Review Article

MJN Parents' Participation in Atraumatic Care During Children Hospitalization: Systematic Review

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ABSTRACT

Introduction: Atraumatic care for children undergoing hospitalization requires parental participation. Parental participation is an important aspect of atraumatic care for hospitalized children. Parental participation is expected to reduce child pain and anxiety. Aim: This study aimed to describe the participation of parents in atraumatic care while the child is hospitalized. **Methods:** The methodology used in this study was a systematic review, which began with topic selection and entails searching several databases, including Proquest, PubMed, ScienceDirect, Ebscohost, CINAHL, Scopus, and Google Scholar, by entering keywords "parents' participation" AND "atraumatic care" AND "hospitalized children." Articles were reviewed from 2019 to 2023. Protocol and evaluation of the literature review using the PRISMA checklist. Results: All databases provided 263 articles published in the years 2019–2023. There were forty articles left after duplicates were removed and inclusion and exclusion criteria were applied. Ten articles were left for quality assessment after the full-text review, and all of them scored higher than seven parental participations in atraumatic care while the child is hospitalized based on the results of the review of the articles above, including emotional support, distraction techniques, comfort measures, communication and education, advocacy, collaboration with the healthcare team, participating in care routines, and providing postprocedure comfort. Conclusion: Parental participation in atraumatic care while the child is hospitalized includes emotional support, distraction techniques, comfort measures, communication and education, advocacy, collaboration with the healthcare team, participating in care routines, and providing post-procedure comfort. This literature review provides a viewpoint for thinking about how to enhance the way that parents are currently being prepared to participate in the traumatic care of their children during hospitalization. Further research is expected to be able to develop research on specific interventions related to each form of parental participation in childcare during hospitalization.

Keywords: Parents' Participation; Atraumatic Care; Children Hospitalization

INTRODUCTION

A hospitalized child must get medical care at a hospital due to an acute or long-term illness. Stress is a result of hospitalization (Claridge & Powell, 2023). Children will experience uncomfortable procedures that affect their physical and mental health (Perdani, Mutiar, & Nazmudin, 2021). Children who are hospitalized often experience discomfort as a result of being placed in an unfamiliar environment, receiving painful treatments, losing control, and feeling insecure (Delvecchio *et al.*, 2019). When they are healthy, and even more so when they are ill, parents are children's primary source of support for a healthy and secure upbringing (Rokach, 2016). Hospitalized children have to acclimate to a number of difficult situations, such as therapies, medical personnel, and being away from their families, especially their parents. When a child is taken away from their parents, they often go through significant emotional changes, like anxiety, which can eventually result in trauma related to hospitalization (Handayani & Daulima, 2020). It can be difficult for a healthcare provider to interact with a child who has experienced hospitalization trauma because of their range of

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behaviors, which include crying, panic attacks, refusing to eat, hyperactivity, and self-alienation (Handayani & Daulima, 2020). Providing trauma-sensitive care to hospitalized children can alleviate the distress experienced by both the children and their parents. Consequently, it can be deduced that the admission process and overall care of hospitalized children are significantly impacted by the way nurses interact with them. Therefore, it is essential to identify appropriate interventions to optimize the care of children during their hospital stay (Hassan & Hassan, 2023).

Each year, more than six million children are admitted to hospitals (Moore, Freeman, & Jiang, 2019). A study found that 69.5% of patients experienced pain during their hospitalization, while 30.2% experienced severe pain. Children in hospitals tend to experience pain between 27% and 87% of the time. According to research, 63% of children who were hospitalized reported pain, and 29% of those children had pain before they were admitted (Cardona *et al.*, 2019). Most people (82%) who are hospitalized experience extreme anxiety (Bajpai *et al.*, 2017), and 75% are determined to have anxiety disorder (Pelcovitz *et al.*, 2023). The primary driver of this high nervousness is insufficient atraumatic care because of the absence of parental inclusion or support. Atraumatic care is a restorative methodology intended to lessen the potential for hospitalized youngsters and their families to persevere through physical and mental pressure. It includes the utilization of methods and systems that diminish agony, nervousness, and injury during medical treatments (Wong *et al.*, 2003). So, the fundamental principles of atraumatic care involve reducing or preventing a child's separation from the family, fostering a sense of control, and minimizing physical harm or discomfort (Mahato *et al.*, 2022).

Parental investment is a significant part of atraumatic care for hospitalized youngsters. Research proposes that family-focused care is supportive of guardians being available and engaged with their kids' considerations nonstop in clinics (Handayani & Daulima, 2020). In light of studies, guardians' presence and contribution during a kid's hospitalization can assist them with adapting to the circumstances and limit their enduring during obtrusive systems (Palomares González *et al.*, 2023). Due to this being the primary way that children adapt when they are in the clinic, medical caretakers encourage guardians to remain with their youngsters consistently. Furthermore, guardians can help by standing up for their kid's necessities, offering solace and trust, and partaking in choices with respect to their child's consideration.

Parents assume an essential role in advancing atraumatic care during their youngster's hospitalization. Atraumatic care centers around limiting the physical and profound misery related to operations and hospitalization. By effectively partaking in atraumatic care, guardians can add to their kid's solace, close-to-home prosperity, and generally certain medical clinic experience. It's fundamental for guardians to work as a team with medical services experts to guarantee that the consideration furnished lines up with the children's particular requirements and advances atraumatic rehearses (Ashcraft *et al.*, 2019; Jordan, Carter, & Vasileiou, 2021). This study was to investigate parents' involvement in non-traumatic care during a child's hospital stay.

METHODOLOGY

Research Design

A systematic review was the methodology in this study. To identify the clinical questions, the researchers employed PICO (Patient, Intervention, Comparison, and Outcomes) (Table 1). A well-liked framework for creating research questions for systematic reviews is PICO (Considine *et al.*, 2017). This study's research question was, "How is parents' participation in atraumatic care during child hospitalization?"

Patient	Children and Teenagers (0–18 years old) and their Relatives/Parents
Intervention	Parental involvement in the patient's care, including aspects that are directed toward the patient, the family, or both. Atraumatic care elements were also incorporated into the interventions.
Comparison	Usual care
Outcomes	Parents' participation during atraumatic care of hospitalized children

Table 1: Description of PICO PICO

Search Methods

A chase of the composing was done with seven databases. The databases used are Proquest, PubMed, Sciencedirect, Ebscohost, CINAHL, Scopus, and the Google Scholar search engine. The articles used are international sources with a range of years from 2019-2023. The literature search strategy steps carried out include using keywords that are appropriate to the research topic, namely "parents participation" AND "atraumatic care" AND "hospitalized children". The inclusion criteria in this study were full text, randomized control trial, quasy-experimental, descriptive study and written in English. While the exclusion criteria are articles with systematic reviews, literature reviews, and case reports.

Inclusion and Exclusion Criteria

The systematic review's inclusion criteria were: (1) studies involving pediatric patients and their families between the ages of 0 and 18; (2) publications in recognized international journals; (3) journal publication years between 2019 and 2023; and (4) English-language articles. The following articles met the exclusion criteria: (1) protocols, case reports, reviews, conference proceedings, surveys, theses, and dissertations; and (2) articles that are not fully accessible and cannot be downloaded.

RESULTS

The researcher employed the PRISMA search parameters for this literature review (Preferred Reporting Items for Systematic Review and Meta-Analysis) flow chart to find appropriate and eligible research articles (Figure 1). A total of 263 articles were found in the entire database. After re-screening the 263 articles based on exclusion criteria, it was found that 59 had search exclusion criteria. A total of 68 articles were screened again, and 10 articles met the researcher's inclusion criteria.



Figure 1: Preferred Reporting Items for Systematic Reviews and Meta Analysis (PRISMA)

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No.	Research Tittle, Author, Year	Author, Year of Publication	Design	Subject of Study	Results
1.	Parental presence in the implementation of atraumatic care during children's hospitalization	Handayani & Daulima (2020)	Qualitative method with a phenomenological approach	11 children aged 7-12 years were treated in the pediatric ward.	Parents participate in atraumatic care during their child's hospitalisation by being there and involved in their child's care. They accompany their children during treatments, help administer medication, check vital signs, and fulfil their children's basic needs. Parents' presence during hospitalisation has demonstrated to have a favorable effect on children , helping them cope effectively and fulfil their holistic psychological needs. Additionally, parents' motivation and explanation can make children feel calmer and more psychologically prepared, especially during invasive procedures. Furthermore, parents al so help fulfil their children's essential daily requirements, like eating, sleeping, taking a bath, and taking medication , which are essential for pediatric patients' psychological well-being.
2.	Parental presence during invasive pediatric procedures: what does it depend on?	Palomares González <i>et al .,</i> (2023)	Cross-sectional study	227 workers of pediatric units	Parents' participation in atraumatic care during their child's hospitalization involves being present during procedures, advocating for pain management interventions, and actively seeking relevant information to feel in control of the situation.
3.	Psychological support of hospitalised children and their parents in Hungary	Páll, Gorove & Baji, (2021)	Descriptive study	566 parents	In order to provide their child with atraumatic care during their hospital stay, parents are essential. Research has shown that parents who are actively involved in therapeutic decisions and receive emotional support demonstrate reduced levels of anxiety. Additionally, a mother's and her child's relationship is dynamic and their behaviors can influence each other, highlighting the importance of parental involvement in creating a supportive and calming environment for the child. Furthermore, when children receive psychological preparation, parents report lower levels of psychological strain, indicating the positive impact of parental participation in atraumatic care. Therefore, parental involvement is essential in promoting atraumatic care for hospitalized children.

Table 2: Data Extraction of the Selected Studies

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4.	Parents' and nurses' ideal collaboration in treatment-centered and home-like care of hospitalized preschool children – a qualitative study.	Sundal & Vatne, (2020)	Qualitative Study	12 parents and 17 nurses are responsible for 11 children who are hospitalized.	Parents participate in atraumatic care during their child's hospitalization by engaging in activities such as distracting, comforting, and securing the child's voluntariness during medical procedures. They work collaboratively with nurses to prepare the ch ild for required procedures, often taking the initiative and providing profound understanding of the child's willingness to participate in these circumstances with various but cooperative contributions. Additionally, in order to acclimate a child who is un dergoing treatment or an illness, parents tend to them and maintain the routine of everyday activities at home in a foreign environment. Parents' levels of cooperation with nurses when tailoring the child's circumstances vary. Enlisting the child's willing ness to participate in procedures and care for their well -being is essential for their protection. The parents' active engagement and collaboration with healthcare professionals contribute to atraumatic care during their child's hospitalization. Previous r esearch has described parents' everyday basic care of hospitalized children, with a focus on their accountability for tasks like cleaning, dressing, feeding, moving the child, and providing comfort. Additionally, it has been discovered that parents have a wealth of knowledge about their kids, which enables them to participate in these circumstances with a variety of cooperative contributions.
5.	Effect of family presence on pain and anxiety levels among patients during invasive nursing procedures in an emergency department at a public hospital in Western Iran.	Gheshlaghi <i>et al</i> ., (2021)	Non-randomized controlled clinical trial	70 respondents (parents of hospitalized children)	Parents can participate in atraumatic care during their child'shospitalisation by being present during invasive procedures. Parental presence during intervention in the pediatric emergency care has been displayed in examinations to diminish agony and nervousness in kids. Besides, the presence of a prepared parental figure, particularly whenever picked by the patient and prepare d for physical and mental help, can assist patients with diminishing uneasiness levels, as friendly help is perhaps of the best consider controlling tension Furthermore, the presence of a caregiver can participate in atraumatic care by being present during invasive procedures, providing physical and psychological support, and offering social support to reduce anxiety levels in their children during hospitalization.

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6.	Hospitalized Children – Parents' and Nurses' Collaboration in Procedural Situations.	Sundal & Vatne, (2020)	Hermeneutic, phenomenological approach	Participants included 11 children who were hospitalized in the general medical pediatric unit with their parents (3 fathers and 9 mothers) and 17 nurses (all girls). The children were between 1 and 6 years old (3 boys and 8 girls), and had a variety of medical diagnoses.	Parents participate in atraumatic care during their child's hospitalization by engaging in activities such as distracting, comforting, and securing the child's voluntariness during medical procedures. They work collaboratively with nurses to prepare the ch ild for required procedures, often taking the initiative and providing profound information on the kid to become engaged with these circumstances with various however cooperative commitments Furthermore, parents care for the youngster impacted by the sickness or therapy and keep the kid's daily schedule of regular circumstances at home in a new climate to acclimate them, differing their levels of joint effort with medical caretakers while individualizing the kid's circumstances. This participation is crucial in safeguarding the child and enlisting the child's voluntary participation with the common goal of carrying out the procedures and caring for the child's well-being. The parents' active engagement and collaboration with healthcare professionals contribute to atraumatic care during their child's hospitalization. These discoveries are upheld by past examinations that have portrayed the guardians' day to day fundamental consideration for hospitalized kids, underscoring their obligation regarding exercises like washing, dressing, regulating food, assembling the young ster, and soothing the kid. Besides, guardians have been found to have broad information on their youngsters, permitting them to become engaged with these circumstances with assorted however cooperative commitments.
7.	The perceptions and practices of parents and children on acute pain management among hospitalized children in two Botswana referral hospitals.	Matula <i>et al.,</i> (2022)	Descriptive cross - sectional survey	Parents/ caregivers who are hospitalized. Number of samples = 275.	Cooperative committents. Children and parents/guardians reported a high frequency of acute pain, expressed satisfaction with pain management services, and demonstrated sufficient understanding of pediatric pain and how to manage it. Further investigation is necessary to address the discrepancies found in this study's knowledge and attitudes, pain intensity, and satisfaction with the effectiveness of pain management. Reports from children , parents, and guardians regarding pain management in Botswana's referral hospitals appear to be at odds with one another. All in all, notwithstanding the high predominance of moderate-to-extreme agony, they are happy with the administrations, regardless of having satisfactory information about pediatric agony and its administration, accepting that youngsters' agony should be dealt with, and being responsive to torment the executives.

8.	Factors Predicting Parent Participation in Caring for Hospitalized Children with Chronic Diseases.	(Sanyod <i>et al .,</i> (2021)	Predictive correlation	234 parents and 125 nurses	During their youngster's hospitalization, guardians partake in atraumatic care by providing emotional support, comfort, and reassurance to their child. In addition, they support their child's needs and preferences, create a safe and cozy environment, and foster trust and security. Parents can also help their child feel less stressed and anxious by reading to them, telling stories to them, and playing with them. In moreover, guardians can effectively take part in dynamic cycles concerning their youngster's c onsideration, offering the clinical group important criticism and viewpoints. To help family-focused care and assurance that the kid's one of a kind necessities and inclinations are thought about, this contribution in clinical navigation is vital. Basicall y, guardians who give atraumatic care to their hospitalized youngster do as such by offering consistent encouragement, pushing for their kid, laying out a consoling climate, and effectively taking part in the clinical dynamic cycle.
9.	Parents' Roles in Overcoming the Impact of Hospitalization on Preschool Children.	Suparto <i>et al.,</i> (2020)	Descriptive study	60 parents	How well parents can help their children in recuperating from the impacts of hospitalization relies upon various elements, remembering their association for their consideration during the emergency clinic stay, their ability to offer profound help, their c apacity to oversee stress, and their capacity to frame social support system . This study shows that nurses need to provide education to parents in dealing with the impact of hospitalization on children. In addition, apart from the role of parents, the environment can also affect the impact of hospitalization.
10.	Exploring the experiences of parent caregivers of children with chronic medical complexity during pediatric intensive care unit hospitalization: an interpretive descriptive study.	Rennick <i>et al.,</i> (2019)	Qualitative study, descriptive study	17 parents	Parents are expected to continue to behave in a good manner while in the PICU; however, they believe that their knowledge and expertise are not always recognized by medical personnel. They emphasized the significance of parent - staff collaboration. There were four themes identified: (1) "we know our children best," (2) when skills clashed, (3) negotiating parenting boundaries, and (4) the value of being known. The study findings support the need for a PICU care approach that recognizes parental expertise. The partnership between staff and parents is critical, especially at CMC, where parents serve as skilled caregivers. In addition to increased collaboration with health care professionals, CMC parents expressed a desire for increased communication with staff and a greater emphasis on continuity of care in the PICU and across hospital services during PICU hospitalization. The parent -staff partnership should be kept up to date on a regular basis by communicating and negotiating caregiving roles while in the PICU.

DISCUSSION

Children are at higher risk of morbidity and death due to the immunocompromised consequences of burns, hospital stays, and diagnostic and therapeutic treatments. Which can lead to physical and psychological trauma (Bahnsawy *et al.*, 2023). Parents can play an important role in supporting their children during traumatic procedures. Parent engagement is a key component of child therapy and makes the process more successful (Jerofke-Owen *et al.*, 2022). The method involved with distinguishing, selecting, and holding families in treatment services is known as parent engagement. Because caregivers play a critical role in the recovery of traumatized children, it is important to involve them in the treatment process. Parents can provide emotional support, practical care, and social support to their children during traumatic procedures (The National Child Traumatic Stress Network, 2017). They can also be involved in therapy and collaborate with experts to give their children the most ideal consideration. Parental participation in atraumatic care while the child is hospitalized, based on the results of the review of the articles above, includes emotional support, distraction techniques, comfort measures, communication and education, advocacy, collaboration with the healthcare team, participating in care routines, and providing post-procedure comfort (Handayani & Daulima, 2020; Ilmiasih & Ningsih, 2022; Jerofke-Owen *et al.*, 2022; van Oort *et al.*, 2019).

Emotional Support. Parents can provide emotional support by being present and reassuring their child during medical procedures or treatments. Their presence and consoling words can help the child feel more secure by reducing anxiety and worry. Understanding and normalizing common anxieties can help reduce pediatric healthcare-related anxiety and distress (Lerwick, 2016). The emotional support dimension examines how well parents relate to their children emotionally and how they express themselves to their children both verbally and physically. Consequently, this dimension is linked to greater flexibility and responsiveness to the child's needs (Gaspar *et al.*, 2022). During a child's hospital stay, parental involvement and emotional support are crucial components of pediatric care. Research has demonstrated that the presence of parents and their involvement in atraumatic care improves the well-being of hospitalized children (Handayani & Daulima, 2020; Ilmiasih & Ningsih, 2022). Additionally, while a baby is in the hospital, medical staff can support parents in their roles as primary caregivers and decision-makers and address the psychological effects of the hospital stay on the family (Gramszlo *et al.*, 2020). Instead, parents also need emotional support, especially in trying circumstances like end-of-life care, where parents might not receive enough emotional support from medical professionals (Das *et al.*, 2021).

Distraction Techniques. Among non-pharmacological pain management options, the distraction method is most frequently employed in children undergoing painful medical procedures. Using this cognitive and behavioral technique, parents can reduce their child's brain's capacity to focus attention on stimulation by diverting it to a task that will divert their attention, thus minimizing the amount of time the child spends attending to painful stimulation (Ebrahem *et al.*, 2019). The idea behind the distraction technique is to create a comfortable environment in order to lessen discomfort, fear, anxiety, and pain (Hsu *et al.*, 2022). Parents can either include their children in activities that are age-appropriate or offer them diversions like reading books, playing games, or watching movies. These diversionary activities can shift the child's focus away from the hospital setting and lessen tension and anxiety.

Comfort Measures. Parents can help establish a cozy and familiar environment. It might be reassuring and comforting to bring familiar objects from home, such as blankets, plush animals, or cherished toys. In order to place their child comfortably for surgeries or treatments, parents can help. Parents must increase the child's sense of comfort, for example, through games, reading, and procedure demonstration and explanation. Other effective adaptation promotion strategies included relaxation techniques, distraction, humour, therapeutic play, art therapy, music therapy, adaptation kits, animal therapy, and therapeutic groups (Barros *et al.*, 2021).

Communication and Education. Parents can actively speak with healthcare personnel to learn about the procedures, treatments, and medicine used to care for their child. When parents understand the process, they may explain it to their child in a developmentally appropriate manner, reducing ambiguity and worry. When parents and caregivers collaborate with healthcare professionals, they can exchange data and mastery to more readily comprehend what is happening, which can prompt the improvement of joint procedures to help the children. Parents and caregivers are experts on their own children, and respectful communication with parents

and families is essential for developing and maintaining effective partnerships (Jerofke-Owen *et al.*, 2022). Even before the child is admitted to the hospital, parents should be informed about first aid for injuries or illnesses. Continuous education and training programs for community first responders should be implemented to reduce the number of deaths and disabilities (Widodo & Poddar, 2020). Nurses should inform parents about their child's condition, which is in danger of generating considerable anxiety in both parents and children, particularly in cases of acute trauma or conditions that require immediate intervention (Osman, 2022).

Advocacy. Parents can act as advocates for their child's wants and needs. They can express any concerns, request alternatives or changes to procedures to reduce discomfort, and ensure that their child's emotional wellbeing is considered throughout care decisions. Gaining an understanding of the child's particular medical condition is the first step to effectively advocating for the highest quality of care (Foster *et al.*, 2020). Parents indicated that they wanted to get more involved in activities pertaining to their child's advocacy, and they were particularly interested in offering consolation and helping with everyday tasks. Pediatric nurses need to be aware of the various ways that parents choose to participate and provide help when needed (Romaniuk, O'Mara, & Akhter-Danesh, 2014).

Collaboration with Healthcare Team. By giving the medical team information about their child's preferences, temperament, and coping strategies, parents can actively support their child's care. Healthcare professionals can use this information to customize care to the child's unique needs. Parental cooperation with the medical staff is crucial when a child is in the hospital (Lim & Bang, 2023). In furtherance of fostering a supportive environment for the child and their family, this collaboration helps to provide the child with the best care possible. Communication, active participation, care coordination, and transition planning are a few other things that help the parent and healthcare team collaborate. Parents can help ensure that their child's care is more patient-centered and comprehensive by actively participating with the medical team. Better outcomes for children result from this collaboration between families and healthcare providers, which fosters trust (Seniwati, Wanda, & Nurhaeni, 2023).

Participating In Care Routines. Activities that parents perform or engage in on behalf of their hospitalized child are referred to as participation in caring for a child. Parents can help by offering social, psychological, or medical attention (Vasli & Salsali, 2014). Parents can actively participate in feeding, dressing, and bathing their children. By maintaining a sense of control and autonomy, involving the child in their own care can help them feel less distressed and helpless. Physical care participation includes primary health care, breastfeeding, supplying food and regulating food and drink intake, administering oral medication, shifting positions, skin care, bathing children, wound care, helping to measure weight and height, and physical examinations. Giving hugs to children and taking actions for the child's comfort are examples of psychological care participation. Participating in safety care entails preventing children from falling out of bed as well as falls in the surrounding environment (Sanyod *et al.*, 2021; Vasli & Salsali, 2014). The parental participation approach aims to provide children and their families with the highest quality of care possible (Burns *et al.*, 2018).

Providing Post-Procedure Comfort. Hospitalization for children is extremely stressful and potentially traumatizing owing to the dangerous new surroundings and medical procedures, which can cause anxiety, fury, impotence, and a lack of control (Islaeli *et al.*, 2023). After invasive or painful procedures, parents can comfort and console their child. This could include giving the child access to pain relievers, being a comfort to them, and engaging in activities that are soothing to them. Post-horrible pressure side effects might happen in kids on the off chance that agony and dread are not effectively tended to, prompting negative perspectives toward clinical medicines (Potts *et al.*, 2019). The degree of flightiness expands dread and the expectation of future agony. In this specific situation, mediations ought to be arranged with the comprehension that aggravation and dread levels are overseen simultaneously and that aggravation levels will diminish as dread levels are controlled (Semerci, Akarsu, & Kılıç 2023). Nurses have to prepare parents to provide comfort measures to their child has had a painful event (Semerci, Akarsu, & Kılıç, 2023).

One essential component of pediatric healthcare is the involvement of parents in atraumatic care during their child's hospital stay. Research has demonstrated that parental involvement in nursing care can result in numerous positive effects. It can shorten hospital stays and recovery periods, as well as lessen the emotional toll that being admitted has on a child and their adjustment to the hospital (Çamur & Karabudak, 2021).

Subsequently, medical care experts should know about these varieties and have the option to offer legitimate bearing, backing, and instruction when required (Fornaro, Della Pelle, & Buccione, 2022). All in all, family cooperation in injury-informed care during a kid's hospitalization is a complicated area of pediatrics that can enormously upgrade the kid's prosperity and recuperating process. Medical care suppliers should underscore the worth of parental inclusion while considering each parent's and child's singular requirements and inclinations. This literature review has various limitations. The primary study was limited to quantitative, non-experimental research, and there were only a few English-language articles in the review. The search terms and inclusion criteria placed restrictions on the articles that were included in the review, perhaps reducing the number of studies that were appropriate for the study's objective.

CONCLUSION

According to the findings of the review of the articles above, parental participation in atraumatic care while the child is hospitalized includes emotional support, distraction techniques, comfort measures, communication and education, advocacy, collaboration with the healthcare team, participating in care routines, and providing post-procedure comfort. This literature review offers a viewpoint from which to consider ways of working on the ongoing way to deal with planning guardians in regards to support in the atraumatic care of kids during hospitalization. Further research is expected to be able to develop research on specific interventions related to each form of parental participation in childcare during hospitalization.

Conflict of Interest

The authors declare that they have no conflict of interests.

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REFERENCES

- Ashcraft, L. E., Asato, M., Houtrow, A. J., Kavalieratos, D., Miller, E., & Ray, K. N. (2019). Parent empowerment in pediatric healthcare settings: a systematic review of observational studies. *The Patient-Patient-Centered Outcomes Research*, 12, 199-212. https://doi.org/10.1159/000297755
- Bahnsawy, N. S., Mohammed, A. R., Ibrahim, H., & Younis, R. A. (2023). Risk Factors Associated with Wound Infections in Burned Children. *The Malaysian Journal of Nursing (MJN)*, 14(4), 100-109. https://doi.org/10.31674/mjn.2023.v14i04.011
- Bajpai, A., Ilayaraja, B. S., Muninarayanappa, N. V., & Nageshwar, V. (2017). Assessment of Anxiety among Hospitalized Children. Indian Journal of Public Health Research & Development, 8(2). https://doi.org/10.5958/0976-5506.2017.00093.6
- Barros, I., Lourenço, M., Nunes, E., & Charepe, Z. (2021). Nursing interventions promoting child/youth/family adaptation to hospitalization: A scoping review. *Enfermeria Global, 20*(1), 577-595. https://doi.org/ 10.6018/eglobal.413211
- Burns, K. E., Misak, C., Herridge, M., Meade, M. O., & Oczkowski, S. (2018). Patient and family engagement in the ICU. Untapped opportunities and underrecognized challenges. *American Journal of Respiratory and Critical Care Medicine*, 198(3), 310-319. https://doi.org/10.1164/rccm.201710-2032CI
- Çamur, Z., & Sarıkaya Karabudak, S. (2021). The effect of parental participation in the care of hospitalized children on parent satisfaction and parent and child anxiety: Randomized controlled trial. *International Journal of Nursing Practice*, 27(5), e12910. https://doi.org/10.1111/ijn.12910

Cardona, C. V., Rajah, C., Mzoneli, Y. N., Friedrichsdorf, S. J., Campbell, F., Cairns, C., & Rodseth, R. N. (2019). An

audit of paediatric pain prevalence, intensity, and treatment at a South African tertiary hospital. *Pain Reports,* 4(6). https://doi.org/10.1097/PR9.000000000000789

- Claridge, A. M., & J Powell, O. (2023). Children's experiences of stress and coping during hospitalization: A mixedmethods examination. *Journal of Child Health Care*, 27(4), 531-546. https://doi.org/10.1177/1367493522 1078060
- Considine, J., Shaban, R. Z., Fry, M., & Curtis, K. (2017). Evidence based emergency nursing: designing a research question and searching the literature. *International Emergency Nursing*, 32, 78-82. https://doi.org/ 10.1016/j.ienj.2017.02.001
- Das, M. K., Arora, N. K., Chellani, H. K., Debata, P. K., Meena, K. R., Rasaily, R., ... & Kumari, M. (2021). Perceptions of the parents of deceased children and of healthcare providers about end-of-life communication and breaking bad news at a tertiary care public hospital in India: a qualitative exploratory study. *PloS One, 16*(3), e0248661. https://doi.org/10.1371/journal.pone.0248661
- Delvecchio, E., Salcuni, S., Lis, A., Germani, A., & Di Riso, D. (2019). Hospitalized children: anxiety, coping strategies, and pretend play. *Frontiers in Public Health*, 7, 250. https://doi.org/10.3389/fpubh.2019.00250
- Ebrahem, G. G. S., Ahmed, G. E. N., Hammad, A., & Eid, R. (2019). Applying cryotherapy and balloon inflation technique to reduce pain of arteriovenous fistula cannulation among children undergoing hemodialysis. *International Journal of Nursing Didactics*, 9(05), 29-35. https://doi.org/10.15520/ijnd.v9i05.2581
- Fornaro, D. S., Della Pelle, C., & Buccione, E. (2022). Parental participation in care during Neonatal Intensive Care Unit stay: a validation study. *Infermieristica Journal*, 1(2), 81-88. https://doi.org/10.36253/if-1920
- Foster, T. D., Decker, K. B., Vaterlaus, J. M., & Belleville, A. (2020). How early intervention practitioners describe family-centred practice: A collective broadening of the definition. *Child: Care, Health and Development, 46*(3), 268-274. https://doi.org/10.1111/cch.12749
- Gaspar, T., Cerqueira, A., Guedes, F. B., & de Matos, M. G. (2022). Parental Emotional Support, Family Functioning and Children's Quality of Life. *Psychological Studies*, 67(2), 189-199. https://doi.org/10.1007/s 12646-022-00652-z
- Gheshlaghi, P. A., Farahani, Z. B., Anboohi, S. Z., Nasiri, M., Ziapour, A., & Garosi, V. H. (2021). Effect of family presence on pain and anxiety levels among patients during invasive nursing procedures in an emergency department at a public hospital in Western Iran. *African Journal of Emergency Medicine*, 11(1), 31-36. https://doi.org/10.1016/j.afjem.2020.11.003
- Gramszlo, C., Karpyn, A., Christofferson, J., McWhorter, L. G., Demianczyk, A. C., Lihn, S. L., ... & Sood, E. (2020). Supporting parenting during infant hospitalisation for CHD. *Cardiology in the Young*, 30(10), 1422-1428. https://doi.org/10.1017/S1047951120002139
- Handayani, A., & Daulima, N. H. C. (2020). Parental presence in the implementation of atraumatic care during children's hospitalization. *Pediatric Reports, 12*(s1), 8693. https://doi.org/10.4081/pr.2020.8693
- Hassan, E. A. F., & Hassan, A. M. (2023). Impact of a Traumatic Care Technique on Pain and Fear among Hospitalized Children Undergoing Intravenous Medication. *International Journal of Health Sciences*, 11(1), 11-22. https://doi.org/10.15640/ijhs.v11n1a2
- Hsu, M. F., Whu, Y. W., Lin, I. C., Liu, C. Y., Lai, F. C., Liu, P. C., & Chen, C. W. (2022). Effectiveness of virtual reality interactive play for children during intravenous placement: A randomized controlled trial. *Asian Nursing Research*, *16*(2), 87-93. https://doi.org/10.1016/j.anr.2022.03.002
- Ilmiasih, R., & Ningsih, N. S. (2022). Application of Atraumatic Care Philosophy to Children in Hospitals a Literature Review. *MedRxiv*, 2022-07. https://doi.org/10.1101/2022.07.12.22277517

- Islaeli, I., Said, F. M., Nambiar, N., & Umar, N. S. (2023). Development and Validation of a Revised VAS-Anxiety Measurement Tools for Preschool Hospitalized Children. *The Malaysian Journal of Nursing (MJN)*, 14(3), 46-54. https://doi.org/10.31674/mjn.2023.v14i03.006
- Jerofke-Owen, T. A., McAndrew, N. S., Gralton, K. S., Totka, J. P., Weiss, M. E., Fial, A. V., & Sawin, K. J. (2022). Engagement of families in the care of hospitalized pediatric patients: a scoping review. *Journal of Family Nursing*, 28(2), 151-171. https://doi.org/10.1177/10748407211048894
- Jordan, A., Carter, B., & Vasileiou, K. (2021). "Pain talk": A triadic collaboration in which nurses promote opportunities for engaging children and their parents about managing children's pain. *Paediatric and Neonatal Pain*, *3*(3), 123-133. https://doi.org/10.1002/pne2.12061
- Lerwick, J. L. (2016). Minimizing pediatric healthcare-induced anxiety and trauma. *World Journal of Clinical Pediatrics*, 5(2), 143. https://doi.org/10.5409/wjcp.v5.i2.143
- Lim, S. J., & Bang, K. S. (2023). The perceptions and performance of family-centered care among pediatric nurses at a children's hospital in South Korea: a descriptive study. *Child Health Nursing Research, 29*(3), 207. https://doi.org/10.4094/chnr.2023.29.3.207
- Matula, S. T., Irving, S. Y., Deatrick, J. A., Steenhoff, A. P., & Polomano, R. C. (2022). The perceptions and practices of parents and children on acute pain management among hospitalized children in two Botswana referral hospitals. *Journal of Pediatric Nursing*, 65, e35-e42. https://doi.org/10.1016/j.pedn.2022.02.004
- Mahato, P., Shrestha, R., Karn, B. K., Chaudhary, A. K., & Singh, R. (2022). Knowledge and Attitude of Nurses on Implementation of Atraumatic Care among Hospitalized Children in Eastern Nepal: A Cross-sectional Study. *Journal of Nepal Paediatric Society*, 42(3), 24-28. https://doi.org/10.3126/JNPS.V4113
- Moore, B. J., Freeman, W. J., & Jiang, H. J. (2019). Costs of pediatric hospital stays, 2016. https://europepmc.org/article/nbk/nbk547762. Accessed on 22nd January, 2023
- Osman, N. L. (2022). A Rare Case of Chest Pain in Children. *Malaysian Journal of Medical Research (MJMR)*, 6(4), 26-27. https://doi.org/10.31674/mjmr.2022.v06i04.005
- Páll, N., Gorove, E., & Baji, I. (2021). Psychological support of hospitalised children and their parents in Hungary. KONTAKT-Journal of Nursing & Social Sciences Related to Health & Illness, 23(2). https://doi.org/10.32725/kont.2021.015
- Palomares González, L., Hernández Caravaca, I., Gómez García, C. I., & Sánchez-Solís de Querol, M. (2023). Parental presence during invasive pediatric procedures: what does it depend on?. *Revista Latino-Americana de Enfermagem*, 31, e3828. https://doi.org/10.1590/1518-8345.6101.3828
- Pelcovitz, M., Bennett, S., Desai, P., Schild, J., Beaumont, R., Walkup, J., ... & Chiu, A. (2023, February). High rates of anxiety among adolescents in a partial hospitalization program. In *Child & Youth care Forum*, 52(1), 105-122. New York: Springer US. https://doi.org/10.1007/s10566-022-09680-2
- Perdani, A. L., Mutiar, A., & Nazmudin, Y. (2021). The Impact of Implementation Virtual Reality (VR) on Pain Levels Among Children with Invasive Procedures: A Literature Review. *KnE Life Sciences*, 713-718. https://doi.org/10.18502/kls.v6i1.8746
- Potts, D. A., Davis, K. F., Elci, O. U., & Fein, J. A. (2019). A vibrating cold device to reduce pain in the pediatric emergency department: a randomized clinical trial. *Pediatric Emergency Care, 35*(6), 419-425. https://doi.org/10.1097/PEC.00000000001041
- Rennick, J. E., St-Sauveur, I., Knox, A. M., & Ruddy, M. (2019). Exploring the experiences of parent caregivers of children with chronic medical complexity during pediatric intensive care unit hospitalization: an interpretive descriptive study. *BMC Pediatrics*, 19(1), 1-10. https://doi.org/10.1186/s12887-019-1634-0

- Rokach, A. (2016). Psychological, emotional and physical experiences of hospitalized children. *Clin Case Rep Rev,* 2(4), 399-401. https://doi.org/10.15761/ccrr.1000227
- Romaniuk, D., O'Mara, L., & Akhtar-Danesh, N. (2014). Are parents doing what they want to do? Congruency between parents' actual and desired participation in the care of their hospitalized child. *Issues in Comprehensive Pediatric Nursing*, *37*(2), 103-121. https://doi.org/10.3109/01460862.2014.880532
- Sanyod, V., Pothiban, L., Mesukko, J., & Niyomkar, S. (2021). Factors predicting parent participation in caring for hospitalized children with chronic diseases. *The Open Public Health Journal*, 14(1). https://doi.org/10. 2174/187494450201401
- Semerci, R., Akarsu, Ö., & Kılıç, D. (2023). The effect of buzzy and cold spray on pain, anxiety, and fear of children during venipuncture in pediatric emergency department in Turkey; A randomized controlled study. *Journal of Pediatric Nursing*, 68, e1-e7. https://doi.org/10.1016/j.pedn.2022.08.019
- Seniwati, T., Wanda, D., & Nurhaeni, N. (2023). Effects of Patient and Family-Centered Care on Quality of Care in Pediatric Patients: A Systematic Review. Nurse Media Journal of Nursing, 13(1), 68-84. https://doi.org/10.14710/nmjn.v13i1.48114
- Sundal, H., & Vatne, S. (2020). Parents' and nurses' ideal collaboration in treatment-centered and home-like care of hospitalized preschool children–a qualitative study. *BMC Nursing*, 19(1), 1-10. https://doi.org/10.1186/s 12912-020-00445-7
- Suparto, T. A., Somantri, B., Andriani, S., Puspita, A. P. W., Rohaedi, S., Amalia, L., ... & Sari, A. T. (2020, February). Parents' Roles in Overcoming the Impact of Hospitalization on Preschool Children. In 4th International Conference on Sport Science, Health, and Physical Education (ICSSHPE 2019) (pp. 140-143). Atlantis Press. https://doi.org/10.2991/ahsr.k.200214.039
- The National Child Traumatic Stress Network. (2017). Family Engagement and Involvement in Trauma Mental Health. https://efaidnbmnnnibpcajpcglclefindmkaj/https://www.nctsn.org/sites/default/files/resources/fact-sheet/cac_family_engagement_and_involvement_in_trauma_mental_health.pdf
- van Oort, P. J., Maaskant, J. M., Smeulers, M., van Oostrum, N., Vermeulen, E., & van Goudoever, J. B. (2019). Participation of parents of hospitalized children in medical rounds: a qualitative study on contributory factors. *Journal of Pediatric Nursing*, *46*, e44-e51. https://doi.org/10.1016/j.pedn.2019.02.033
- Vasli, P., & Salsali, M. (2014). Parents' participation in taking care of hospitalized children: A concept analysis with hybrid model. *Iranian Journal of Nursing and Midwifery Research*, 19(2), 139. https://www.ncbi.nlm.nih.gov/ pmc/articles/PMC4020022. Accessed on 24th February, 2023
- Widodo, S., & Poddar, S. (2020). Analysis of pre hospital emergency management in case of head injury. *Enfermeria Clínica*, 30(5), 228–233. https://doi.org/10.1016/j.enfcli.2019.11.061
- Wong, D. L., Hockenberry, M. J., Wilson, D., Winkelstein, M. L., & Kline, N. E. (2003). Wong's nursing care of infants and children. (No Title). https://cir.nii.ac.jp/crid/1130000798091696000. Accessed on 22nd February 2023