Article

Lived Experiences of Nurses Caring for Children with Asthma in Paediatric Patient Wards in Indonesia

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Abstract

Asthma is a serious health problem among children, and it is important for children to acquire self-management skills in order to optimise their quality of life in the future. Therefore, nurses play an important role in delivering comprehensive nursing care, providing asthma control education, and facilitating appropriate self-management support for paediatric patients. This study aimed to explore the lived experiences of nurses caring for children with asthma in paediatric patient wards in Indonesia. The study used a hermeneutic-phenomenological design approach. Using purposive sampling, 12 participants were recruited. The data was collected through in-depth interviews, direct observations, and field notes. Sampling continued until data saturation was achieved. Thematic analysis was conducted following Braun and Clarke's six-phase framework. The results showed that the lived experiences of nurses caring for children with asthma in paediatric patient wards were categorised into four main themes and nine sub-themes. The four themes included: (1) providing nursing care (nursing priorities and nursing interventions); (2) experiencing personal challenges (communication barriers and feelings of frustration); (3) providing culturally competent care (minimising barriers to treatment and respecting the different cultural beliefs of children and parents); and (4) requiring specialised skills (patience, accuracy in medication administration, and play therapy techniques). Thus, the study concluded that caring for

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hospitalised children with asthma involves a multifaceted approach, distinct from the care of children with other conditions. Nurses face unique challenges due to the influence of cultural beliefs, religious values, and varied perceptions about the illness. Therefore, nurses have to provide nursing care; experience personal challenges; provide culturally competent care; and require specialised skills.

Keywords: asthma; children; Indonesia; paediatric nursing; quality of life; self-management

Introduction

Asthma is the most common chronic disease among children worldwide and remains a significant contributor to paediatric morbidity and mortality (Jones, Lawton and Gupta 2022). According to Simms-Williams et al. (2024), the highest rate of asthma-related hospitalisations occurs in children, with acute exacerbations being the primary cause for admission (Engelkes et al. 2020). Asthma is characterised by chronic inflammation of the airways, typically presenting with symptoms, such as wheezing, shortness of breath, coughing and chest tightness (GINA 2024). One of the major challenges in managing childhood asthma is poor disease control, including limited recognition of early warning signs, persistent daily symptoms, and inadequate management of acute asthma attacks (De Keyser and Szefler 2020). This lack of asthma control greatly diminishes children's ability to self-manage the condition, which in turn significantly impairs their overall quality of life (Theofilou and Vlastos 2023).

Children with asthma have a higher risk of mortality from respiratory diseases than the general population (Sol et al. 2021). It is estimated that approximately 262 million people worldwide suffer from asthma, a substantial proportion of whom are children (Manti et al. 2024). In Indonesia, asthma is a growing health concern among the paediatric population, affecting 1.9% of children aged 5–14 years and even higher rates among those aged 1–4 years. The condition represents a leading cause of childhood disability and contributes to increased risks of hospitalisation and death (Ng et al. 2020). Several contributory factors or risk factors have been associated with poor quality of life in children with asthma, including lack of formal education among caregivers; a family history of asthma; prolonged disease duration; higher disease severity; uncontrolled asthma; and the presence of comorbidities (Kasse et al. 2024).

Caring for children with asthma has a negative influence on parents or caregivers (Mathiazhakan and Abirami 2023). A study by Zen et al. (2022) conducted in Indonesia found that asthma in children significantly disrupts family life, thereby interfering with daily routines; triggering emotional distress; and necessitating ongoing supervision and care. Parents frequently report heightened anxiety related to potential asthma attacks, medication side effects, school absenteeism, and physical activity-induced exacerbations (Rogulj, Vukojević and Lušić Kalcina 2024). Caregiver stress has detrimental effects, such as physical health problems, mental health difficulties, and

lower quality of life (Rogulj, Vukojević and Lušić Kalcina 2024). Parents of children with asthma experience some level of caregiver burden, with more than one-third of parents experiencing moderate to high levels of stress (Yang et al. 2024. Mothers, in particular, show higher levels of separation anxiety due to a history of exacerbations (Ferraro et al. 2024).

Caring for children with asthma presents various challenges for nurses, caregivers and health workers. Among the commonly reported barriers are limited resources, use of alternative medicines, concern over side effects of asthma drugs, and lack of specific training in asthma management for health workers (Ardura-Garcia et al. 2021). Asthma care and management for children in various hospitals often suffers from a lack of standardised treatment protocols. Nurses, in particular, have a low level of knowledge about respiratory disorders in children, which adversely affects their ability to provide effective care. Communication barriers further complicate asthma management. Gijsen et al. (2024) found that ineffective communication hinders the accurate assessment of children's needs and provision of effective care. Children with Medicaid are less likely to receive specialised care for those with asthma (Geissler et al. 2024). Structural factors, such as power, culture and policy are the most influential factors influencing the role of nurses and influencing nurse participation in the management of asthma in children. In this context, "power" refers to the degree of autonomy, authority and decision-making capacity nurses have within healthcare systems.

Asthma care in children during hospitalisation is important because it affects their quality of life (Ali 2023). By providing the necessary knowledge and skills, patients and families are encouraged to manage the disease process effectively and improve their quality of life. Asthma education programmes provided in hospitals can increase children and their caregivers' knowledge about the disease (Thach et al. 2024). It is necessary to monitor the level of hospital utilisation and establish strategies for these patients based on their characteristics to reduce re-hospitalisation and improve the optimal use of hospital resources (Baek et al. 2022). With the help of a special asthma nursing scheme, appropriate treatment can safely and substantially optimise the lung function indicators and inflammatory factor levels of asthma patients and improve their exercise capacity (Sun et al. 2021). Therefore, nurses have an important role in supporting children with asthma by providing emotional support, building self-confidence, as well as ensuring holistic and culturally sensitive care.

The following are some factors that influence the management of childhood asthma: inadequate implementation of asthma management guidelines by health care providers; limited awareness of asthma and its management among children and their caregivers; use of traditional home remedies and complementary and alternative medicine; and lack of health education received from health care professionals (Kassa, Kebede and Habte.Kassa 2022). Through structured asthma education, nurses can help patients and families understand the importance of long-term treatment adherence (Mejias and Ramphul 2018). Therefore, nurses play an important role in providing information and

support; increasing awareness; promoting motivation; understanding; and facilitating appropriate assessment and care. Nurses are tasked with educating patients appropriately about asthma symptom recognition, environmental control, asthma management, and preventive measures, as well as providing evidence-based asthma care for positive patient outcomes.

Evidence-based nursing interventions have been shown to effectively improve asthma patients' knowledge, self-management skills, symptom monitoring, and emergency preparedness. Nurses occupy a frontline position to assess patients' risk of respiratory failure, monitor them, evaluate their care, and coordinate a multidisciplinary approach (Sun, Sun and Wang 2023). Evidence has confirmed the transformative impact of nursing interventions on asthma outcomes, including: reduced frequency of exacerbations; reduced burden on the health system; enhanced treatment adherence; and ultimately, an improved quality of life for paediatric asthma patients.

Despite the growing burden of childhood asthma in hospital settings, there remains a significant lack of research exploring the lived experiences of nurses caring for children with asthma. Most previous studies have focused on exploring experiences from the perspective of the caregivers and paediatric patients themselves. To determine effective, accurate and efficient steps to improve asthma care management in paediatric patient wards, it is necessary to explore and understand nurses' lived experiences (Gijsen et al. 2024; McQuaid and Landier 2018).

Methodology

Study Design

The study used a hermeneutic phenomenological design, specifically following the French philosopher Paul Ricoeur's approach. The hermeneutic phenomenology aims to enter the subjective world of individuals to uncover meaning, wisdom, possibilities and new understandings (Polit and Beck 2018). The lifeworld approach is suggested to gain a deeper experience by exploring the experiences of nurses providing care to children with asthma (Lindseth and Norberg 2004). The researchers attempted to ensure that the meaning obtained was to interpret the participants' experiences of the phenomenon of their experiences in caring for children with asthma by going back and forth between parts and the whole of the data. The participants were selected through purposive sampling. The inclusion criteria for the study required that the participants were registered nurses working in paediatric care units; had direct experience providing care paediatric patients with asthma; and had at least six months of experience working in a paediatric care unit.

Sample and Setting

The purposive sampling technique is used to identify individuals who possess specific characteristics relevant to the research objectives. The final sample included 12

participants, with data collection continuing until data saturation was reached, that is, when no new information or themes emerged from additional interviews. This sample size was consistent with phenomenological research and ensures depth of understanding. Previous studies, particularly in Western contexts, have primarily focused on exploring the experiences of caregivers and the perspectives of children, with limited attention given to the perspectives of nurses, especially within the Southeast Asian or Indonesian context.

Data Collection

The researchers collected data using a combination of qualitative techniques, ensuring methodological rigor and richness of data. These included: methods, tools, interview protocols and data collection procedures.

Data Collection Methods

The data collection methods used in the study were in-depth interview methods, observations, and field notes. Each interview lasted approximately 45 to 60 minutes, and the participants were engaged in 2–3 preliminary sessions prior to the formal interview to establish rapport and trust, a principle known as prolonged engagement.

Data Collection Tools

The research took place in a public general hospital located in an urban area of Indonesia. This hospital has a paediatric patient unit and caters to a substantial and culturally diverse patient base, offering offered rich insights into the interplay between cultural values, clinical practice, and nurse-patient-family interactions in asthma care.

The Interview Protocol

The interviews were conducted between April and June 2020 in the nursing staff meeting room. Prior to the interviews, the participants were asked to provide their demographic information, including age, gender, education and work experience. To guide the interviews, the researcher developed a semi-structured interview guide based on the research objectives and theoretical concepts relevant to paediatric asthma care. This guide ensured that the interviews remained focused, consistent, and aligned with the purpose of the study. Four open-ended questions were prepared in advance, namely:

1. How is your experience in providing care for children with asthma?
2. What challenges do you experience in providing care for children with asthma?
3. How has your experience been in caring for children with asthma from diverse ethnic and belief backgrounds?
4. How do you feel about caring for children with asthma at different developmental stages or ages?

These core questions were supplemented by probing questions to elicit the participants' deeper insights and encourage them to elaborate on their responses. Each interview lasted approximately 45 to 60 minutes and was conducted in a single session.

Data Collection Procedures

The researchers conducted prolonged engagement several times with each participant, to increase the relationship of mutual trust between the researchers and the participants. The interview process included careful preparation of all necessary equipment and materials, such as, digital voice recorders, informed consent forms, interview guides, and participant demographic sheets, to ensure the interviews were conducted smoothly and systematically. In this phase, the participants were asked once again for verbal and written consent before voice recording began.

The researchers began the in-depth interviews according to the interview guide containing the questions that had been created and in between the questions the researchers could use the probing technique, asking follow-up or clarifying questions related to encourage depth and richness in participant narratives. To ensure data authenticity and reduce bias, the researchers practised bracketing, a process where personal assumptions, beliefs and preconceptions were set aside. This approach allowed the participants to express their lived experiences freely and without influence, thereby preserving the integrity of the qualitative data (Polit and Beck 2018).

Data Analysis

The data was evaluated using thematic analysis to identify and examine recurring themes present in the dataset (Braun and Clarke 2019). This methodology was used to facilitate the identification and exploration of emerging themes systematically, which can help develop the data obtained from the interviews. This analysis consists of the following six stages:

1. Familiarisation with the data: The researcher and research team members independently read the transcripts repeatedly to search for meaning and patterns without prior assumptions and carefully documented detailed notes for each outcome of the interview.
2. Generating initial codes: At this stage, the researcher and research team members begin to discuss coding as the analysis organises the data into meaningful groups. Codes provide features of the data that may be of interest to the analyst.
3. Searching for themes: The third stage in the thematic analysis process involves two main steps. The first involves searching for themes, and the second involves reviewing those themes.

4. Reviewing themes: The researcher and research team members read the data related to each theme and consider whether the data supports it. The next step is to think about whether the theme works in the context of the entire data set.
5. Defining and naming themes: Themes can inform the construction of conceptual diagrams that can cohesively provide a conceptual framework as a significant outcome of a qualitative study. After identifying themes, the researcher and research team members are responsible for coding and refining the thematic framework. In the current study, faculty members from the paediatric nursing department were involved in reviewing and validating the identified themes. They contributed by independently evaluating theme clarity, suggesting appropriate titles, and helping to resolve any disagreements through discussion and consensus.
6. Producing the final report: The researchers write a report to provide a logical, coherent and scholarly report, supported by direct quotes and evidence from the participants. This ensures that the themes have been well substantiated and reflect the authentic voices of the participants.

Trustworthiness

Credibility, dependability, confirmability and transferability were established in the study to ensure the credibility of the research (Polit and Beck 2018). Credibility was established through prolonged engagement and member checking with nurses working in the paediatric patient ward. The researchers observed all situations related to the phenomenon being studied for a sufficient time to gain an in-depth understanding of the phenomenon under investigation. The researchers conducted a literature review to familiarise themselves with the content of the participants' life experiences, and in-depth interviews were utilised as the primary method of data collection. Dependability was carried out by discussing with members of the research team the results of data analysis in the form of significant statements, formulations of the meaning of significant statements, sub-themes, and themes that emerged to suit the objectives of the research. Confirmability was ensured through continuous consultation with members of the research team to determine the theme of the research results. To ensure certainty in the study, the researchers used the bracketing process to reduce the negative impact of the researchers' preconceptions about life experiences that could cause bias that could contaminate the research process, and to ensure that the experiences and thoughts found in the researchers' work truly belonged to the participants and not to the researchers. Transferability was established through the provision of research reports as thick descriptions. Thick descriptions in the research process mean that the researchers store all archives and materials during the research process.

The study received ethical approval from the Research Ethics Committee of the University of Sumatera Utara (No. 164/KEP/USU/2020). Before data collection, all the participants were informed about the purpose and process of the study, their right to withdraw from the study, privacy, confidentiality, and anonymity. Each participant

agreed to participate in the study by filling out a consent form or by verbally stating their willingness to participate in the study.

Results

Demographics of Participants

The demographic data showed that the majority of the participants (50.0%) were aged between 30–34 years. All 12 participants (100%) were female and most of them (83.3%) identified as Muslim, while the remaining (16.7%) identified as Christian. All 12 participants (100%) held a Bachelor's degree in Nursing (Strata 1/S1) and were working as implementing nurses in the paediatric patient ward. Regarding length of work experience, 50.0% had worked for 13–24 months, 33.3% for 25–36 months, and 16.7% for 6–12 months.

Table 1: Demographics of participants

Characteristics	Frequency	Percentage (%)
Age		
20–24	2	16.7
25–29	4	33.3
30–34	6	50.0
Gender		
Female	12	100
Religion		
Muslim	10	83.3
Christian	2	16.7
Education		
Bachelor's degree	12	100
Months of experience		
6–12 months	2	16.7
13–24 months	6	50.0
25–36 months	4	33.3

Thematic analysis of the data led to the identification of the following four main themes: (1) performing nursing care; (2) experiencing personal challenges; (3) providing culturally competent care; and (4) requiring specialised skills.

Theme 1: Performing Nursing Care

This theme consists of two sub-themes: (1) nursing priorities; and (2) nursing interventions.

Sub-theme 1.1: Nursing priorities

This sub-theme describes the expressions stated by the participants regarding the priority of nursing for the formulation of children's problems by using the level of emergency to obtain the stages of nursing interventions needed in children with asthma. The role of nurses in providing care to children with asthma includes: (1) maintaining the children's breathing pattern; (2) improving gas exchange; and (3) preventing complications.

The participants stated that they took action to maintain the children's breathing pattern. One participant stated that:

> The first action I take is to maintain the child's breathing pattern, so I teach and invite the child to do abdominal breathing exercises to strengthen the respiratory muscles, helping to minimise the occurrence of respiratory failure. (Participant 3)

Another participant used balloons as a therapeutic tool and stated that:

> I teach the child to blow up a balloon when they feel short of breath. Blowing up a balloon can reduce the sensation of breathlessness and it doesn't cause pain. (Participant 5)

One of the participants taught the children to promote effective gas exchange by adjusting their sleeping position:

> For less cooperative children, I teach them to place a slightly higher pillow on the head. This helps increase lung expansion and ventilation optimally. This position allows the diaphragm to function effectively and reduces pressure on the chest, improving gas. (Participant 12)

Another participant's statement concerned taking action to prevent complications in children:

> To prevent lungs collapse and ensure that the lungs remain inflated, I collaborate with the physiotherapy team to perform chest physiotherapy. (Participant 8)

Sub-theme 1.2: Nursing interventions

This sub-theme describes the expressions stated by the participants regarding nursing interventions to resolve problems experienced by children, including: (1) educating children and parents about asthma and its management; and (2) providing education to consume asthma controller medication regularly.

One participant described their efforts to increase the children's understanding of asthma:

> After the child is in stable condition, I explain to the child and parents about nature of the illnesses, signs, and symptoms to watch for, and possible triggers that influence attacks. (Participant 4)

Another participant emphasised the importance of regular medication use and proper technique:

> I teach and demonstrate to children and parents how to take medications regularly, using the correct inhalation technique, and how to avoid triggers for asthma attacks. (Participant 10)

Table 2: Theme, sub-themes and categories

Theme	Sub-themes	Categories
Perform nursing care	Nursing priorities	Maintaining the children's breathing pattern
		Improving gas exchange
		Preventing complications
	Nursing intervention	Providing education to children about asthma
		Providing education to consume the asthma controller medication regularly

Theme 2: Experiencing Personal Challenges

This theme describes the personal challenges nurses experience, consisting of two sub-themes: (1) communication barriers; and (2) feelings of frustration.

Sub-theme 2.1: Communication barriers

This sub-theme describes the challenges experienced by nurses when providing nursing care to children with asthma. Communication is a fundamental part of nurses providing nursing care to children with asthma, but it can be difficult for children who are very young or have limited language skills. Some important things to consider in caring for children with asthma, expressed by the participants, included: (1) the children's age and maturity; and (2) the children's limited understanding of their condition.

The following comment came from a participant who had difficulty communicating with children due to their age and language ability:

> Children are often fussy, especially toddlers. They are limited in how they express their feelings and often cry or act out. As a nurse, I need to be able to interpret what they are feeling. That is one of the challenges of being a paediatric nurse. For example, a child experiences shortness of breath, when a nebulizer is about to be administered, the child may cry, scream, or resist any approach. (Participant 5)

Another participant stressed the importance of using child-friendly language:

> Children have varying levels of understanding. They can become scared or confused, if they do not understand what is happening to them. So, I avoid using complicated language when explaining their situation and the procedures they are going to undergo. (Participant 9)

Similarly, a participant described how to explain to the children about the disease they are experiencing.

> Children can feel afraid and not understand what they are experiencing. Therefore, as a nurse who is in charge of caring for them, I explain the symptoms of asthma, such as shortness of breath, difficulty in breathing, using simple and easy-to-remember language. (Participant 7)

Sub-theme 2.2: Feelings of frustration

The nurses providing care to children with asthma can experience feelings of frustration. The results of the study showed that there were participants who expressed that it was not easy to provide nursing care to children because the children could be uncooperative and refuse their treatment the first time.

The following statement came from one of the participants:

> I feel frustrated when a child experiences repeated episodes of dyspnea, tachypnea, and wheezing. Then I want to check and take action but the child resists, it hard to even approach the child and give medicine, the child just cries and screams. While his breath is short, I ask the mother for help, and she just says wait until the child is calm. (Participant 6)

Another participant stated that sometimes the children refused to be given treatment:

> As a nurse, there are moments of annoyance and wanting to get angry, because the child really does not want to be given treatment. Sometimes I even have to apply a little force to administer the care they need. (Participant 11)

Table 3: Theme, sub-themes and categories

Theme	Sub-themes	Categories

Experiencing personal challenges	Communication barrier	Children's age and maturity
		Limited knowledge
	Feelings of frustration	Uncooperative
		Refusal of treatment

Theme 3: Providing Culturally Competent Care

Providing culturally competent care in nursing encompasses the nurse's ability to engage with children from diverse cultural backgrounds. This often involves navigating challenges, such as differences in religious background, beliefs and other potential barriers to care. Cultural competence in nursing bridges these misunderstandings. Cultural background influences the child's health care experience. Two sub-themes emerged: (1) minimising barriers to treatment; and (2) respecting the children's and parents' cultural beliefs that conflict with the plan of care.

Sub-theme 3.1: Minimising barriers to treatment

The first sub-theme describes the efforts made by the nurses to improve the children's and parents' knowledge about asthma; minimise language barriers; and improve the children's compliance with treatment.

One of the participants reported using simple and culturally relevant language to improve the children's knowledge about asthma:

> I try to explain in simple terms using language familiar that children use every day, such as regional languages, which will make it easier for children to understand. (Participant 8)

Another participant reported that they made specific efforts to create a safe space for open communication and to minimise communication barriers:

> Usually, children with asthma are more withdrawn and embarrassed when asked about their illness. I try to encourage them to tell me about the obstacles in following their illness treatment. (Participant 1)

Understanding the sociocultural context of each child helped the nurses to tailor their communication and promote adherence to treatment, as one participant commented:

> I try to understand the background of children who come from different ethnic and religious backgrounds than mine, and why they might refuse treatment. I respect what they know about asthma, after that I explain what asthma is and the dangers of not receiving proper treatment. (Participant 8)

Sub-theme 3.2: Respecting the children's and parents' cultural beliefs that conflict with the plan of care

This sub-theme focuses on nurses' efforts to understand beliefs about the disease and cultural beliefs about asthma management. Beliefs and attitudes toward health behaviour have a strong influence on children or mothers in making decisions to comply with treatment.

Nurses strive to understand and respect the beliefs held by families while gently correcting any misunderstandings to support effective care. One participant commented as follows:

> I try to understand the beliefs children and parents have about asthma. If their beliefs are incorrect, I don't confront them directly. However, I try to correct their misunderstandings by using simple language and sometimes using regional languages. (Participant 5)

Establishing a trusting relationship with the family is key to influencing health behaviours and promoting adherence to treatment plans. This statement came from one of the participants:

> As a nurse in the paediatric unit, I build a relationship of trust. I first understand their beliefs and opinions regarding adherence to the child's medication. After that, I explain the importance of adhering to the child's asthma medication to reduce the risk of future asthma exacerbations and health care costs. (Participant 10)

Table 4: Theme, sub-themes and categories

Theme	Sub-themes	Categories
Providing culturally competent care	Minimising the barriers to treatment	Improve the children's and parents' knowledge about asthma
		Minimise the language barriers
		Improve the children's compliance with treatment
	Respect the children's and parents' different cultural beliefs	Respect the children's and parents' beliefs related to asthma
		Respect the children's and parents' beliefs regarding asthma management

Theme 4: Specialised Skills Required in Paediatric Asthma Care

Nurses provide nursing care to children to meet their care needs and provide the best treatment. Nurses must be equipped with specialised skills to ensure that children receive appropriate and high-quality care. This theme revealed three sub-themes: (1) patience; (2) thoroughness regarding medication administration; and (3) application of play therapy techniques.

Sub-theme 4.1: Patience

Nurses must show patience to help calm the child and mother, gain trust, and help them feel comfortable during the examination and treatment. Patience is a fundamental skill that needs to be developed, such as accepting the child's anxiety and understanding fear in medical procedures. The following method was described by one participant:

> When the procedure was about to be carried out, the child showed high anxiety. As a nurse, I accepted this response. I held the child's hand and explained calmly about the procedure that would be carried out so that he would not feel short of breath. I clarified that the nebulizer inhaler would not hurt him. (Participant 12)

Other participants let the child calm down first. For example, one participant made the following statement:

> I give the child time to calm down and accept the anxiety they feel and avoiding rushed interactions. I provide clear and simple information, which helps reduce anxiety. Only then, I proceed with the injection. (Participant 5)

Sub-theme 4.2: Thoroughness regarding medication administration

Nurses must review each child's care plan. Attention to detail in the treatment received by the asthmatic child relates to the dosage of medication and how to administer the medication.

The participants calculated the children's medication dosage carefully before administering it. One of the participants made the following statement:

> As a nurse, I am responsible for ensuring accurate dosage calculation by weighing the child and considering their age to avoid medication errors. Like how Ventolin works in the body, the dosage that must be given to children must be according to the child's age, 3–4 times a day, given after meals. Because Ventolin is a hard drug, the dosage calculation must be correct and precise. (Participant 7)

The participants also carried out the correct way of administering medication. For example, one participant expressed the following view:

> Usually, children with asthma receive Theophylline medication. There are rules for its administration, such as, giving it on an empty stomach, either one hour before or two hours after eating, children should not consume theophylline if they have allergies. Theophylline can also cause gastrointestinal side effects, such as, nausea, vomiting, abdominal pain, and diarrhoea. (Participant 5)

Sub-theme 4.3: Application of play therapy techniques

Nurses must have the skills to reduce stress and anxiety resulting from medical procedures and the impact of hospitalisation through play therapy.

The participants used storytelling techniques to help reduce the children's anxiety about the shortness of breath experienced by children. The following statement was made by one of the participants:

> I use storytelling to help children reduce anxiety due to shortness of breath and also being in the hospital. Usually, after I read a story about the greatness of brave children who fight their illness, they become calmer and easier to cooperate with. (Participant 4)

The participants used storytelling techniques for the procedures to be carried out, as expressed by the following participant:

> Preschool children often experience intense anxiety and fear. Sometimes it is very difficult to get children to cooperate in several actions such as chest physiotherapy, nebulization, or administration of medication. The storytelling approach can foster cooperative behaviour and encourage children to comply with treatment. (Participant 3)

The participants invited the children to play therapeutically and to role-play overcoming their anxiety and fear of the procedure to be carried out. The following comments were made by two of the participants:

> I invite children to practice breathing exercises, like blowing bubbles with a doll that is having shortness of breath. I then explain that when they feel the same,, they should do what they did with the doll. (Participant 12)

> As a nurse, especially for toddlers or preschoolers, I invite children to be involved in the procedure that will be carried out. For example, they are invited to play a role first using a doll for the nebulizer action before performing it on the child. (Participant 6).

Table 5: Theme, sub-themes and categories

Theme	Sub-themes	Categories
Specialised skills required	Patience	Accepting the child's anxiety
		Understanding the child's fear during medical procedures
	Thoroughness regarding medication administration	Calculating accurate medication dosage
		Ensuring proper medication administration
	Application of play therapy techniques	Storytelling
		Therapeutic play methods

Discussion

Asthma is a common chronic disease in children; the medical and economic burden associated with it remains high (Zhang and Zheng 2022). In recent years, the prevalence of asthma symptoms has increased globally in children and adolescents, especially in middle-income countries (Ferrante and La Grutta 2018). Nurses play a critical role in

implementing and supporting stepwise asthma management; ensuring adherence to treatment protocols; and providing patient-centred care. Therefore, exploring the experiences of nurses can play an important role in caring for children with asthma. This study aimed to explore the lived experiences of nurses caring for children with asthma using a phenomenological approach. The lived experiences of nurses caring for children with asthma include: performing nursing care; experiencing personal challenges; providing culturally competent care; and requiring specialised skills.

Performing Nursing Care

The study found that nurses implement nursing priorities and nursing interventions. In this condition, nurses can play an important role in the early initiation of asthma exacerbation therapy and play an important role in the care process, acting as educators, advocates, and support systems for children with asthma (Sheldon et al. 2018). Managing asthma exacerbations in care can be challenging and can lead to adverse outcomes. Nurses participating in this study reported taking actions to promote effective gas exchange in children with asthma. Scullion (2018) noted that nurses are the primary point of contact for patients with asthma, and are in a key position to understand patients' views of treatment and encourage adherence to treatment. In line with the results of this study, it states that nurses must be able to recognise clinical signs and symptoms of acute asthma, assess the severity and provide advice on appropriate management (Sheldon et al. 2018). Nurses must explain: (1) monitoring vital signs and peak expiratory flow; (2) administering oxygen and other prescribed medications; and (3) educating patients and families about crisis management and relapse prevention of (Alexandre-Sousa et al. 2024).

Other studies support the role of nursing interventions in reducing asthma exacerbations through self-management, reducing the frequency of hospitalisations, and reducing health care costs. Children with asthma who received nursing interventions reported improved quality of life and decreased emergencies and acute asthma attacks. In addition, integrated asthma care models led by nurses have successfully reduced hospital admissions by bridging acute and primary care and offering resources and education to families (Homaira et al. 2022).

Experiencing Personal Challenges

The study also found that nurses reported experiencing communication barriers and feelings of frustration. Nursing is an integral part of the well-being of hospitalised children, as it involves providing specialised care tailored to their unique physical, emotional and developmental needs (Varvani Farahani and Ozturk 2024). The main barriers to communication with children are nurses' uncertainty about competence; nurses' limited knowledge of children's rights; and the children's age and maturity.

Nurses must be able to explain medical procedures, diagnoses and treatment plans in a way that children can understand. Effective communication with children who may

have limited verbal skills requires nurses to use age-appropriate techniques to assess and meet their needs. Work pressure, lack of resources, inadequate team performance, lack of experience, and knowledge in administering medications are some of the barriers to communicating with children (Soltanian et al. 2016). To overcome these barriers, nurses used puppetry, dramatisation, and distraction strategies, including colourful uniforms and age-appropriate techniques.

However, nurses' feelings of frustration were commonly reported, especially when the children refused treatment. According to Jiménez-Herrera et al. (2020) found that in critical and emergency caring situations, nurses had experiences of emotional guilt, anger and frustration related to moral conflict. In their study, Öner and Sarıkaya Karabudak (2021) noted that nursing students experienced feelings of helplessness, frustration, anger, resignation and guilt when children or families cannot cooperate and refuse treatment. Nurses experience negative emotions such as anger and frustration when they cannot do anything because of restrictions on being able to perform nursing actions, which affect the human dimension of quality of care (Jiménez-Herrera et al. 2020). Medical procedures and hospitalisations can pose emotional threats and psychological trauma to patient (Lerwick 2016). Managing these emotions requires more patience, flexibility, and self-control to deal with their ever-changing emotions. Therefore, Lulgjuraj et al. (2021) identified several strategies used by nurses to manage their emotions when providing care to children, including: practising self-reflection; engaging in peer debriefing after emotionally intense situations; maintaining emotional boundaries; utilising humour appropriately; and seeking emotional support from colleagues or supervisors. These strategies help nurses to process their feelings, prevent burnout, and remain emotionally available for paediatric patients. According to Luz et al. (2023), emotional exhaustion, feelings of frustration, and difficulties in understanding their professional roles can affect nurses' performance in providing care to children.

Providing Culturally Competent Care

The current study found that nurses attempted to minimise barriers to treatment and respect the different cultural beliefs of children and parents (McQuaid and Landier 2018). Cultural competence among healthcare providers may be associated with better medication adherence. Patients' cultural health beliefs and behaviours may conflict with biomedical healthcare values and practices, potentially leading to non-adherence to asthma medication regimens (Arcoleo et al. 2015). Effective self-management needs to be tailored to cultural norms, individuals' clinical preferences and needs, health literacy level, and supported by a patient-practitioner partnership (Koh et al. 2021). Therefore, providing culturally competent care is important to enhance parental empowerment (Guarda-Rodrigues et al. 2025). One of the benefits of implementing cultural competence is to ensure that cultural aspects are considered in every encounter between the nurses and the children and their families (De and Richardson 2022). Nurses need to establish effective communication with patients who have different beliefs and cultures and have the responsibility to provide holistic care (Tutar and Tuzcu 2024).

Cultural competence is one of the main foundations of clinical nursing and is essential to provide quality care to patients from different cultural backgrounds (Ahn 2017; Birhanu, Getnet and Alem 2023). Improving cultural competence is a cornerstone in the field of clinical nursing (Zeleke et al. 2024).

According to Malabat and Ruiz (2019), nurses who have a general understanding of other cultures and are aware of institutional barriers are more likely to prevent the creation of cultural gaps. Nurses with a stronger sense of self and well-being are able to ensure better performance in terms of providing high-quality care to patients. Nurses' cultural competence can significantly affect the efficiency of health systems worldwide (Sarkhani, Negarandeh and Dashti 2022). Studies have found support for cultural competence that emphasises nursing and the major effects it has on patient care and health outcomes. Nurses who are culturally competent can communicate more effectively, provide better care, and improve patient satisfaction, because they are equipped to work with patient groups from different cultures (Feliciano et al. 2021). They are also more likely to communicate with patients from different cultural backgrounds; improve health outcomes; develop better nurse-patient relationships; and increase patient trust and satisfaction.

Culturally competent nurses are better able to understand patients' diverse feelings and develop better relationships with patients, thereby improving the patient-nurse relationship and care delivery (Liu et al. 2022). Many nurses reported being inadequately prepared to deal with culturally diverse patient populations and felt unable to practice cultural competence because they were too busy and did not receive ongoing professional development. Nurses need to be continually provided with opportunities to reflect on cultural encounters to maintain and develop cultural competence as part of efforts to improve health among children from foreign backgrounds and ensure evidence-based care (Golsäter et al. 2023). In providing good quality nursing care to patients, nurses cannot ignore the cultural needs of patients; instead, they need to strive to be culturally competent (Maboko, Armstrong and Casteleijn 2024).

The inability of healthcare institutions to provide culturally sensitive clinical care to patients with diverse cultures, beliefs and behaviours is correlated with poor nursing care and decreased patient outcomes (Barral et al. 2023). Studies have identified significant barriers to achieving cultural competence in nursing practice, including: inadequate cultural competence training, time constraints, and lack of resources for nurses (Červený et al. 2022). Language barriers and a lack of knowledge about cultural differences are also cited as barriers to nurses' ability to provide culturally competent care (Liu et al. 2022).

Specialised Skills Required

The study findings have emphasised the importance of paediatric nurses possessing specific competencies, including patience, thoroughness in medication administration, and the use of play therapy techniques to effectively care for children with asthma.

Nurses provide emotional support to young patients and families by calming anxious and distressed children during hospitalisation and medical procedures. To perform these duties effectively, nurses must demonstrate strong knowledge and skills in all physiological and pathological systems (De Goumoëns et al. 2025). According to Ghaljeh, Mardani-Hamooleh and Pezaro (2024), nurses must have the following characteristics: (1) empathy; (2) altruism; and (3) respect for cultural values and family beliefs. Nurses build empathetic communication with their patients by: (1) having humanistic and unique behaviours with patients; (2) providing a calm and happy environment for patients; and (3) reducing fear and comforting patients (Olszewski et al. 2023).

In paediatric nursing, compassionate care and emotional regulation are fundamental in every nurse-child-family interaction (Diogo et al. 2021). Nurses can use play as a care strategy for hospitalised children (Godino-Iáñez et al. 2020). Play therapy is a valuable therapeutic intervention in paediatric nursing, facilitating the emotional, cognitive and social well-being of children in the healthcare setting. Interventions such as therapeutic play, anticipatory information, relaxation techniques, distraction, humour, music therapy, adaptive devices, therapy groups, and strategies for increasing hope are emphasised. Several studies have shown that the impact of nurses in conducting play therapy during the child's hospitalisation decreases the level of these feelings on the day of surgery (He et al. 2015). The robot-assisted digital storytelling approach not only reduces children's anxiety but also has positive effects on children's communication about intravenous injections, emotions during hospitalisation, and therapeutic engagement (Chang et al. 2023). Storytelling was found to be effective in reducing anxiety or fear in children during hospitalisation. Art-based interventions can be used as a treatment to reduce anxiety and depression among children with chronic illnesses such as cancer (Ku, Chua and Shorey 2025).

Play interventions are performed at all ages by various healthcare professionals (Gjærde et al. 2021). Hospitalisation can be a distressing experience for children, often involving unfamiliar and potentially painful procedures without understanding the need for these treatments (Godino-Iáñez et al. 2020). Several studies regarding children's behaviour in certain nursing techniques, have shown that intravenous such as punctures or drug administration, help children express and communicate their feelings and emotions through toys. It also makes them understand the process and the need for hospitalisation (Caleffi et al. 2016). Other studies have shown that therapeutic play therapy is an effective intervention to reduce anxiety in children undergoing invasive procedures. This therapy has also been shown to reduce pain and fear and improve quality of life (Halemani et al. 2022).

Nurses must be detail oriented to ensure that they provide accurate and appropriate care to their young patients. Play interventions have different roles in four clinical contexts: (1) diagnostic procedures and tests; (2) patient education; (3) treatment and recovery; and (4) adaptation (Gjærde et al. 2021). They must be able to pay attention to details such as

medication dosages, vital signs, and medical records to ensure that their patients receive the right care at the right time. Paediatric patients are at higher risk for medication errors due to variability in ordering and administering medications (Campbell et al. 2022). The medication use process for paediatric patients is complex, and errors can occur at all stages, including prescribing, administering, and dispensing.

Medication errors are a major cause of morbidity and mortality (Bin Abdul Jamil et al. 2024). Nurses must have high skills in mathematical calculations and numerical abilities to calculate the correct dosage and medication because one error in calculation can lead to serious, life-threatening conditions in children. Calculating the correct medication dosage for paediatric patients can be difficult for nurses to determine, because paediatric doses are usually a fraction of adult doses (Suluhan, Yildiz and Fidanci 2023). Miscalculation of medication dosage is the most common nursing error. To calculate the correct dosage for paediatric patients, two methods are used: the more common one is based on drug units per kilogram of body weight, while the other uses body surface area (Hockenberry, Wilson and Rodgers 2019).

Each theme represents unique aspects of the nurses' experiences, yet these aspects are intertwined in real-world practice. Challenges faced by nurses on a personal level, such as difficulties with communication and emotional frustrations, can directly impact their capacity to deliver culturally sensitive care. Encounters between nurses and children from diverse cultural backgrounds frequently necessitate enhanced emotional control and tailored communication techniques, especially in situations where the child is uncooperative or anxious. These difficulties underscore the importance of possessing specific skills, including endurance, therapeutic play, and meticulousness in dispensing medication, to guarantee that high-quality care is sustained. The capacity for nurses to provide culturally sensitive and effective asthma care is influenced not only by external factors such as culture and policy, but also by the nurses' internal emotional and professional resilience.

Strengths and Limitations of the Study

Strengths

This phenomenological study provided in-depth insights into the everyday experiences of nurses caring for children with asthma, a field that has been insufficiently examined in previous research. The thematic research revealed new insights, encompassing the intersection of emotional strength, cultural understanding, and specialised training in paediatrics, which differed from previous studies focused on other chronic health issues. The use of robust qualitative techniques, including in-depth engagement, participant validation, and the combining of observational data and field notes, enhanced the trustworthiness and dependability of the research findings.

Limitations

Potential biases may have been introduced during the data collection and analysis phase, which overlapped with the initial stages of the COVID-19 "new normal", due to contextual factors such as altered hospital procedures, elevated stress levels, and evolving patient care protocols. Subtle factors influencing the participants' experiences or memories could have been present and must be taken into account when analysing the results. Moreover, the study took place in a single-site public hospital located in an urban environment, which might restrict how applicable the findings are to various institutional or regional contexts. Additionally, all the participants were female and held a bachelor's degree, indicating a homogenous sample that may not fully represent the diverse spectrum of nursing experiences. The use of purposive sampling ensured the data was relevant to the research objectives, but it may have limited the variety of views obtained, especially regarding differences in nursing practice that are influenced by gender or educational background.

Conclusion

These findings indicate the important role of nurses in providing comprehensive care to children with asthma. Four core themes emerged from the analysis: (1) the delivery of effective nursing care; (2) the personal challenges experienced by nurses; (3) the importance of providing culturally competent care; and (4) the necessity of possessing specialised paediatric skills. The nurses explained the need to apply a holistic nursing framework grounded in paediatric principles to improve the quality of care they provide to children with asthma.

Recommendations

The study concluded that nurses know the importance of: (1) performing nursing care; (2) experiencing personal challenges; (3) providing culturally competent care; and (4) requiring specialised skills. Based on the findings, the study recommends that nursing practices in paediatric asthma care prioritise some aspects. First, nurses can create policies in the paediatric patient ward to always apply the concept of holistic nursing. Second, emphasis on cultural competence to ensure sensitive and respectful engagement with families from diverse backgrounds. Routine integration of therapeutic play to improve the quality of nursing care and the quality of life of children need to be considered. Further studies need to investigate the effect of implementing the concept of holistic nursing, cultural competence, and therapeutic play on admission, quality of care, and quality of life of children with asthma. The researchers also recommend exploring the perspectives of paediatricians and hospital administrators regarding policies that will be implemented when caring for children with asthma.

Implications for Practice

Given the many different challenges and barriers to achieving optimal asthma management in children, nurses need to provide interventions that are appropriate to the child's age and cultural beliefs of the child and parents. Therefore, paediatric nurses must apply the concepts of culturally competent and therapeutic play so that children can cooperate during hospitalisation.

A training programme should be implemented for regular child care related to issues in caring for children with asthma, which has many challenges and barriers, such as cultural competence, and should incorporate therapeutic play techniques.

A comprehensive set of policies should be developed to address the specific challenges faced by paediatric nurses in the context of childhood asthma, such as: (1) poor acceptance of asthma diagnoses by families; (2) limited access to and affordability of asthma control medications; (3) the tendency to seek traditional medicine or alternative treatments; (4) poor treatment adherence among children and caregivers; (5) steroid phobia; and (6) cultural concerns. These policies should support paediatric nurses by requiring a holistic approach when caring for children with asthma and providing opportunities for professional development. With a holistic care approach and training related to childhood asthma, comprehensive steps can be formulated to effectively support paediatric nurses in dealing with the challenges and barriers in caring for children with asthma.

Author Contributions

All the authors made substantial contributions to the research process, including conducting interviews with the participants, writing the main manuscript, and approving the final manuscript for submission.

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