

ISSN Online: 1949-5005 ISSN Print: 1949-4998

Challenges of Bioethics Education in Pediatric Basic Nursing Education: A Faculty Perspective

Junko Nemoto¹, Chikage Kubota², Yukiko Yoshikawa¹

¹Faculty of Nursing, Hyogo University, Kakogawa, Japan

How to cite this paper: Nemoto, J., Kubota, C. and Yoshikawa, Y. (2024) Challenges of Bioethics Education in Pediatric Basic Nursing Education: A Faculty Perspective. *Health*, **16**, 105-117.

https://doi.org/10.4236/health.2024.162010

Received: January 20, 2024 Accepted: February 23, 2024 Published: February 26, 2024

Copyright © 2024 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

http://creativecommons.org/licenses/by/4.0/





Abstract

In the field of pediatric nursing, in the perinatal period, numerous ethical issues arise alongside the advancement of medical technology. However, sufficient education on bioethics is not provided in the pediatric nursing domain of basic nursing education. The purpose of this research is to examine the current status of bioethics education in the pediatric nursing domain of basic nursing education and explore the challenges perceived by the pediatric nursing faculty regarding bioethics education. The research method was a questionnaire survey on 100 randomly selected pediatric nursing faculty members from nursing universities across Japan. The results revealed that although bioethics issues were considered important, the emphasis remained primarily on addressing bioethics as part of nursing that respects children's rights. Furthermore, respondents expressed difficulties regarding teaching methods and content related to bioethics.

Keywords

Basic Nursing Education, Bioethics Education, Pediatric Nursing

1. Introduction

As medical technology continues to advance, ethical challenges in the realm of bioethics are on the rise, particularly within the field of pediatric nursing. Presently, pediatric nursing is founded on the principles of pursuing the best interests of children in the healthcare setting, as defined by the United Nations Convention on the Rights of the Child, which enshrines children's rights. However, due to the nature of the physical and psychological development of children during their formative years, respecting their preferences and prioritizing their choices regarding treatment and procedures can be challenging, often leading to

²Department of Emergency Medical Science, Suzuka University of Medical Science, Suzuka, Japan Email: jnemoto@hyogo-dai.ac.jp

a conflict between adherence to children's rights and practical decision-making.

Furthermore, the increasing prevalence of severely physically and mentally disabled children presents even greater complexity, as expressing their own preferences becomes considerably more challenging due to their physical conditions. This poses the difficult question of what constitutes the "best interests" of such individuals. Recent legislative changes, such as the 2010 amendment to organ transplant laws in Japan, have made it possible to obtain organs from children under 15 years of age with family consent in cases where their own consent is unavailable, thereby sparking various debates. Thus, bioethical issues can arise across a wide range of age groups, but they have a particularly profound impact on the landscape of pediatric healthcare.

Ethics education within the current nursing foundational curriculum is often limited to lectures and codes of conduct [1]. Students have limited exposure to ethical decision-making related to bioethics. Upon acquiring their nursing qualifications, nurses often become heavily entrenched in the medical-centric thought processes of their daily duties, potentially succumbing to paternalistic approaches. In essence, while clinical nurses develop problem-solving skills through handson experience, they may become less attuned to underlying ethical issues that do not manifest visibly.

In response to this situation, efforts have been made within pediatric nursing education to address topics such as laws, treaties, guidelines related to children's rights, evolving perceptions of children, the rights of children in healthcare, child abuse, and more. Additionally, initiatives have been undertaken to incorporate conferences during pediatric nursing practicums, providing students with opportunities to recognize the importance of exploring children's rights and ethical dilemmas [2].

However, it is noteworthy that more than half of the educators in the field express dissatisfaction with the current state of education concerning child rights advocacy [2]. On the other hand, at a university, specialized education in research ethics in life sciences and healthcare, led by experts in life sciences ethics, has resulted in a more nuanced and concrete understanding of ethical issues [3].

Given this context, this study aims to examine the current status of bioethics education in the pediatric nursing domain of basic nursing education and explore the challenges perceived by the pediatric nursing faculty regarding bioethics education.

2. Research Method

2.1. Data Collection Method

To collect data for this study, the following methods were employed:

- Utilizing the list of member universities of Japan Association of Nursing Programs in Universities (JANPU), 100 universities were randomly selected.
- A document requesting cooperation in this research and providing access to the web-based survey (conducted using SurveyMonkey) was sent to these uni-

versities.

- Only pediatric nursing faculty members who approved the contents of the document were invited to access and complete the web-based survey.
 - Responses were collected anonymously and using a free-text format.

2.2. Questionnaire Items

The questionnaire included the following items:

- 1) How many years of experience do you have in the field of pediatric nursing education?
 - 2) Currently, what type of courses do you teach?
- 3) Does your current university offer courses related to bioethics in the field of pediatric nursing?
- If yes, please provide detailed information about the content, methods, target student year, and class size of these courses.
- 4) Have you been involved in teaching bioethics in your previous experiences in nursing foundational education, including lectures, exercises, or clinical training, outside the field of pediatric nursing?
- 5) Do you encounter any challenges in bioethics education in the field of pediatric nursing?
- 6) Do you have any particularly memorable experiences related to bioethics education?
- 7) Regarding bioethics education in the field of pediatric nursing within nursing foundational education, do you believe there are specific content areas that are particularly important?
- 8) Concerning future bioethics education in the field of pediatric nursing, what are your thoughts or considerations (including challenges, hopes, prospects, methodologies, etc.)?

2.3. Analysis Method

The data obtained through the questionnaire were subjected to qualitative analysis using the following four steps for each questionnaire item:

- **Step 1:** All responses from the questionnaires were read to gain an overall understanding, and major themes within the responses were identified.
- **Step 2:** Attention was given to opinions, emotions, and experiences expressed by the respondents, and these were categorized.
 - **Step 3:** Extracted categories were further analyzed to identify larger themes.
- **Step 4:** The entire questionnaire was interpreted using these themes and categories.

2.4. Ethical Considerations

Although this survey was anonymous, an explanation was provided in writing regarding the research's purpose, content, and methodology during the request for research cooperation. Participation in the research was voluntary, and it was

explained that expressing an intent to participate by entering the web survey did not carry any disadvantages. It was ensured that no harm would come to participants even if they chose not to cooperate.

This research has been conducted in accordance with the Declaration of Helsinki and approved by the Research Ethics Review Committee of Hyogo University (Approval Number: 21008).

3. Results

3.1. Respondent Demographics

The research cooperation request documents were sent to 100 nursing universities in Japan, and responses were received from 40 faculty members. The breakdown of respondents based on their teaching experience is shown in **Table 1**. Most respondents had over 11 years of experience as nursing faculty staff, with 10 individuals (25%) having 1 - 10 years of experience. All respondents had experience teaching courses related to pediatric nursing.

3.2. Current Bioethics Education

As shown in **Table 2**, the most common course addressing bioethics was "Introduction to Pediatric Nursing", followed by practical training. Lecture-based instruction was the most common teaching format, but other methods such as group work, case presentations, and conferences were also used to foster student discussion and facilitate a deeper understanding of specific scenarios. Regarding content, while some respondents mentioned broad concepts of ethical issues and challenges in pediatric nursing, many focused on specific themes such as children's rights and dignity. Topics like congenital diseases, disabilities, end-of-life care, and urgent bioethical decisions were frequently addressed.

3.3. Challenges in Bioethics Education

As indicated in **Table 3**, 11 respondents reported facing challenges in bioethics education. These challenges included concerns about the validity of the episodes covered, discrepancies between knowledge and practical application, lack of sufficient lecture time, and difficulties in conveying and discussing the depth and complexity of bioethical issues with students. Some respondents expressed the difficulty of teaching a subject such as bioethics, where there are often no clear-cut answers, especially to students with limited experience.

3.4. Memorable Experiences in Bioethics Education

As shown in **Table 4**, 7 respondents found memorable experiences in practical training and exercises, emphasizing the importance of two-way communication through dialogues with students rather than one-way instruction. The experiences often revolved around children who faced bioethical challenges, such as those with severe physical and mental disabilities or children in end-of-life situations.

 Table 1. Respondent attributes.

Experience in Nursing Education	Number of Respondents
1 - 5 years	4
6 - 10 years	6
11 - 15 years	7
16 - 20 years	12
>20 years	11
Total	40

Table 2. Bioethics education currently offered.

Category	Subcategory	Specific Examples
Class year	1st year (1) ^a , 2nd year (17), 3rd year (6), 4th year (2)	
Classes covered	Introduction to pediatric nursing (8), practicum (6), nursing ethics (medical ethics) (5), pediatric nursing methodology (2), assistance theory (2), bioethics (2), seminar (2)	
	Lecture (17)	
	Group work (7)	Discussion about finding ethical issues from newspaper articles and other sources, what needs to be done to solve (improve) them, method, and the role of nurses.
Class	Case study (4)	
formation	Conference (4)	Exchange of students' opinions on ethical situations.
	Report submission (4)	
	Practical training/exercise (4)	Faculty members make students aware of the need to consider bioethical perspectives regarding the patients they receive during their practical training.
	Ethical issues and challenges in	
	pediatric nursing (7) Rights and dignity of children (6)	Living like a child and what it means, the child's right to life, growth, and development, etc.
Details	Children with congenital diseases and disabilities and their families (5)	8
	End-of-life and palliative care (4)	
	Prenatal diagnosis (2)	
	Organ transplantation and decision-making (1)	
	Abuse/suicide (1)	

^aNumbers in parentheses indicate number of respondents.

Table 3. Challenges in bioethics education.

Category	Subcategory	Specific Examples
		How to communicate to students who do not yet have much experience.
	Difficulties in teaching and communicating (4) ²	Communicate to promote visualization.
		Feeling limitations because of expertise arequired.
		There are many absolutes in bioethics that are difficult to communicate.
techniques	Methodology concerns (3)	Cases addressed tend to be abstract and sentimental. Discrepancy between theoretical knowledge and reality. No teaching experience dealing with bioethics.
Limitations	Insufficient time (4	Insufficient time for lectures. Practical training period does not deepen learning to the point of considering bioethics.

^aNumbers in parentheses indicate number of respondents.

Table 4. Memorable experiences in bioethics education.

Category	Subcategory	Details
Location/place	Practical training (6) ^a ,	
Location/place	exercises (1)	
	Conferences (3), lectures (1),	
Opportunity	prenatal diagnosis (1),	
Opportunity	common routine procedural	
	situations (1)	
	Children (4), critically ill	
Subjects	children (2), terminally ill	
	children (1)	
	Children's rights, consideration for children (5)	Ethics in prenatal diagnosis.
		Happiness for severely ill children who
		cannot exercise their will.
		Student perceptions and statements about
		children.
		Terminally ill children, the right to life
		and the right to die for severely mentally
Theme		and physically handicapped children.
THEIHE		The importance of daily life and nursing
		care through the death of a child patient.
		Awareness of ethical issues in routine
	Student awareness and learning (4)	procedural situations.
		The question of how you would handle
		the situation if you were a ward nurse.
		Realizing that you are actually in contact
		with children.

 $^{{}^{\}mathrm{a}}\mathrm{Numbers}$ in parentheses indicate number of respondents.

3.5. Important Aspects of Bioethics Education

In response to the question about what they consider important in bioethics education, approximately one-third of the respondents (13 individuals) emphasized children's rights and human rights, as shown in **Table 5**. Six respondents highlighted children's self-determination, and three mentioned the rights and dignity of children with disabilities or illnesses. It was clear that children's rights, dignity, and human rights were common focal points in bioethics education within the field of pediatric nursing.

Table 5. What is considered important in bioethics education.

Category	Subcategory	Specific Examples
	Human rights and rights of children (13) ^a	Respect for children's rights and self-esteem.
		How children's rights are reflected in the pediatric nursing setting.
		The right to know the origin of the child.
		Understanding the perspective of the child's own experience.
		Be child-centered. Do what is best for the child.
		Ethical education that values all children.
Uuman right		Nursing care for the dignity of children.
Human right	Self-determination (6)	Who makes the decisions and how to support them.
		Position of the child who is unable to make
		self-determination.
		Respect for the child's wishes, parents' thoughts and
		ideas, procedures that cause pain, treatment,
		restraints, etc.
	Rights and dignity of children with disabilities and illnesses (3)	The rights of severely disabled children.
		How to protect the dignity of the child in the nursing
		care of children with disabilities.
		Nursing care for children with birth defects or
	miresses (3)	diseases that require medical treatment.
CI 11 1	Thoughts of the	Parent-child disagreements about self-determination,
Children	family (5)	support for consent, transplantation medicine, etc.
and families	Best interests of the	Sensibility to protect the best interests and logical
lammes	child and family (3)	thinking to figure out how to do it.
		Thinking seriously about life.
	Understanding the value of life (5)	The value/importance of life.
		That it is never only when life is nearing its end that
D. 1. 1		we consider bioethics.
Bioethical		Various issues such as abuse, abortion, bullying,
thinking		suicide, end of life, etc.
	Ability to think, keep thinking (3)	Students should expand their ideas through group
		discussions that include other faculties.
		Understand the need to think about this on an
		ongoing basis.

^aNumbers in parentheses indicate number of respondents.

3.6. Perception of Their Own Challenges in Bioethics Education

Regarding their perception of their own challenges in bioethics education (shown in **Table 6**), eight respondents mentioned improving teaching methods, while three highlighted the challenge of dedicating time to cover bioethics in courses or practical training. In this way, the most cited challenges were related to teaching methods and constraints. However, there were also a significant number of respondents who considered important aspects of bioethics education, such as respecting children's intentions and rights, fostering ethical thinking, and promoting ethical values and critical thinking skills. There was a certain level of consensus regarding what they considered important and challenging.

Table 6. Issues in bioethics education in own opinions.

Category	Subcategory	Specific Examples
		Lectures by lecturers with high expertise.
	I	Learn lecture content in depth onsite, not online.
		To help children understand the world they are experiencing, and to construct teaching materials and educational methods for this purpose.
		Education that incorporates practicum.
Teaching methods and constraints		Multiple case understanding and care review are handled in the same unit and shared with the entire class. Thinking by example, use of various media such as film and YouTube.
		Conducted child rights conferences with clinical experts.
		Careful selection of content to be covered specifically in pediatric nursing. Engagement and guidance to carefully connect what is learned in lectures with what is learned in practical training.
	Take time to cover bioethics in class and practice (3)	To cover as much as possible in class or practice, even if you don't have time.
		Want to share with the clinical staff but cannot do so because of the length of the conference. Want to be involved in ward cases but cannot go to the wards in a timely manner.
		To educate in classroom and practical training with an awareness of children's rights (currently there is not much awareness of bioethics).
What to communicate	for the will and rights of the child (4)	Want to tell them that living is a child's right to be respected, but that it has been put on the back burner because of parental wishes. That the child's wishes can be respected and that their health is protected, and the family should be supported in a better direction.
	To convey the importance of continuing to think (3)	Bioethics is something we will continue to think about as we continue our nursing careers. Want to be involved in classes and practical training in a way that will make people continue to think about it and be interested in it.

Continued

often find themselves caught up in the demands of rk, attempting to justify their actions with the at "the best for the child equals efficient medical ope that nurses take a moment to pause and questioning whether their actions truly align with interests of the child.
at "the best for the child equals efficient medical ope that nurses take a moment to pause and questioning whether their actions truly align with
ope that nurses take a moment to pause and questioning whether their actions truly align with
uestioning whether their actions truly align with
interests of the child.
nue to think about what it means for the child,
amily, and for the medical professionals around
nunicate about medical care, end of life,
s, and other questions that should be asked in the
ment of ethics.
der nursing ethics from the perspective of not
ethics but also nursing ethics, and to help
think about the role that nursing takes in team
e.
hat allow each student, with little experience in
, to think about the subject matter as their own.
opportunities to make students think in
s and practical training situations.
rations for students (e.g. recalling past
ices).
ucation is not enough; clinical education is
Č
think about the role that nursing takes in e. that allow each student, with little experier, to think about the subject matter as their gopportunities to make students think in and practical training situations. Trations for students (e.g. recalling past acces).

^aNumbers in parentheses indicate number of respondents.

4. Discussion

Based on the survey results, it has become evident that in the field of pediatric nursing, many educators consider it important to teach the necessity of respecting children's rights, especially their right to self-determination. They also view their teaching methods and content as areas for improvement. This discussion will explore the survey results, incorporating specific quotes from the respondents.

4.1. Significance of Addressing Bioethics in Nursing Basic Education (Pediatrics)

4.1.1. Nursing That Respects Children's Rights in Bioethics Education

As mentioned earlier, many respondents consider the teaching of nursing that respects children's rights to be of utmost importance in bioethics education. On the one hand, nursing that respects children's rights places a strong emphasis on recognizing children as individuals with independent rights. It values children's opinions and emotions, striving to keep children as comfortable and safe as possible during treatments. This approach includes providing information and obtaining consent, offering psychological support, ensuring physical comfort, involving families, and catering to individual needs. On the other hand, bioethical consideration for children involves a broader application of universal ethical principles (autonomy, non-maleficence, beneficence, justice, etc.) to all patients,

including children. While considering children's needs, it also takes into account broader ethical aspects of medical procedures, such as the appropriateness of treatment, patient autonomy, and justice among stakeholders. Bioethical consideration for children provides a comprehensive framework for addressing ethical dilemmas and encompasses a wide range of issues, including clinical judgments, resource allocation, and meeting the needs of diverse patient populations.

4.1.2. Best Interests of Children

Both nursing approaches, those that respect children's rights and those that consider bioethics, share a common goal of pursuing the best interests of children. However, this shared goal raises new questions about what constitutes the best interests of children. In the survey, a respondent provided the following insight under the question about challenges in bioethics education:

"I think about what is best for the child. However, sometimes what I think is best for the child may prioritize the convenience of healthcare providers. For example, the idea that 'it would be better for the child to not explain but quickly complete the procedure, resulting in less pain for the child', can be a convenient perspective for healthcare providers, but it takes away the opportunity for the child to try their best to be patient. It is important to recognize that in pediatric nursing, things often take time, but as nurses become busier, they may justify the idea that 'what is best for the child equals smooth medical care'. However, I hope nurses will become individuals who stop and reconsider whether that is truly in the best interests of the child. During practical training, I set aside time for an ethics conference to think about what is in the best interests of the child and discuss it."

The foregoing quote highlights the challenge of whether current nursing and nursing education personnel unintentionally create favorable conditions for healthcare providers by using the term "the best interests of the child". This respondent raises the important point that healthcare providers need to recognize the depth of ethical considerations in pediatric nursing, particularly when there are no clear-cut answers. This ethical dilemma requires students and healthcare professionals to engage in reflective ethical thinking. The best interests of children in healthcare extend beyond just medical treatment. It involves considering the overall quality of life and happiness of children comprehensively. Therefore, healthcare providers must support decision-making processes that aim to maximize children's health and well-being. Even procedures such as blood draws should be critically examined to ensure they are truly in the child's best interests, and this critical thinking should be instilled through nursing education.

4.2. Challenges in Teaching Methods

4.2.1. Difficulty in Utilizing Case Studies for Integrating Theory and Practice

In this survey, many responding educators indicated that they presented cases during lectures and engaged students in group work and report writing. Furthermore, there was a strong reflection of educators' belief that merely teaching general theories in lectures is not sufficient. They expressed the need to incorporate experiences from practicum cases into conferences and other activities.

To bridge the gap between theory and practice, it is possible to utilize real-life cases or hypothetical scenarios, allowing students to analyze problems from different perspectives. This enables students to learn how to apply theoretical knowledge to specific situations. Through discussions based on actual cases, students can experience decision-making processes when faced with complex ethical dilemmas. This goes beyond theoretical knowledge, helping students develop practical problem-solving skills.

Handling real cases also allows students to gain a deeper understanding of the patient's perspective and cultivate emotional empathy, which is crucial in providing patient-centered care. By applying theoretical ethical principles and guidelines to actual clinical situations, students can understand how these concepts impact real decision-making.

Addressing ethical challenges related to pediatric nursing through case presentations provides students with valuable knowledge and fosters problem-solving skills. However, in the survey, a respondent described case presentation as follows:

"For children's rights, it tends to become abstract and sentimental episodes, and while the importance of bioethics is understood, it is not being addressed in specific learning."

When using cases related to bioethics, such as parental refusal of treatment, organ transplantation, or disclosing terminal conditions to children, the situations directly touch upon life and death, and values, making them memorable but potentially overly sentimental. In short learning sessions, students might only be left with the impression of confronting such realities without deeper understanding.

It is important to be aware of these ethical issues related to life, which can be addressed as social problems, and to deepen one's individual thoughts on these issues. However, it is also necessary to conduct research on ethical issues that are more routine, often involving nurses and persisting in the daily lives of patients. Ethical issues that persist involve small decisions integrated into the individual lives of the patients in question, and they may go unnoticed by others [4].

When providing cases for bioethics consideration, it is crucial for educators and students to engage in educational dialogue through cases. Reflecting and deepening learning through this dialogue is essential.

4.2.2. Importance of Continued Reflection and Increased Sensitivity

According to the survey results, some educators recognize the challenge of allocating sufficient time within the nursing foundational curriculum but still consider it quite a task to incorporate even a small amount of time for discussing ethical issues and connecting them to clinical practicum experiences. They emphasize the importance of continuous reflection as well as making students real-

ize the significance of ongoing critical thinking.

"In lectures, we discuss case scenarios and stimulate students' ethical perspectives to increase readiness, but during practicum, the duration is short, and we cannot reach the depth of learning where students contemplate life ethics."

"Regarding life ethics, I think students should continue to ponder throughout their nursing career. I hope to provide lessons and interactions during courses and practicum that will make them interested and willing to continue thinking."

It seems that there are limitations to what can be taught within the scope of courses subject to evaluation. However, it is essential to convey the importance of continued reflection, especially during the basic nursing education stage. Education on life ethics should not be a once-off one-time occurrence but rather an ongoing process of learning and reflection. Even if students cannot put their learning into action in the actual clinical practice setting, continuing their learning can lead to the development of students who can make ethical judgments and provide support in various situations [5].

It is crucial for nurses to continually contemplate ethical issues and engage in lifelong learning throughout their careers. Basic nursing education should focus on enhancing students' sensitivity to life ethics, ensuring that it carries forward into their future endeavors.

5. Conclusions

5.1. Current Situation and Challenges

The results of the nationwide survey conducted among educators in the field of pediatric nursing revealed the significance of addressing bioethics in basic pediatric nursing education. Educators emphasized the importance of nursing education that: 1) respects children's rights and incorporates bioethics education, and 2) aims to pursue the best interests of children.

Furthermore, the survey shed light on the challenges faced in bioethics courses, including: 1) the difficulty of integrating theory and practice using case studies, and 2) the importance of continuous reflection and increasing sensitivity, highlighting the complexity of teaching methods.

5.2. Remaining Challenges

The response rate for this survey was 40%. One contributing factor to the relatively low response rate may have been the timing of the survey, which coincided with the period when most universities were conducting specific practicum sessions for various nursing fields, creating a busy period for educators. Originally, interviews with nursing educators were planned for this research, but due to the challenges posed by the COVID-19 pandemic, the methodology was changed to a web-based survey, which may have presented difficulties, including open-ended questions that were not easy for respondents. In the future, conducting interviews with educators will be considered to delve deeper into the subject.

Acknowledgements

We would like to express our heartfelt gratitude to all the educators who understood the purpose of this research and cooperated with us.

This manuscript was supported by JSPS KAKENHI, Grant Number JP20K19154.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- [1] Katsuyama, K., Katsuhara, Y., Hoshi, K., Kamata, K. and Williamson, A. (2010) Characteristics of Ethics Research in the Past 5 Years and Future Challenges. *Journal of Japanese Nursing Ethics*, **2**, 77-86.
- [2] Takahashi, K. and Hamanaka, K. (2015) Current Situation of Nursing Ethics and Advocacy of Children's Rights in Basic Nursing Education. *The Japanese Journal of Health Science Research*, **19**, 25-30.
- [3] Hoshino, M., Okamoto, N., Ishii, M., Yamazaki, A. and Sakurai, M. (2021) Ethical Issues and Learning Perceived by Nursing Students in Pediatric Nursing Integration Conferences during Clinical Practice. *Journal of Takasaki University of Health and Welfare*, 20, 29-41.
- [4] Nemoto, J., Kubota, C. and Nakamura, T. (2022) Trend and Foresight of Research for Bioethics Education in Basic Nursing Education Courses. *Hyogo University Journal*, **27**, 21-30.
- [5] Yoshioka, E. and Fujita, C. (2019) Pediatric Nursing Teaching Method and Contents of Ethics Education: A Literature Review. *Journal of Japanese Society of Child Health Nursing*, 28, 128-131.