



Senior nurses' expectations and support of new graduate nurses' adjustment in hospitals: A qualitative descriptive study

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ABSTRACT

Aim: This study aimed to identify senior nurses' expectations and support of new graduate nurses' adjustment to their work environment.

Background: New graduate nurses have difficulties in adjusting to their work environment because they are not well prepared for clinical nursing practice upon graduation. Hospitals support their adjustment to their work environment through residency/transition programs. Although such support exists, new graduate nurses are expected to learn the expected behavior and attitude themselves. Thus, identifying senior nurses' expectations and support of new graduate nurses' adjustment may facilitate smooth adjustment to the work environment.

Design: This was a qualitative descriptive study.

Methods: Fourteen nurses who teach new graduate nurses in Japanese hospitals were interviewed face-to-face individually. The data were analyzed using qualitative inductive content analysis, which was coded and sorted to identify categories.

Results: Regarding senior nurses' expectations of new graduate nurses' adjustment, six categories emerged: trying to fit in with people in their ward, behaving by following the unspoken rules of their ward, having attitudes compatible with learning, addressing their situations using their initiative, showing a willingness to learn, and obtaining necessary information by themselves. Senior nurses' support of new graduate nurses' adjustment consisted of four categories: watching over and speaking to them, trying to create a good working environment, encouraging them to have attitudes compatible with learning, and teaching them how to learn.

Conclusions: Senior nurses need to understand and express what they expect from new graduate nurses at the stage of hospital adjustment. If senior nurses understand their expectations for adjustment, they can help new graduate nurses effectively. Furthermore, understanding the expectations of senior nurses may facilitate new graduate nurses' adjustment. These findings may contribute to good working relationships between senior and new graduate nurses.

1. Introduction

New graduate nurses have many difficulties transitioning from being a student to a nurse and have stress and anxiety adjusting to the working environment [1–4]. Rubenstein et al. [5] defined newcomer adjustment as “the process by which new employees acquire

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the requisite behaviors and attitudes to assume the roles of participating organizational members” (p. 1). New graduate nurses must understand their roles as nurses and achieve their daily nursing practice tasks. The adjustment of new graduate nurses in hospitals is essential in continuing nursing education to ensure patient care quality.

Hospitals support new graduate nurses to facilitate their adjustment to their work environment through residency/transition programs [6–9] or preceptorship [4,10–12]. Nurse residency programs in the U. S. and graduate nurse programs in Australia are well recognized for supporting new graduate nurses for a smooth transition. In Japan, no certified system exists for the education of new graduate nurses; however, many hospitals have unique support programs because the postgraduate clinical training programs have been encouraged by law since 2010 [13]. Regarding support programs in Japanese hospitals, orientation programs and preceptorship, or the Partnership Nursing System (two nurses partnering to take care of patients) are the main strategies. Even though strategies to facilitate the adjustment of new graduate nurses exist, new graduate nurses have an essential role in adjusting to the work environment. They must learn expected behaviors and attitudes within the new work environment [14]. However, it is not easy for new graduate nurses to understand how to behave in a new ward that is not familiar to them.

New graduate nurses’ experiences have been explored extensively [15–21], and some studies identified nurse educators’ experiences and perceptions of teaching nursing students [22,23]. These findings are helpful in supporting new graduate nurses’ adjustment to their work environments. However, if the expectations and support of senior nurses are identified, it would help new graduate nurses smoothly adjust to the work environment since senior nurses’ primary role is patient care, and they teach new graduate nurses daily. The findings of this study also suggest ways to facilitate a healthy work relationship between senior and new graduate nurses.

This qualitative inductive study aimed to identify senior nurses’ expectations and support of new graduate nurses’ adjustment to their work environment. In this study, new graduate nurses were those with less than 12 months of work experience at hospitals, and senior nurses were those with more than two years of work experience at hospitals.

2. Methods

2.1. Setting and participants

The study participants were 14 registered nurses who were teaching new graduate nurses at five acute care hospitals in Japan. We used purposeful sampling methods. This study’s inclusion criteria were nurses currently teaching new graduate nurses at hospitals and agreed to participate in the study. The exclusion criterion was nurses employed as nurse managers because they are not in a position to directly teach new graduate nurses for daily nursing practice. The study participants knew the researchers’ rationale for this research, study history, and affiliations from our study participation request letter. Interviews were conducted with the study participants’ permission in a private room in their hospital at their convenience. The interviews lasted approximately 60 min.

2.2. Data generation

The first author conducted face-to-face, individual, semi-structured interviews for all study participants. Although there was no relationship with the study participants before the interviews, the first author introduced herself and tried to have a friendly atmosphere. The interview guide was developed based on a new graduate nurse education literature review and the research team’s discussion. The interview guide included the following questions: What do you think are the new graduate nurses’ difficulties in adjusting to your ward? How are new graduate nurses trying to adjust to their work? What do you do to help new graduate nurses to adjust to their work environment? The interviews were digitally recorded with the study participants’ permission and transcribed verbatim.

2.3. Data analysis

We used a qualitative inductive content analysis method. We read manuscripts line by line and coded for each incident using participants’ exact words without interpretations. Next, we sorted codes based on similar meanings and identified the clustering of codes, which formed subcategories. The subcategories were sorted based on similar meanings and named to fit the cluster. We conducted these processes manually. We used Lincoln and Gube’s criteria [24] for credibility, transferability, dependability, and confirmability to confirm this study’s rigor.

We asked two study participants to check the analysis to establish credibility. They confirmed the analysis to be a good description of senior nurses’ expectations and support of new graduate nurses’ adjustment. We described the results in detail for transferability and included quotations taken from the study participants for readers to understand our results. The authors, who have studied and focused on new graduate nurses’ socialization as faculty members for more than ten years, discussed data analysis to maintain dependability. We recorded discussions about analysis to avoid bias and maintain confirmability.

2.4. Ethical considerations

After obtaining approval from the Institutional Review Board at the first author’s institute (2018-01-5), the first author asked nursing directors to introduce prospective study participants. We sent a request letter to participate in this study to 21 prospective study participants. Fourteen prospective study participants responded to the request and became study participants. Before the interviews, the first author explained their right to withdraw from this study anytime, and confidentiality was guaranteed. We obtained signed consent from all study participants before their interview.

3. Results

3.1. Characteristics of study participants and their clinical units

Thirteen nurses were female, and one was male. Their clinical experience was 3–19 years, and about 60% of the study participants had more than five years of clinical experience. Seven nurses graduated from diploma programs, six from baccalaureate programs, and one from an associate degree program.

Regarding the educational system for new graduate nurses, 11 wards used a preceptor and a person in charge of education who usually had more nursing experience than the preceptor but no special training or qualification. Three wards used a person in charge of education only. Six participants were in charge of education for new graduate nurses, and one nurse was a preceptor. Although the other seven study participants had no particular role in the educational system, they taught new graduate nurses daily.

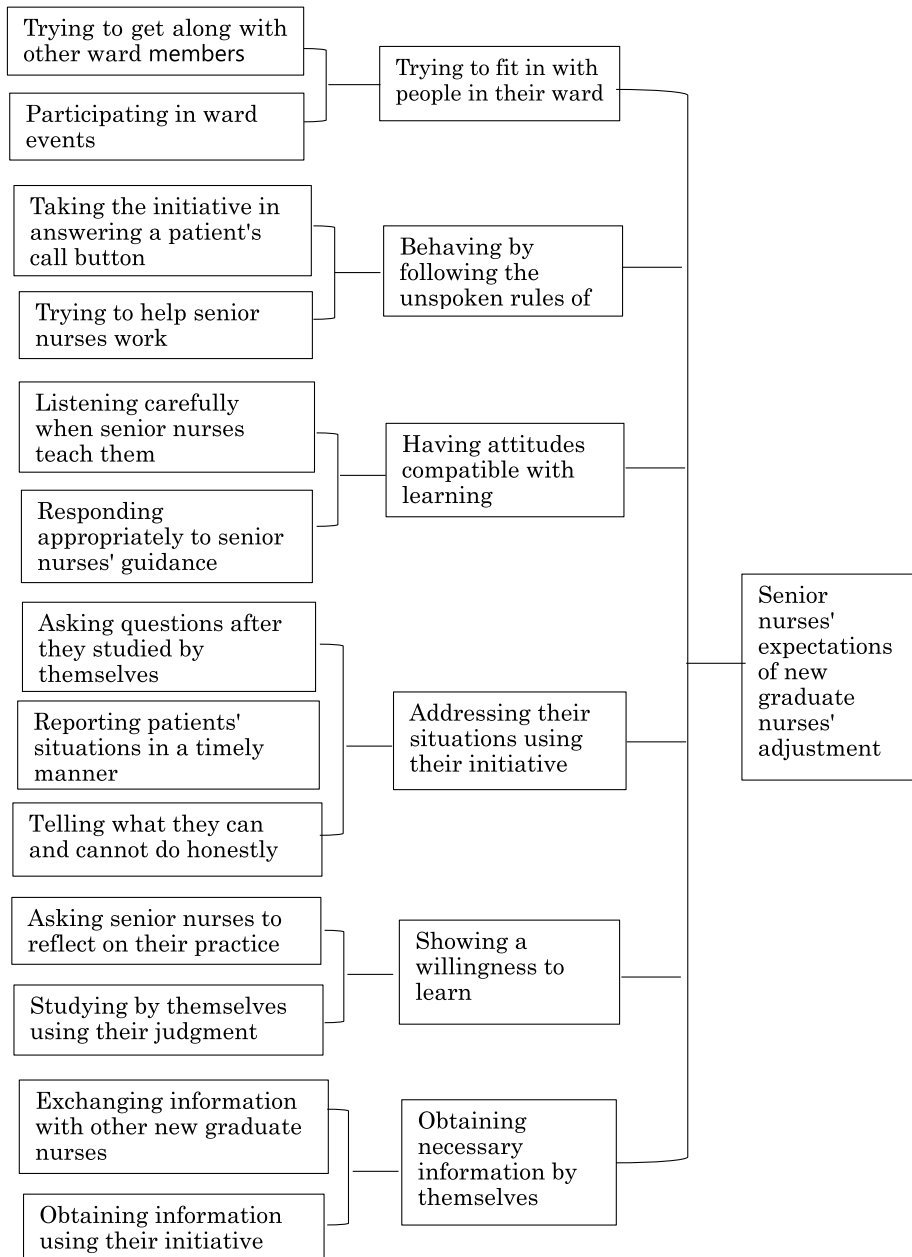


Fig. 1. Senior nurses' expectations.

3.2. Expectations

Senior nurses' expectations from new graduate nurses' adjustment indicated six categories and 13 subcategories, which emerged from data analysis, as shown in Fig. 1. Table 1 indicates an example of categorization. The six categories were: trying to fit in with people in their ward, behaving by following the unspoken rules of their ward, having attitudes compatible with learning, addressing their situations using their initiative, showing a willingness to learn, and obtaining necessary information by themselves. We explain the categories by quotations from the study participants with numbers.

3.2.1. Trying to fit in with people in their ward

The study participants focused on new graduate nurses' attitudes of trying to fit in with people in their ward. This category included two subcategories: trying to get along with other ward members and participating in ward events.

"All new graduate nurses need is to show positive attitudes to fit in in the ward. If they have positive feelings about work, they will do what other people teach them, even though they cannot do it perfectly. The important thing is that they try to do whatever they have to do. If I see their effort, it is enough." (No. 1)

She expressed her expectation as showing attitudes to fit in in the ward because the attitude showed new graduate nurses' willingness to work together. The senior nurses did not have high expectations regarding new graduate nurses' attitudes. They only wanted new graduate nurses to have a good feeling working with senior nurses and showing the feeling through their attitude.

3.2.2. Behaving by following the unspoken rules of their ward

Senior nurses expected new graduate nurses to understand and behave following the unspoken rules of their ward. This category included two subcategories: taking the initiative in answering a patient's call button and trying to help senior nurses work.

"I think there are unspoken rules of the ward. For example, younger nurses should answer a patient's call button. When new graduate nurses concentrate on charting, they don't hear the ring of a patient's call button. To answer the call button by new graduate nurses is not an explicit rule, so we cannot teach them to do it. Understanding the unspoken rules means new graduate nurses get used to the ward environment." (No. 2).

She explained that following the rule meant they started adjusting themselves in the ward. The senior nurses recognized that picking up patients' call buttons was essential to build up new graduate nurses' clinical experiences to work as nurses.

Another unspoken rule is to help senior nurses work.

"Last year, a new graduate nurse went home after finishing her work even though a senior nurse who taught and helped her in the shift was still working. I cannot say it is a big problem, but I think that behavior is inappropriate as a new graduate nurse ... We don't have many things we can ask new graduate nurses to help with, but they should ask us if they can help. This is good behavior by new graduate nurses to be accepted as team members." (No.4)

She was a preceptor with four years of experience and remembered her clinical practice as a student. She did not learn how to be a team member as a student; therefore, she noticed that one way to be accepted as a team member was to offer help to senior nurses. However, she thought it should be taught something other than explicitly. The senior nurses, especially with less than five years of experience, shared this expectation.

3.2.3. Having attitudes compatible with learning

Senior nurses expected new graduate nurses' attitudes to be compatible with learning. This category consisted of two subcategories: listening carefully when senior nurses teach them and responding appropriately to senior nurses' guidance. Senior nurses focus on new graduate nurses' attitudes while they are teaching.

Table 1
An example of categorization.

Category	Subcategories	Example of codes
Showing a willingness to learn	Asking senior nurses to reflect on their practice	At first, we have to tell them to have a reflection meeting, but gradually they can ask us to have the meeting. (No.2) New graduate nurses should ask me if today's care was all right while working with them. (No. 11) If a new graduate nurse asks to have a reflection meeting, other new graduate nurses should ask the same. (No.13)
	Studying by themselves using their judgment	New graduate nurses sometimes study on their own the diseases that they could encounter for the first time without being assigned to study them. (No. 5) Sometimes new graduate nurses just ask a senior nurse close to their age and be done with it. It shouldn't be that way; they must study what they don't understand by themselves. (No. 6) It is desirable that new graduate nurses take their self-learning materials to senior nurses, asking if their studies are good enough. (No. 14)

“Sometimes I was irritated because of their attitude. For example, a new graduate nurse did not take a note while I was teaching her and started copying a manual. I was wondering if she was listening to what I said. On another occasion, a senior nurse taught a new graduate nurse to follow the manual from start to end; the new graduate nurse started showing an attitude that she wanted to go home ... I want new graduate nurses to think about how they receive guidance.” (No. 4)

The senior nurses observed new graduate nurses’ attitudes when they taught them about patient care and found many undesirable attitudes of new graduate nurses who needed senior nurses’ help. They expected the necessary attitude of new graduate nurses as nurses who work with senior nurses’ support.

3.2.4. *Addressing their situations using their initiative*

Senior nurses expected new graduate nurses to inform senior nurses about their situations, including work and study, using their initiative. This category consisted of three subcategories: asking questions after they studied by themselves, reporting patients’ situations in a timely manner, and telling what they can and cannot do honestly.

“I asked a new graduate nurse if she could do something. She said yes, but she did so without knowing what it was, so I stopped her. However, this year new graduate nurses told us, ‘I have never done this before, so would you please come with me,’ if they have no experience. New graduate nurses must tell us what they can or cannot do in order for us to be able to work together.” (No. 11).

The senior nurses expected new graduate nurses honestly tell their situations or ability of patient care to be a nurse working with them because patient safety was their priority.

3.2.5. *Showing a willingness to learn*

Senior nurses thought that new graduate nurses must be willing to learn daily nursing practice to adjust to the work environment. This category consisted of two subcategories: asking senior nurses to reflect on their practice and studying by themselves using their judgment. All hospitals that study participants belonged to had a system in which a senior nurse has time to talk to a new graduate nurse when they finish their shift, which is called a daily reflective meeting.

“From the beginning, I told a new graduate nurse, ‘we must have a daily reflective meeting at the end of our shift, so please ask me when you are ready.’ For a while, I had to tell them, ‘Let’s start today’s reflective meeting.’ However, gradually they began to say to us, ‘Please have a daily reflective meeting.’ ... If they do what they are told and report back to us properly, I think we will feel like colleagues working together.” (No. 9)

In her experience as a nurse in charge of education, she observed new graduate nurses well. She expressed a willingness to learn by following senior nurses’ advice was crucial for new graduate nurses to work together. The senior nurses shared this expectation regardless of their role in teaching new graduate nurses.

3.2.6. *Obtaining necessary information by themselves*

Senior nurses expected new graduate nurses to obtain the information that was necessary for the situation by themselves. This category consisted of two subcategories: exchanging information with other new graduate nurses and obtaining information using their initiative.

“New graduate nurses choose people with whom they can gain information. In the beginning, new graduate nurses asked questions to whomever they could easily ask. And then, they asked questions to people who had the correct information. Sometimes they ask other nurses how to ask questions to one particular senior nurse.” (No. 3)

She was a team leader with 18 years of nursing experience focused on the content of information and a way of gaining information. The senior nurses expressed obtaining the information vital for them was necessary for new graduate nurses to adjust to their wards.

3.3. *Support for new graduate nurses*

Senior nurses supported new graduate nurses’ adjustment to meeting their expectations. Their support consisted of four categories and seven subcategories that emerged from data analysis: watching over and speaking to them, trying to create a good working environment, encouraging them to have attitudes compatible with learning, and teaching them how to learn.

3.3.1. *Watching over and speaking to them*

Senior nurses tried to watch over and speak to new graduate nurses because they understood that new graduate nurses have difficulties speaking to senior nurses. This category consisted of one subcategory, which was the same as the category.

“As a new graduate nurse, it wasn’t easy to interrupt senior nurses to ask questions. So, if I feel like a new graduate nurse wants to say something, I try to ask her what’s wrong ... They sometimes look really anxious, so I pay attention to them. When I speak to them, they often ask questions.” (No. 13)

She had four years of experience and taught new graduate nurses daily. She was a new graduate nurse only three years ago; therefore, she understood the new graduate nurses’ situation well. She paid close attention to new graduate nurses if they had any

difficulties. The senior nurses with more nursing experience supported new graduate nurses similarly.

3.3.2. *Trying to create a good working environment*

Senior nurses tried to create a good working environment for new graduate nurses to adjust to the new workplace. This category consisted of two subcategories: creating a workplace culture where everyone is comfortable talking and considering a way of reflecting on new graduate nurses' practice.

"I think new graduate nurses should initiate their behavior. However, if there is no ward culture that new graduate nurses can ask about anything, it is hard for them to behave proactively ... For new graduate nurses, we should be easy to talk to. Still, more importantly, we should have a ward culture in which everybody consults on nursing practice, then new graduate nurses can talk and ask questions. I hope new graduate nurses can train in this kind of ward environment." (No. 2)

She had 19 years of experience in two hospitals in the same group. She paid attention to not only individual nurses but also the ward atmosphere itself. The senior nurses with less experience also recognized the importance of a good working environment to support new graduate nurses.

3.3.3. *Encouraging them to have attitudes compatible with learning*

Senior nurses tried to teach new graduate nurses the desired attitudes as nurses who need help with daily nursing practice. This category consisted of one subcategory, which was the same as the category.

"While a senior nurse was teaching a new graduate nurse, the new graduate nurse was writing a chart. I told her that her attitude hurt my feeling as a nurse who was trying to teach her ... Although it is hard to say that her attitude was not good, we have to teach them (the desired attitude)." (No. 5)

As senior nurses expected new graduate nurses had attitudes compatible with learning, they tried to teach the desirable attitude indirectly.

3.3.4. *Teaching them how to learn*

New graduate nurses need to acquire ways of learning; therefore, senior nurses tried to teach them how to learn. This category consisted of three subcategories: facilitating new graduate nurses to think by themselves, teaching them to study by themselves first and then ask questions, and encouraging mutual help with other new graduate nurses.

"The first thing I tell new graduate nurses is to show me what they understand and what information they have gathered. If new graduate nurses start by telling senior nurses what they understand and think, we can teach them how we see it. This is how new graduate nurses learn the daily practice, so I told them they should tell us what they think and how they interpret things. I encourage them to do so." (No. 10)

The senior nurses taught new graduate nurses during their shifts, not off-the-job training. They noticed that understanding how to learn in daily practice is essential to a nurse and tried to support them in learning while working.

4. Discussion

Senior nurses are in a position to help new graduate nurses adjust to their work environment. This study focused on senior nurses' expectations and support of the adjustment of new graduate nurses. The study participants expected new graduate nurses to use their initiative, show a willingness to learn, and obtain necessary information by themselves. These findings relate to proactive behaviors, defined as "self-initiated, anticipatory action that aims to change and improve the situation or oneself" [25]. Proactive behaviors are a factor for successful adjustment to the professional workplace [26]. New graduate nurses need to engage in proactive behaviors, which senior nurses in this study expected, to adjust to their work environment.

Not only do senior nurses realize the importance of new graduate nurses' proactive behavior, but they also recognize the importance of creating a good work environment that facilitates such behaviors. For new graduate nurses to be a member of their ward, it is essential to work in a supportive environment [2,27,28]. The senior nurses in the present study focused on creating a good working environment for all nurses in their ward where everybody consulted about their nursing practice with each other. This environment may facilitate new graduate nurses' proactive behaviors, which leads to their smooth adjustment to the work environment.

Some studies suggested that new graduate nurses were unprepared for clinical nursing practice upon graduation. The study with sixteen graduate program coordinators in Australia indicated that the majority of new graduate nurses were not adequately prepared for clinical practice [29]. In a study in Swaziland, employers, and nursing educators stated that new graduate nurses were not ready for practice upon licensure [30]. A systematic integrated review of experienced nurses' perceptions of new graduate nurses' clinical competence in their first year of practice reported that one of the areas of concern was overall readiness for practice [31]. The Japanese new graduate nurses' situations are almost the same as other countries; Fukada [32] reported in the review article that nurses with one year of experience had difficulty providing individualized nursing care.

Increasing practice readiness in basic nursing education is essential [33]; however, new graduate nurses must learn the reality of clinical practice after starting working. They must study by themselves and learn from senior nurses to understand the reality of clinical nursing practice. In a model of newcomer adjustment for current college graduates, Larson and Bell [26] reported that proactive behaviors facilitate newcomer learning and lead to adjustment. The senior nurses' expectations in the present study focused on new

graduate nurses' learning attitudes, which are attitudes compatible with learning and a willingness to learn. For the expectations of new graduate nurses' adjustment, senior nurses focused more on new graduate nurses' attitude to try to learn than their current levels of knowledge and skills. They expected new graduate nurses to learn by following their instructions and, at the same time, learn using their initiative. Nour and Williams [28] identified the learning transition process of new graduate nurses in Canada. They reported that new graduate nurses had an experience of "theory becoming alive," and they used senior nurses as learning resources during the process. Senior nurses' expectations in the present study for new graduate nurses to learn from them are relevant. Senior nurses need to be a learning resource and teach new graduate nurses how to learn about daily nursing practice. Senior nurses should also consider whether their ward's environment supports learning.

Phillips et al. [34] proposed a model of organizational socialization for an ideal graduate nurse transition. According to their model, new graduate nurses' behaviors, such as information-seeking, feedback-seeking, and relationship building, influence adjustment. The study participants' expectations in the present study can be explained by this model. The senior nurses expected new graduate nurses to obtain necessary information using their initiative and ask senior nurses for feedback by requesting reflection on their practice at the end of the shift.

Regarding relationship building, senior nurses expected new graduate nurses to try to fit in with people in their ward. They are also expected new graduate nurses to be transparent and communicate their practice level to senior nurses to help them work as nurses. Senior nurses in this study tried to watch over and speak to new graduate nurses to facilitate them fitting in their ward. New graduate nurses' adjustment to the ward in an Australian study [35] indicated that new graduate nurses understand the importance of helping other nurses by showing commitment and contribution to the team, and they used this strategy to fit in their work environment. St-Martin et al. [36] reported that the interchange of help between senior and new graduate nurses is an essential factor for their acceptance as team members. The study participants in the present study indicated that not many new graduate nurses understood the importance of offering help to senior nurses, which was considered an unspoken rule. New graduate nurses need to know the importance of offering help and using this as a strategy to adjust to their environment. On the other hand, senior nurses need to consider whether the ward environment is suitable for fitting in, rather than just expecting new graduate nurses to perform some action to fit in. Mossop et al. [37] reported that a conflict between the process of becoming an excellent professional and that of learning what is necessary to fit into a new environment may exist. Senior nurses should reflect on whether their expectations of fitting in the ward environment facilitates becoming an excellent professional.

Morrison [38] emphasized the importance of information-seeking behaviors during organizational entry. She identified necessary information as technical information to perform the required job, reference information to identify the role's demands and expectations, and normative information to understand the expected behaviors and attitudes. Compared to Morrison's necessary information [38], senior nurses in this study focused on strategies to seek information and did not refer to the types of information. Thus, senior nurses should identify the type of information they expect during the adjustment process to assist new graduate nurses' learning.

New graduate nurses need to know unspoken rules to work as team members. The importance of nurses knowing unspoken rules has been reported in several countries [39–41]. Taking the initiative to answer a patient's call button and trying to help senior nurses work may come from Japanese cultural characteristics, as Japan has a vertical-collectivist society, in which people emphasize in-group goals and comply with senior figures. Senior nurses expected new graduate nurses to understand unspoken rules and follow these rules to judge if they had adjusted themselves to the ward. Kim and Oh [42] indicated that nurses begin to learn their ward's unspoken rules in time for assimilation into the hierarchical culture. At the same time, new graduate nurses learned about unacceptable behavior to being members of their workplace. It is essential to observe the unspoken rules of the ward in order to learn desired attitudes and behaviors. However, senior nurses should consider the meaning and relevance of the unspoken rules of the ward.

Senior nurses need to understand and express what they expect from new graduate nurses at the stage of hospital adjustment. The authors conducted this study at Japanese hospitals; therefore, the findings can only be applied to acute care hospitals in Japan. Many differences exist in relation to nursing practice between other countries and Japan, such as nursing education and the health care system. These differences may influence senior nurses' expectations and support of new graduate nurses' adjustment, described in this paper. Some findings also are related to Japanese culture, especially the importance of unspoken rules. However, according to ICN [43], nurses share fundamental nursing responsibilities, and the need for nursing is universal. Therefore, to some extent, the findings of this study could have transferability to other countries. Some aspects of this study, such as the importance of new graduate nurses' proactive behavior, understanding senior nurses' expectations, and the necessity of supportive environments, are appropriate for other countries' settings to facilitate the adjustment of new graduate nurses.

This study has limitations. All study participants worked in acute care hospitals in Japan; therefore, other practice sites in Japan or other countries may have different expectations and support. The senior nurses' support of new graduate nurses' adjustment in this study may be more than average because the study participants volunteered to take part in this research. Many factors exist that influence senior nurses' perceptions of the adjustment, such as ward atmosphere and their manager's management style. Identifying the factors related to senior nurses' expectations and support is needed. Furthermore, research about new graduate nurses' perceptions of expectations and support of senior nurses will add helpful information regarding new graduate nurses' adjustment.

5. Conclusion

This study was conducted at acute care hospitals in Japan and aimed to identify senior nurses' expectations and support for the adjustment of new graduate nurses to their work environment. The senior nurses' expectations were: trying to fit in with people in their ward, behaving by following the unspoken rules of their ward, having attitudes compatible with learning, addressing their situations using their initiative, showing a willingness to learn, and obtaining necessary information by themselves. To facilitate new graduate

nurses' adjustment to their work environment, they tried to support them by watching over and speaking to them, trying to create a good working environment, encouraging new graduate nurses to have attitudes compatible with learning, and teaching them how to learn. If senior nurses understand the expectations for their adjustment, they could help new graduate nurses effectively. Understanding the expectations of senior nurses would facilitate the adjustment of new graduate nurses. These findings may contribute to creating a good working relationship between senior and new graduate nurses.

Author contribution statement

Misuzu Gregg: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Toyomi Wakisaka: Chifuyu Hayashi: Conceived and designed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data.

Data availability statement

The data that has been used is confidential.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Misuzu Gregg reports financial support was provided by Japan Society for the Promotion of Science (JSPS).

References

- [1] I. Gardiner, J. Sheen, Graduate nurse experiences of support: a review, *Nurse Educ. Today* 40 (2016) 7–12.
- [2] J.H. Kim, H.S. Shin, Exploring barriers and facilitators for successful transition in new graduate nurses: a mixed methods study, *J. Prof. Nurs.* 36 (2020) 560–568.
- [3] S. Kumaran, M. Carney, (2014). Role transition from student nurse to staff nurse: facilitating the transition period, *Nurse Educ. Pract.* 14 (6) (2014) 605–611, <https://doi.org/10.1016/j.nepr.2014.06.002>.
- [4] B. Whitehead, P. Owen, L. Henshaw, E. Beddingham, M. Simmons, Supporting newly qualified nurse transition: a case study in a UK hospital, *Nurse Educ. Today* 36 (2016) 58–63, <https://doi.org/10.1016/j.nedt.2015.07.008>.
- [5] A.L. Rubenstein, J.D. Kammeyer-Mueller, T.G. Thundiyil, The comparative effects of supervisor helping motives on newcomer adjustment and socialization outcomes, *J. Appl. Psychol.* (2020), <https://doi.org/10.1037/apl0000492>.
- [6] G. Anderson, C. Hair, C. Toderro, 2012, Nurse residency programs: an evidence-based review of theory, process, and outcomes, *J. Prof. Nurs.* 28 (4) (2012) 203–212, <https://doi.org/10.1016/j.profnurs.2011.11.020>.
- [7] M.D. Ankersa, C.A. Bartonb, Y.K. Parry, A phenomenological exploration of graduate nurse transition to professional practice within a transition to practice program, *Collegian* 25 (3) (2018) 319–325, <https://doi.org/10.1016/j.colegn.2017.09.002>.
- [8] M.A. Blegen, N. Spector, B.T. Ulrich, M.R. Lynn, J. Barnsteiner, J. Silvestre, Preceptor support in hospital transition to practice programs, *J. Nurs. Adm.* 45 (12) (2015) 642–649, <https://doi.org/10.1097/NNA.0000000000000278>.
- [9] L. Doughty, A. McKillop, R. Dixon, C. Sinnema, Educating new graduate nurses in their first year of practice: the perspective and experiences of the new graduate nurses and the director of nursing, *Nurse Educ. Pract.* 30 (2018) 101–105, <https://doi.org/10.1016/j.nepr.2018.03.006>.
- [10] H.T. Allan, C. Magnusson, K. Evans, K. Horton, K. Curtis, E. Ball, M. Martin Johnson, Putting knowledge to work in clinical practice: understanding preceptorship experiences as outcomes of interconnected learning domains, *J. Clin. Nurs.* 27 (1–2) (2018) 123–131, <https://doi.org/10.1111/jocn.13855>.
- [11] S.G. Forneris, C. Peden-McAlpine, Creating context for critical thinking in practice: the role of the preceptor, *J. Adv. Nurs.* 65 (8) (2009) 1715–1724, <https://doi.org/10.1111/j.1365-2648.2009.05031.x>.
- [12] B. Clipper, B. Cherry, From transition shock to competent practice: developing preceptors to support new nurse transition, *J. Cont. Educ. Nurs.* 46 (10) (2015) 448–454, <https://doi.org/10.3928/00220124-20150918-02>.
- [13] Japanese Nursing Association, Nursing in Japan, 2016. <https://www.nurse.or.jp/jna/english/pdf/nursing-in-japan2016.pdf>. (Accessed 7 July 2022).
- [14] F.M.J.J. Kowsikka, R. James, Newcomers' socialization: the proactive behaviors, satisfaction and social integration, *J. Bus.* 6 (1) (2019) 89–107, <https://doi.org/10.4038/jbs.v6i1.44>.
- [15] S.M. Dyess, R.O. Sherman, The first year of practice: new graduate nurses' transition and learning needs, *J. Cont. Educ. Nurs.* 40 (9) (2009) 403–410, <https://doi.org/10.3928/00220124-20090824-03>.
- [16] K. Hunter, C. Cook, Role-modelling and the hidden curriculum: new graduate nurses' professional socialization, *J. Clin. Nurs.* 27 (15–16) (2018) 3157–3170, <https://doi.org/10.1111/j.1365-2702.2008.02308.x>.
- [17] J. Kelly, K. Ahern, Preparing nurses for practice: a phenomenological study of the new graduate in Australia, *J. Clin. Nurs.* 18 (6) (2009) 910–918, <https://doi.org/10.1111/j.1365-2702.2008.02308.x>.
- [18] J.A. McCalla-Graham, J.C. De Gagne, The lived experience of new graduate nurses working in an acute care setting, *J. Cont. Educ. Nurs.* 46 (3) (2015) 122–128, <https://doi.org/10.3928/00220124-20150220-17>.
- [19] J.E. Lee, I.O. Sim, Gap between college education and clinical practice: experience of newly graduated nurses, *Nurs. Open* 7 (2020) 449–456, <https://doi.org/10.1002/nop2.409>.
- [20] H.K.S. Laschinger, A.L. Grau, J. Finegan, New graduate nurses' experiences of bullying and burnout in hospital settings, *J. Adv. Nurs.* 66 (12) (2010) 2732–2742, <https://doi.org/10.1111/j.1365-2648.2010.05420.x>.
- [21] V. Parker, M. Giles, G. Lantry, M. McMillan, M., New graduate nurses' experiences in their first year of practice, *Nurse Educ. Today* 34 (1) (2014) 150–156, <https://doi.org/10.1016/j.nedt.2012.07.003>.
- [22] H. Zeb, I. Arif, A. Younas, Nurse educators' experiences of fostering undergraduate students' ability to manage stress and demanding situations: a phenomenological inquiry, *Nurse Educ. Pract.* 65 (2022), <https://doi.org/10.1016/j.nepr.2022.103501>.
- [23] T. Jarvinen, H. Virtanen, S. Kajander-Unkuri, L. Salminen, Nurse educators' perceptions of factors related to the competence of graduating nursing students, *Nurse Educ. Today* 101 (2021), <https://doi.org/10.1016/j.nedt.2021.104884>.
- [24] Y.S. Lincoln, E.G. Guba, *Naturalistic Inquiry*, Sage, Newbury Park, CA, 1985.
- [25] S. K Parker, C.G. Collins, Taking stock: integrating and differentiating multiple proactive behaviors, *J. Manag.* 36 (3) (2010), <https://doi.org/10.1177/0149206308321554>.

- [26] R.E.K. Larson, A.A. Bell, First newcomer adjustment among recent college graduates: an integrative literature review, *Hum. Resour. Dev. Rev.* 12 (3) (2013) 284–307, <https://doi.org/10.1177/1534484313475869>.
- [27] A. Andersson, U.H. Graneheim, M.S. Nilsson, Newly-graduated nurses' work-integrated learning: a qualitative study from an educational and occupational perspective, *Nurse Educ. Pract.* 59 (2022), <https://doi.org/10.1016/j.nepr.2022.103290>.
- [28] V. Nour, A.M. Williams, "Theory becoming alive": the learning transition process of newly graduated nurses in Canada, *Can. J. Nurs. Res.* 51 (1) (2019) 6–13, <https://doi.org/10.1177/0844562118771832>.
- [29] K. Missen, L. McKenna, A. Beauchamp, Work readiness of nursing graduates: current perspectives of graduate nurse program coordinators, *Contemp. Nurse* 51 (1) (2015), <https://doi.org/10.1080/10376178.2015.1095054>.
- [30] C.P. Dlamini, N.G. Mtshali, C.H. Dlamini, S. Mahanya, T. Shabangu, Z. Tsabedze, New graduates' readiness for practice in Swaziland: an exploration of stakeholders' perspectives, *J. Nurs. Educ. Pract.* 4 (5) (2014) 148–158, <https://doi.org/10.5430/jnep.v4n5p148>.
- [31] K. Missen, L. McKenna, A. Beauchamp, Registered nurses' perceptions of new nursing graduates' clinical competence: a systematic integrative review, *Nurs. Health Sci.* 18 (2) (2016) 143–153, <https://doi.org/10.1111/nhs>.
- [32] M. Fukuda, Nursing competency: definition, structure and development, *Yonago Acta Med.* 61 (2018) 1–7.
- [33] J.L. Monagle, K. Lasater, S. Stoyles, N. Dieckmann, New graduate nurse experiences in clinical judgment: what academic and practice educators need to know, *Nurs. Educ. Perspect.* 39 (4) (2018) 201–207, <https://doi.org/10.1097/01.NEP.0000000000000336>.
- [34] C. Phillips, A. Esterman, A. Kenny, The theory of organisational socialisation and its potential for improving transition experiences for new graduate nurses, *Nurse Educ. Today* 35 (1) (2015) 118–124, <https://doi.org/10.1016/j.nedt.2014.07.011>.
- [35] C. Feltrin, J.M. Newton, G. Willetts, How graduate nurses adapt to individual ward culture: a grounded theory study, *J. Adv. Nurs.* 75 (2019) 616–627, <https://doi.org/10.1111/jan.13884>.
- [36] L. St-Martin, A. Harripaul, R. Antonacci, D. Laframboise, M. Purden, Advanced beginner to competent practitioner: new graduate nurses' perceptions of strategies that facilitate or hinder development, *J. Cont. Educ. Nurs.* 46 (9) (2015) 392–400, <https://doi.org/10.3928/00220124-20150821-01>.
- [37] L. Mossop, R. Dennick, R. Hammond, I. Robbe, Analysing the hidden curriculum: use of a cultural web, *Med. Educ.* 47 (2013) 134–143, <https://doi.org/10.1111/medu.12072>.
- [38] E.W. Morrison, Newcomer information seeking: exploring types, modes, sources, and outcomes, *Acad. Manag. J.* 36 (3) (1993), <https://doi.org/10.5465/256592>.
- [39] V. Sørli, L. Jansson, A. Norberg, The meaning of being in ethically difficult care situations in paediatric care as narrated by female Registered Nurses, *Scand. J. Caring Sci.* 17 (3) (2003) 285–292, <https://doi.org/10.1046/j.1471-6712.2003.00229.x>.
- [40] S. Laustsen, L. Brahe, Coping with interruptions in clinical nursing—a qualitative study, *J. Clin. Nurs.* 27 (7–8) (2018) 1497–1506, <https://doi.org/10.1111/jocn.14288>.
- [41] W.L. Chua, H. Legido-Quigley, D. Jones, N.B. Hassan, A. Tee, S.Y. Liaw, A call for better doctor–nurse collaboration: a qualitative study of the experiences of junior doctors and nurses in escalating care for deteriorating ward patients, *Aust. Crit. Care* 33 (1) (2020) 54–61, <https://doi.org/10.1016/j.aucc.2019.01.006>.
- [42] M.Y. Kim, M. Y, S. Oh, Assimilating to hierarchical culture: a grounded theory study on communication among clinical nurses, *PLoS One* (2016), <https://doi.org/10.1371/journal.pone.0156305>.
- [43] International Council of Nurses, The ICN Code of Ethics for Nurses, 2021.chrome-extension://efaidnbmnnnibpajpcglclefindmkaj/https://www.icn.ch/system/files/2021-10/ICN_Code-of-Ethics_EN_Web_0.pdf.