



International

Journal of Human Sciences

ISSN:2458-9489

Volume: 22 Issue: 1 Year: 2025

Pediatric patient educational material development and implementation: A qualitative study of nursing students' experiences and opinions

Sibel Küçük¹
Dilek Uludaşdemir²
Perver Karşıgil³

Abstract


Research problem/aim: This study aimed to evaluate the opinions of nursing students about the preparation and implementation of educational materials for hospitalized children.


Methods: The research was conducted by using a phenomenological research design, one of the qualitative research methods during clinical practice was carried out within the scope of the Child Health and Disease Nursing Course in a university in Ankara with 59 students. Data were collected face-to-face interview technique. The collected data were analyzed using the qualitative content analysis method.

Results: The analysis identified five themes reflecting the students' experiences with using pediatric training materials: (1) communication, (2) education, (3) nursing perception, (4) motivation, and (5) hospital and treatment adaptation. Developing of child patient-student nurse relationship, becoming easy, effective, permanent education, making them love clinical practice, facilitating compliance of the pediatric patient to the hospital and breaking the known prejudice of nursing are firstly taking place in the positive opinion of the nurse students. On the other hand, difficulties in getting feedback from child patients, having difficulties at identifying the training topic and preparing the material, increasing heavy workload with this study are main negative opinions.

Conclusion: The majority of opinions are positive about providing education with materials to child patients. It's suggested that to increase work on material preparation and training, use student motivation to develop educational roles, provide guidance to students on the subject.

Keywords: Nursing student; pediatric patient; health education; qualitative study.

¹ Associate Professor, Ankara Yıldırım Beyazıt University, Faculty of Health Sciences, Department of Nursing, Department of Child Health and Disease Nursing, sibel_9741@hotmail.com  Orcid: [0000-0001-9009-1871](https://orcid.org/0000-0001-9009-1871)

² Assistant Professor, Ankara Yıldırım Beyazıt University, Faculty of Health Sciences, Department of Nursing, Department of Child Health and Disease Nursing, duludasdemir@gmail.com  Orcid: [0000-0002-2910-2110](https://orcid.org/0000-0002-2910-2110)

³ Research Assistant, Ankara Yıldırım Beyazıt University, Faculty of Health Sciences, Department of Nursing, Department of Child Health and Disease Nursing, pervermst@gmail.com  Orcid: [0000-0001-9996-7622](https://orcid.org/0000-0001-9996-7622)



1. Introduction

Patient education is an important part of basic nursing care for nurses (Bastable, 2017). In order to promote patient self-management and carers, nurses should educate patients and their caregivers about health issues. (London, 2016). The educational aspect of professional nursing focuses on instilling candidates with the necessary information, skills, attitudes, behaviors and habits in the provision of patient education and the promotion of a healthy lifestyle among individuals (Aydemir Gedük, 2018; Yıldırım, 2010; Whitehead, 2004). The relevance of patient education in nursing care is growing along with the need for nurses to assist patients in learning (Oyetunde & Akinmeye, 2015).

It is very important to use educational materials in patient education (Kavala ve Enç, 2022). The use of materials in education facilitates the educational process by embodying learning issues and enhancing the effectiveness of the process (Kaya, 2006). Effective patient health education requires the use of simple, planned, understandable, targeted and updateable materials (Karan, 2016). In particular, pediatric patient education and educational material should have a particular purpose, and should involve careful preparation, age-specific characteristics and aspects that meet the needs of child patients (Orgun & Özkütük, 2003). Studies reporting on the educational experiences of children and their parents have demonstrated that material-based training programs are highly effective in enhancing learning outcomes and fostering positive educational experiences (Kelo et al., 2013; Gubbels, van der Put & Assink 2019; Coşkun Şimşek & Günay 2024).

Patient education provided using educational materials is among the important issues emphasized in nursing education. (Scheckel et al., 2010; Richard et al., 2018). It is especially important to provide this skill to nursing students who begin clinical practice in pediatric clinics (de SáI et al., 2022). Because it is known that nursing students in pediatric clinics experience stress on issues such as touching the baby, communicating with the child and caregiver, administering medication, and providing appropriate and effective care to the child and caregiver (Arslan et al., 2018; Mutlu et al., 2020). The use of prepared materials increases creativity in nursing students, contributes to professional development and increases motivation, making the clinical education process easier (Kaymakçı et al., 2007). It has also been reported that it contributes to the development of nursing students' communication skills with patients (El-Demerdash et al., 2014). It is of utmost importance that nursing students be educated in the development of educational materials throughout school, since they also provide patient education as well as patient care to the healthy and sick as part of both their clinical and field applications (Demir et al., 2009).

When the curricula of universities offering undergraduate nursing education in Turkey are examined, it is seen that this subject is addressed as a course especially in the fourth grade (Ege University Nursing Faculty, 2023; Ankara Yıldırım Beyazıt University Nursing Department, 2024; Hacettepe University Nursing Faculty, 2024). Additionally, the pediatric nursing course is given in the third year. However, considering the stress students experience in pediatric clinics and the benefits of providing patient education with materials, it is thought that it would be appropriate to give this course before or together with taking a pediatric nursing course. In conclusion, aligning the timing of this course with pediatric nursing education could enhance students' preparedness and confidence, ultimately improving the quality of care provided to pediatric patients.

2. Purpose

This study aims to evaluate the opinions of nursing students, engaged in clinical practice as part of a Child Health and Disease Nursing Course in their undergraduate education, regarding the preparation and use of health education materials for hospitalized children.

3. Method

3.1. Study Design

The research was conducted by using a phenomenological research design, one of the qualitative research methods. The research question was: What are the opinions and experiences of nursing students related to the development and implementation of pediatric educational materials? The study is composed of three phases.

1. Phase: Providing material development training

In an hourly training session, the participant students were explained the benefits of using educational material, how to prepare a good educational material, which elements to look out for when communicating with pediatric patients and the benefits of the material prepared for the pediatric patient. Following the training session, the students were asked to develop training materials for “hospitalized children”.

2. Phase: Educational material development and the education of child patients using the materials

Before starting the study, the students were divided into 12 groups, with five participants in each group. One student who was in the final group withdrew from the study during the research, and so the final student group completed the research with four students.

The student groups were asked to develop original educational materials for the children's diseases. No interventions were made to the students for the characteristics of the material. All of the students were given one month to develop their training materials within their groups, and each student group provided training to at least one child with the materials they had prepared. During this period, the nursing students developed materials for adaptation with the hospital and hygiene rules. The prepared materials were handmade and original materials, and included a stethoscope, a blood pressure monitor, a doll, a face mask, a question wheel, a tooth, and a toothbrush and toothpaste (See Table 1, Figure 1). No interventions were made to the students throughout the material preparation and training phases. The training of patients using the developed materials continued for about four weeks.

3. Phase: Student interviews

After the student groups had completed their training, they were subjected to face-to-face interviews.

Table 1. Education material subject and prepared material

Main Topic of educational material	Subtopic of educational material	Prepared Material	Student Group
Adaptation with the hospital	Material used at the hospital	Stethoscope, blood pressure monitor	1,2,3. Group
	Therapeutic play	Doll, mask	4,5,6. Group
Hygiene rules	Hand washing	Question wheel, Plaster hand	7,8,9. Group
	Dental health	Tooth, toothbrush, toothpaste	10,11,12. Group



Figure 1. Prepared education material samples (Material used at the hospital, Therapeutic play, Hand washing, Dental health)

3.2. Sample

The universe of the study was composed of a total of 124 students from the third year of the Nursing Department of the Faculty of Health Sciences of a university in Ankara, Turkey during the 2016–2017 academic year, undertaking clinical implementation within the scope of a Child Health and Disease Nursing Course. No sampling was carried out, and 59 students volunteered to take part in the study, and so comprised the sample of the study.

3.3. Data collection

Data were collected after the completion of the clinical practice stage of the Child Health and Disease Nursing Course. After the clinical practice phase was completed, the students were asked three questions: (1) "What do you think about preparing training materials and giving education using the patient materials?", (2) "What do you think about the contribution of your prepared patient health education materials to university education?" and (3) "What do you think about pediatric nurses preparing health education materials for patient education in clinical settings?". Interviews with students were conducted face-to-face, and each interview lasted about 20 min and was recorded using a voice recorder. In addition, the gender and age of the students and pediatric patients were asked.

3.4. Statistical Analysis

The collected data were analyzed using the qualitative content analysis method proposed by Sönmez and Alacapınar (Sönmez & Alacapınar, 2017). Following the completion of the interviews, the raw transcripts of the audio recordings were uploaded to the computer, the audio recordings were listened to, raw data was converted to text in Microsoft Word document. The audio recordings were re-heard, and the written material was double-checked. The information has been read several times. The codes that may be extracted from each word and sentence were discovered after reading. Following the formation of the codes, thematic coding was initiated, and the codes were categorized by the researcher, with relevant themes and sub-themes extracted. In order to boost the validity of the research, it was ensured that the same procedures were carried out by three experts separately. (Experts have taken the qualitative course in their doctoral education. A specialist gives a qualitative lecture to doctoral students.) The data were rearranged by the experts and the researcher. Then, all the data were interpreted according to the themes and turned into a report. The student responses were then classified as either good or negative. The students' answers were found to cover the same themes for positive and negative, and so five main themes were identified, including communication, education, nursing perception, motivation and child's adaptation to hospital and treatment, based on the students' views of the pediatric material preparation. A total of 16 positive sub-themes were identified, and seven negative sub-themes. The positive and negative expressions of the students were

given directly for each theme.

After reading, the codes that can be extracted from each word and sentence were found. After the codes were formed, thematic coding was started, and appropriate themes and sub-themes were created by the researcher. In order to increase the validity of the research, it was ensured that the same procedures were carried out by three experts separately. The data were rearranged by the experts and the researcher. Then, all the data were interpreted according to the themes and turned into a report.

3.5. Ethical considerations

All of the participants signed a written consent form voluntarily after being described the purposes and procedures of the study. Prior to the study, legal (31.05.2017/27139605) and ethical permissions (Ankara Yıldırım Beyazıt University Ethical Board, 21.04.2017/548) were obtained. The study was conducted in accordance with the principles of the Declaration of Helsinki.

3.6. Limitations

There are some limitations to this study. First, the sample size was small, and the results do not necessarily represent the views of all nursing students in Turkey. Second, the researchers and students in the study had an existing educator-student relationship. That said, the researchers did not intervene in the preparation or implementation of the materials so as not to affect the research process. All of the students were encouraged to volunteer for the preparation of materials, and in this way it was ensured that the research was objective.

4. Results

The mean age of the nursing students was 21.32 ± 0.77 (min 20, max 24), and 94.9% of them were girls. The mean age of the pediatric patients was 7.13 ± 2.0 (min 7, max 14), and 59.3% of them were boys. The following five themes emerged from the data describing the students' experiences of using pediatric training materials: (1) communication; (2) education; (3) nursing perception; (4) motivation and (5) hospital and treatment adaptation (Table 2).

Table 2. The nursing students' categorized opinions of theme about teaching with material

Theme	Positive subtheme	Negative subtheme
Communication	Strengthening the development / relationship of patient child -student nurse communication Strengthening the relationship of patient child-student nurses	
Education	Contribute to nurse student education Increase nursing knowledge level Recognition to child patient and learning to developmental feature Learning to child and adult patient educational difference	Contribute not to nurse student education To spend labor To take time To fatigue
Nursing Perception	To change traditional nurse perception, to break prejudice To make society perspective positive of the nurse To recognize the educational role of nurses	To increase the workload of nurses To spent out of work time of nurses To fill in leisure time, to prepare the material at home
Motivation	To like clinical practice, to motivation	

		To understand that they have tasks beyond the doctor's request/order
		To help make good things for humanity, to make happy
Hospital treatment adaptation	and	To ease hospital adaptation for child patient
		To decrease hospital fear for child patient
		To increase treatment adaptation for child patient
		To help spending enjoyable time for child patient

Communication

The nursing students reported that, through using the materials, they learned to communicate with pediatric patients, increased their communication experience, easier nursing procedures, and strengthened their relationships with pediatric patients.

“... I learned how to talk to children, that is, how to communicate ...” (2nd group, 2nd student)

“... While preparing the materials for them and the other nurses went, my patient requested me. The child did not want the other nurses because she did not have any communication with them ... the child allowed me to approach her and wanted me.” (11th group, 1st student)

“Teaching with material facilitated communication with the child. The patient, who did not speak to me, wanted to talk when he saw the material in my hand. I like this too. I saw that what I did was beneficial for the child. He learned without getting bored, attracted his attention and actively participated in the training. I had a great deficiency in communicating with children, I was inexperienced, I learned to communicate with children.” (3rd group, 1st student)

“As my communication with children increases. I think it contributed to my education in facilitating communication with the child patient. The unhappy-looking children who did not want to communicate with us talked to us after the training and asked questions. I really liked this. I realize I learn easier.” (10th group, 4th student)

“I know from my nephews how to communicate with the child normally, but with this practice, I have seen that communication is better with the game. Since children's cognitive states are different from adults, I have seen that communication with the game is easier. I have observed in my own patient that it is easier to approach the child with a game rather than talking to the child and then he wants to talk to me. I think that educating with materials makes it easier to start communicating and educating children.” (12th group, 1st student)

“After the use of the material, the children were much more comfortable in their approach to us ... They interacted with us more comfortably. For example, previously there were children who did not even allow us to enter their rooms.” (8th group, 2nd student)

“From the patient's point of view, his/her communication with us increases, and also ours with them. This allows us to develop a close relationship with the patient, and we gain a different dimension to the one in which we provide routine nursing care. It also prevents patients from seeing nurses as a profession that only administers drugs. I think it increases patient-nurse communication and relationship. While making the hospital fun for the child, it also provides education.” (1st group, 3rd student)

“There was a great difference in my communication with the patient before and after the use of materials. It allowed me to practice. Since giving education with the material strengthened our communication, they said that that sister should make my medicine, she should come, they looked us in the eye. They felt more comfortable. There were children who did not even let us into the room.

Since we introduced ourselves with the training material and said that we were with him, they communicated more easily. Those who were hospitalized for the first time were more irritable and aggressive, they did not accept our training at first, but we contacted those who were hospitalized for the second time more easily and they accepted the training.” (6th group, 4th student)

Education

Nursing students stated that providing education through the use of materials contributed to their awareness of the difference between pediatric patients and adult patients. They also reported that they had sought to learn about the characteristics of pediatric patients, that they had gained better knowledge of the characteristics of the pediatric patient age group and that this situation had reflected positively on their nursing education.

“To prepare the material, we first need to have a sufficient level of knowledge; we need to investigate ... In this process... we learn the characteristics of the age group, and it is of great benefit to us” (1st group, 2nd student)

“While preparing the nursing education material, we read and studied more to get to know the children so that we could give them a better education. Thanks to this, we learned the subject.” (3rd group, 4th student)

“The preparation of the education materials definitely contributed to my education and personal development. Preparing material provides clarity of mind and enrichment of imagination. For pediatric patient, on the other hand, they learn more easily with visuals and games instead of direct narration. I wish the education system was always like this.” (7th group, 1st student)

“I think it has contributed to my education. You cannot treat child patients like you treat adult patients. That is what we have learned. You're just introducing yourself to adults, and they know they're here to heal. They do not show any difficulties unless they have an extra situation. You are doing your treatment and leaving. But children are not like that.” (7th group, 3rd student)

“We treat the patient not only as a sick person, but also as a social individual, and I think that by engaging in social activities ... I have done something good in terms of humanity.” (9th group, 1st student)

“... We came to understand that the patient is an individual when teaching with materials. I came to understand the developmental and age group characteristics of the children It may contribute to my education, since I have discovered an intelligence level and understanding.” (10th group, 3rd student)

On the other hand, the nursing students also had negative opinions on the use of such materials. They said that providing education through childhood materials did not contribute to their education, and required additional time and effort, and they considered the process to be exhausting.

“...We have so many classes and we had to give extra time for this.” (4th group, 1st student)

“Developing materials and training did not contribute to our education. We became exhausted in the process of preparing the material ... Accordingly, we should not give training through the use of such materials during nursing education ...” (5th group, 3rd student)

“It helped me communicate with child patients, but I had to spend extra time and effort in an intensive course term ...” (6th group, 4th student)

“I do not think education with materials contributed to my education. I did not have fun, because I did not like doing things with the kids.” (9th group, 4th student)

“... I do not think preparing materials and providing education with such materials contributed to my education.” (12th group, 1st student)

Nursing perception

The nursing students stated that training with the help of changing the social nursing perception positively contributed to their love of their profession, and they considered such studies and implementations to be necessary.

“Nurses should absolutely be educated using materials. ... I think that such practices must be carried out so that nursing can be understood as a profession in which care is given to people” (4th

group, 1st student)

“... I believe education should be undertaken. In this way, our pediatric patients come to love us, they do not feel fear.” (7th group, 4th student)

“Nursing is seen as a profession that only medicates. If these are developed, the public perception of nursing may change and be better.” (8th group, 2nd student)

“... I became their sister nurse rather than a nurse they were afraid of.” (9th group, 2nd student)

“I saw very few nurses who undertook training. This is our role, and it is ignored.” (10th group, 5th student)

“I think that such activities should be undertaken if nursing is to be understood as care giving rather than sitting in the nurses' room.” (11th group, 4th student)

The nursing students reported that training with materials increased their workload, as they had to prepare materials in their spare time at home.

“Considering the high number of patients for which a nurse is responsible and the conditions in which they provide service are so bad, we cannot expect such a thing from them. ... She/he has to make the materials that she/he cannot do in the hospital environment at home, and so has to steal from her own time.” (4th group, 5th student)

“... There are so many patients. The nurses are unable to provide health care for all of them. I am not quite sure whether they have to prepare material for all...” (8th group, 2nd student)

“... They work hard. I guess they prefer to rest and spend time with their families whenever they have free time.” (8th group, 3rd student)

“It is impossible to undertake education with materials considering the current work load” (12th group, 2nd student)

Motivation

The nursing students also stated that providing education with materials did not only make them love the clinic, but also relieved the pediatric patient. They understood beyond the doctor's order/request at nursing functions. In addition, the student nurse expressed that they were motivated by the happiness they experienced among children.

“For children ... It is an entertaining and educating activity even for 15 minutes. This increased my motivation for work.” (1st group, 4th student)

“...My patient asked me to undertake the implementations. This made me very happy, my patient was also happy, his mother told me the kid had been happier on internship days.” (5th group, 1st student)

“...Playing games and engaging in educational activities with kids helped me learn a lot about pediatric nursing outside of my regular nursing duties. I did not only handle papers. This made me even happier while I was preparing them...” (6th group, 1st student)

“... Nursing is seen as a profession that only administers medicine. I saw that my roles outside the doctor's order/request. The public's perception of the profession will change if these practices are expanded.” (6th group, 8th student)

Hospital and treatment adaptation

Nursing students stated that the use of material increased the compliance of the sick children with the treatment, increased the harmony with the hospitals and the nurses, and relieved their fear and made the process funnier.

“We helped ... ease the treatment of children; they accepted treatment more easily.” (2nd group, 2nd student)

“It is difficult for children to adjust to the hospital environment, and they stay away from us as they see us as people who make injections and give medicine. We show them that we are their friends with such materials, so they get used to us as well as the hospital, making their adaptation to the hospital easier.” (1st group, 2nd Student)

“Children feel ... entertained and as they have acquisition, and this makes adaptation to the

hospital and treatment easier.” (3rd group, 1st student)

“Using the education material on the first day of the child's hospitalization makes it easier for the child to adapt to the hospital environment, and may alleviate some of their fears. Children are really afraid of white gowns, hospital workers, stuff in the hospital (beds, stretchers, etc.)” (2nd group, 4th student)

“...You only introduce yourself to adults, and they are already aware that they are here to recover. They do not show any difficulty. ... You apply the treatment and leave them alone. Kids are not like that ... I have seen children who are frightened of pens, as they think it is a needle.”(4th group, 1st student)

“I saw a child exhibit aggressive behavior towards a nurse during treatment. If she approached using the materials and the game, the child may not exhibit the same behavior and may accept the treatment.” (5th group, 5th student)

5. Discussion

Regardless of the subject of education, it should be provided with educational materials (models, books, brochures, films, games, etc.) appropriate for the age and cognitive development level of children (Lange et al., 2012; Waldron et al., 2012). In this study, it was found that all nurses considered providing education with materials enhanced and developed of patient child-nurse communications. Similar to the study by Demir et al. (2009), the use of materials also improved communications among the nursing students. According to the findings of a study done by Kürtüncü et al. (2017), nursing students stated that communicating with children and managing their care requirements was more difficult than with adults. Furthermore, they were shown to have specific problems understanding and communicating with the child. In the aforementioned study, the authors also reported that the use of material contributed considerably to patient child-student nurse communication, assisting in the acceptance of nursing care and treatment practices, and in gaining communication experience with children.

Providing educational support to hospitalized children reduces their fear of hospital and contributes to the children being informed (Ünüvar, 2011). It has been reported that children aged 4–6 were mostly unhappy prior to treatment, and had difficulties in accepting the procedures, but that their concerns were eased through the use of therapeutic games, allowing them to accept medication more easily (Dantas et al., 2016). Similarly, Arıkan et al. (2018) found that therapeutic clowning and a hygienic hand washing technique taught with films decreased bacterial colonization on preschool children's hands by 50%. It has also been shown that positive thinking shortens healing periods in children and affects health in a positive manner (Venning et al., 2007). Similar to these studies, the nursing students in the present study claimed that education using the prepared materials improved the comfort of the children, increased their compliance with the treatment and supported them positively. The students also reported that the use of such materials improved the adaptation of pediatric patients to the treatment process, helped them to spend time enjoying themselves, and reduced fears and hesitations.

Demir et al. (2009) found that it was helpful for the students to produce the basic concepts related to the subject in the production of patient education materials, while in another study it was reported that preparing patient education materials benefits also the nursing students (Kaymakçı et al., 2007). In the present study, the preparation of the training materials was considered necessary for patient education, and also helped in the knowledge and behavioral development of the nursing students.

It is known that before the clinical practice of pediatric nursing, students have different concerns due to the fact that the patient is a child. Touching the child patient, giving care, communicating with the child and the caregiver, drug administration, fear of harming the child are among the sources of concern (Arslan et al., 2018; Mutlu et al., 2020). In this study, nursing students stated that providing education with materials provides motivation for performing operations such

as caring for the child and communicating with the child patient. Moreover, the nursing students stated that providing education with materials not only made them grow to love the clinic, but also provides some relief to the pediatric patients. They said that they had come to understand that the duties of a nurse go beyond the doctor's requests/orders, and that making children happy was a factor that motivated them.

In Turkish society, nurses are seen as people who make injections, measure blood pressure and take blood (Tan et al., 2007; Tunç et al., 2010; Çelik et al., 2013), however the nursing students concluded that teaching with materials may contribute to improving the patient-nurse relationship, to breaking the known prejudices and to changing the stereotypical view of traditional nursing.

In a previous study, Demir et al. (2009) reported that much time was spent in preparing patient education materials, and that this led to fatigue among the nursing students who have to find the time to prepare such materials. Similarly, in another study, it was found that students had individual difficulties in terms of time management while preparing educational material (Güven & Avcı, 2022). In the present study also, some negative opinions were given by some students related to the time and labor spent preparing educational material.

6. Conclusion and Recommendations

In conclusion, the results of the study indicate that experiences in preparing and employing pediatric materials of nursing students were mostly considered positive, while the use of such pediatric training materials helped the patients initiate and strengthen child-nurse communication, improve treatment and patient compliance, and change the stereotyped perception of traditional nursing. The process also improved the education process of nursing students. On the positive side, the nurses declared an increased love of the profession and the welcomed the ability to break the routine of nursing work, while negative opinions related to difficulties in communicating with pediatric patients, increased workload, the determination of the educational issue and difficulty in preparing the materials.

Based on the findings of this study, it can be stated that providing training on the use of materials in nursing education, using patient education materials in clinical practice, and guiding students in this respect is useful. It may also be advisable to work with larger groups on the topic. During nursing education, it is advisable to provide training in the use of materials, and to guide and inform the students about the subject.

References

- Ankara Yıldırım Beyazıt University. (2024). Nursing Department Course Program. Ankara Yıldırım Beyazıt University. Retrieved December 25, 2024, from <https://obs.aybu.edu.tr/oibs/bologna/index.aspx?lang=tr&curOp=showPac&curUnit=06&curSunit=5290#>
- Anıkan, D., Gürarlan Baş, N., Kurudirek, F., Baştopcu, A., & Uslu, H. (2018). The effect of therapeutic clowning on handwashing technique and microbial colonization in preschool children. *Journal of nursing scholarship: an official publication of Sigma Theta Tau International Honor Society of Nursing*, 50(4), 441–450. <https://doi.org/10.1111/jnu.12392>
- Arslan, S., Şener, D. K., & Cangür, Ş. (2018). Validity and reliability of clinical comfort and worry assessment tool of pediatric nursing student. *Journal of Düzce University Health Sciences Institute*, 8(2), 61- 66. <https://dergipark.org.tr/tr/pub/duzcesbed>
- Aydemir Gedük, E. (2018). Developing roles of the nursing profession. *Journal of Health Science and Profession*, 5 (2), 253-258. <https://doi.org/10.17681/hsp.358458>
- Bastable, S.B. (2017). *Essentials of patient education* (2nd ed). Burlington, MA: Jones & Bartlett Learning.

Küçük, S., Uludaşdemir, D., & Karşıgil, P. (2025). Pediatric patient educational material development and implementation: A qualitative study of nursing students' experiences and opinions. *Journal of Human Sciences*, 22(1), 44-55. doi:[10.14687/jhs.v22i1.6502](https://doi.org/10.14687/jhs.v22i1.6502)

- Coşkun Şimşek, D., & Günay, U. (2024). The Experience of Students using Educational Material in Pediatric Clinics: A Qualitative Study. *Gümüşhane University Journal of Health Sciences*, 13(2), 658-665. <https://doi.org/10.37989/gumussagbil.1135949>
- Çelik, A.S., Pasinlioğlu, T., Kocabeyoğlu, T., & Çetin, S. (2013). Determination of the image of nursing profession in community. *Florence Nightingale Nursing Journal*, 21(3), 147-153. Retrieved from <https://fnjn.org/en/determination-of-the-image-of-nursing-profession-in-community-16777>
- Dantas, F.A., Nóbrega, V.M., Pimenta, E.A.G., & Collet, N. (2016). Use of therapeutic play during intravenous drug administration in children: exploratory study. *Online Brazilian Journal of Nursing*, 15(3), 454-465. doi: 10.17665/1676-4285.20165581
- de SáI, I. C. T. F., CardosoI, J. M. R. M., da SilvaII, L. J., SilvaI, I. R., dos Santos CostaIII, L., & da SilvaI, T. P.b (2022) Teaching of play for the care of hospitalized children: its meanings to nursing students. *Rev enferm UERJ, Rio de Janeiro* 30:e64642. <http://dx.doi.org/10.12957/reuerj.2022.64642>
- Demir, S.G., Bulut, H., & Dal, U. (2009). Student's experience with developing patient education materials. *Procedia Social and Behavioral Sciences*, 1(1), 2828–2831. <https://doi.org/10.1016/j.sbspro.2009.01.503>
- Ege University Nursing Faculty. (2023). *Undergraduate Nursing Program Curriculum*. Ege University. Retrieved December 25, 2024, from [https://hemsirelik.ege.edu.tr/files/hemsirelik/icerik/2023mufredat\(1\).pdf](https://hemsirelik.ege.edu.tr/files/hemsirelik/icerik/2023mufredat(1).pdf)
- El-Demerdash, S.M., Basal, A.A., & Soliman, F.E. (2014). Barriers of patient health teaching among nursing students. *International Journal of Current Research*, 6(1), 4770-4776. <https://doi.org/10.13140/RG.2.2.14025.85605>
- Gubbels, J., van der Put, C. E., & Assink, M. (2019). The Effectiveness of Parent Training Programs for Child Maltreatment and Their Components: A Meta-Analysis. *International journal of environmental research and public health*, 16(13), 2404. <https://doi.org/10.3390/ijerph16132404>
- Güven, E., & Avcı, İ.A. (2022). The thoughts and suggestions of the students taking the public health nursing course about providing health education to the society. *Journal of Nursology*, 25(2), 89-94.
- Hacettepe University. (2024). *Nursing Faculty Course Program*. Hacettepe University. Retrieved December 25, 2024, from <https://bilsis.hacettepe.edu.tr/oibs/bologna/index.aspx?lang=tr&curOp=showPac&curUnit=567&curSunit=567#>
- Karan, S. (2016). *Development tool in education* (6th ed). Ankara: İzge Publishing.
- Kavala, A., & Enç, N. (2022). Importance of nutrition education and alternative methods in patients with chronic kidney failure. *Journal of Nephrology Nursing*, 17(1), 29-38. <https://doi.org/10.47565/ndthdt.2022.51>
- Kaya, Z. (2006). *Teaching Technologies and Material Development* (2nd ed). Ankara: Pegem Publishing.
- Kaymakçı, S., Yavuz, M., & Orgun, F. (2007). Surgical patient education: Turkish nursing students experiences. *Nurse Education Today*, 27(1), 19–25. <https://doi.org/10.1016/j.nedt.2006.02.005>
- Kelo, M., Martikainen, M., & Eriksson, E. (2013). Patient education of children and their families: nurses' experiences. *Pediatric Nursing*, 39(2), 71–79.
- Kürtüncü, M., Çınar, N., Kahraman, İ., & Demirbağ, B. C. (2017). Experience in clinical pediatric oncology nursing students: qualitative study. *Journal of Health Sciences and Professions*, 4 (1), 8-15. DOI: 10.17681/hsp.287510
- Lange, K., Klotmann, S., Saßmann, H., Aschemeier, B., Wintergerst, E., Gerhardsson, P., Kordonouri, O., Szypowska, A., Danne, T., & SWEET group (2012). A pediatric diabetes toolbox for creating centres of reference. *Pediatric Diabetes*, 13 Suppl 16, 49–61. <https://doi.org/10.1111/j.1399-5448.2012.00913.x>

Küçük, S., Uludaşdemir, D., & Karşıgil, P. (2025). Pediatric patient educational material development and implementation: A qualitative study of nursing students' experiences and opinions. *Journal of Human Sciences*, 22(1), 44-55. doi:[10.14687/jhs.v22i1.6502](https://doi.org/10.14687/jhs.v22i1.6502)

- London, F. (2016). *No time to teach: the essence of patient and family education for health care providers* (2nd ed). Atlantic (GA): Pritchett & Hull Associates.
- Mutlu, B., Azak, M., & Kalaycı, S. (2020). Investigation of the relationship between clinical comfort-worry and self-efficacy perceptions of nursing students who have taken pediatric nursing course. *OPUS International Journal of Society Researches*, 15(26), 4293-4315. <https://doi.org/10.26466/opus.659694>
- Orgun, F., & Özkütük, N. (2003). Evaluating health education materials developed by nurse students. *Journal of Ege University Nursing Faculty*, 19 (1-3), 115-126.
- Oyetunde, M., & Akinmeye, A. (2015) Factors influencing practice of patient education among nurses at the university college hospital, Ibadan. *Open Journal of Nursing*, 5, 500-507. doi: [10.4236/ojn.2015.55053](https://doi.org/10.4236/ojn.2015.55053).
- Richard, E., Evans, T., & Williams, B. (2018). Nursing students' perceptions of preparation to engage in patient education. *Nurse Education in Practice*, 28, 1-6. <https://doi.org/10.1016/j.nepr.2017.09.008>
- Scheckel, M., Emery, N., & Nosek, C. (2010). Addressing health literacy: the experiences of undergraduate nursing students. *Journal of Clinical Nursing*, 19(5-6), 794-802. <https://doi.org/10.1111/j.1365-2702.2009.02991.x>
- Sönmez, V., & Alacapınar, F.G. (2017). *Illustrated scientific research methods* (5th ed.). Ankara: Anı Publishing.
- Tan, M., Yuncu, S., Şentürk, Ö., & Yıldız, Ö. (2007). Point of view on nursing of university students. *Ataturk University Journal of Nursing School*, 10(1), 22-29.
- Tunç, G.Ç., Akansel, N., & Özdemir, A. (2010). Factors affecting career choices of nursing and health officer program students. *Maltepe University Journal of Nursing Science and Art*, 3(1), 24-31.
- Ünüvar, P. (2011). Providing educational support for in-patient children (Case study of age group between 3-7). *Electronic Journal of Social Sciences*, 10(35), 31-44.
- Venning, A. J., Elliott, J., Whitford, H., & Honnor, J. (2007). The impact of a child's chronic illness on hopeful thinking in children and parents. *Journal of Social and Clinical Psychology*, 26(6), 708-727. doi:[10.1521/jscp.2007.26.6.708](https://doi.org/10.1521/jscp.2007.26.6.708)
- Yıldırım, B.O. (2010). *Critical thinking in nursing practical approach*. (S. Altuğ Özsoy, Ed.) Aydın: Tuna Publishing.
- Waldron, S., Rurik, I., Madacsy, L., Donnasson-Eudes, S., Rosu, M., Skovlund, S. E., Pankowska, E., Allgrove, J., & SWEET group (2012). Good practice recommendations on paediatric training programmes for health care professionals in the EU. *Pediatric Diabetes*, 13 Suppl 16, 29-38. <https://doi.org/10.1111/j.1399-5448.2012.00910.x>
- Whitehead, D. (2004). Health promotion and health education: advancing the concepts. *Journal of advanced nursing*, 47(3), 311-320. <https://doi.org/10.1111/j.1365-2648.2004.03095.x>