

## School-Age Children's Satisfaction Regarding the Care Provided for them During their Period of Hospitalization

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### Abstract

*School-age children's satisfaction regarding care provided during their hospitalization is very important to improve their health care outcomes. **Objective:** To identify the school-age children's satisfaction regarding the care provided for them during their period of hospitalization. **Research Design:** A descriptive research design was used to accomplish this study. **Settings:** This study was carried out at three pediatric inpatient medical wards of Alexandria University Children's Hospital at El-Shatby in Alexandria. **Subjects:** A convenient sample of 200 hospitalized school-age children, who ranged from 7 to 12 years and hospitalized for at least one week. **Tools:** Two tools were used to collect the necessary data and developed by the researchers. Tool one: "Children's characteristics and clinical data record". Tool two: "School-age children's satisfaction regarding the care provided during their hospitalization structured interview schedule". **Results:** The study findings showed that only 9% of hospitalized school-age children had a completely satisfied level of care provided during their hospitalization. Additionally, only 8.5% of the hospitalized school-age children had a completely satisfied level of physical care provided. Moreover, nineteen percent of hospitalized school-age children had a completely satisfied level concerning social care provided. Further, only twelve percent of hospitalized school-age children had a completely satisfied level of care concerning emotional care provided. **Conclusion:** Hospitalized school-age children had a low level of satisfaction regarding care provided.*

**Keywords:** School-age children, Satisfaction, Care provided, Period of hospitalization.

### Introduction

Illness and hospitalization are traumatic and extremely stressful experiences for school-age children and their parents however, those children are hospitalized to return to a state of health (Surman & Laing, 2021). Since, it is an interruption of the children's social environment, growth and development, habits, and their daily activities. Children during hospitalization are engaged in a

new different environment, full of restrictions and another routine, with unfamiliar people. Additionally, those children who undergo a lot of painful and frightening procedures. Unfortunately, it was emphasized that hospitalization can lead to psychological and behavioral disorders for children that may continue for months, years, or even longer, especially for children who have frequent and extended hospital admissions (Jepsen et al., 2019). Generally, it was estimated that more than 6

million children were hospitalized annually (Moore et al., 2019) Additionally, mortality of children and young adolescents has dropped worldwide. Globally according to UNICEF (2018) reports the mortality risk in the age group between 5 and 15 years was 0.9 million. In Egypt, it was estimated that nearly 9 thousand of children aged 5-14 were died in 2017 (UNICEF, 2018).

Child's development must be taken into considerations for providing appropriate care during their hospitalization. School-age children range between the ages of 7 and 11 and are in the concrete operational stage of cognitive development. School-age children can understand the cause-and-effect relationships more accurately. Additionally, those children can apply logic to a variety of situations and experiences. Children in this stage may feel threatened and afraid when having medical experiences. This is because children at this age can only apply logical reasoning to concrete situations or objects, not to abstract issues like illness or the significance of investigations and treatment (Hockenberry et al., 2017).

During hospitalization, children are subjected to numerous diagnostic and therapeutic interventions that cause pain, physical harm, and emotional distress. As hospitalized children experience many difficulties such as separation, physical discomfort and pain due to disease process and intense manipulation and all which have an impact on affective, emotional and psychological aspects. So, hospitalization represents a hostile and unfamiliar experience for those children. Consequently, healthcare provided during school-age hospitalization is not restricted to physical care; rather it involve emotional and social care for children and their parents, along with the social-cultural context of the care (Puriani & Allenidekania, 2020)

School-age children can demonstrate some understanding of the illness, but they are still susceptible to situations that make them feel powerless and helpless. In addition to being different from their normal life, the hospital routine includes predetermined schedules, a lack of privacy, and forced rest in addition to requiring assistance with mobility. A children's illness can

also exert control over them, causing them to become bored and frustrated, which can breed hostility and even depression. To improve children's satisfaction during their hospitalization, the children must receive appropriate and trauma-free care for their recovery. In this regard, it is advised that children spend time with their family and engage in recreational activities while in a hospital setting. Studies have shown that doing so, can lower stress and anxiety (Silva et al., 2017, Hockenberry et al., 2017).

Children satisfaction is a multifaceted, complex concept that is crucial in hospital care settings. It is regarded as the gold standard of care as a health indicator, making it a concern for pediatric nurses all over the world. Previous studies have shown that nursing care is one of the factors that has a significant impact on hospitalized children and is consistently found to be correlated with overall satisfaction with care. Additionally, children's satisfaction enables the inclusion of those children's perspective in the quality of care of the healthcare system (Loureiro et al., 2019).

Nowadays, pediatric nurses play a crucial role to provide the physical and psychosocial care for hospitalized school-age children to enhance their satisfaction (Linder & Seitz, 2017). The goal of the pediatric nurses is to help the child and caregivers to ensure that children receive better, less traumatic care, to facilitate their hospital stay and adapt well to the hospital environment. Regarding the three areas of physical, psychosocial and health education, nurses perform a crucial supportive role. The most essential of all measures is psychosocial nursing. Establishing harmonious relationships and communication are especially vital for hospitalized children. In this manner, nurses can reduce anxiety and tension in children when they are staying in the hospital (Loureiro, Figueiredo, et al. 2019, (Holmedal & Olsbakk, 2019).

### **Aim of The Study**

The aim of the present study is to identify the school-age children's satisfaction regarding the care provided for them during their period of hospitalization.

### **Research Question**

What is the school-age children's satisfaction regarding the care provided for them during their period of hospitalization?

## **Materials and Method:**

### **Materials:**

**Study Design:** A descriptive research design was used to accomplish this study.

**Settings:** The study was carried out at three pediatric inpatient medical wards of Alexandria University Children's Hospital at El-Shatby in Alexandria. Each ward contains 7 rooms, and each room contains approximately eight beds. It provides 24 hours services for children from Alexandria and the surrounding Governorates.

**Subjects:** A convenient sample of 200 school-age children, whose age ranged from 7 to 12 years and hospitalized for at least one-week was included in this study. The study sample was estimated based on Epi info program according to the following parameters: total population lasting three months =300, confidence level =95%, acceptable error=5%, expected frequency =50% and minimum sample size =168 school-age child.

**Tools:** Two tools were used to collect the necessary data.

**Tool one: Children's Characteristics and Clinical Data Record.** This tool was developed by a researcher to assess socio-demographic characteristics of children and their clinical data. It included two parts:

**Part I: Children's Socio- Demographic Characteristics,** which included child's age, gender, place of residence, level of education, number of siblings and birth order.

**Part II: Clinical Data of Children;** includes child's diagnosis, prescribed treatment, previous

hospitalization: if yes, how often, length of stay in hospital and reason for hospitalization.

### **Tool two: School-Age Children's Satisfaction Regarding the Care Provided During their Hospitalization Structured Interview Schedule:**

This tool was developed by the researcher after thorough review of the related literature (Gomes et al., 2015, Hockenberry & Wilson, 2017, Cooke et al., 2019) and to assess the school-age children's satisfaction regarding the care provided during their hospitalization. It included three parts as follows:

**Part I: Physical Care;** included four main items namely, pain, diet, treatment, and procedures. Satisfaction regarding care provided to pain management included seven subitems. Moreover, satisfaction concerning care provided to diet, treatment and procedures included 9 subitems for each. Total children's satisfaction regarding physical care included 34 subitems.

**Part II: Social Care;** included three main items namely, communication with health care professionals, orientation and admission criteria and visiting hours. Satisfaction regarding communication with health care professionals included 9 subitems. While satisfaction regarding orientation and admission criteria included three subitems and visiting hours included four subitems. Children's total satisfaction regarding social care included 16 subitems.

**Part III: Emotional Care;** included three main items namely, care during sleeping trouble, being sad and recreation. Where, satisfaction regarding care during sleeping trouble included nine subitems. Additionally, satisfaction regarding being sad and recreation included four and five subitems respectively. Total children's satisfaction regarding emotional care included 18 subitems.

**Scoring system for School-Age Children's Satisfaction Regarding the Care Provided During their Hospitalization:** Responses to each

subitem were recorded on three-point Likert scale categories as following; (1) “not satisfied”, (2) “satisfied to certain extend”, (3) “completely satisfied”. The scores of the subitems were summed-up and total score was divided by the three-point Likert scale, these scores were converted into three levels of satisfaction as following:

Level of satisfaction	Physical Care (34- 102)	Social Care (16-48)	Emotional Care (18 - 54)	Care Provided (68-204)
• Not satisfied	34-56	16-26	18-30	68-113
• Satisfied to certain extend	57-79	27-37	31-42	114-158
• Completely satisfied	80-102	38-48	43-54	159-204

## Method

Approval from the Research Ethics Committee of the Faculty of Nursing at Alexandria University was obtained. An Official approval was obtained from the directors of the study settings after explaining the aim of this study to collect the data. Two tools of the study were developed by the researchers after thorough review of recent and relevant literatures. The study tools were submitted to a jury of five experts in the Pediatric Nursing field for content validity (94.4%) and necessary modifications were done. Reliability of the tools were confirmed by using the appropriate statistical test, Cronbach’s Alpha test which was 0.914. A pilot study was carried out on 20 school-age children (10% of the subjects) to test the clarity and feasibility of the tools; accordingly, necessary modifications were done, and these children were excluded from the study subjects.

Every child was interviewed individually in the previously selected setting to collect the

necessary data using tools one and two. The duration of each interview lasted from 10-15 minutes. Data was collected over a period of four months extending from the beginning of May 2022 to the end of August 2022.

**Ethical Considerations:** Written informed consent was obtained from the caregivers of the school-age children after explaining the aim of the study to them and their children. Children’s participation on a voluntary base and caregivers had the right to withdraw their children from the study at any time were allowed. Confidentiality of data was considered.

**Statistical Analysis:** Collected data were revised, coded, and transferred into a specially designed format to be suitable for computer feeding. Data were analyzed using IBM SPSS software package version 20.0(Armonk, NY: IBM Corp). **Descriptive measures** used involved numbers and percentages for qualitative data, where minimum, maximum, mean ( $X^2$ ), median and standard deviation (SD) for quantitative data description. **Analytical statistics:** Chi-square test: for categorical variables, to compare between different groups. The 0.05 level was used as the cut off value for statistical significance. Cronbach's Alpha test: to assess reliability statistics.

## Results

The present findings revealed that nearly two thirds of children (62.5%) had less than nine years with a mean age  $8.30 \pm 1.63$ . While more than half of hospitalized school-age children (56%) were male as shown in table (1). Moreover, it was noticed that more than half of hospitalized school-age children (52.5%) were living in rural areas. It was apparent from table (2) that more than one quarter of hospitalized school-age children (29.5%) were admitted to the hospital with renal disorders, while slightly more than two thirds of hospitalized

school-age children (67%) had history of previous hospitalization.

Table (3) portrays physical care satisfaction of hospitalized school-age children. It was noticed that nearly half of hospitalized school-age children had a completely satisfied level of care regarding to notify the doctor during their suffering from pain, direct respond from the medical team to children notification to their pain suffering and received pain assessment from the medical team (48.5%, 47% & 49.5%, respectively).

It was noticed that most hospitalized school-age children informed about the purpose of the treatment (79%). Moreover, it was observed that nearly half of those children had satisfied to certain extend regarding to informed about the purpose of treatment (46.8%). Table (4) illustrates social care satisfaction of school-age children during their hospitalization. It was found that more than half of school-age children (53.6%) reported completely satisfied concerning their communication with a member of the health team when needed. In addition to that, more than two thirds of children (66.8%) had a completely satisfied regarding to interviewed on admission and told enough information. Furthermore, 19.0% of school-age children had a completely satisfied concerning the visitation period is suitable.

Slightly more than half of hospitalized school-age children have satisfied to certain extend concerning to quiet during the sleep time, medical and nursing interventions during the sleep time, temperature of the room and the nature of child's hospital sleep (51%, 51.5%, 50.5%, & 50.5%, respectively) as illustrated in table (5). Additionally, ninety percent of children reassured and calmed during their frighten. Further, more than half of those children (52.8%) had satisfied to certain extend level of care. Unfortunately, all hospitalized school-age children (100%) not allowed to watch television.

Figure (1) showed that only 8.5% of the hospitalized school-age children had a completely satisfied level of physical care provided. Additionally, only 19% of hospitalized school-age children had a completely satisfied level concerning social care provided. Moreover, just 12% of hospitalized school-age children had a completely satisfied level of care concerning emotional care provided. Further, nearly half of hospitalized school-age children (47.5%) had satisfied to certain extends level of care provided during their hospitalization.

## Discussion

The current study findings revealed that half of hospitalized school-age children reported that they are not satisfied with physical care provided during their hospitalization. This finding could be explained by the shortage of professional health care members and their lack of knowledge and practices about appropriate care provided to those children. In addition to, it may be due to dependency of health care members on child's companion who mainly is child's mother. This finding is in contrast with Newey et al.(2021) , finding that reported the response rate of satisfaction was higher than expected.

The findings of the current study provided a crucial insight into how gender differences in child health and how interacts with accessing health services. It was observed that more than half of hospitalized school-age children were males. This result could be justified by the reason that there are pediatric disorders more common incidence in male than female which recently called gender-based medicine (Piccini, Montagnani, & de Martino, 2018). Additionally, it may be due to socio-cultural disparities in gender preferential treatment, where

Egyptian families are more interested with males than females. This finding is in line with findings of Piccini, Montagnani, & de Martino, (2018) that reviewed the gender disparity among children. Moreover, another study done by Santos PM, Silva LF, Depianti JRB, Cursino EG, Ribeiro CA, (2016) reported the same finding.

Factually, renal disorders are reported as a worldwide medical condition among children with increasing frequency that impairs their quality of life (Zarifi, Sadeghi-Bojd, & Teimouri, 2022). Accordingly, the findings of the present study found that more than one quarter of hospitalized school-age children were admitted to the hospital with renal disorders. This finding can be interpreted by nearly two thirds of hospitalized school-age children had less than nine years and most of those children were lived in rural areas that associated with renal disorders (table, 1). Additionally, this finding is congruent with Ali, Rahman, & Karrar, (2012) that recorded most children admitted to hospital with renal diseases.

The number of admissions to hospital must be kept to a minimum, and length of hospital stay should be limited as much as possible. It is advisable to limit hospitalization to school-age children (Abdellatif et al., 2022). The current study findings reflected that nearly half of hospitalized school-age children who were informed about the purpose of the treatment had satisfied to certain extend concerning provided care. This result could be justified by that certain treatments require parent's consent to be applied with written in format includes purpose, risks, and complications. While other treatments are considered routine care. Hospitals really have a high admission rate of children in their medical wards with different ages. This finding is congruent with Bazaraa, El Houchi, & Rady, (2012) findings who revealed that highly number of children admitted to the hospital.

The finding of current study noticed that less than half of hospitalized school-age children

reported that they were not satisfied with social care provided during their hospitalization. This finding is in contrast with Kenyon et al., (2020) that recommended that child health care outcome was improved through social needs intervention. Similarly, Li et al., (2021) finding supported the current study finding that reported children in community as a general who exposed to any stressful situation need social support.

The result of the current study reflected that slightly more than half of hospitalized school-age children have reassured and calmed during their fear and distress. This could be justified by all of pediatric nurses in hospital wards are females that have the sense of maternity. In addition to that, nearly two thirds of hospitalized school-age children were less than nine years and require attention and assurance (table, 1). This finding is in congruent with Carter et al., (2021) finding who found that pediatric nurses was provided highly reassurance for children.

The finding of the current study revealed that all hospitalized school-age children weren't allowed to watch television. This finding could be related to TV present in some rooms and if present not working or maybe need maintenance. In addition to that, there is a high number of children in the room. This finding is in contrast with Boztepe et al., (2017) result that illustrated that rooms in hospitals have to supply with TV and internet access.

Emotional care provided for hospitalized school-age children involved sleeping troubles, fear, and recreation. Fortunately, nearly half of hospitalized school-age children reported that had satisfied to a certain extend with emotional care provided during their hospitalization. This finding is contradiction with Williams et al., (2018) findings that emphasized that hospitalized school-age children needed emotional support. This finding related to no specific psychological care team for children present in the hospital to provide

emotional care, and the high number of children in the ward. So, pediatric nurses are overloaded, have more duties, and don't have enough time to provide emotional care.

Finally, nearly half of hospitalized school-age children reported being satisfied to certain extends with care provided during their hospitalization. These results could be interpreted by higher admissions rate of children in medical wards with different diagnosis as shown in table (1) that require different medical and nursing care. In addition to that, may be due to lack of supplies and treatment. In the same line, Lim et al., (2018) reported a positive effect relationship between provided quality of care with overall children's satisfaction.

#### **CONCLUSION:**

It can be concluded that nearly half of hospitalized school-age children were satisfied to certain extend level of care provided during their hospitalization. While only a small percent of hospitalized school-age children had a completely satisfied level of care provided during their hospitalization. Moreover, less than half of hospitalization were not satisfied level of care provided during their hospitalization.

#### **RECOMMENDATIONS:**

**Based on the previous findings, the following recommendations are suggested:**

1. Updated guidelines as well as a manual booklet for care provided should be provided for pediatric nurses.
2. Continuous and regular health educational programs are essential for pediatric nurses about care provided (physical, social, and emotional care) for hospitalized school-age children.
3. Pediatric hospitals have to introduce standardized preparatory (orientation) programs to familiarize the children with the hospitals, their routines, anticipated treatment that the children may need

according to child's age and development and involving their parents in their care.

4. Pediatric hospitals should provide additional psychosocial services for children and families.

**Table. 1: Socio-Demographic Characteristics of Hospitalized School-Age Children: (n=200)**

<b>Children’s Socio-Demographic Characteristics (n=200)</b>	<b>No.</b>	<b>%</b>
<b>Age (years)</b>		
<9	125	62.5
≥9	75	37.5
Min. – Max.	5.0 –12.0	
Mean ± SD.	8.30 ± 1.63	
<b>Sex</b>		
Male	112	56.0
Female	88	44.0
<b>Residence</b>		
Rural	105	52.5
Urban	95	47.5
<b>Level of education</b>		
No read and no write	4	2.0
Primary school	196	98.0
<b>Number of siblings</b>		
1-2	112	56.0
3-4	80	40.0
5 and more	8	4.0
<b>Birth order</b>		
First	75	37.5
Second	78	39.0
Third	34	17.0
Fourth	12	6.0
Others	1	0.5

SD: Standard Deviation



**Table 2: Clinical Data of Hospitalized School-Age Children: (n=200)**

Children's Clinical data	No.	%
<b>Diagnosis:</b>		
• Renal disorders	59	29.5
• Bleeding disorders	26	13.0
• Respiratory disorders	26	13.0
• Inflammatory disorders	36	18.0
• Metabolic disorders	11	5.5
• Neurological disorders	29	14.5
• Immunological disorders	13	6.5
<b>Prescribed Treatment#</b>		
• Antibiotics	143	71.5
• Non-steroidal Anti inflammatory	107	53.5
• Antiemetics	33	16.5
• Bronchodilators	23	11.5
• Diuretics	24	12.0
• Minerals and vitamins	15	7.5
• Blood and blood products	49	24.5
• Intravenous (I.V) fluids	51	25.5
• Others	47	23.5
<b>Previous Hospitalization:</b>		
• Yes	134	67.0
• No	66	33.0
<b>If yes, how often; (times)</b>	<b>(n = 134)</b>	
• 1-	42	31.3
• 5-	29	21.6
• 10-	22	16.4
• 15-	6	4.5
• 20 times and more.	35	26.1
Min. – Max.	1.0 – 200.0	
Mean ± SD.	19.50 ± 31.71	
Median	8.0	
<b>Duration Spent in Hospital:</b>	<b>(n = 134)</b>	
• Less than week	26	19.4
• Week to less than 2 weeks	58	43.3
• From 2 weeks or more	50	37.3
Min. – Max.	1.0 – 35.0	
Mean ± SD.	11.90 ± 7.80	
Median	9.0	
<b>Cause for previous hospitalization:</b>	<b>(n = 134)</b>	
• Fever	35	26.1
• Oliguria	9	6.7
• Anemia	12	9.0
• Nephritis	40	29.9
• Coughing	16	11.9
• Pneumonia	10	7.5
• Joint Inflammation	2	1.5
• Hepatitis	1	0.7
• Convulsion	5	3.7
• Others	4	3.0

#: More than one answer

**Table 3: Provided Physical Care Satisfaction of Hospitalized School-Age Children: (n=200)**

Physical Care Child satisfaction	Not Apply		Apply							
			Level of satisfaction							
			No.	%	Not Satisfied		Satisfied to certain extend		Completely Satisfied	
	No.	%			No.	%	No.	%	No.	%
<b>A. Pain (n=113)</b>										
1. Is the doctor notified.	14	12.4	<b>99</b>	<b>87.6</b>	14	14.1	37	37.4	48	48.5
2. Respond of medical team to child's pain directly.	13	11.5	<b>100</b>	<b>88.5</b>	16	16.0	37	37.0	47	47.0
3. medical team assesses child's pain.	16	14.2	<b>97</b>	<b>85.8</b>	15	15.5	34	35.1	48	49.5
4. Sit child in comfortable position.	51	45.1	<b>62</b>	<b>54.9</b>	5	8.1	28	45.2	29	46.8
5. Distract child's attention by:	91	80.5	<b>22</b>	<b>19.5</b>	2	9.1	9	40.9	11	50.0
- toys			7	31.8						
- Watch TV			0	0.0						
- Play with mobile games			15	68.2						
6. Give child warm fluids	56	49.6	<b>57</b>	<b>50.4</b>	8	14.0	32	56.1	17	29.8
7. Perform warm compresses on site of pain	73	64.6	<b>40</b>	<b>35.4</b>	5	12.5	23	57.5	12	30.0
<b>B. Nutrition: (n=200)</b>										
8. Type of food	-	-	-	-	45	22.5	103	51.5	52	26.0
9. Time of meals	-	-	-	-	39	19.5	92	46.0	69	34.5
10. Meal serving format	-	-	-	-	42	21.0	91	45.5	67	33.5
11. Cleanliness of food	-	-	-	-	39	19.5	87	43.5	74	37.0
12. Cleanliness of staff responsible for child's meals	-	-	-	-	34	17.0	83	41.5	83	41.5
13. Oder of food	-	-	-	-	40	20.0	94	47.0	66	33.0
14. Taste of food	-	-	-	-	37	18.5	100	50.0	63	31.5
15. Amount of food	-	-	-	-	34	17.0	89	44.5	77	38.5
16. Variety of meals	-	-	-	-	43	21.5	98	49.0	59	29.5
<b>C. Treatment:</b>										
17. Commitment of treatment administration in its time	7	3.5	<b>193</b>	<b>96.5</b>	19	9.8	83	43.0	91	47.2
18. Child informed about treatment dose.	38	19.0	<b>162</b>	<b>81.0</b>	28	17.3	78	48.1	56	34.6
19. Child informed about how to take the treatment (Route of administration)	40	20.0	<b>160</b>	<b>80.0</b>	29	18.1	73	45.6	58	36.3
20. Child informed about schedule of treatment (frequency of treatment per day)	47	23.5	<b>153</b>	<b>76.5</b>	31	20.3	73	47.7	49	32.0
21. Child informed about purpose of treatment	42	21.0	<b>158</b>	<b>79.0</b>	31	19.6	74	46.8	53	33.5
22. Child informed about side effects of treatment	93	46.5	<b>107</b>	<b>53.5</b>	27	25.2	52	48.6	28	26.2
23. Child informed about how long treatment prescribed	67	33.5	<b>133</b>	<b>66.5</b>	45	33.8	53	39.8	35	26.3
24. Child alerted about any warning signs if happened report physician immediately.	30	15.0	<b>170</b>	<b>85.0</b>	35	20.6	78	45.9	57	33.5
25. Child told time of follow up.	43	21.5	<b>157</b>	<b>78.5</b>	32	20.4	80	51.0	45	28.7
<b>D. Procedures:</b>										
26. Child's caregiver approved before any medical or nursing procedure is required	44	22.0	<b>156</b>	<b>78.0</b>	18	11.5	57	36.5	81	51.9
27. Explanation about type of procedure child will have.	41	20.5	<b>159</b>	<b>79.5</b>	28	17.6	78	49.1	53	33.3
28. Child informed about purpose of procedure.	45	22.5	<b>155</b>	<b>77.5</b>	31	20.0	81	52.3	43	27.7
29. Child explained what will happen during and after the procedure	45	22.5	<b>155</b>	<b>77.5</b>	30	19.4	83	53.5	42	27.1

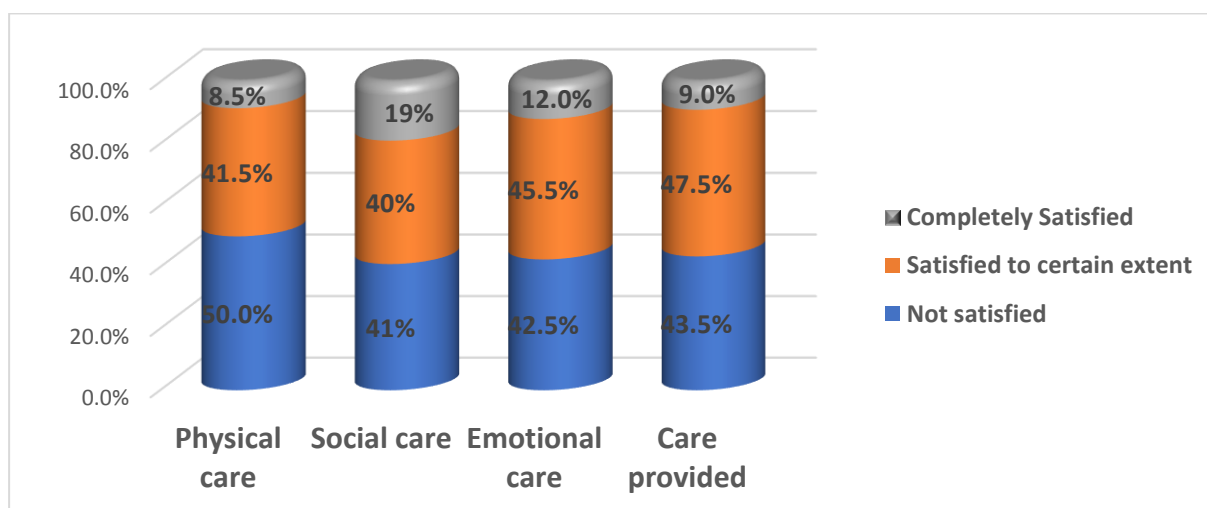
Physical Care Child satisfaction	Not Apply		Apply							
			Level of satisfaction							
			No.	%	Not Satisfied		Satisfied to certain extend		Completely Satisfied	
	No.	%			No.	%	No.	%	No.	%
30. Child prepared for any medical or nursing procedure.	27	13.5	173	86.5	33	19.1	96	55.5	44	25.4
31. Child allowed participating during procedure.	33	16.5	167	83.5	32	19.2	87	52.1	48	28.7
32. Child get a chance to ask questions during the procedure.	24	12.0	176	88.0	32	18.2	91	51.7	53	30.1
33. Child caregivers have the right to refuse the procedure.	46	23.0	154	77.0	27	17.5	76	49.4	51	33.1
34. Child and parents are informed by the results of the procedure.	36	18.0	164	82.0	37	22.6	76	46.3	51	31.1

**Table 4: Social Care Satisfaction of Hospitalized School-Age Children.**

Social Care satisfaction	Not Apply		Apply							
			Level of satisfaction							
			No.	%	Not Satisfied		Satisfied to certain extend		Completely Satisfied	
	No.	%			No.	%	No.	%	No.	%
<b>Communication with health care and professional (n=200)</b>										
1. Child communicates with a member of health team when needed.	8	4.0	192	96.0	33	17.2	56	29.2	103	53.6
2. Child told about daily routine of the hospital.	53	26.5	147	73.5	24	16.3	55	37.4	68	46.3
3. Child permitted to ask for help when need (physical-psychological-social)	22	11.0	178	89.0	33	18.5	74	41.6	71	39.9
4. Child feels comfortable when talk to a doctor or nurse.	14	7.0	186	93.0	39	21.0	100	53.8	47	25.3
5. Child accessed reach to doctor or nurse easily at any time.	23	11.5	177	88.5	41	23.2	97	54.8	39	22.0
6. Child's caregivers are involved in making decisions about type of treatment	38	19.0	162	81.0	37	22.8	86	53.1	39	24.1
7. Child's values, preferences and needs are respected	11	5.5	189	94.5	27	14.3	84	44.4	78	41.3
8. There's interest for child and family.	5	2.5	195	97.5	26	13.3	96	49.2	73	37.4
9. doctor or nurse answered any questions	11	5.5	189	94.5	36	19.0	89	47.1	64	33.9
<b>Orientation and admission criteria (n=200)</b>										
10. Child interviewed on admission and told enough information (e.g., history of illness)	1	0.5	199	99.5	16	8.0	50	25.1	133	66.8
11. Child oriented to different hospital places.	109	54.5	91	45.5	19	20.9	46	50.5	26	28.6
12. Child informed about hospital policies upon admission.	97	48.5	103	51.5	32	31.1	48	46.6	23	22.3
<b>Visiting hours (n=200)</b>										
13. Child notified about permitted time for relatives visit.	81	40.5	119	59.5	23	19.3	67	56.3	29	24.4
14. Child informed about limited number of personnel allowed to visit	74	37.0	126	63.0	29	23.0	74	58.7	23	18.3
15. Visiting times are convenient	15	7.5	185	92.5	70	37.8	80	43.2	35	18.9
16. visitation period is suitable.	16	8.0	184	92.0	70	38.0	79	42.9	35	19.0

**Table 5: Emotional Care Satisfaction of Hospitalized School-Age Children: (n=200)**

Emotional care satisfaction	Not Apply		Apply							
			Level of satisfaction							
	No.	%	No.	%	Not Satisfied		Satisfied to certain extent		Completely Satisfied	
					No.	%	No.	%	No.	%
<b>A. Sleeping troubles:</b>										
1. Sleeping and waking up time.	-	-	-	-	49	24.5	86	43.0	65	32.5
2. Preparing room at sleep time.	-	-	-	-	57	28.5	94	47.0	49	24.5
3. doors and windows are locked at sleep time	-	-	-	-	52	26.0	94	47.0	54	27.0
4. Sleep time is quiet.	-	-	-	-	51	25.5	102	51.0	47	23.5
5. Lighting during sleep time	-	-	-	-	58	29.0	89	44.5	53	26.5
6. Medical and nursing sleep time interventions	-	-	-	-	52	26.0	103	51.5	45	22.5
7. Room ventilation	-	-	-	-	45	22.5	99	49.5	56	28.0
8. Room temperature	-	-	-	-	50	25.0	101	50.5	49	24.5
9. nature of child's hospital sleep: sleep hours/day	-	-	-	-	52	26.0	101	50.5	47	23.5
<b>B. Fear:</b>										
10. A nurse or a doctor sitting with child.	35	17.5	<b>165</b>	<b>82.5</b>	27	16.4	47	28.5	91	55.2
11. Child allowed to talk with a nurse or a doctor about the frighten things.	32	16.0	<b>168</b>	<b>84.0</b>	28	16.7	64	38.1	76	45.2
12. Child reassured and calmed	20	10.0	<b>180</b>	<b>90.0</b>	22	12.2	95	52.8	63	35.0
13. Child given a favorable toy	73	36.5	<b>127</b>	<b>63.5</b>	13	10.2	74	58.3	40	31.5
<b>C. Recreation:</b>										
14. Good place to play/kids' area.	81	40.5	<b>119</b>	<b>59.5</b>	21	17.6	49	41.2	49	41.2
15. Different Playing materials are available	101	50.5	<b>99</b>	<b>49.5</b>	10	10.1	51	51.5	38	38.4
16. Child permitted to play in the medical ward or with other hospitalized children.	74	37.0	<b>126</b>	<b>63.0</b>	24	19.0	65	51.6	37	29.4
17. Child allowed to watch television	200	100.0	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>
18. The medical or nursing team celebrates with children for social events (Feasts, Ramadan, and Mother's Day).	54	27.0	<b>146</b>	<b>73.0</b>	18	12.3	69	47.3	59	40.4



**Figure. 4.1: Total Score of Hospitalized School-Age Children's Satisfaction Regarding to Physical, Social, Emotional and Care Provided.**

**References:**

- Abdellatif, A. M., Tehewey, M. M. A., Rady, M. H., Abdelhafez, A. M., Eldeeb, M. A., & Gabal, H. A. M. S. (2022). Appropriateness of hospital admissions in a university hospital in Egypt: Analyzing a preintervention phase. *Indian Journal of Public Health, 66*(2), 113.
- Ali, E.-T. M., Rahman, A. H., & Karrar, Z. A. (2012). Pattern and outcome of renal diseases in hospitalized children in Khartoum State, Sudan. *Sudanese Journal of Paediatrics, 12*(2), 52.
- Bazaraa, H. M., El Houchi, S., & Rady, H. I. (2012). Profile of patients visiting the pediatric emergency service in an Egyptian university hospital. *Pediatric emergency care, 28*(2), 148-152.
- Boztepe, H., Çınar, S., & Ay, A. (2017). School-age children's perception of the hospital experience. *Journal of Child Health Care, 21*(2), 162-170.
- Carter, B., Harris, J., & Jordan, A. (2021). How nurses use reassurance to support the management of acute and chronic pain in children and young people: An exploratory, interpretative qualitative study. *Paediatric and Neonatal Pain, 3*(1), 36-44.
- Cooke, J. E., Kochendorfer, L. B., Stuart-Parrigon, K. L., Koehn, A. J., & Kerns, K. A. (2019). Parent-child attachment and children's experience and regulation of emotion: A meta-analytic review. *Emotion, 19*(6), 1103.
- Gomes, G. C., Xavier, D. M., Pintanel, A. C., Farias, D. H. R., Lunardi, V. L., & Aquino, D. R. (2015). Meanings attributed by family members in pediatrics regarding their interactions with nursing professionals. *Revista da Escola de Enfermagem da USP, 49*, 951-957.
- Hockenberry, M., Wilson, D., & Rodgers, C. (2017). Wong's essentials of pediatric nursing 10th Edition. In: Canada: Elsevier Health Sciences.
- Holmedal, M. B., & Olsbakk, E. F. (2019). *Ekspert i eget liv-Barnas erfaringer fra sykehuset* NTNU].
- Jepsen, S. L., Haahr, A., Eg, M., & Jørgensen, L. B. (2019). Coping with the unfamiliar: how do children cope with hospitalization in relation to acute and/or critical illness? A qualitative metasynthesis. *Journal of Child Health Care, 23*(4), 534-550.
- Kenyon, C. C., McPeak, K. E., & Fiks, A. G. (2020). Improving Child Health Care Outcomes Through Social Needs Intervention—A Signal. *JAMA Network Open, 3*(6), e206456-e206456.
- Li, A., Wang, S., & Liu, X. (2021). Childhood psychological maltreatment and life satisfaction among Chinese young adults: The mediating role of internalizing problems and the buffering role of social support. *Current Psychology, 1*-11.
- Lim, J., Lim, K., Heinrichs, J., Al-Aali, K., Aamir, A., & Qureshi, M. (2018). The role of hospital service quality in developing the satisfaction of the patients and hospital performance. *Management Science Letters, 8*(12), 1353-1362.
- Linder, L. A., & Seitz, M. (2017). Through their words: sources of bother for hospitalized children and adolescents with cancer. *Journal of Pediatric Oncology Nursing, 34*(1), 51-64.
- Loureiro, F., Figueiredo, M. H., & Charepe, Z. (2019). Nursing care satisfaction from school-aged children's perspective: An integrative review. *International Journal of Nursing Practice, 25*(6), e12764.
- Moore, B. J., Freeman, W. J., & Jiang, H. J. (2019). Costs of pediatric hospital stays, 2016: statistical brief# 250.
- Newey, C. R., George, P., Honomichl, R., Gomes, J., Maraj, A., Kinzy, T., . . . Hang, D. (2021). Satisfaction with care and satisfaction with decision making are similar regardless of staffing model in a

neurocritical care unit. *Neurocritical Care*, 34(1), 13-20.

- Piccini, P., Montagnani, C., & de Martino, M. (2018). Gender disparity in pediatrics: a review of the current literature. *Italian journal of pediatrics*, 44(1), 1. <https://doi.org/10.1186/s13052-017-0437-x>
- Puriani, D., & Allenidekania, A. (2020). Pemanfaatan Teknologi Dalam Menurunkan Kecemasan Pasien Anak Jelang Tindakan Operasi; Tinjauan Literatur. *Viva Medika: Jurnal Kesehatan, Kebidanan Dan Keperawatan*, 14(01), 41-56.
- Santos, P. M. d., Silva, L. F. d., Depianti, J. R. B., Cursino, E. G., & Ribeiro, C. A. (2016). Nursing care through the perception of hospitalized children. *Revista Brasileira de Enfermagem*, 69, 646-653.
- Silva, S. G. T. d., Santos, M. A., Floriano, C. M. d. F., Damião, E. B. C., Campos, F. V. d., & Rossato, L. M. (2017). Influence of Therapeutic Play on the anxiety of hospitalized school-age children: Clinical trial. *Revista Brasileira de Enfermagem*, 70, 1244-1249.
- Surman, D., & Laing, J. (2021). During Illness and Hospitalisation. *Wong's Nursing Care of Infants and Children Australia and New Zealand Edition-E-Book: FOR PROFESSIONALS*, 467.
- United Nations Children's Fund, World Health Organization, World Bank Group, & United Nations. Levels and trends in child mortality 2018.
- Williams, N., Petkus, J., Clark, H., & Kazemi, R. (2018). Supporting Families and Children in Hospital: Policies and Practical Approaches to Pediatric Psychosocial Care.
- Zarifi, E., Sadeghi-Bojd, S., & Teimouri, A. (2022). Clinical Signs and Causes of Chronic Kidney Disease in Pediatrics. *International Journal of Pediatrics*, 10(8), 16434-16448.