

ORIGINAL ARTICLE

Volume:3 Issue:4 Year:2025

<https://doi.org/10.5281/zenodo.17915075>**Experiences of Nurses Providing Care to Burned Children Regarding Atraumatic Care Practices: A Qualitative Study****Özge Karakaya Suzan¹, Meryem Çalışkan², Nursan Çınar³**¹Sakarya University, Faculty of Health Sciences, Department of Pediatric Nursing, Sakarya, Türkiye²Sakarya University, Institute of Health Sciences, Department of Pediatric Nursing, Sakarya, Türkiye³Sakarya University, Faculty of Health Sciences, Department of Pediatric Nursing, Sakarya, Türkiye**ABSTRACT**

Introduction: In pediatric burn care, atraumatic approaches are crucial to reducing children's stress, pain, and anxiety, yet nurses' experiences in this area remain insufficiently explored.

Objective: The aim of this study was to explore the experiences of nurses providing care to burned children regarding atraumatic care practices.

Method: This phenomenological qualitative study was conducted between March-July 2025 in the pediatric surgery department of training and research hospital in western Turkey. Fifteen nurses who had at least one year of experience in pediatric burn care were selected through purposive sampling. Data were collected via in-depth individual interviews using a semi-structured interview form and analyzed using inductive content analysis with the support of MAXQDA software.

Results: Analysis revealed one main theme, "Atraumatic Care for Injured Children," comprising three categories and thirteen codes. Nurses reported employing strategies such as distraction, breastfeeding for infants, collaboration with families, providing age-appropriate explanations, and understanding children's emotions during painful procedures like burn dressing. These practices were perceived to reduce fear and stress, decrease pain perception, alleviate psychological trauma, enhance treatment compliance, foster a sense of security, and increase patient-family satisfaction. Additionally, nurses recommended increasing the availability of distraction tools (e.g., toys, bubble machines, audiovisual devices) and arranging child-friendly physical environments to strengthen atraumatic care practices.

Conclusion: Atraumatic care is a key nursing approach that supports both the physical and psychological well-being of burned children. To improve care quality, it is recommended to provide supportive resources, increase the number of distraction tools, and design child-friendly care environments.

Keywords: Atraumatic care, Burn, Child, Nurse.

INTRODUCTION

Burn injuries are traumatic health events that can lead to serious systemic problems, long-term disabilities, and high mortality rates depending on the size, depth, and location of the affected area (1,2). Additionally, since children's skin is thinner than adults', pediatric burns often result in deeper injuries, increasing the risk of infection, organ failure, and death (3,4). Burns are among the leading causes of death in children and occur primarily in low-income countries, mostly in domestic settings. According to the World Health Organization (WHO), approximately 11 million people require medical care for burns each year, and a considerable proportion of these are children (5). Global data from 2019 indicate that the incidence of burns among children and adolescents is 274.75 per 100,000 population, corresponding to 7.09 million new cases (6). In Turkey, there is no epidemiological study that indicates the general incidence of burns in children. However, a 10-year experience from a burn center analyzed pediatric cases of severe contact burns in detail (7), while another study evaluating 1,442 pediatric burn patients reported a mortality rate of 0.69% (8).

Pediatric burns not only cause physical injury but also result in long-term pain, loss of function, risk of infection, cosmetic problems, and lifelong psychosocial consequences. Children who experience burns are at high risk for post-traumatic stress disorder, anxiety, sleep disturbances, and depression (9,10). These challenges profoundly affect families as well; parents often report high levels of anxiety, guilt, burnout, and caregiving burden (11). The socioeconomic balance of the family is frequently disrupted,

Corresponding Author: Özge Karakaya Suzan, e-mail: ozgekarakayasuzan@sakarya.edu.tr

Received: 29.08.2025, Accepted: 22.10.2025, Published Online: 20.12.2025

Cited: Karakaya Suzan Ö, et al. Experiences of Nurses Providing Care to Burned Children Regarding Atraumatic Care Practices: A Qualitative Study. Acta Medica Ruha. 2025;3(4):155-165. <https://doi.org/10.5281/zenodo.17915075>



The journal is licensed under a [Attribution 4.0 International \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/)

and the prolonged treatment process requires reorganization of family roles. In this context, atraumatic care practices are essential to reduce pain, fear, and anxiety in children, to mitigate psychological trauma, and to provide emotional support to families (12).

In burn care, atraumatic care principles are of great importance, especially in pediatric invasive procedures, to reduce children's stress, pain, and anxiety. For example, a study conducted in Portugal demonstrated that nurses employed non-pharmacological strategies to minimize the emotional experience of pediatric patients (12). Similarly, the importance of providing psychosocial care support to healthcare personnel has been emphasized, with recommendations that nurses adopt trauma-focused approaches to support both patients and their families (9,10).

The success of burn care depends on a multidisciplinary approach encompassing multiple areas of expertise; nurses' responsibilities range from wound care to pain and infection management, rehabilitation, and psychosocial support (13,14). However, the need for continuous quality nursing care during both the acute and rehabilitation phases of burn care makes it a physically and emotionally demanding process for nurses (10,11). Studies have noted that caring for burn patients is both physically and emotionally exhausting for nurses (11,15,16). Additionally, the nature of burns and the patients themselves have been identified as additional sources of stress (11). Recent studies have shown that nurses caring for children with burns face both physical and emotional burdens; however, especially during invasive procedures, atraumatic approaches can significantly reduce children's stress levels (6). Despite this, qualitative studies focusing on atraumatic care practices and nurse experiences in caring for children with burns are quite limited. In this context, the aim of this study is to deeply understand and analyze the experiences of nurses providing care to burned children regarding atraumatic care practices using a qualitative approach.

METHODS

Research Type

This study was conducted using the qualitative method of phenomenology. The phenomenological design is a qualitative methodology that aims to investigate individuals' experiences in detail and reveal how they make sense of these experiences (17).

Research Location and Time

This research was conducted in the pediatric surgery department of an Education and Research Hospital in western Turkey between March and July 2025.

Research Population and Sample

The population of the study consisted of all nurses working in the Pediatric Surgery Department of the Education and Research Hospital, and the sample consisted of nurses who met the inclusion criteria. Due to the nature of qualitative research, fieldwork and data collection continued until data saturation was achieved. Purposive sampling was used in the sample selection process. The criterion for this study was "nurses performing burn dressings in the pediatric surgery department." Purposive sampling allows for in-depth research by selecting cases that can provide more information in line with the study's objectives. Criterion sampling, on the other hand, is based on the study of cases that meet the criteria determined by the researcher (18). In this context, the sample of the study consists of 15 pediatric nurses.

Inclusion criteria: Voluntarily participating in the study, having provided care to burned pediatric patients in the pediatric surgery unit for at least one year, and being open to communication and collaboration.

Data Collection Tools

Nurse Demographic Information Form

This form was created by the researchers to determine the socio-demographic characteristics of the nurses participating in the study. It includes questions such as age, educational status, economic status, years of professional experience, etc.

Semi-structured Interview Form Draft

Individual in-depth interviews were conducted with participants using a semi-structured interview form. The semi-structured interview form template was prepared based on the literature and researchers' experiences. The interview form contains a total of three open-ended questions. When preparing the questions, care was taken to ensure that they were understandable to the participants, prevented the researcher from deviating from the topic, and encouraged participants to provide detailed answers. Four experts in the field (two from the Department of Child Health and Nursing, one from the Midwifery Department, and one pediatric health specialist) were consulted, and the final version of the form was finalized. The main and sub-questions included in the interview form and evaluated in this study are shown below.

- What are the atraumatic care practices you use when providing care to pediatric burn patients?
- What benefits do you think the atraumatic care practices you use when caring for pediatric burn patients provide to the patient?
- What are your suggestions for improving the care process?

Data Collection

In-depth interview technique was used for data collection. In qualitative research, interviews are the basic work to be done in the field of research to understand the case. Interviews are necessary to learn about behaviors, emotions, or how people express their perceptions of the world around them that cannot be observed (19). In the interviews, nurses were asked about the skin protection methods they use in pediatric care, their experiences, and their suggestions. The researcher who conducted the interviews was a female researcher trained in qualitative research. The interviews were conducted using the face-to-face interview method and recorded on audio. The interviews were conducted using active listening and in-depth interview techniques, in an environment where the nurse felt comfortable, using an Introductory Information Form and a Semi-Structured Interview Form. Each interview lasted an average of 45-60 minutes.

Audio Recording

In qualitative research, qualitative data collection techniques such as observation, interviews, document analysis, and discourse analysis are commonly used. In qualitative research, the data collection process can involve transcribing conversations conducted during face-to-face interviews or creating visual-auditory materials such as audio and video recordings to enhance the data, which can then be transcribed (20). Qualitative interviews were recorded in audio format to increase the validity of the study and facilitate content analysis.

Data Analysis

Data analysis is the most important step in qualitative research, encompassing the processes of identifying facts, classifying them, and describing how concepts are related to one another. The data set obtained from the participants was created by transcribing the audio recordings. After listening to the first audio recording, coding began and was repeated with expert opinion, consensus was reached, and the content analysis process was carried out (21). All interviews were transcribed word for word and coded using traditional content analysis to produce codes directly from the participants' narrative statements, with the support of the Max Qualitative Data Analysis (MAXQDA) Analytics Pro2020 program. After all focus group interviews were completed, the audio recordings were transcribed word for word by a researcher. The analysis was conducted as a repeated and non-linear process of " , " in which the research team improved the data by moving back and forth between the analysis steps. During the data coding process, two independent researchers performed open and comprehensive coding. The data were coded line by line and independently by the research team using inductive reasoning. Regular comparisons were made between coders to increase consistency between codes. Discussions were held on the codes and themes by the research team until consensus was reached at all stages of the analysis. The researchers created preliminary codes related to the phenomenon of interest and divided them into possible themes. A continuous comparison method was used to verify the consistency of codes and

themes with the data. Original quotations obtained from participants were used in the coding and theme formation process. Subsequently, the themes were reviewed by the research team; some themes were removed, some were combined, or separated into separate themes.

MAXQDA software facilitates the comparison of large sample data, the grouping of codes under specific themes, the rapid repetition of processes when necessary, continuous access to findings, and the organization and presentation of obtained data in the form of models, graphs, or reports. Using the MAXQDA program, codes grouped under subcategories and related categories were combined to reveal relationships between concepts and form themes. After the program's coding classification, researchers identified, analyzed, and reported on relevant themes. Survey numbers (P1, P2, P3, etc.) were used to code participant data. A total of 480 minutes of meetings were held to finalize the themes and codes.

Reflexivity

Researchers used reflexivity throughout the study. In qualitative research, reflexivity is important in terms of the researcher's ability to manage their own influence as a data collection tool (22). Throughout the process, researchers behaved transparently toward participants regarding nursing professions. Interviewees recorded their experiences and feelings in a diary to prevent internal bias and the risk of unintentionally influencing the study's outcomes. This helped them approach subsequent interviews with a higher level of reflexivity.

Reliability of the Research

To prevent potential issues arising from the interviewer role and to ensure consistency, all interviews were conducted by the same researchers. The researchers hold doctoral degrees in pediatric nursing and have experience in conducting qualitative research. In this study, Lincoln and Guba's (23) reliability strategies were used. These strategies are credibility, consistency, verifiability, and transferability. To ensure research ethics, verbal and written consent was obtained from participants prior to each interview. Participants were informed about confidentiality, anonymity, and their right to withdraw from the study at any stage. To increase the reliability of the data, participants were not addressed by name during the interviews.

In this study, the elements of qualitative research rigor—credibility, transferability, consistency, and verifiability—were considered to ensure reliability (24).

Validity of the Research

Data collection tools were developed based on the literature and the researchers' experiences. The draft of the semi-structured interview form prepared by the researchers was evaluated by experts in the field (four experts) and revised based on their feedback to finalize the interview form. The interviews were conducted individually using in-depth interview techniques. The interviews were recorded on audio devices with the verbal and written consent of the participants.

Ethics

Ethical approval for this study was obtained from the Health Ethics Committee (Date: 20.02.2025 Number: E-4302747-050.04-45885-89). This study was conducted in accordance with the principles of the Helsinki Declaration. Verbal and written informed consent was obtained from the nurses.

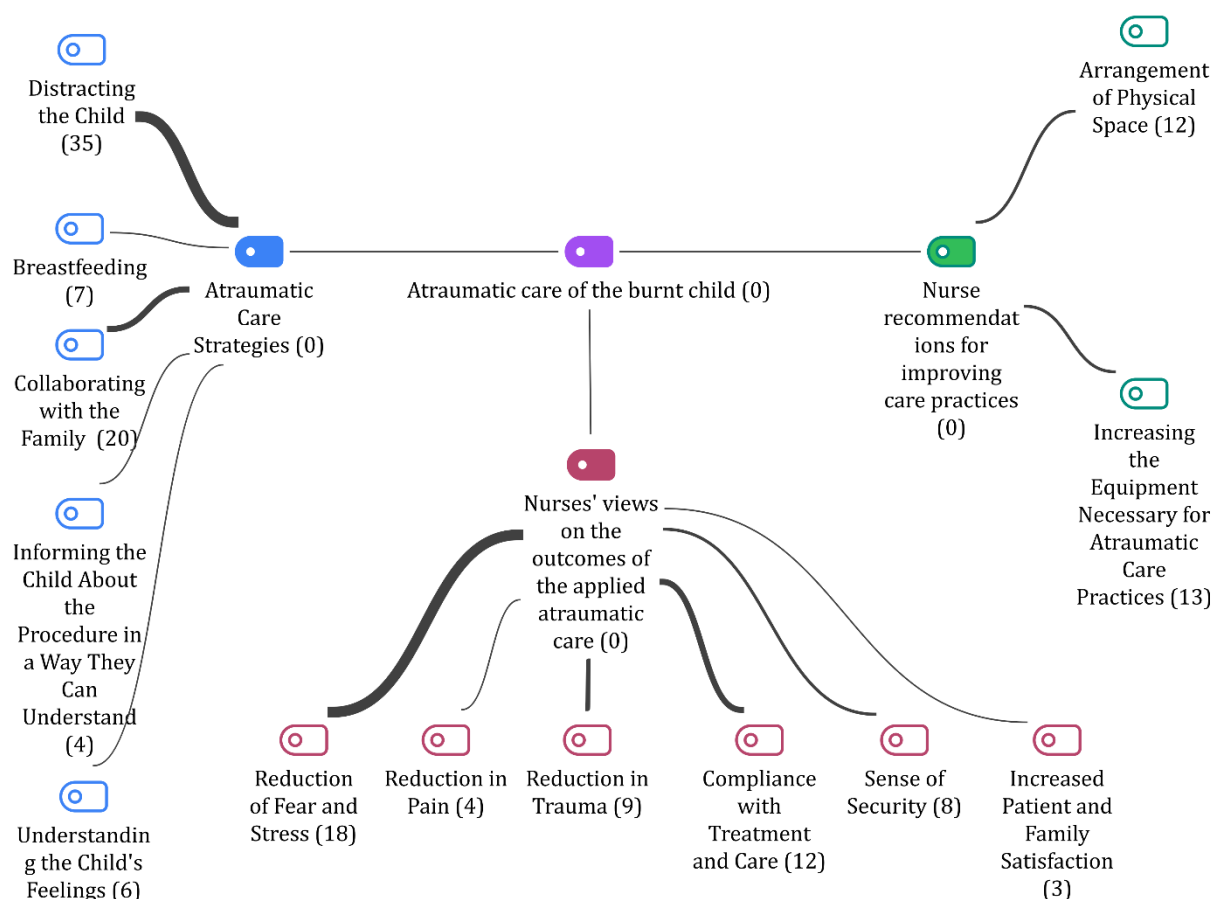
RESULTS

The average age of the nurses participating in the study was found to be 32.60 ± 5.55 years. The average professional experience of the nurses was 9.0 ± 5.35 years, 100% were female and university graduates, and 66.7% had worked in the pediatric surgery department for 1-5 years. Table 1 presents the sociodemographic data of the nurses in detail. In the analysis of the data, inductive coding was followed methodologically. As a result of the coding, a theme related to the experiences of nurses providing care to burned children regarding atraumatic care practices was identified, along with three categories and 13 codes (Figure 1).

Table 1. Demographic Characteristics of Nurses

		n	
Age	mean±SD (min-max)	32,60±5,55 (24-45)	
Years of professional experience	mean±SD (min-max)	9.0±5.35(1-19)	
Education	University	15	100
Economic status*	Income is less than expenses	2	13,3
	Income equals expenses	11	73,3
	Revenue exceeds expenses	2	13,3
Gender	Female	15	100
Marital Status	Married	12	80,0
	Single	3	20,0
Parental status	Yes	11	73,3
	No	4	26,7
Pediatric surgery department length of service	1-5 years	10	66,7
	6-10 years	4	26,7
	Over 10 years	1	6,7
Work type	Shift work	12	80,0
	Daytime	3	20,0
Related to burn care	Yes	3	20,0
Special education status	No	12	80,0
Type of education	Course		
	In-service training	2	13,3

*According to their own statements.

**Figure 1.** Theme and Code Display

The Theme of Atraumatic Care For Injured Children

The theme of expectations from healthcare personnel includes three categories: (1) Atraumatic Care Strategies, (2) Atraumatic Care Outcomes, and (3) Nurses' Views on the Outcomes of Applied Atraumatic Care (Table 2).

Atraumatic Care Strategies

Atraumatic care strategies include five codes: (1) Distracting the Child; The majority of participants indicated that diverting the child's attention during painful and stressful procedures such as burn dressing is an effective strategy in atraumatic care. Methods such as showing cartoons, playing music, using toys, blowing bubbles, telling stories, and arranging the room to be visually child-friendly were highlighted for this purpose. (2) Breastfeeding; One of the most frequently used methods in atraumatic care for infants is breastfeeding during or before the procedure. Participants noted that breastfeeding provides both physical comfort and a sense of security. (3) Collaborating with the Family; Nurses stated that collaborating with the family during the care process helps the child calm down and increases their sense of security. It has been emphasized that the presence of the mother and father reduces the child's anxiety and facilitates the procedure. (4) Informing the Child About the Procedure in a Way They Can Understand; Participants have stated that informing children about the treatment process is effective in reducing fear and stress. Providing age- and development-appropriate information helps children to be more cooperative during the procedure. (5) Understanding the Child's Feelings; Nurses emphasized that understanding and supporting the child's feelings is an important aspect of atraumatic care. Establishing eye contact, using reassuring words, and giving the child a choice are among the commonly used methods (Table 2).

Nurses' Views on the Outcomes of the Applied Atraumatic Care

Nurses' views on the results of the applied atraumatic care include six codes: (1) Reduction of Fear and Stress; Participants stated that atraumatic care practices reduced children's fear of healthcare professionals and lowered their stress levels. (2) Reduction in Pain; Some nurses stated that pain perception decreased when the child's attention was diverted elsewhere. (3) Reduction in Trauma; It was stated that the methods applied reduced the psychological trauma experienced by children. (4) Compliance with Treatment and Care; Nurses emphasized that atraumatic care increased children's compliance with the treatment process. (5) Sense of Security; It was stated that the presence of family and the nurse's reassuring approach strengthened the sense of security in children. (6) Increased Patient and Family Satisfaction; It has been noted that a less stressful process for both the child and the family increases satisfaction (Table 2).

Nurse Recommendations For Improving Care Practices

Nurses' Recommendations for Improving Care Practices include two codes: (1) Increasing the Equipment Necessary for Atraumatic Care Practices; Participants stated that the number of atraumatic care tools for children (toys, bubble machines, cartoon players, etc.) should be increased. (2) Arrangement of Physical Space; Nurses emphasized that arranging procedure rooms in a child-friendly manner would improve care quality (Table 2).

Table 2. Themes, Categories, Codes, and Nurses' Statements

Theme	Category	Code	Participant Statement
Atraumatic Care Practices	Atraumatic Care Strategies	Distraction	During dressing changes, we try to distract children's attention with their favorite cartoons, songs, or toys. (P7)
			We play videos like "Red Fish," which sometimes works well. (P4)
			We change their focus by using a phone, tablet, or cartoons. (P9)
		Breastfeeding	Small babies calm down when their mother breastfeeds them. (P5)
			When the mother breastfeeds, it seems like the pain decreases. (P3)
			We recommend breastfeeding during dressing changes. (P6)
		Cooperation with the family	The child is more cooperative when the mother is present. (P4)
			When parents hold the child's hand, the child feels more secure. (P13)
			The father provided support by quietly touching the child's shoulder, which was very effective. (P15)
			The child who was afraid on the first visit was calm on the second visit because they knew what to expect. (P2)
		Explaining the Treatment	Explaining the procedure in an age-appropriate manner reduces fear. (P14)

Table 2 continues...			
			I show the child their room and explain what will happen. (P2)
		Understanding the Child's Feelings	When the child sees a face that understands their situation, they become calmer. (P8)
			I make eye contact and hold their hand, which reduces their fear. (P10)
			I ask them how they would like to proceed, which reduces their resistance. (P15)
	Nurses' Perspectives on the Outcomes of Atraumatic Care	Reduction of Fear and Stress	When we use distraction techniques before and during dressing changes, children do not come in afraid and find the process easier to manage. (P5)
			Parents also calm down, and the child feels loved. (P1)
			When the child came for the second dressing, they knew where to sit, and their fear had decreased. (P2)
		Reduction of Pain	They know they are in pain, but since their attention is elsewhere, they feel it less. (P9)
			When we redirect their attention, their crying decreases, and their pain perception decreases. (P10)
			When the mother breastfeeds, the child becomes less agitated and feels less pain. (P11)
		Reduction in Traumas	Nighttime restlessness and sudden awakenings decrease with these methods. (P7)
			Thanks to the bubbles, she barely cried during the procedure and left happily. (P13)
			After atraumatic care, they become more cooperative in subsequent sessions. (P14)
		Adaptation to Treatment and Care	A calmer child adapts much more easily to treatment. (P9)
			A child with reduced fear does not resist care. (P14)
			The process is shorter and completed with fewer interventions. (P16)
		Sense of Trust	They trust us when their family is present. (P11)
			The sense of trust is important not only in the moment but also for future treatments. (P13)
			Thanks to family support, the child feels safer. (P15)
		Increased Patient and Family Satisfaction	The process being less stressful makes the family happy. (P9)
			The reduction in the child's pain and fear is very valuable to the family. (P14)
			When the family is involved in the process, satisfaction increases. (P15)
	Recommendations for Improving Care Practices	Increasing the availability of equipment necessary for atraumatic care practices	Having more up-to-date equipment that reduces trauma would make us happy. (P2)
			The number of distractions such as toys and bubble machines should be increased. (P7)
			Low-cost but effective small toys should be provided. (P17)
		Physical Space Organization	Our room is very simple; I would like it to be a room specifically for children. (P3)
			We are decorating the service area to appeal to children, and this alone makes a difference. (P8)
			Child-friendly environments enhance treatment compliance. (P14)

DISCUSSION

This study revealed the experiences of nurses caring for burned children regarding atraumatic care practices, and the data obtained were examined under three main categories: atraumatic care strategies, results of atraumatic care, and nurses' suggestions for improving care practices. The findings show that

nurses adopted child-centered, psychosocial support-based approaches that emphasized family participation in their practices.

Atraumatic Care Strategies

The findings indicate that nurses use methods such as distracting children, breastfeeding, collaborating with families, informing children about the procedure, and understanding children's emotions during painful and stressful procedures such as burn dressing. These results are consistent with the "distraction, family involvement, and age-appropriate information" identified as core components of trauma-informed care in the literature (12,25). In particular, distraction techniques have been shown to reduce pain perception and anxiety in children and positively influence their biophysiological stress responses (26). Zhang et al. (27) conducted a study with 52 children aged 1–3 years (26 children in each group) and used a specially designed medical screen to distract children during dressing changes. They found the method to be effective. Distraction is a common non-pharmacological, non-traumatic care approach frequently used in children. Studies have shown that distraction can divert children's attention to something more appealing, thereby alleviating pain, anxiety, and tension (28,29). In our study, breastfeeding was found to be effective in promoting calmness and a sense of security in infants; this aligns with previous studies reporting that oral stimulation and maternal contact increase endorphin release, thereby providing an analgesic effect (30).

Outcomes of the Applied Atraumatic Care

Participants reported that atraumatic care contributed to a reduction in fear and stress, improved pain control, alleviation of psychological trauma, increased compliance with treatment and care, strengthened sense of trust, and increased patient-family satisfaction. The literature indicates that psychosocial support and pain management during invasive procedures in burn patients directly affect treatment success and reduce the risk of post-traumatic stress disorder (9,10). The literature indicates that visual-auditory distraction techniques, particularly watching cartoons or videos, significantly reduce pain perception and physiological stress responses during dressing changes in children aged 6–12 years (31). Active distraction methods, such as virtual reality (VR) games, bubble blowing, or the use of interactive toys, have been found to be more effective than passive methods; randomized controlled studies have demonstrated that VR applications significantly reduce both pain and fear scores in pediatric burn patients (32,33). Simple materials such as picture cards or kaleidoscopes have also been reported to reduce pain and anxiety by diverting attention during procedures (34,35). Music therapy and child-friendly environmental arrangements also have a calming effect during procedures, particularly in younger age groups, and reinforce a sense of security (36,37). Family involvement is known to reduce anxiety and increase a sense of security in both the child and the family, thereby facilitating compliance with subsequent procedures (38). This finding is consistent with our study, in which nurses considered family support to be an integral part of trauma-informed care.

Nurse Recommendations For Improving Care Practices

Nurses emphasized the need to increase the number of necessary equipment (toys, bubble machines, visual-auditory materials) and to arrange the physical space in a child-friendly manner to enhance the effectiveness of atraumatic care practices. The literature shows that environmental arrangements reduce children's stress responses and increase cooperation during procedures (37). Child-friendly environments include elements such as colorful decorations, soothing music, distracting objects, and family presence, and they increase both the quality of care and patient satisfaction in line with the philosophy of atraumatic care (25). Additionally, it has been demonstrated that children's attention spans increase and they are able to collaborate more effectively with both healthcare professionals and their families during procedures in quiet, noise-controlled areas supported by environmentally friendly design elements (39). When integrated with non-pharmacological relaxation methods, such environmental arrangements in nursing practice increase both child and family satisfaction and make the care process more efficient and less traumatic (40).

This study was conducted with a limited number of nurses working in the pediatric surgery department of a single teaching and research hospital, and the generalizability of the findings is limited. Since a

qualitative research method was used, the results reflect only the experiences and opinions of the nurses who participated in the study.

CONCLUSION

This study revealed the experiences of nurses caring for burned children regarding atraumatic care practices. The findings showed that nurses frequently used atraumatic care strategies such as distracting the child, breastfeeding, collaborating with the family, informing the child in an age-appropriate manner, and understanding their feelings during the care process. These methods were found to reduce fear and stress in children, decrease pain perception, alleviate psychological trauma, improve compliance with treatment and care, strengthen feelings of trust, and increase both patient and family satisfaction.

Nurses also recommended increasing the number of distractive equipment (toys, bubble machines, cartoon players, etc.) for children and arranging procedure areas in a child-friendly manner to enhance the effectiveness of atraumatic care practices. These findings highlight that atraumatic care is an important nursing approach that supports both the physical and psychological well-being of burned children during their treatment process.

DESCRIPTIONS

No financial support.

No conflict of interest.

REFERENCES

1. Jeschke MG, Gauglitz GG. Pathophysiology of burn injuries. Handbook of burns. Vol. 1. Cham: Springer; 2020. doi:10.1007/978-3-030-18940-2_18
2. Knighton J. Burn. In: Lewis SL, Bucher L, Heitkemper MM, Harding MM., Kwong J, Roberts D, editors. Medical-surgical nursing E-book: assessment and management of clinical problems. St. Louis, Missouri: Elsevier Health Sciences; 2016
3. Lowell G, Quinlan K, Gottlieb LJ. Preventing unintentional scald burns: moving beyond tap water. *Pediatrics*. 2008;122(4):799–804
4. Pham TN, Cancio LC, Gibran NS. American Burn Association Practice Guidelines: Burn Shock Resuscitation. *Journal of Burn Care and Research*. 2008;29(1):257–66
5. WHO: Burns. Fact Sheet. Geneva; 2016. Available at: <https://www.who.int/en/news-room/fact-sheets/detail/burns>. (Accessed August 8, 2025).
6. Zhu, H., Wang, K., Liu, X., Ji, J., Yang, P., & Xu, F. Global burden of burns among children and adolescents: a trend analysis from the global burden of disease study 2019. *Frontiers in Public Health*, 2025;13: 1505023.
7. Demir, S., Bostancı, S. A., Erten, E. E., Çayhan, V. S., Öztörün, C., Altınok, M. K., ... & Şenel, E. Çocuklarda temas yanıkları; Bir çocuk yanık merkezinin 10 yıllık deneyimi. *Ahi Evran Medical Journal*, 2021;5(2): 146-151.
8. Özlü, Ö., & Basaran, A. Epidemiology and outcome of 1442 pediatric burn patients: A single-center experience. *Turkish Journal of Trauma & Emergency Surgery*, 2022;28(1): 57.
9. Zabihi MR, Bastani M, Rashtiani S, Yavari S, Akhoondian M, Farzan R. The role of nursing care during post-burn mood disorders: A narrative review. *Journal of Nursing Reports in Clinical Practice*, 2024;3(3): 279-289
10. Wang Y, Wong FKY, Bayuo J, Chung LYF, Zhang L, Wang T. Challenges faced by nurses and family members of burn patients: An integrative review. *Nursing Open*, 2023;10(6):3547-3560
11. Bayuo J, Agyei Bediako F, Allotey G, Kyei Baffour P. Developing support strategies for burn care nurses through an understanding of their experiences: a meta-ethnographic study. *Int J Nurs Pract* 2019;25:e12685
12. Neto J, Fernandes R, Andrade L, Fernandes I, Martins T, do Céu Barbieri-Figueiredo M, Lima L. Invasive procedures and atraumatic care in pediatric nursing practice: nurses' perceptions. *Frontiers in Pediatrics* 2025;13:1543138
13. Cambiaso-Daniel J, Suman OE, Jaco M, Benjamin DA, Herndon DN. Teamwork for total burn care: burn centers and multidisciplinary burn teams. In: Herndon DN, editor. Total burn care. New York: Elsevier; 2018. p. 813.e11. doi:10.1016/B978-0-323-47661-4.00002-2
14. Benjamin DA, Jaco M. Burn nursing. In: Herndon DN, editor. Total burn care. New York: Elsevier; 2018. p. 355–63.e51. doi:10.1016/B978-0-323-47661-4.00002-2

15. Haik J, Brown S, Liran A, Visentin D, Sokolov A, Zilinsky I, Kornhaber R. Burnout and compassion fatigue: prevalence and associations among Israeli burn clinicians. *Neuropsychiatr Dis Treat* 2017;13:1533–40. doi:10.2147/ NDT.S133181. PMID: 28670122; PMCID: PMC5478274
16. Kornhaber RA. The lived experience of nursing severe burns injury patients: a phenomenological inquiry. 2009, <https://hekyll.services.adelaide.edu.au/dspace/bitstream/2440/56331/9/01front.pdf> (Accessed 24 July 2025)
17. Harrison RL, Reilly TM, Creswell JW. Methodological rigor in mixed methods: An application in management studies. *Journal of Mixed Methods Research* 2020;14(4): 473–495
18. Korkmaz İ. Population, sample, and sampling techniques in quantitative research. In B. Oral, A. Çoban (Eds), *From theory to practice: Scientific research methods in education*, Pegem Academy Publications, Ankara, 2020, pp.147–159.
19. Merriam SB, Grenier RS. *Qualitative research in practice: Examples for discussion and analysis*. San Francisco, CA: Jossey-Bass Publishers, 2019.
20. Pinar Y. *An introduction to videography and video analysis in qualitative research*. Pegem Academy, Ankara, 2022.
21. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 2006;3(2):77–101. doi:10.1191/1478088706qp063oa
22. Dodgson JE. Reflexivity in qualitative research. *J Hum Lact*. 2019;35(2):220–2. doi:10.1177/0890334419830990
23. Lincoln YS, Guba EG. *Naturalistic Inquiry*. Beverly Hills, CA: Sage Publications, 1985, pp.289–331. doi:10.1016/0147-1767(85)90062-8
24. Kyngäs H, Kääriäinen M, Elo S. The Trustworthiness of Content Analysis. In: Kyngäs, H., Mikkonen, K., Kääriäinen, M. (eds) *The Application of Content Analysis in Nursing Science Research*. Springer, Cham. 2020;pp.41–48. doi:10.1007/978-3-030-30199-6_5
25. Koller D, Goldman RD. Distraction techniques for children undergoing procedures: A critical review of pediatric practice. *Child: Care, Health and Development*. 2023;49(2):187–196. Doi:10.1111/cch.13079
26. Birnie KA, Noel M, Parker JA, Chambers CT, Uman LS, Kisely SR. Systematic review and meta-analysis of distraction and hypnosis for needle-related pain and distress in children and adolescents. *Journal of Pediatric Psychology* 2018;43(8):903–918. doi:10.1093/jpepsy/jsy053
27. Zhang X, Cui C, Ren J, Cheng D, Wu W, Yu J. A randomized trial of a distraction-type intervention to assist in managing dressing changes for children experienced burns. *Journal of advanced nursing* 2019;76:3 doi:10.1111/jan.14278
28. Agustus JL, Golden HL, Callaghan MF, Bond RL, Benhamou E, Hailstone JC, Warren JD. Melody processing characterizes functional neuroanatomy in the aging brain. *Frontiers in Neuroscience* 2018;12:815
29. Lynn SJ, Malakataris A, Condon L, Maxwell R, Cleere C. Post-traumatic stress disorder: cognitive hypnotherapy, mindfulness, and acceptance-based treatment approaches. *American Journal of Clinical Hypnosis* 2012;54(4):311–330.
30. Shah PS, Aliwalas LL. Breastfeeding or breast milk for procedural pain in neonates. *Cochrane Database of Systematic Reviews*, 2023;12:CD004950. doi:10.1002/14651858.CD004950.pub4
31. Cheraghi F, Shirinabadi Farahani A, Torkaman M, Rassouli M. The effect of visual–auditory distraction on pain and physiological indicators in school-age children during burn dressing change: A randomized controlled clinical trial. *Journal of Pediatric Nursing*, 2021;58:e81–e86. doi:10.1016/j.pedn.2020.11.016
32. Xiang H, Yabroff KR, Gielen A, McDonald CC, Carlson KF, Finch CF. Effect of smartphone-based virtual reality on pain during burn dressing changes in children: A randomized clinical trial. *JAMA Network Open*, 2021;4(6):e2112083. doi:10.1001/jamanetworkopen.2021.12083
33. Norouzkhani N, Farnia V, Yazdchi K, Hosseini S, Khodabakhsh M. Virtual reality for pain management in burn patients: A systematic review and meta-analysis. *Pain Research and Management*, 2022, 1–15. doi:10.1155/2022/3520972
34. Canbulat N, Inal S, Sönmezer H. Efficacy of distraction methods on procedural pain and anxiety by applying distraction cards and kaleidoscope in children. *Asian Nursing Research*, 2014;8(1):23–28. Doi:10.1016/j.anr.2013.12.001
35. Inal S, Kelleci M, Canbulat N. Distraction cards reduce pain and anxiety during blood draw in children aged 6–12 years: A randomized controlled study. *International Journal of Nursing Practice*, 2012;18(2):210–219. Doi:10.1111/j.1440-172X.2012.02019.x
36. van der Heijden MJE, Oliai Araghi S, van Dijk M, Jeekel J, Hunink MGM. Do hospitalised premature infants benefit from live music interventions? A randomized controlled trial. *Burns*, 2018;44(4): 881–888. doi:10.1016/j.burns.2018.01.012
37. Lambert V, Coad J, Hicks P, Glacken M. Young children’s perspectives of ideal physical design features for hospital-built environments. *Journal of Child Health Care*, 2021;25(3): 447–459. doi:10.1177/1367493520917573

38. Coyne I, Holmström I, Söderbäck M. Centeredness in healthcare: A concept synthesis of family-centered care, person-centered care and child-centered care. *Journal of Pediatric Nursing*, 2016;31(3): 321–329. Doi:10.1016/j.pedn.2015.11.010
39. Shepley MM, Pasha S. *Design for pediatric and neonatal critical care*. New York: Routledge. 2013
40. Ulrich RS, Zimring C, Zhu X, DuBose J, Seo HB, Choi YS, Joseph A. A review of the research literature on evidence-based healthcare design. *HERD: Health Environments Research & Design Journal*, 2008;1(3):61–125. doi:10.1177/193758670800100306