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The relationship between anxiety and parental support with hospitalization in school-age children (6–12 years) at RSUD X Jakarta

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Abstract

Hospitalization is a threatening experience for children undergoing hospital care due to environmental changes that create feelings of insecurity. The insecurity and discomfort experienced by school-age children can lead to various reactions to their illness or condition, such as separation from family, unfamiliar surroundings, and reduced affection. This quantitative study used a descriptive analytic correlational cross-sectional approach. The study population consisted of parents of school-age children hospitalized at X Regional General Hospital or RSUD X Jakarta, using total sampling with 42 respondents.

Results showed that the majority of parents experienced no anxiety (40.5%), most parents provided high support (66.7%), and most children experienced mild anxiety (64.3%). The Kendall's Tau C test showed a significant relationship between the level of parental anxiety and children's hospitalization anxiety (p-value = 0.012 ($\alpha < 0.05$)) and a significant relationship between parental support and children's hospitalization anxiety (p-value = <0.001 ($\alpha < 0.05$)).

The conclusion of the study indicates that children's hospitalization anxiety is significantly related to both parental anxiety and parental support. It is recommended that parents, as one of the main sources of support for hospitalized children, enhance their support by actively listening to complaints, being friendly and helpful in meeting needs, participating actively in care, providing reassuring information, and giving praise for following medical advice

Keywords: Anxiety; Parental Anxiety; Parental Support; Hospitalization; School-Age Children

1. Introduction

Hospitalization is a threatening experience for children undergoing treatment in a hospital due to environmental changes that create feelings of insecurity (1). The process of hospitalization affects children before, during, and after being discharged from the hospital. Numerous unpleasant experiences during hospitalization can lead to negative impacts that may hinder their development (2).

Hospitalization anxiety refers to the level of anxiety experienced by a child during hospitalization, caused by stressors or anxiety triggers related to the hospital environment (3). Anxiety in school-age children can cause various reactions to their illness or condition, such as separation from family, unfamiliar surroundings, and a lack of affection. Children undergoing hospitalization may express their anxiety by withdrawing, becoming irritable, being uncooperative with healthcare workers, exhibiting fear, refusing to eat, and crying quietly (4).

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Hospitalization involves facing an unfamiliar environment, unfamiliar caregivers, and a loss of autonomy. This can be influenced by previous hospitalization experiences, the recovery process in the hospital, and may also affect the length of hospital stay. A study by Pragholapati, Septiani, & Sudiyat, (2020) explained that at Regional General Hospital in Majalaya, 4.1% of parents did not experience anxiety, 23.7% had mild anxiety, 59.8% had moderate anxiety, and 12.4% had severe anxiety (5).

Based on data from the WHO in 2020, between 4% and 12% of pediatric patients in the United States felt anxious due to hospitalization. Similarly, in Germany, 3% to 6% of school-age children experienced the same issue, while in Canada and New Zealand, about 4% to 10% of children faced anxiety during hospital stays (6). In Indonesia, 58% of all children have experienced illness (7). Reports also indicate that approximately 10.22% of children in Indonesia had health complaints that required treatment, with the figure still at 11.9% in DKI Jakarta (8).

Reports also indicate that approximately 10.22% of children in Indonesia had health complaints that required treatment, with the figure still at 11.9% in DKI Jakarta (6). To help children adapt and reduce anxiety, parental support as family is essential. Parental support fulfills the child's emotional needs in the hospital and includes physical presence, listening, and nonverbal support such as touch (9).

Based on preliminary research, interviews, and observations by the researcher in the Alamanda pediatric ward of RSUD X Jakarta, it was found that some children occasionally cried and asked to go home, looked for their parents even if they had just stepped away briefly, appeared sad, and withdrew socially. This behavior was especially evident during care procedures, particularly invasive ones like IV insertions, blood draws, and oral or injectable medication administration. Parents accompanying their children tried to provide support by holding hands, caressing, and comforting them.

Based on these observations, the researcher inquiring into conducting a study on the relationship between anxiety and parental support with hospitalization in school-age children at regional general X hospital Jakarta.

2. Material and methods

This study is a quantitative research project using a cross-sectional approach conducted from March to July 2024 in the Alamanda pediatric inpatient ward at RSUD X Jakarta. The sample consisted of 42 parents of school-age children (6–12 years old) who were hospitalized, selected using a total sampling technique.

The instruments used included the Hamilton Anxiety Rating Scale (HAM-A) to measure parental anxiety levels, a parental support questionnaire, and a modified version of the Spence Children Anxiety Scale (Parent Report) to assess children's anxiety levels. Data analysis was performed using SPSS version 27 software, employing Kendall's Tau C statistical test to examine the relationships between the independent and dependent variables.

The results of this data analysis were used to objectively describe and examine the anxiety between parents and their children during hospitalization.

3. Results

Table 1 Frequency Distribution of Parental Anxiety Levels in Parents of Hospitalized School-Age Children (6–12 Years) in the Alamanda Pediatric Ward, X Hospital, 2024

Parental Anxiety Level	Frequency (n)	Percentage (%)
No anxiety	**17**	**40.5**
Mild anxiety	7	16.7
Moderate anxiety	7	16.7
Severe anxiety	9	21.4
Panic	2	4.8
Total	42	100.0

Table 1 shows that the majority of respondents (17 or 40.5%) reported no anxiety, indicating that most parents of pediatric patients at RSUD X Jakarta did not feel anxious during their child's hospitalization in the Alamanda pediatric ward.

Table 2 Frequency Distribution of Parental Support for Hospitalized School-Age Children (6–12 Years) in the Alamanda Pediatric Ward, X Hospital, 2024

Parental Support	Frequency (n)	Percentage (%)
Moderate	14	33.3
High	**28**	**66.7**
Total	42	100.0

Table 2 shows the majority of respondents (28 or 66.7%) provided a high level of support to their children during hospitalization.

Table 3 Frequency Distribution of Hospitalization Anxiety Levels in School-Age Children (6–12 Years) in the Alamanda Pediatric Ward, X Hospital, 2024

Hospitalization Anxiety Levels	Frequency (n)	Percentage (%)
Mild Anxiety	**27**	**64.3**
Moderate Anxiety	6	14.3
Severe Anxiety	9	21.4
Total	42	100.0

Table 3 shows that the majority of children (27 or 64.3%) experienced mild hospitalization anxiety.

Table 4 Kendall's Tau C Correlation Test of the Relationship Between Parental Anxiety and Children's Hospitalization Anxiety in the Alamanda Pediatric Ward, X Hospital, 2024

Parental Anxiety Level	Hospitalization Anxiety Levels								*p-value*
	Mild Anxiety		Moderate Anxiety		Severe Anxiety		Total		
	n	%	n	%	n	%	n	%	
No Anxiety	15	35.7	1	2.4	1	2.4	17	40.5	.012
Mild Anxiety	2	4.8	4	9.5	1	2.4	7	16.7	
Moderate Anxiety	4	9.5	0	0	3	7.1	7	16.7	
Severe Anxiety	6	14.3	0	0	3	7.1	9	21.4	
Panic	0	0	1	2.4	1	2.4	2	4.8	
Total	27	64.3	6	14.3	9	21.4	42	100	

Table 4 shows that most parents who reported no anxiety had children with mild hospitalization anxiety (15 or 35.7%). Conversely, parents with panic-level anxiety had children who experienced severe hospitalization anxiety. The Kendall's Tau C test yielded a p-value of 0.012 ($\alpha < 0.05$), indicating a significant relationship between parental anxiety levels and children's hospitalization anxiety.

Table 5 Kendall's Tau C Correlation Test of the Relationship Between Parental Support and Children's Hospitalization Anxiety in the Alamanda Pediatric Ward, X Hospital, 2024

Parental Support	Hospitalization Anxiety Levels								*p-value*
	Mild Anxiety		Moderate Anxiety		Severe Anxiety		Total		
	n	%	n	%	n	%	n	%	
Moderate	2	4.8	3	7.1	9	21.4	14	33.3	
High	25	59.5	3	7.1	0	0	28	66.7	<.001
Total	27	64.3	6	14.3	9	21.4	42	100	

Table 5 shows that children whose parents provided high support predominantly experienced mild hospitalization anxiety (25 or 59.5%). On the other hand, moderate support was associated with a higher incidence of severe anxiety in children. The Kendall's Tau C test result of $p < 0.001$ ($\alpha < 0.05$) confirms a significant relationship between parental support and children's hospitalization anxiety.

4. Discussion

The results of this study showed that over 25% of respondents scored 3 to 4 on the anxiety questionnaire, particularly on indicators related to cognitive disturbances (31.0%) and feelings of depression (28.6%). These findings indicate that a number of parents experienced significant symptoms of anxiety while their children were hospitalized. This is supported by the data in Table 1, where 9 respondents (21.4%) experienced severe anxiety and 2 respondents (4.8%) experienced panic-level anxiety.

Stuart, Keliat, & Pasaribu (2016) explain that anxiety can occur at varying levels from mild to severe and at certain levels, it can disrupt a person's ability to carry out daily activities. In the context of child hospitalization, parental anxiety is often manifested through feelings of helplessness, doubts about medical personnel, a need for information, and a strong need for support during the care process (1). Physiological and behavioral responses due to anxiety can signal that an individual is attempting to activate coping mechanisms to adjust to the situation (10).

This study differs from that of Kustiawan, Cahyati, & Somantri (2024), who found that the majority of parents (54.8%) experienced moderate anxiety (11). Meanwhile, Wahyuni, Ardiana, & Rifai (2020) revealed that prior experience with medical procedures can lower parental anxiety because they are more familiar with what their child will go through (12).

The researcher observed that one factor contributing to the relatively low anxiety among some parents was the performance of nurses at RSUD X Jakarta, especially in the Alamanda ward. The nurses not only performed their clinical duties but also engaged in supportive communication, asking parents about their condition, accompanying children, and providing emotional support, which helped build trust and a sense of comfort.

In terms of parental support, the majority of respondents demonstrated a high level of support for their children. However, more than 30% of respondents provided only a moderate level of support, as indicated by their answers of "sometimes" to aspects such as listening to the child's complaints (33.3%), helping kindly (31.0%), being actively involved (33.3%), avoiding negative information (33.3%), and giving praise (33.3%). Furthermore, 32 respondents (76.2%) reported that they shared the doctor's diagnosis with their child, reflecting transparency in communication.

According to Friedman, Bowden, & Jones (2014), parental support is a critical factor in maintaining a child's emotional and psychosocial health. This is supported by Apriani & Sudiarsani (2020), who found that out of 134 respondents, 107 parents (79.9%) provided high support while their children were hospitalized. Understanding children's anxiety responses, such as aggression or regression, can help parents manage situations better and strengthen parenting after discharge (1).

The researcher concluded that the desire to help their children recover motivates parents to provide optimal support. This support reflects their hope and commitment to accelerating the child's healing process.

Hospitalization anxiety levels among children in this study were dominated by the mild category, with 50%–70% experiencing mild symptoms. However, emotional symptoms such as feeling sad when left alone (45.2%), crying when parents were absent (47.6%), and worrying about their condition (31%) were still reported. These findings show that children still experienced emotional anxiety triggered by hospitalization and their need for parental presence.

Hospitalization is known to interfere with child development and hinder recovery, especially when children refuse treatment (13). According to Hockenberry, Wilson, & Rodgers (2017), children's anxiety during hospitalization stems from several factors, including fear of separation, loss of control, and pain. A child's response depends on their age, past experiences, coping ability, and environmental support (1).

An unfamiliar hospital environment can also increase anxiety, making it important to create a child-friendly and comforting atmosphere. In the Alamanda ward of RSUD X Jakarta, the presence of a playroom and the communicative approach of the nurses helped create a more comfortable environment. Observations showed that children were still able to play and engage in activities, indicating the absence of severe anxiety.

A total of 15 parents (35.7%) showed no anxiety, and their children experienced only mild anxiety. This finding is consistent with studies by Herlina et al. (2023) and Marlianti & Risqiea (2023), indicating a connection between parental anxiety levels and children's anxiety. Statistical test results (p-value = 0.001) confirmed a significant relationship between the two variables (14,15).

Children often use their parents as their primary source of coping. When parents display anxiety, children tend to imitate or sense that anxiety. Conversely, when parents appear calm, they help the child feel more secure.

According to Kyle & Carman (2015), a child's response during hospitalization is influenced by the attitudes and behaviors of their parents, who serve as their main caregivers. Parental reactions to hospitalization such as helplessness and anxiety also affect the child, making the emotional bond within the family key to managing anxiety during hospitalization (16).

Additionally, the study found that 25 parents (59.5%) who provided high support had children who experienced only mild anxiety. This is consistent with Apriani & Sudiarsani (2020), who also demonstrated a significant relationship between parental support levels and children's anxiety levels (p-value < 0.001) (9).

Parental emotional support has proven effective in helping children manage anxiety during hospitalization (17). Simamora et al. (2021) through Spearman's correlation test, also confirmed a significant relationship between parental roles and children's anxiety levels (p = 0.002) (18). Moral and emotional support from parents fosters a sense of security that children need during a health crisis.

The researcher concluded that parental support plays a vital role in managing anxiety in school-age children during hospitalization. Although some children still experienced mild anxiety, the consistent presence of parents helped significantly reduce it. The hospital environment, healthcare approach, and quality of emotional relationships within the family are crucial factors supporting children's holistic recovery.

5. Conclusion

This study shows that there is a significant relationship between parental anxiety and parental support with the level of hospitalization anxiety in school-age children (6–12 years) at X Regional General Hospital or RSUD X Jakarta. Of the 42 respondents, 40.5% of parents did not experience anxiety, 66.7% provided high support, and 64.3% of children experienced mild anxiety. The Kendall's Tau C test showed a significant correlation between parental anxiety and child anxiety (p = 0.012), as well as between parental support and child anxiety (p < 0.001). These findings confirm that the higher the level of parental support, the lower the child's anxiety during hospitalization, and vice versa the higher the parent's anxiety, the more likely the child is to experience increased anxiety as well.

Compliance with ethical standards

Disclosure of conflict of interest

All authors declare that no competing interests were disclosed.

Statement of ethical approval

This study received ethical clearance from the Ethics Committee of Sint Carolus College of Health Sciences, with the approval number 026/KEPPKSTIKSC/IV/2024, and from the Ethics Committee of RSUD Tarakan Jakarta, with the approval number 036/KEPK/RSUDT/2024.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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