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Intraprofessional collaboration: A qualitative study of registered nurses' experiences

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ABSTRACT

Background: Collaboration and intraprofessional relationships are essential for healthy work environments; they affect everyday practice, quality of care, patient outcomes, and nurses' welfare. Little is known about how nurses experience nurse–nurse collaboration.

Aims: To describe registered nurses' experiences of nurse–nurse collaboration in one Finnish and one Norwegian university hospital.

Design: This study used a qualitative descriptive approach applying the Consolidated criteria for Reporting Qualitative research guidelines.

Methods: Interviews were conducted with 29 nurses in two university hospitals in Finland and Norway in 2015. Interviews were audio-recorded and transcribed, and data were categorised by inductive content analysis.

Findings: The registered nurses described nurse–nurse collaboration as equal and smooth collaboration towards a common goal with the patient in the centre, professional collegiality, a functioning working environment and clear communication. Also essential were empowering relationships, including categories such as sharing of knowledge and skills, and support and sharing of work.

Discussion: There is considerable variation in the ways nurses understand and experience collaboration within the profession.

Conclusions: Intraprofessional collaboration profoundly affects nurses' well-being. Strategies and continuous reinforcement are needed to strengthen and support intraprofessional collaboration, for instance through staff education and training.

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Summary of relevance

Problem

Nurse–nurse collaboration is essential in nursing practice, as demands on nurse professionals are growing constantly. Little research has focused on nurses' experiences of nurse–nurse collaboration.

What is already known

Relationships between colleagues are connected with job satisfaction, high-quality nursing care and patient satisfaction. Collaboration is also associated with a healthy work environment.

What this paper adds

The meaning of nurse–nurse collaboration is clarified to improve understanding of its impact on nurses. It demonstrates that good collaborative nurse–nurse relationships are supported by an open communication culture, effective inducting processes, competence assurance and social interaction opportunities.

Introduction

There is a global shortage of nurses, so nurse retention is an issue of wide concern. A key objective is to retain employees and further their professional development by creating healthy workplaces with good management practices. This is emphasised now, when nurses work hard under the pressure of the COVID-19 pandemic, where collaboration between colleagues is significant (WHO, 2020).

The Nordic countries face challenges in health care because the number of elderly citizens is increasing, and fewer professionals

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are available to work in the sector. Additionally, financial resources are limited so there is an urgent need for change in health towards proactive and preventive care, to control costs (Nordic Council of Ministers, 2019.) Health care in the Scandinavian countries is mostly provided by the public sector, financed by taxes and based on equivalent rights to health care services for all. Nursing education is also quite similar in these countries (Lindqvist et al., 2014.)

Nurses play vital roles in delivering health services, so their continuing professional development, and collaborative professional partnerships are important. The positive impact of nursing is strengthened by intra- and interprofessional collaborative partnerships (WHO, 2016.) Intraprofessional collaboration has been defined as 'multiple members of the same profession working collaboratively to deliver quality care within and across settings' and interprofessional collaboration as "a variety of health care professionals working together to deliver quality care within and across settings" (College of Nurses of Ontario, 2014).

2. Background

The results of the American Association of Critical-Care Nurses study conducted in 2018, on nurses' work environments, revealed that there had been an improvement in true collaboration in nursing work units since the previous study in 2013. Collaboration was positively associated with job satisfaction, quality of care, effectiveness and retaining nurses in nursing (Ulrich, Barden, Cassidy, & Varn-Davis, 2019.) Studies have shown that a healthy work environment enhances job satisfaction among health care personnel (Lin, Lai, Huang, Huang, & Hsieh, 2020; Ulrich et al., 2019) and enables a high quality of care (Schön Persson, Nilsson Lindström, Pettersson, Nilsson, & Blomqvist, 2018). Norman and Strømseng-Sjetne (2017) found that the domains that most commonly affect nurses' perceptions of the work environment are collaborative relationships with peers, supportive managers, professional practice and autonomy.

In a study by Kowalski et al. (2019), an effective work environment is one characterised by respect, teamwork, leadership, autonomy, staffing and organisational commitment to nursing. Collaboration, trust and mutual responsibilities are crucial for the well-being and feeling of belongingness among health care providers (Schön Persson et al., 2018).

Lindqvist et al. (2014) suggested in their study that Norwegian registered nurses (RNs) are more satisfied with their work and work environment than Finnish RNs. In their study, almost half of the participating Finnish RNs intended to leave their current job within a year to seek a new nursing position, compared to only one-quarter of Norwegian RNs (Lindqvist et al., 2014.) Most studies on collaboration have focused on collaboration between nurses and physicians (House & Havens, 2017; Lin, Lei, Meng, Hong, & Xue, 2016); there has been little research on nurse–nurse collaboration. Nurses and physicians' views on collaboration may vary (House & Havens, 2017); however, collaboration between these professionals has an impact on job satisfaction (Lin et al., 2016). This study sought to answer the question: What are RNs' experiences of nurse–nurse collaboration in one Finnish and one Norwegian university hospital?

3. Methods

3.1. Design

A qualitative descriptive approach was adopted to obtain an understanding of RNs experiences of nurse–nurse collaboration. Data were gathered via interviews with open-ended questions (Polit & Beck, 2008). The interview questions were formulated based on the

domains of the Nurse-Nurse Collaboration Scale (Dougherty & Larson, 2010), which measures nurse-nurse collaboration focusing on problem solving, communication, coordination, shared process, and professionalism.

Double translation and the revision of the interview themes were conducted by two official language revisers. The interview was piloted in both Finland and Norway to ensure the comparability and comprehensibility of the themes. Participants had the freedom to speak openly about the topics under discussion (Polit & Beck, 2008). The Consolidated criteria for Reporting Qualitative research (COREQ) were applied when reporting the results of this study (Tong, Sainsbury, & Craig, 2007, Supplementary file 1).

3.2. Participants and data collection

Data collection started by contacting the contact persons at each hospital, who had been selected during the study approval process. Then, the nurse director or person in charge of nursing at both hospitals was approached by email. A cover letter describing the study and its voluntary nature was sent out to all RNs in connection with a survey at the Finnish and Norwegian university hospitals (N = 1031 and N = 1039, respectively), inviting them to participate in the study. The sole inclusion criterion was being a RN. All nurses who were interviewed met the eligibility criteria. Nurses who were interested in participating contacted the researcher. The interviews were conducted by the first author in both countries in the respondents' native language and audio-recorded with the participants' permission. Data saturation was achieved after 29 interviews, when no new information was discovered (Polit & Beck, 2008.)

Sixteen interviews were conducted in Finland and thirteen in Norway. Face-to-face interviews were conducted between June and December 2015 with the Finnish and Norwegian RNs at the hospitals where they worked, one Norwegian RN was interviewed by telephone. The volunteer participants selected the date, time and location for the interviews. Each interview lasted for 30–60 minutes.

3.3. Data analysis

A qualitative inductive content analysis was performed to answer the research questions by processing the data in a stepwise fashion, going from specific statements to general categorisations. The audio-recorded interviews were transcribed verbatim by the first author, and the transcripts were read repeatedly to get an overview of the full dataset. Initial notes were made during this process. The interviews were divided into meaning units dealing with the same issues. The meaning units were then condensed, and codes were developed, reread and clustered into categories. Finally, the categories that emerged from the responses of the nurses in each country were compared to identify similarities and differences (Polit & Beck, 2008.) Quotations are used in the text, numbers represent the informant RN, and FI stands for Finland and NO for Norway. Fig. 1 presents examples of the progression from meaning units to categories in the inductive content analysis process.

3.4. Ethical considerations

Ethical approval for the study's design and conduct was obtained from the University Committee on Research Ethics (14/2014) and the Norwegian Data Protection Authority (3130/2015). Permission was also granted by the relevant authorities of the two hospitals. All participants received a detailed information sheet about the study, its confidentiality and their anonymity. The participants were informed that they could withdraw from the study at any

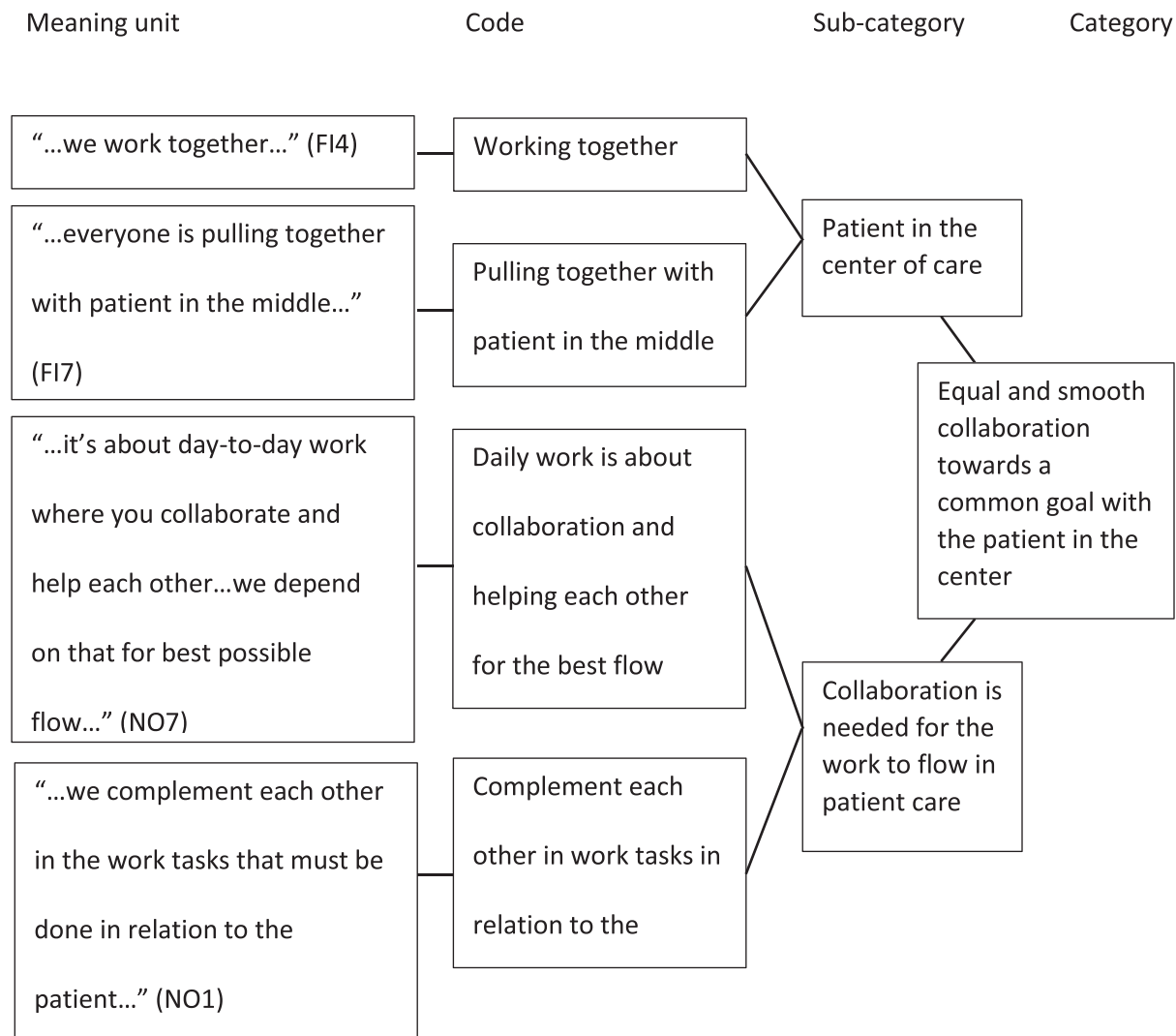


Fig. 1. Example of the inductive content analysis process from meaning unit to categories.

time. Informed consent was obtained from participants before the interviews and the cover letter included a confidentiality pledge (Polit & Beck, 2008).

3.5. Trustworthiness

Lincoln and Guba's (1985) criteria of credibility, transferability, confirmability and dependability were used to establish the study's trustworthiness. Data were collected in two countries with different languages by the interviewer (first author), which may have caused misinterpretations of the text and could thus reduce the study's validity. However, the interviewer has lived and worked in both countries and thus, had sufficient language skills to perform the data collection and analyses. The interviewer built trust by informing the respondents about the interview herself and the interview process. Credibility was ensured by giving the respondents enough time to answer the questions undisturbed and by listening to them actively. However, the transcripts were not reviewed by each individual participant, since the interviews were audio-recorded during visits to the countries only for the interviews. Confirmability was established by using a transparent analysis process and providing examples to illustrate the progression from meaning units to subcategories and main categories. Depend-

ability was strengthened when the researchers discussed the content of the data and the categorisation process. Transferability was achieved by providing detailed accurate descriptions of the analytical process and findings (Lincoln & Guba, 1985).

4. Results

4.1. Demographic characteristics

The demographics of participants are presented in Table 1. The participating nurses were similarly divided in the units in both countries.

4.2. Nurses' experiences of nurse–nurse collaboration

Six categories were identified in the analysis as follows: (i) equal and smooth collaboration towards a common goal with the patient in the centre; (ii) professional collegiality; (iii) functioning working environment; (iv) clear communication; (v) sharing of knowledge and skills; and (vi) support and sharing of work (Table 2). In the following sections, direct quotations are presented with the interview number in parentheses.



Fig. 1. Continued

Table 1
Demographics of participants (n = 29).

	Finland	Norway	(n)
Gender			
Female			25
Male			4
Age (years)	24–59 (mean 45)	22–57 (mean 38)	
Work experience in healthcare (years)	18	15	
Work experience in current unit (years)	8	7.7	
Working unit			
Medical unit			9
Surgical unit			9
Psychiatry			2
Anaesthesia and operation units			3
Child and adolescent units			3
Other			3

Table 2

Nurses experiences of nurse–nurse collaboration.

Category
Equal and smooth collaboration towards a common goal with the patient in the centre
Professional collegiality
A functioning working environment
Clear communication
Sharing of knowledge and skills
Support and sharing of work

4.2.1. Equal and smooth collaboration towards a common goal with the patient in the centre

Nurses experienced intraprofessional collaboration as working together with a spirit of togetherness: “It means that the work is done in collaboration so that the patient receives the care they need” (F19). Collaboration was referred to as: “Working in teams and complementing each other in work tasks that must be done in relation to the patient” (NO1); “In practice it means professional co-operation” (F19); “We should experience equality at work, be on the same level” (F12). Intraprofessional collaboration was also linked to patient safety, for example, “It is about quality assurance...We double check medication together” (NO5).

The participants reported that work experience facilitates collaboration: “Those who have experience, manage to take it easier, things go a bit automatically, and faster, and one can simply use more time to strengthen collaboration” (NO4). Further, some nurses said that collaboration is more about interpersonal skills: “Good collaboration is formed when you get along, enjoy each other and are able to work together” (NO5). Another nurse stated, “It is always easier to work with like-minded people” (F19). One said, “They should be knowledgeable and social, they should be talkative” (F11).

4.2.2. Professional collegiality

Collegiality was mentioned as an important part of collaboration, professional networking and interaction by the Finnish nurses. One nurse said, “You should respect your colleagues and give both good and bad feedback in a positive spirit” (F114) and another nurse said “A flow of information should be unified for all” (F12). One described, “Colleagues are also important in larger networks, when planning and agreeing on patient care. Collegiality is collaboration with co-workers, colleges, and of course with physicians...collaboration with different professional groups” (F13).

Every participating nurse spoke about cohesion, for example, one nurse said, “Let say that we are a kind of family within this work community” (F14). Most of them said that nurses’ personalities can influence intraprofessional collaboration both positively and negatively: “We are not all alike when it comes to collaboration” (F13). However, one nurse said, “Collaboration is supported when you are motivated to work” (F17). A nurse stated, “It is not just about personalities, it is about human behaviour” (F111). One said, “Collaboration depends on how one is as a person and if different types of personalities get along” (NO11).

4.2.3. A functioning working environment

The atmosphere in the workplace and collaboration between nurses depended strongly on the nurse leader: “The management culture must support collaboration” (F15) and “It’s of course the management, how they have posted collaboration, how they speak about it on the unit and generally” (NO7). An encouraging and open atmosphere with a positive attitude and humour gives strength. One nurse described, “Collaboration is important not only for me but also for well-being at work” (NO8). Another nurse shared, “It is about clear division of labour, good routines and good communication methods” (NO4). A third of the Norwegian nurses stated that collaboration was associated with a good working environment and well-

being, for example, “It can give joy, which makes the day float, things go smoothly and hopefully includes some humour” (NO3).

Successful collaboration requires adequate unit-level resources. A nurse said, “Of course, we need resources, we need sufficient staffing, we need enough working time, we need appropriate tools and space to perform tasks properly” (F16). Some Finnish nurses underlined thoughtful planning of work, for example, “Collaboration is strengthened if the working environment is functional, the shifts are functional” (F18), while the Norwegian nurses highlighted good practices, “I’m very fond of routines and guidelines, because I like that we have certain things to relate to” (NO4).

A good work environment was promoted by social interaction. A nurse said, “It is important to get to know each other within the team, that you are socialising” (NO1) and “We have our breaks, which I consider really important, because we can get to know one another, exchange ideas and thoughts” (NO10). However, many participants mentioned that the physical premises of their units sometimes made this challenging. Interaction was facilitated within stable and smaller units. A nurse said, “We have started to work in smaller groups, which means a lot” (NO8).

4.2.4. Clear communication

Several Norwegian nurses felt that clear communication promotes good collaboration and was essential for mutual understanding. One said, “You should be open to each other’s opinions, and willing to hear others’ opinions...there should be no problems communicating with one another” (NO5). The importance of common courtesies and nonverbal communication were stressed: “You kind of have a good attitude” (NO13) and “It’s nice when you don’t have to say what should be done, when it’s already done” (NO3).

According to the Norwegian nurses, poor communication and understanding were barriers to good collaboration. As one nurse said, “It can be many things, for example, poor communication of course, that you misunderstand each other, that you don’t speak the same language” (NO1). One nurse shared, “It can be the personality, some can be difficult to approach when you need help...or it is just the body posture” (NO7).

4.2.5. Sharing of knowledge and skills

Nurses stated that it was important to be able to discuss issues professionally with colleagues. Flexibility, positivity and bidirectional knowledge sharing were considered to enhance intraprofessional collaboration. One said, “Collaboration is about exchange of knowledge, it’s about sharing patient information” (F15) and “Nurse–nurse collaboration is assistance, guiding, teaching, advising...everything is done for the benefit of the working community” (F114). The nurses also emphasised the importance of further training and professional development, and the need for nursing leaders to enable it: “You are interested in the work you are doing; with patients you like; it is exciting, and you are in environment where you feel you can grow and develop yourself in your profession” (NO1).

4.2.6. Support and sharing of work

The nurses found it fulfilling to help one another with daily tasks. One nurse said, “It is helping a friend in need...and reciprocally you receive help when you need it” (F110) and “We often need help from each other; we must check things together...we depend on each other” (NO9). The nurses expressed some disablers of collaboration: “Collaboration is weaker, if you don’t have time to help each other and the day is really busy” (NO8) and “Collaboration is not implemented properly, if we lack resources, we lack support from each other, because we don’t have time to discuss” (F116) and “You have to trust one another, rely on their competence...if they are insecure, they must ask for help” (NO4). Collaboration was also jeopardised when the nurses felt that their colleagues’ attitudes towards their work was lacking: “You have to be generally interested in your work and

in your patients, and not only with an attitude that I'm only working here" (F14).

5. Discussion

The purpose of this study was to describe RNs' experiences of nurse–nurse collaboration in one Finnish and one Norwegian university hospital. The findings suggest that there is some variation in the ways nurses understand and experience collaboration within the profession in these two countries, but there are also similarities.

Overall, nurse–nurse collaboration was considered highly important by the participating RNs. This finding aligns with a study by [Catania et al., 2021](#) who reported that teamwork and collaboration is highlighted in tough situations like pandemics. They found that collaboration was seen as vital not only for patient safety ([Ma, Hye Park, & Shang, 2018](#)), but also for team support and spirit [Moore and Prentice \(2015\)](#). Another study by [George, Murphy, DeCristofaro, and Hucks \(2019\)](#) in the United States showed that nursing students emphasised the importance of teamwork and suggested that collaborative learning activities are needed for the students to understand the meaning of intraprofessional relationships. [Petersen et al. \(2019\)](#) studied Danish hospital and home care nurses' experiences of cross-sectoral collaboration. They found that unawareness of each other's work caused insufficient communication and preconceptions, and questioned if it filled the components of interprofessional rather than intraprofessional collaboration.

Our findings show that nurses consider patient-centred care to be significant. Collaboration was required when delivering the needed care for patients. Similar results were found in a study in the Netherlands by [Kieft, De Brouwer, Francke, and Delnoij \(2014\)](#), which reported that collaborative working relationships occur when professionals complement each other and focus on patient-centred care. They revealed that patient-centred care is also known to influence patients' recovery by encouraging patients to take responsibility for their own health [Kieft et al., 2014](#).

Our results indicate that intraprofessional collaboration and teamwork both within and between units enhances nurses' well-being. This finding is consistent with previous research that shows teamwork as a source of job satisfaction ([Lin et al., 2020](#); [Uhrenfeldt & Hall, 2015](#)). A systematic review by [Wei, Sewell, Woody, and Rose \(2018\)](#) focused on nurse work environments in the United States. The results revealed that collaboration through teamwork was essential for the maintenance of a healthy work environment and correlated positively with job satisfaction and retention of nurses. According to [Catania et al. \(2021\)](#), disruption or unexpected situations for teams may even strengthen the bonds between peers [Wei et al., 2018](#).

Finnish nurses highlighted professional collegiality as part of collaboration. Professional networking and interaction with colleagues were seen as significant. We found that intraprofessional collaboration was facilitated through reciprocal interaction when RNs know and have confidence in one another and are able to provide mutual support. These objectives were most easily achieved in smaller units [Uhrenfeldt & Hall, 2015](#) when nurses appreciated and showed confidence in each other. [Bondas \(2018\)](#) pointed out that collegial collaboration strengthens nurses' motivation and improves patient care. According to a study by [Cowin and Eagar \(2013\)](#), collegiality is important for nurse retention and lack of collegiality and failures of communication create dissatisfaction [Cowin & Eagar, 2013](#).

This study indicates that a functioning working environment is needed for effective collaboration. The participants felt that nurses must get along and interact positively with one another, which in turn improves the unit's working atmosphere. Work motiva-

tion and a genuine interest in the work was an important aspect of intraprofessional collaboration according to the Finnish nurses. The results are congruent with an earlier qualitative study conducted in Canada, which found that nurse relationships, where nurses know each other's skills, knowledge and expertise facilitate effective intraprofessional collaboration ([Moore & Prentice, 2015](#)). Another study by [Wei et al. \(2018\)](#) suggests that a healthy work environment and high-quality care are achieved by promoting nurse empowerment, engagement and interpersonal relationships. It emerged that nurse leaders play a key role in organising a functioning working environment, with adequate resources.

Our findings show that a supportive leadership culture enhances collaboration. However, the contributions of all staff members were considered important for proper functioning of a unit. [Cowin and Eagar \(2013\)](#) highlighted, in their study on collegial relationships, the importance of leadership on teamwork and communication on work motivation.

Norwegian nurses experienced communication as a significant part of intraprofessional collaboration. It was considered important for nurses to speak the same language. In a study by [George et al. \(2019\)](#), students reported that appropriate feedback and communication facilitated collaboration. However, communication and knowledge sharing can also adversely affect collaboration if the communicating nurses use different medical terminology and do not speak about the care in the same terms ([Vendel Petersen, Foged, & Nørholm, 2019](#)). Communication, clear goals and structure increase personal strength, team cohesion and joy; togetherness is created when individuals know one another ([Bondas, 2018](#)).

Our results show that nurse–nurse collaboration depends on collegial unity among nurses, and that face-to-face meetings are important. This must be recognised by nursing leaders given the growing impact of digital technologies and networking on nursing practices and the increasing tendency for work to be done via remote connections. The study's results confirm previous findings of the importance of having the opportunity to get to know one another personally and professionally ([Moore et al., 2015](#); [Schön Persson et al., 2018](#)). Nurses should also be offered opportunities to attend personal get-togethers with other health care professionals to support cross-sectional collaboration ([Vendel Petersen et al., 2019](#)). [Moore et al. \(2015\)](#) argue that social interaction can be jeopardised if nurses have insufficient time to get to know each other.

The nurses considered sharing of knowledge and skills to be important. Professional interaction with one another was seen as necessary for intraprofessional collaboration. This finding is consistent with previous studies showing that relationships between professionals are strengthened through collaboration, feedback ([Bondas, 2018](#)) and knowledge exchange ([Kieft et al., 2014](#)). [Kaiser and Westers \(2018\)](#) noted in their study, that nurses perform their own duties and collaborate and share knowledge in specific situations.

Support and sharing of work by working together and helping one another was seen as an important aspect of nurse–nurse collaboration. This is supported with previous studies showing that nurses are clear on the responsibilities and chores expected of them and others in their teams ([Kaiser & Westers, 2018](#)) and that a positive attitude towards collaboration and mutual aid is highly valued among nurses in practice ([Moore & Prentice, 2015](#)). In addition, [Lin et al. \(2020\)](#) found that teamwork, support and caring were positively associated with job satisfaction.

The results can be transferred to other countries as collaboration is an essential part of nursing (e.g., Magnet hospitals). Cultural variations might occur; however, the goal is to provide the best possible care for the patient, and this can only be achieved with good collaboration.

5.1. Limitations

There are some limitations to this study. Participants were recruited from two hospitals in two Scandinavian countries, which could limit transferability of the findings. However, the findings are consistent with previous studies (Kowalski et al., 2019; Moore & Prentice, 2015), which indicate that the results are still relevant and can be useful in other countries. Collaboration between nurses is an important part of nurse's daily work. Nurses are more involved in shared decision-making and take on more responsibilities, where nurse–nurse collaboration is essential, for optimal continuous care. The interview questions were pretested in both countries to enhance the reliability. The data were collected in the second half of 2015, though the findings are still current and provide more in-depth insights into previous knowledge, offer information of clear practical value and are relevant to a wider societal debate. To our knowledge, there are little qualitative research on the subject. This is supported by a more recent study by Al-Ajarmeh, Rayan, Eshah, and Al-Hamdan (2021). Despite these limitations, this study provides knowledge of RN experience of RN–RN collaboration and job satisfaction.

6. Conclusions

Knowledge about how nurses experience nurse–nurse collaboration is needed both to enhance collaboration, to improve relationships within the profession and to increase quality of care and job satisfaction. The results presented here provide new insights into intraprofessional collaboration. It is shown that nurses experience collaboration in various ways and that social interaction is an important issue for many nurses. There is a desire for informal get-togethers to develop relationships between nurses, which should be considered when seeking to promote intraprofessional collaboration. To improve nurse–nurse collaboration, plans must be developed and evaluated.

Intraprofessional collaboration profoundly affects nurses' well-being, and nurse leaders have important roles to play in facilitating and supporting intraprofessional collaboration. Development of interaction and collaborative skills is needed. A healthy work environment, with a supportive atmosphere, climate of open communication, constructive feedback and a collaborative approach enhance job satisfaction and thereby, quality of patient care and patient safety. This in turn can attract new nurses and prevent nurses from leaving the profession. Effective and diverse approaches are needed to improve the understanding of nurse–nurse collaboration, for example, by consensual working methods and continuously evaluating progress. The results of this study can be useful when arranging training for nurses; thus, they can indicate skills needed for successful intraprofessional collaboration. Further research is needed to verify that the conclusions presented here hold in other countries and different hospital sites.

Author contribution

Study design: Tuija Ylitörmänen, Tarja Kvist, Hannele Turunen; data collection: Tuija Ylitörmänen; manuscript preparation: Tuija Ylitörmänen, Tarja Kvist, Hannele Turunen; analysis and statistics: Tuija Ylitörmänen, Tarja Kvist, Hannele Turunen. All authors approved the final version for submission.

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Ethical statement

The study was reviewed and approved by the Eastern Finland University Committee on Research Ethics (14/2014) and the Norwegian Data Protection Authority (3130/2015). Permissions were also obtained from the relevant authorities in the hospitals.

Conflict of interest

The authors report no conflicts of interest.

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