

Promoting Parenting Process in Caring for Preterm Infants in the Neonatal Intensive Care Unit: Student Nurse Experiences

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Abstract

The purpose of this descriptive qualitative study was to describe student nurse experiences in caring for parents of premature infants in a neonatal intensive care unit (NICU). Twelve senior student nurses who completed their NICU clinical practice participated in the study. A semi-structured interview guide with open-ended questions used along with audio-taped recordings. After each interview, the tape was transcribed verbatim. The data were analyzed using inductive content analysis.

The results revealed that supporting parental care was the main category to describe the student nurse experiences in the NICU. This main category consisted of three generic categories and thisteen sub-categories. Three generic categories were encouraging parental visits, promoting parental care, and supporting parents emotionally. Among thirteen sub-categories, five sub-categories described encouraging parental visits, two subcategories described supporting parents emotionally, and the rest delineated promoting parental care.

In conclusion, supporting parental care during infant hospitalization is an important role of neonatal nurses in the NICU. These student experiences can be used to guide the pediatric clinical practice course design to train student nurses to support parents of premature infants during hospitalization. This is even more important when parental care delivery is restricted due to the COVID-19 pandemic.

Key words: Promoting parenting process, student nurse, theoretical parenting model, inductive content analysis

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การส่งเสริมกระบวนการเลี้ยงดูบุตรของบิดามารดาในการดูแล ทารกเกิดก่อนกำหนด ในหอผู้ป่วยวิกฤตทารกแรกเกิด: ประสบการณ์นักศึกษาพยาบาล

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บทคัดย่อ

การศึกษาเชิงคุณภาพแบบพรรณานี้มีวัตถุประสงค์เพื่อบรรยายประสบการณ์ของนักศึกษาพยาบาลในการส่งเสริมกระบวนการเลี้ยงดูของบิดามารดาในการดูแลทารกเกิดก่อนกำหนดในหอผู้ป่วยวิกฤตทารกแรกเกิด ผู้ให้ข้อมูลเป็นนักศึกษาพยาบาลหลักสูตรพยาบาลศาสตรบัณฑิตชั้นปีที่สี่ จำนวน 12 คน ที่สำเร็จการศึกษาภาคปฏิบัติทางคลินิกในหอผู้ป่วยวิกฤตทารกแรกเกิด เก็บข้อมูลด้วยการสัมภาษณ์เชิงลึกโดยใช้แบบสัมภาษณ์แบบกึ่งโครงสร้างพร้อมคำถามปลายเปิด วิเคราะห์ข้อมูลโดยใช้การวิเคราะห์เนื้อหาแบบอุปนัย

ผลการวิจัยพบว่า การสนับสนุนการเลี้ยงดูบุตร เป็นหมวดหมู่หลักที่อธิบายประสบการณ์พยาบาลของนักศึกษาในหอผู้ป่วยวิกฤตทารกแรกเกิด ซึ่งหมวดหมู่หลักประกอบด้วย 3 หมวดหมู่ทั่วไป ได้แก่ การส่งเสริมการเยี่ยม การส่งเสริมการดูแลบุตร และการสนับสนุนทางอารมณ์ของบิดามารดา ส่วนหมวดหมู่ย่อย 30 หมวดหมู่นั้นประกอบด้วย 5 หมวดหมู่รอง ที่อธิบายการส่งเสริมการมาเยี่ยมบุตรจำนวน 5 หมวดหมู่ อธิบายการสนับสนุนทางอารมณ์ จำนวน 2 หมวดหมู่ และส่วนที่เหลือเป็นการอธิบายการส่งเสริมการดูแลบุตรของบิดามารดา

สรุปได้ว่า การส่งเสริมกระบวนการเลี้ยงดูบุตรในระหว่างทารกเกิดก่อนกำหนดได้รับการรักษาอยู่ในหอผู้ป่วยวิกฤตทารกแรกเกิด เป็นบทบาทสำคัญของพยาบาลทารกแรกเกิด ข้อมูลที่ได้จากประสบการณ์ของนักศึกษาในครั้งนี้สามารถนำมาใช้ในการออกแบบการเรียนการสอนเพื่อฝึกอบรมนักศึกษาพยาบาลที่จะเป็นผู้สำเร็จการศึกษาใหม่ให้ส่งเสริมกระบวนการเลี้ยงดูทารกเกิดก่อนกำหนดที่ได้รับการรักษาอยู่ในหอผู้ป่วยวิกฤตทารกแรกเกิดในอนาคตโดยเฉพาะในช่วงที่มีการเข้มงวดในการเลี้ยงดูทารกระหว่างการแพร่ระบาดของโควิด-19

คำสำคัญ: การส่งเสริมกระบวนการเลี้ยงดูบุตร นักศึกษาพยาบาล ต้นแบบเชิงทฤษฎี การวิเคราะห์เนื้อหาแบบอุปนัย

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Introduction

Globally, preterm birth continues to be a critical issue in reducing child mortality and improving maternal and newborn care quality (Chawanpaiboon et al., 2019). An incidence of preterm birth in Thailand is found higher than expectation due to risk factors associated to preterm deliveries (Kinpoon & Chaiyarach, 2021).

After birth, these preterm infants are at a very high risk of developing a life-threatening condition (Walani, 2020). Some infants require lengthy treatment in the neonatal intensive care unit (NICU). Despite having health problems, these infants have a higher survival rate resulting from developments in medical technology utilized in their treatments. Possibly, these infants survive with a chance of a disability that will need to be cared for and corrected later (Hee Chung, Chou, & Brown, 2020; Lugli et al., 2020; Sharp, French, McMichael, & Campbell, 2018).

Parents play an important role to provide quality of parental care to enhance health and well-being of the infants although they are born prematurely and have adverse health problems (Sharp, French, McMichael, & Campbell, 2018). Parental involvement is recommended during health management of these infants to promote positive health outcomes (Piriyaopokin, Chuthapisith, Emrat, & Nuntnarumit, 2020). Quality engagement between parents and hospitalized preterm infants is also promoted to be effective in boosting infant health outcomes (Klawetter, Greenfield, Speer, Brown, & Hwang, 2019). However, providing parental care to the severely ill preterm infants in the NICU necessitates parental energy to raise the tiny infants. Parents must apply their strengths to overcome challenges in the NICU (Franck, McNulty, & Alderdice, 2017).

Because of the importance of parents to the preterm infants with high demands of special parental care and attention, caring for parents during their infant hospitalization is the main neonatal nursing roles to facilitate parents to be able to effectively deliver their parental care to the infants to promote health and well-being. This competency of neonatal nurses is systematically trained in pediatric nursing courses and short course specialty training. As a result, neonatal nurses are competent to support parents of preterm infants during NICU hospitalization.

Although neonatal nurses provide high quality of care to parents and NICU parents are satisfied with the NICU care, some parental expectations are unfulfilled and neonatal nurses must develop interventions to support parents (Abuidhail, Al-Motlaq, Mrayan, & Salameh, 2017). Gaps between parental expectations and nursing care delivery may be developed, leading to unsupportive parental feelings and affecting quality of nursing care; especially, in the NICU settings with qualified neonatal nurse shortages including those in rural areas of Thailand.

Social contribution in quality of health care improvement is an important role of nursing schools located in the rural communities. The faculty members design clinical practice courses not only to train student nurses to be competent to fulfill population health needs, but also to support qualified nursing care deliveries. In the neonatal nursing areas, student nurses receive continuous training from the beginning until their graduation in their pre-licensing program. However, little is known about how well these student nurses apply their knowledge and clinical experiences to care for parents of preterm infants in the NICU and what competencies are needed

to add or improve in student nurses who are going to be the new graduates. Therefore, the purpose of this study aimed at exploring student nurse experiences in caring for parents of premature infants in the NICU. The research results will be useful for improving neonatal course designs that are used to train student nurses to be new qualified nursing graduates who effectively respond to NICU population health needs and support neonatal nursing quality improvement in the future.

Study objective

To describe student nurse experiences in caring for parents of premature infants in the NICU.

Conceptual framework

In the Global Strategy for Women's, Children's and Adolescent's Health (2016-2030), children including preterm infants must survive and thrive (WHO & Mathers, 2016). To address this issue in nursing, the global strategic directions for strengthening nursing and midwifery 2016-2020 have been implemented in many countries to address health issues in nursing profession (Ajuebor et al., 2019). Nursing and Midwifery programs in Thailand have been developed and accredited by Thailand Nursing and Midwifery Council to meet the national course and clinical standard (Thailand Nursing and Midwifery Council, 2005) and WHO recommendations (World Health Organization [WHO], 2013).

In the Bachelor's program in nursing, a three-credit theory course and four-credit clinical practice courses about the Child and Adolescents Nursing course are offered in the program. Student nurses study pediatric nursing contents in class and apply them to their clinical practices. The

family-centered care concepts are listed in the pediatric nursing contents that all students learn before applying the concepts in their clinical practices, including their practices in the NICU.

Methodology

Study design and participants

A descriptive qualitative design with in-depth interview was applied for this research. Participants were 12 senior student nurses including one male and eleven females. These students were 21 years old with Thai nationality and understood Thai language and had no physical disability or mental health problems. All students had experiences in caring for parents of preterm infants during parental visits in the NICU. This NICU setting was located in a central hospital in a rural province of Thailand. This NICU provided six beds with two isolation beds to care for sick newborns who met the eligible admission criteria. The hospital visitation policy offered both fathers and mothers to visit their infants 24 hours and mothers were allowed to stay overnight with their infants in the NICU. This study collected data before COVID-19 pandemic when the visitation hospital policy has been modified.

Research Instruments

The first researcher served as the human instrument to collect the data using a semi-structured interview guide. This interview guide included a main question, specific questions, several probed questions, and closing questions. The main question was initially used to gather the information from students. The main question was "Please kindly tell me about your experience in caring for parents during their parental visits in the NICU". The specific questions were used to ask the students deeper in details of their NICU

experiences. For instance, students were asked “*What parents should do when having a preterm infant in the NICU?*”, “*What did you really do to care for parents during their visitation?*”, and “*What do you want to do to parents during their visitation?*” If students answered only a few words, the probed questions were used to encourage students to describe more details. The closing questions were used at the end of the interview to summarize experiences that students shared.

Human Subjects protection

This project was approved by Chanthaburi Research Ethics Committee/Region 6 before the project started. The approval number is CTIREC019. To preserve students’ confidentiality, all paperwork of students was assigned with the code. No student name or other identifiable student information was used on any data collection sheet in the overall data collecting process. Throughout the study, the researcher checked to see if the students had continued to give their consent. The students might refuse to join or withdraw from the study at any time without penalty or loss of their study benefits.

Data collection

The data collection process started after receiving an ethical approval. The first researcher contacted a senior student representative to ask their friends by using the recruitment script to voluntarily participate in this study. The students who were interested in the participation filled in the contact form. The researcher directly contacted these students based on their contact information the student provided and reviewed their eligibility criteria. The researcher informed the objectives and the activities the students did in the research. The researcher confirmed the students’ willingness to participate in research

again. When the students confirmed their participation, they signed a consent form. The researcher interviewed the students using the semi-structured interview guide and took interviewing observation notes in a quiet comfortable private room in the nursing school where both students and the researcher agreed to use it. The interview took approximately 30-60 minutes, along with audio-taped recordings. During the interview, the researcher provided opportunity for students to review and confirm their information. The tape of each interview was transcribed verbatim and the researcher read the transcripts and listened to the tapes to confirm the accuracy before data analysis. Data collection was terminated when no new information was generated from data collection and analysis.

Data analysis

An inductive content analysis method was chosen for data analysis (Elo & Kyngäs, 2008). All interview texts and notes exploring student nurse experience in caring for parents with preterm infants in the NICU were chosen to be the unit of analysis. All researchers involved, discussed, and reached agreement on the way the data were analyzed. The researchers read the transcripts several times to obtain a sense as a whole. The open coding, creating categories, and abstraction process was applied throughout. The formulation of a general description of student nurse experience amid generating categories was completed at the end of the process.

Results

A main category, three generic categories and 13 subcategories were identified from student nurse experiences when caring for parents of preterm infants during the parental visits in the

NICU. The descriptions, properties, dimensions, and authentic citations of categories were used to present the study results. The letters “ST#” used in this result presentation represented a student nurse with number. For instance, the “ST5” represented the 5th student nurse. Hence, neither student nurse identifiers were used throughout.

The supporting parental care, a main category, was a general description of student nurse experience in caring for parents of preterm infants during parental visits. This main category was generated by grouping three generic categories with 13 subcategories as presented in Figure 1.

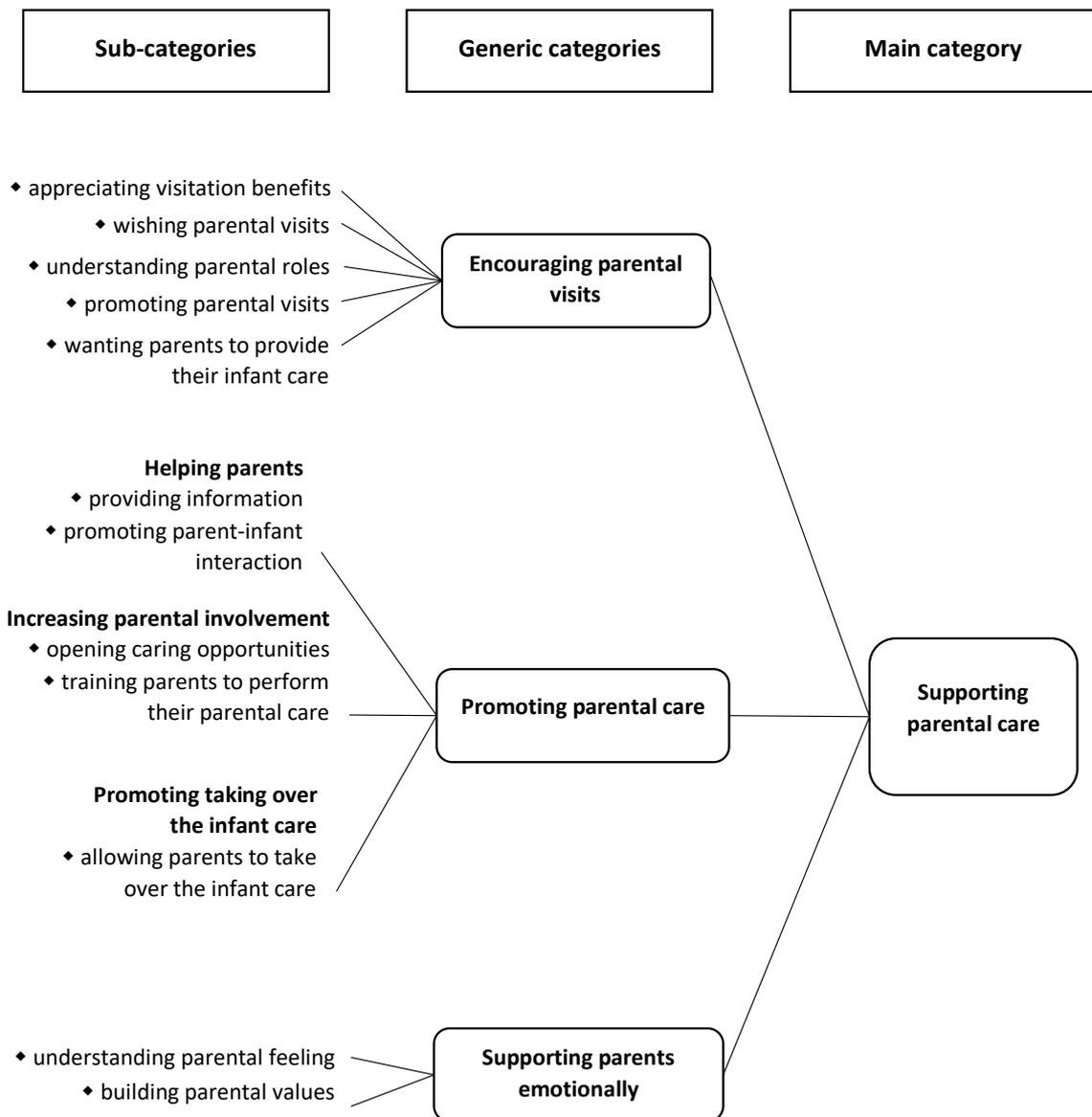


Figure 1. Summary of Main Category, Generic Categories, and Subcategories of Student Nurse Experiences in Caring for Parents of Preterm Infants in the NICU

Encouraging parental visits

Encouraging parental visits was the first generic category of student nurses' experiences. This generic category referred to a set of students' emotions and behaviors that resulted in students' attempts to persuade parental visits. At the end of this encouragement, students hoped parents made their visits and provide their care for their infants. This category consisted of five subcategories which were appreciating visitation benefits, wishing parental visits, understanding parental roles, promoting parental visits, and wanting parents to provide their infant care.

Appreciating visitation benefits referred to an expression of students' admiration on visitation benefits. All students stated that parental visitation was very important to the infants and beneficial to parent-infant relationships. The students described in more details that parents who visited their infants were able to talk, touch, and provide care for their infants. They continued to provide more information about the infant perception during parental visits. They believed that the infants felt very happy when parents came. The students noted that these parents were the persons who provided unique love and care for their infant, while other people were unable to provide it exactly like biological parents. An example of appreciating visitation benefits to the infant stated by the female student was presented below.

I think it is maternal warmth like when the mother visits, the infant knows that her mother came. At least to touch and talk to her (the infant) to build parent-infant relationships. (ST5, pg.5)

She continued to describe more about different cares provided by the mother and the

student nurses. She said *"Like us, we always take care of the infant with love and care; however, our care is dissimilar to the love the mother communicates to her infant"* (ST5, pg.6).

Next, wishing parental visits was the second subcategory of the first generic category. This subcategory referred to the students' wish to see parents to make their visits during the infant hospitalization in the NICU. Most students wished both fathers and mothers to make their visits in order to support their sick infants. The students wanted to support parents to care for the infants; hence, making parental visits was a desirable parental activity to the students. The male student nurse said that *"The father never visits the girl. I don't know if he is able to provide care for her. I wish he could visit"* (ST2, pg.10). Not only did the students wish parental visits, but they also wished for the mothers to stay overnight with the infant so that the mothers were able to frequently visit and provide care to the infants. A female student made her wish of having overnight-stayed mother during her clinical practice. When she saw the mother came to the NICU, she felt very happy for the infant. She said as follows.

I feel..wow..oh no she (the mother) comes today. I feel like (laugh) I feel like if I were her (the infant), I would be so happy to see my mother. I wish she (the mother) could stay overnight with daughter. (ST4, pg. 14)

Moreover, understanding parental roles was a subcategory that referred to student perception on parental obligations to care for their children after birth. Although the infants were sick, all students perceived that the parents were able to play their parental roles. They

provided more in details that mothers had to breastfeed their infant by pumping their breast milk and delivering it to the infants in the NICU. They continued providing more information that they thought parents had to perform their parental roles such as visiting, encouraging, and watching over, and care for their sick infants. A female student said that “...as if the mother knows that she is able to care for her son although he is sick. Like, ah...I (the mother) still have an obligation like breastfeeding my son” (ST1, pg.7).

In addition, after their appreciation and understanding of parental roles, the students promoted parental visits. This promoting parental visits subcategory offered to set of student behaviors and to promote rental visits. This behaviors included respecting parental privacy, welcoming parents, and relieving parental stress. The students believed that these behaviors they established in the NICU would welcome parents to the NICU although the NICU environment was busy.

Respecting parental privacy referred to the respectful student behaviors when parents came and stayed with their infants. They students applied this caring behavior that was trained in the school to their clinical practice. All students indicated that they told parents everything they provided to the infants and they asked for parental permissions before providing their care.

Welcoming parents referred to the student behaviors to allow parents to visit their infants anytime based on the hospital policy. The students informed that some parents had their transportation limitation, leading to late visitation, the other parents had to work. When the parents arrived the NICU, the students sought ways to welcome these parents to visit the infants in the

NICU.

About relieving parental stress, all students perceived that the parents were stressed when having the sick infant in the NICU. They also understood that all parents wanted their infants to survive. They additionally described more that the parents wanted to see, hug, and hold the infants like having normal newborns and going back home safely. When seeing parents with stress, the students indicated that they wanted to help them. A female student provided more in details that:

I feel that the mother is already suffering but I don't know whether it is about family or financial issues but she must know her daughter is sick. She may be double suffering. I help lighten her burden by providing close attention to and took best care of her daughter. When she sees this good nurse, she knows that her daughter is cared for by a good provider. She will be ok and have no worry (ST3, pg.13).

The final set of the first generic category was that the students wanted parents to provide their infant care during parental visits. The students believed that parental care was beneficial to the infant; therefore, they really wanted parents to provide the qualified parental care. For instance, a female student said that “I want the mother to hold her baby in the right position while breastfeeding so that when they go home, she is able to do it right” (ST5, pg. 8). The other example was from a student who wanted parents to provide their infant care. She said “Um...I mean parents come to visit and they do not do anything much but I want them to do” (ST4, pg.12).

Promoting parental care

Promoting parental care, the second generic category, referred to the student activities that were performed to promote parents to be able to provide the infant care during parental visits. This generic category included three main subcategories consisting of helping parents, encouraging parental involvement, and promoting taking over the infant care.

Helping parents was the first set of student care behaviors that the students performed when parents made their visits. This main subcategory included two sets of subcategories which were providing information and promoting parent-infant interaction. Providing information referred to a set of students asking and answering questions. Information was provided when parents asked questions and students answered them. If parents had no questions, the students prepared information for parents. For instance, a female student took care of a preterm infant with phototherapy. She told parents a reason why the infant required phototherapy, while the parents did not ask her any questions. She stated that *"I think if I were her parents, I would be curious"* (ST11, pg. 10). In terms of student behaviors in promoting parent-infant interactions, the students asked parents to hold the infants. The students checked if the infant was ready to be held. If ready, they helped parents to hold their infant. However, the students found although the infant health status was ready for parents to hug and hold, some new parents were fearful of holding and caring for the infant. The students came up with ways to help parents. For example, a female student said that *"I brought my baby doll with me and showed them how to hold it right"* (ST5, pg.8).

Increasing parental involvement was the second set of the main subcategories that referred to the student behaviors to try to work with parents until parents were able to care for their infants. Mostly, the students utilized infant daily life activities as tools to increase parental involvement. The activities such things as changing diapers, wearing socks, and feeding were the simple most useful activities students used to encourage the involvement. The students firstly offered opportunities to parents to involve in the care. Students prepared their encouragement by searching for activities of daily life of the infants and offered them to parents to perform. For instance, the female student told a mother who came to visit her infant to clean vernix caseosa from the infant's groin. She asked *"would you like to look at the vernix caseosa from his groin and clean it?"* (ST9, pg.9).

The latter set of student behaviors in encouraging the involvement was training parents to perform their parental care. Some students demonstrated caring activities to parents and parents performed it after the demonstration. However, with new parents with no parenting experience, the students used a simple simulator to train the parents to build parental confidence before the parents were able to perform the parental care to their real baby. An example of a female student who tried to train a father of a preterm infant to hold his baby was described as follows.

I wanted parents to hold the infant so that the infant felt touched and warm emotionall from parents. However, this father felt fearful of dropping his little girl. Then, I brought a baby doll to the NICU to train him. I held the real infant, while the

father held the baby doll and imitated my activities (ST3, pg.11)

Promoting taking over the infant care was the last main subcategory of the student behaviors to allow parents to perform their parental care on their own. The students were next to parents to support their confidence and the infant safety. The students wanted parents to do it right so that they were able to care for their infants after the NICU discharge. A male student shared his experience in promoting taking over infant care. He described that:

I trained the mother to change the infant diaper and feeding and allowed the mother to feed her infant. Later on, she was able to perform her roles without fear. I stayed next to her to ensure the infant safety although she was able to do it independently (ST2, pg.9).

When parents were competent, the students wanted parents to perform parental care on their own and they supported parents to do them. Eventually, promoting taking over the infant care activities by students was developed. This behavioral set allowed parents to take over the infant care. The students stimulated parents to perform parental activities. A female student described her experience in caring for a father who was unable to keep the infant warm emotionally. She helped the father and increased his involvement. She stated that when the father was brave to do it at the first time, he would do it again and he was competent. She described her experience as follows.

He touched her forehead and said to his infant that he was fine. He is not fearful. When he was able to do it once, next time, I did not tell him anything but allowed

him to do it himself. Today, I saw that he touched his infant which meant he did not feel fearful to touch her (the infant). (ST1, pg.12)

Supporting parents emotionally was Support parents emotionally referred to student perception and behaviors to support parents when having sick preterm infants admitted in the NICU. The students worked on maintaining parental strengths and helped build up parental energy to overcome parents' negative feelings during parental visits. The subcategories included understanding parental feelings and building parental values.

Understanding parental feelings referred to the state of mind of the students to be able to reach a conclusion through reasoning and information about parental feelings when having the sick infants in the NICU. The students observed that most parents were highly worried about their infants and understood that all parents wanted their infants to be better and go back home. They also indicated with understood parents for feeling concerned about infant health and well beings because all parents loved and cared for their infants as if the infants were of the apple of their eye.

Building parental values referred to student behaviors to help parents to be strong to care for their sick infants. The students were happy to be part of promote parents to be invaluable for their sick infants. The students believed that the parents were able to care for their infants although the infants were sick. The students offered simple task for parents to perform. For instance, the students built parental values by training parents to change diapers and touch the infants. The students indicated that the parents would feel more

valuable than watching health care providers to do for them. The students thought that parents would be low self-esteem if parents were unable to do anything for their love ones. Therefore, the students explored activities of daily life of the infants and offered parents to perform during parental visits.

In brief, the student nurses supported parental care to the infants during parental visits. This supporting parental care contributed to enhance parents to be able to support their hospitalized preterm infants in the NICU. The students worked on this support using various sets of states of mind and behaviors which included encouraging parental visits, promoting parental care, and supporting parents emotionally. When parents visited the infants, the students applied these activities with meaningful purposes to enhance parents to be able to provide their parental care for their infants. Without supporting parental care in the NICU, the students thought that some parents would be possible to encounter difficulties in providing parental care to preterm infants after discharge since some preterm infants with chronic health issues required some special care at home.

Discussion and Conclusion

Experiences of student nurses in practicing their clinical practice in the NICU illustrated the contribution of these students in supporting parental care. These students applied their knowledge and clinical experiences accordingly to support parents. Three main groups of the activities the students performed consisted of encouraging parental visits, promoting parental care, and supporting parents emotionally to ensure that parents are able to care for their

infant in the NICU. The finding is compatible to a parenting process described in Theoretical Infantipetal Parenting Model for NICUs (Sitanton, 2009). In this model, parents of preterm infants take on their parenting roles in the NICU, while the student nurses work on supporting the process. The finding also reflects the nursing support that is included in the nursing discipline (Im & Oh, 2021).

Encouraging parental visits was the attempt of the students to support parents in the NICU. This current finding support the results of the study about the limited NICU visitation system that physically separate parents for a long period by using the visitation devices; however, the parents want to have a closer look at their infant treatment and speak with doctors and nurses face to face (Seiiedi-Biarag, Mirghafourvand, Esmailpour, & Hasanpour, 2021). Moreover, encouraging parental visitation in the NICU is recommended as parental visits decrease parental stress levels (Özdemir & Alemdar, 2017). The nurses can support parents to visit regularly and promote infant care (Hearn, Clarkson, & Day, 2020) and the parental visits are necessary in the NICU. Finally, this finding supports the importance of encouraging parental visits in a follow-up qualitative study. The nurses are seen as a source of comfort by fathers. Nurses can encourage fathers to visit and participate in infant care activities on a regular basis. NICU presence helps fathers gain confidence and knowledge in parenting during their child's infancy, which can pave the way for ongoing involvement (Hearn et al., 2020). Therefore, encouraging parental visits should be maintained in clinical practice in neonatal nursing education to respond to health needs of parents and their infants in the NICU.

Next, promoting parental care for the infant is another student caring behavior set that the students performed to promote parental care during visits. The students helped parents, encouraged parental involvement, and promote parents to take over the infant care. The result of this study supports the finding of a review of the clinical practice guidelines that were developed to support parents in the NICU which recommends the use of a multilayered approach to support parents and their infants in the NICU (Treyvaud, Spittle, Anderson, & O'Brien, 2019). Moreover, caring behaviors of the students support the previous knowledge in that parental involvement in infant's care improves clinical outcomes (Filippa et al., 2021; Pillai, Pournami, Prabhakar, & Jain, 2021; Zhang et al., 2020). The finding supports the results of a study indicating that involving parents in their infants' daily care is feasible and should be encouraged by NICU clinicians (Zhang et al., 2020). That the students promoted parental care in the NICU supports the finding of a study about parents experiencing NICU visit restrictions due to COVID-19 pandemic. The study points out the importance of parents presence in the NICU and the benefits of parental involvement in the care in promoting infant health and development (Bembich et al., 2021). Therefore, training student nurses in pediatric field to be capable to respond to parental needs during COVID-19 pandemic must be in transition to promote parental involvement in more innovative ways to maintain health and well beings to both parents and preterm infants in the future.

The final set of students caring for the parents is about supporting parents emotionally. That the students played the emotional support roles to parents of the NICU infants supports the

finding of previous studies. The NICU parents have various emotions and parents need supports (Gutiérrez et al., 2020; Zhang et al., 2020). The fathers indicated that they received strong emotional support from nurses. Supporting parents emotionally is valuable for NICU parents and nurses are those who were mentioned by the parents to be friendly and kind.

Supporting parental care is the main category describing student nurse experiences in caring for parents during their NICU visits. The students worked with the parents to support the parents to be able to provide infant care during parental visits. The students' contribution in parental supports during their clinical practice in the NICU adds values in nursing education and clinical practice. In nursing education, training student nurses to effectively support parents of preterm infants during their clinical practice should be promoted to improve the students' contribution in neonatal nursing care, resulting in having new graduates with parental support competencies ready to be used in promoting health and well-being of infants and parents. However, the training programs should be well designed to meet changes of parental needs and NICU caring environment; especially, when the parents take on their parental roles during COVID-19 pandemic.

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