personal and cultural background and showed that nurses could develop a person-centered approach to consultation. Other factors included: structured and unstructured language, and the use of different vocabulary. The nurses had a higher degree of overall self-satisfaction with the consultations than doctors. Patient care was significantly related to building a relationship with their patient.</td>
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<tr>
<td>Sundler et al. (2018)</td>
<td>To explore the relationship between nurses and older persons who are cared for in their home</td>
<td>Qualitative</td>
<td>Home health care</td>
<td>The major discourse was non-person-centered oriented. The alternative discourse was un-linked related to the patient’s personal and cultural background and showed that nurses could develop a person-centered approach to consultation. Other factors included: structured and unstructured language, and the use of different vocabulary. The nurses had a higher degree of overall self-satisfaction with the consultations than doctors. Patient care was significantly related to building a relationship with their patient.</td>
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<tr>
<td>Underboe et al. (2009)</td>
<td>To investigate the relationship between nurse–patient communication patterns and nurse-patient satisfaction</td>
<td>Qualitative, expert review of MIAS</td>
<td>Hospital</td>
<td>Nurse care was significantly related to patient satisfaction. Patients with higher satisfaction regarding the communication they had with the nurses were more satisfied with the care. The nurses’ satisfaction was indicated by 70% of nurses, especially women or cancer, and 54% expressed a positive relationship. Nurses explored 55% of the cases per consultation. 54% were acknowledged and 55% had a sense of being supported.</td>
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<tr>
<td>Weidholz et al. (2006)</td>
<td>To compare differences in nurse–patient communication profiles between two telehealth modalities: telephone and telepresence, and evaluated longitudinal changes in communication profiles and patient satisfaction</td>
<td>Randomized controlled clinical trial, data coded with RAS</td>
<td>Home-based heart failure care</td>
<td>There were no significant demographic differences between the telephone and telepresence groups. The nurses had a high degree of satisfaction related to the classification of data gathering. Building a relationship and partnering building. The highest number of uterine cancers appeared in the following relationship categories. Nurses commonly used open-ended questions, basic channel recovery, friendly jokes and checks to try to increase their satisfaction. On the telepresence the nurses more often gave specific information and approval comments, and it was more common to use closed-ended questions.</td>
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Abbreviations: MIAS, the Medical Interview Aural Rating Scale; NG, nut state; RAS, Rating Interaction Analysis System; VU-CuDES, the Venosa Coding Definitions of Emotional Sequences.