

Parental Anxiety During Hospitalization of Children with Diarrhea at Santa Elisabeth Hospital Medan

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ABSTRACT

Diarrhea is one of the common diseases in children and may cause children to undergo hospitalization at Santa Elisabeth Hospital in Medan between January and March 2026. During hospitalization, children experience various medical procedures that may cause discomfort and affect the psychological condition of parents. Parents' anxiety arises due to concerns about the child's health condition, treatment process, and behavioral changes during hospitalization. This study aimed to determine the overview of anxiety in parents of children with diarrhea during hospitalization. This study uses a descriptive design with a quantitative approach. The sampling technique uses consecutive sampling with a total of 30 respondents, out of a target sample of 48 calculated using the Slovin formula. The research instrument used is the Zung Self-Rating Anxiety Scale (ZSAS) questionnaire consisting of 20 questions. The majority of respondents experience moderate anxiety, totaling 17 people (56.7%), while 13 people (43.3%) experienced mild anxiety. No respondents experienced severe anxiety or panic. Most parents of children with diarrhea during hospitalization experienced moderate anxiety.

Keywords: anxiety, diarrhea children, hospitalization, parents, ZSAS

INTRODUCTION

Diarrhea is a clinical symptom of a digestive system disorder specifically affecting the intestines characterized by a bowel movement frequency that exceeds normal levels (Arda et al., 2024). More frequent bowel movements than usual are the hallmark of diarrhea, a clinical sign of a digestive system illness that primarily affects the intestines. Consuming food or drinks tainted with germs, viruses, or parasites is typically the cause of diarrhea (Gebremariam et al., 2024). Poor environmental hygiene exacerbates transmission, which happens through tainted food and drinking water (Akmalia et al., 2024). Due to the immune system's incomplete development, childhood is a time of vulnerability to a number of health problems (Auma et al., 2024).

The lack of a habit of washing hands with soap before and after meals or after playing increases the risk of disease transmission. These variables can cause a number of infectious disorders in kids, including digestive tract infections like diarrhea (Ruslina et al., 2023). The child must cope with the physical effects of their condition, the hospital environment, and the necessary

treatments until they are healthy enough to be discharged (Haniyah & Triana, 2025). During their hospital stay, the child will undergo various medical procedures that are often painful and must be repeated frequently. The child may have to undergo procedures such as blood draws, the insertion of a nasogastric (NG) tube, CT scans, and the placement of an IV line procedures that often cause discomfort and are performed repeatedly (Fiteli et al., 2024).

When a child is admitted to the hospital because of diarrhea, parents frequently feel anxious as they watch their child endure many medical procedures and suffer from illness and discomfort (Khamdalah et al., 2024). The child's erratic health, the hospital treatment process, and behavioral changes such as fatigue from constant crying, an unwillingness to engage with nurses, impatience, frequent requests to return home, and a refusal to eat are the causes of this worry (Veronika et al., 2025). Parental anxiety may worsen as a result of these factors, which can impede recovery, lower the child's motivation to heal, and result in a lack of cooperation throughout therapy (Putra et al., 2022).

Parents' nervousness when seeing their child in the hospital is a problem that needs to be addressed since it impacts not only their emotional state but also their physical and mental health (Geser et al., 2026). Fatigue, headaches, appetite loss, physical weakness, heart palpitations, nausea and vomiting, muscle soreness, and stiff neck are among the physical symptoms that parents may experience (Maulina & Ohira, 2024). Psychologically, they may have anxiety about their child's well-being, find it difficult to focus over the course of treatment, feel anxious and restless, and feel profound melancholy, which can occasionally show up as frequent daydreaming or thoughtful behavior while the child is receiving treatment (Erizon & Sari, 2023).

Concerns about a child's health and the likelihood of their recovery frequently cause anxiety in parents. When parents are unable to handle the stress of a child's extended hospital stay, the issue gets worse (Jannah et al., 2025). Another major cause of concern is a lack of knowledge about the medical procedures the child will have. This condition can develop into a more serious anxiety disorder in the absence of sufficient emotional support. The prolonged hospital stay puts parents under more psychological strain, which may jeopardize their emotional stability (Nurahmawati et al., 2026). As a result, parenting approaches may change, such as being overly protective or, on the other hand, less attentive to the child's needs. In the end, the family's general wellbeing is also impacted by the emotional stress of the child's hospital treatment (Isma et al., 2025).

Healthcare providers can help reduce parental worry throughout a child's hospital treatment by communicating clearly and effectively. Parents are better prepared for the ongoing treatment process when they receive timely and pertinent information about their child's condition. Additionally, social support is essential for reducing psychological stress; family members' presence and care can help parents cope with stress and worry while their child is in the hospital (Veronika et al., 2025). While previous studies have widely documented parental anxiety during general pediatric hospitalization, there is a notable gap in understanding the specific psychological responses to acute conditions like diarrhea.

Unlike chronic illnesses, pediatric diarrhea presents sudden, visible physical deterioration, such as rapid dehydration and lethargy, which may trigger distinct anxiety patterns in parents. Furthermore, contextual studies addressing this issue within the demographic setting of Medan, Indonesia, remain limited. Therefore, this study aims to explore the specific dimensions of parental anxiety during the hospitalization of children with diarrhea, providing targeted insights for pediatric nursing interventions.

METHODS

Research design

A research strategy plan is essential to an inquiry since it gives you the most control over a number of variables that may have an impact on the correctness of the findings. The phrase "research plan" has two meanings: first, it refers to the method used to pinpoint the issue before the last phase of data collecting; second, it outlines the format of the study that will be carried out (Nursalam, 2020). The type of research employed is descriptive research, which describes a situation or phenomenon. This study describes the anxiety experienced by parents of children with diarrhea at Santa Elisabeth Hospital, Medan, in 2026.

Participant characteristics

Subjects who fit predefined criteria, such as individuals or clients, make up the study population. 55 children were treated for diarrhea at the hospital between January and March 2026, according to the study's initial survey.

Sampling technique

Consecutive sampling is the sampling strategy used in this study, which involves enrolling each subject who satisfies the inclusion criteria one after the other until the necessary sample size is reached. The broad conditions or traits that research participants must have in order to be eligible to participate in the study are known as inclusion criteria. This study used consecutive sampling, enrolling every eligible subject until the target sample size was reached. Eligible respondents were parents of children diagnosed with diarrhea and receiving active treatment in the pediatric ward. Parents also had to be proficient in written and spoken communication, willing to participate voluntarily, and able to comply with the data collection process.

Data collection

The process of approaching research participants while concurrently obtaining the various subject characteristics needed for the study is known as data collection. The phases of data collecting are in line with the methods and tools used, as well as the research design. The following are the phases of the data collection methods employed in this investigation: the researcher started data collection operations in line with the timetable decided upon with the hospital and the management of the Santa Theresia Ward after receiving research authorization from Santa Elisabeth Hospital Medan.

Prospective respondents who satisfied the inclusion criteria were then visited, during which the researcher introduced themselves and used simple, intelligible language to describe the goals, advantages, and methods of the study. After this discussion, the researcher asked the respondents if they would be ready to participate; those who accepted were asked to sign an informed consent form to give written consent, while those who declined were respected without any compulsion or pressure. Once consent was obtained, the researcher explained how to complete the 20-item Zung Self-Rating Anxiety Scale (ZSAS) questionnaire, which is intended to measure the respondent's anxiety. If a respondent had trouble answering the questions on their own, for example due to physical limitations or reading difficulties, the researcher helped by reading the questions aloud and recording the answers without influencing the respondent's choices. After the questionnaire was finished, the researcher collected the instrument and promptly checked it for completeness (editing), asking for clarification if anything was found incomplete.

Ethical Clearance

This study was ethically approved by the Health Research Ethics Committee of the Santa Elisabeth School of Health Sciences in Medan (Reference No. 058/KEPK-SE/PE-DT/V/2026). Prior to data collection, written informed consent was obtained from all participating parents after they were fully informed about the study's objectives and procedures. The respondents' participation was entirely voluntary, and their anonymity and data confidentiality were strictly maintained throughout the research process.

Measures

An instrument for measuring or evaluating variables in a study is called a research instrument. It may be an interview guide, lab measuring gadget, observation sheet, or questionnaire (Nursalam, 2020). The tool utilized in this study was taken from earlier studies by Situmeang (2024) to measure the level of anxiety experienced by parents of hospitalized children with diarrhea, using the 20-item Zung Self-Rating Anxiety Scale (ZSAS), a measurement instrument. Each respondent is required to mark (√) the appropriate response for each item: "never" scored 1, "sometimes" scored 2, "often" scored 3, and "always" scored 4. Responses were analyzed using frequency distribution to identify response patterns, which were then used to draw the study's conclusions.

RESULTS

Table 1. Frequency Distribution of Respondents Based on Demographic Data of Santa Elisabeth Hospital Medan

Characteristics	<i>f</i>	%
Age		
Late Adolescence (17-25)	8	26.7
Early Adulthood (26-35)	20	66.7
Late Adulthood (36-45)	2	6.7
Total	30	100
Gender		
Female	25	83.3
Male	5	16.7
Total	30	100.0
Relationship to Patient		
Parents	30	100.0

The demographic data distribution table shows that 20 respondents (66.7%) fall into the early adult category (26–35 years old), followed by 8 respondents (26.7%) in the late teenager category (17–25 years old) and 2 respondents (6.7%) in the late adult category (36–45 years

old). Gender-wise, there are five male respondents (16.7%) and twenty-five female respondents (83.3%). In terms of their relationship with the patient, 30 respondents (100%) are parents.

Table 2. Frequency Distribution of Parents' Anxiety Levels

Anxiety Level	<i>f</i>	%
Mild Anxiety	13	43.3
Moderate Anxiety	17	56.7
Severe Anxiety	0	0
Panic	0	0
Total	30	100.0

According to Table 2, the majority of respondents, 17 individuals or 56.7%, had moderate anxiety, whereas only 13 individuals or 43.3% had mild anxiety. There were zero respondents who experienced severe or panic anxiety. Specifically, high scores (mostly "Often" and "Always") were concentrated around Item 8 (physical weakness and fatigue) and Item 19 (sleep disruptions and night restlessness). When the demographic results in Table 1 are taken into consideration, this physiological toll becomes even more considerable. The data shows that young moms bear the majority of these physical loads, with the majority of respondents being female (83.3%) and falling into the early adulthood category of 26–35 years old (66.7%). This pattern demonstrates the extreme physical exhaustion that pediatric diarrhea causes in these primary caregivers, who often have to forgo their own sleep in order to keep an eye on their child's irregular bowel movements and hydration levels. As a result, their caregiving fatigue is directly translated into higher somatic anxiety scores.

DISCUSSION

The primary objective of this study was to explore the dimensions of parental anxiety during the hospitalization of children with acute diarrhea. Given the limited literature on parental anxiety specific to acute pediatric diarrhea, and the scarcity of contextual studies within the Medan setting, this study addresses that gap by characterizing the anxiety response in this specific clinical population. The findings indicate that the majority of parents (56.7%) experienced moderate anxiety, with no incidence of severe anxiety or panic. This aligns with broader pediatric hospitalization studies, such as those by Erizon and Sari (2023) and Mbaloto et al. (2024), which found that moderate anxiety is the most common psychological response among parents. However, by utilizing a symptom-level analysis of the ZSAS, this study reveals that this "moderate anxiety" is not primarily driven by psychological terror or panic, but rather by severe somatic and physiological exhaustion.

The demographic data provides a crucial lens for understanding this physical toll. Mothers (83.3%) in their early adult years (26–35 years old) made up the great majority of the caregivers in this study. In Indonesian society, young moms are frequently in charge of providing bedside care when a child is in the hospital. Managing a fussy, uncomfortable youngster, keeping an eye on intravenous lines, and cleaning up frequent bowel movements are all part of providing care for a child with diarrhea. The mother's sleep and repose are significantly disrupted by this unrelenting demand, which immediately results in high somatic anxiety scores (Items 8 and 19 on the ZSAS). As a result, "anxiety" is closely linked to both physical exhaustion and acute maternal role strain.

This psychological state is greatly influenced by the unique clinical characteristics of pediatric diarrhea. Acute dehydration is a persistent, obvious risk associated with diarrhea, which manifests as abrupt and swift physical decline. This stands in stark contrast to the anxiety associated with general hospitalization. For example, a prior study by Novitarum et al. (2024) in the same hospital found that when complete discharge planning was used, 87.3% of parents had relatively mild anxiety. The discrepancy between these results emphasizes how the unpredictable, acute nature of diarrhea, where a child's condition can deteriorate quickly due to fluid loss, inherently raises parental baseline anxiety to a moderate level, making standard reassurance inadequate if the child continues to be clinically unstable.

These results offer focused information for pediatric nursing interventions. Given that parental worry in cases of diarrhea is mostly physical and fatigue-related, nurses need to go beyond simple clinical communication. Although it is essential, giving the child clear information about their treatment is insufficient (Riyana & Triguna, 2024). Family-Centered Care techniques that actively promote parental rest should be implemented in pediatric wards. Scheduled respite intervals for moms, improving the ward environment for better sleep at night, and proactively helping with the physical duties of washing the infant are examples of nursing interventions. Nurses can effectively lower these young mothers' general anxiety levels by relieving their physical weariness.

CONCLUSION

The majority of parents of children hospitalized with acute diarrhea experienced a moderate level of anxiety. A deeper analysis suggests that this anxiety may be more closely associated with somatic and physiological exhaustion than with psychological panic, based on the elevated frequencies observed on Items 8 and 19; further correlational or factor analysis would be

needed to confirm this pattern. Particularly for young moms who serve as primary caretakers, the constant demands of keeping an eye on the child's hydration and irregular bowel movements cause considerable sleep disruption and physical exhaustion. As a result, pediatric nurse interventions should use a Family-Centered Care strategy that actively promotes parental rest and physical relief during the hospital stay in addition to providing clinical information.

LIMITATION

This study on the overview of parental anxiety during the hospitalization of children with diarrhea at Santa Elisabeth Hospital Medan in 2026 encountered limitations regarding the number of respondents recruited during the data collection period. Based on an initial survey conducted from January to March 2026, the total population was identified as 55 parents. Using the Slovin formula with a 5% margin of error, the required minimum sample size was calculated to be 48 respondents.

However, during the actual execution of the study, only 30 respondents who met the inclusion criteria could be reached. The study employed a consecutive sampling technique, which involves recruiting all accessible subjects meeting the inclusion criteria over a specific period until the target is met or the data collection period ends. Throughout the data collection phase in the St. Theresia Ward, the number of eligible parents did not reach the initial calculated target, resulting in a final sample size of 30 respondents. Although this number falls short of the target determined by the Slovin formula, all participating respondents strictly met the predefined inclusion criteria. This reduced sample size may result in wider confidence intervals and limited statistical power to detect differences between smaller subgroups, and the findings should therefore be interpreted with some caution regarding their precision and generalizability, even though they still provide a meaningful overview of parental anxiety during the hospitalization of children with diarrhea.

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