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## A study to assess the parent satisfaction level as an outcome of nursing care behavior for children admitted in pediatric ward in a selected hospital of Kolkata, West Bengal

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### Abstract

**Background:** In the modern era the most important goal of the modern healthcare management system is to provide high quality medical services including nursing care. Meeting the fundamental needs of the pediatric patients is an important aspect as they belong to the minor age group which is the vulnerable age group.

**Materials and Method:** A descriptive study was conducted at a selected tertiary hospital in Kolkata, West Bengal to assess parent satisfaction level as an outcome of nursing care behavior for children admitted in the pediatric ward. The conceptual framework was based on “The Donabedian model” for evaluating the quality of health care services. The participants of the study were 100 parents of hospitalized children, were included by using purposive sampling technique. Background information of the parent and child were collected by using self-reporting semi structured questionnaire and parent satisfaction was measured by administering self-reporting 5point Likert Rating scale.

**Results:** Data were analyzed and interpreted using SPSS version 26 software by descriptive and inferential statistics. Findings revealed that 72%, 16% and 12% parents were average satisfied, highly satisfied and low satisfied respectively with the care provided to the children admitted in the pediatric ward. In the domain of “Care & Cure” 73%, 17% and 10% parents were average satisfied, highly satisfied and low satisfied respectively. In the “Parental Participation” domain 75%, 17% and 8% parents were average satisfied, highly satisfied and low satisfied respectively and in the domain of “Professional Attitude” of the nurses 75%, 20% and 5% parents were average satisfied, highly satisfied and low satisfied respectively. The study also showed that there were significant association between parent satisfaction level and educational qualification ( $\chi^2 = 6.801$ ,  $df = 2$ , 0.05 level of significance) of parent and occupation of parent ( $\chi^2 = 7.897$ ,  $df = 3$ , 0.05 level of significance).

**Conclusion:** Hence, on the basis of the study findings it can be concluded that the overall parent satisfaction level was average regarding the nursing care behavior provided to the child admitted in the pediatric ward.

**Keywords:** parent, satisfaction level, nursing care behavior

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### Introduction

Providing high quality medical care including nursing care is one of the most important goals of modern health care systems [1]. In the present days patient satisfaction is an important indicator of evaluating the quality of nursing care [2]. Over the past 20 years patient satisfaction surveys has become the essential sources of information for identifying the gaps and developing the effective action plan to improve the quality of nursing care [3]. In the pediatric setting as the children are minor they are unable to personally express their needs, experiences and feelings. So, the parents of children admitted to the pediatric departments are the legal guardians of children and are responsible for evaluating the satisfaction level of nursing care provided to their hospitalized children [4]. Satisfaction level with nursing care can be defined as the difference between the expectations by the patient and/or its family members regarding the nursing care and actual degree of care which has been provided to them [1]. Presently, in the care of pediatric patient the approach is being implemented is Family Centered Care (FCC) which recognizes family as the major participant in child care and families have the rights and responsibilities to participate in determining and satisfying the health care needs of their children [5]. Beside this, there are various psychosocial, environmental, situational, demographic factors those can influence the parental satisfaction regarding nursing care provided to their children. From the admission of a child till the discharge it is very crucial to provide effective and informed nursing care in a well-behaved manner, so that the satisfaction level of the child as well as of the parents can be improved. So, the assessment of parental satisfaction is an important aspect of holistic nursing care provided to a pediatric patient and towards the family which helps to reveal the parent’s attitude towards the nursing care.

### Objectives of the study

- To assess the parent satisfaction level as an outcome of nursing care behavior for children admitted in pediatric ward in a selected hospital.
- To find out association between parent satisfaction level and selected demographic variables.

**Material and method**

**Study Design:** Descriptive survey research design

**Study Setting:** Pediatric ward of Apollo Gleneagles Hospitals, Kolkata

**Study Duration:** 04<sup>th</sup> December, 2021 to 30<sup>th</sup> December, 2021

**Sample Size:** 100 parents of children admitted in the pediatric ward of Apollo Gleneagles Hospitals, Kolkata.

**Sample Selection Method:** In this study, subjects were selected by Non-probability purposive sampling technique

**Inclusion Criteria**

1. Parents of children who were admitted with medical problems at the time of data collection.
2. Parents having children aged between 1 year – 15 years
3. Parents of children who stayed at hospital for more than 3 days.
4. Parents who stayed in the hospital with their children not shorter than 12 hours per day.
5. Parents who were willing to participate in the study.
6. Parents, who were able to understand, read and write in English/ Bengali/ Hindi language.

**Exclusion Criteria**

1. Parents whose children were critically ill.
2. Parents of children who were admitted for surgery.

**Description of data collection tools**

The data were collected by using questionnaire on background information of parent and child and satisfaction rating scale of parent of children who are admitted in pediatric ward. The questionnaire on background information of parent and child consisted of 14 items to collect the demographic information of parents and children. The satisfaction rating scale of parent of children who are admitted in pediatric ward was a 5 point Likert rating scale, consisted of 25 questions. The tool was developed by the researcher based on the 'EMPATHIC' (Empowerment of Parents in the Intensive Care) questionnaire developed by Latore *et al* (2011)<sup>[6]</sup>. There were 3 domains in the tool namely "Care & cure", "Parental participation" and "Professional attitude" which assessed the satisfaction level of parent in respective areas. The "Care & cure" and "Professional attitude" domains contained 10 questions each and the domain "Parental participation" contained 5 questions. For each question, the respondent was provided with 5 alternatives to give her response i.e. 'Strongly agree', 'Agree', 'Neutral', 'Disagree', 'Strongly disagree'. The alternatives were arranged in such a way that the scoring system for all items will remain the same on the basis of their acceptability, i.e. 5, 4, 3, 2, 1. There were no negative marking question. Hence, Maximum possible score is, 125 and Minimum possible score is, 25.

**Ethical consideration**

Ethical approval has obtained from the Institutional Ethical Committee, Apollo Gleneagles Hospitals, Kolkata. Written informed consents were taken from the parents and verbal consents were taken from the children.

**Data collection procedure**

Data was collected over 1 month of period in the month of January 2021. Each day the duration of data collection was 8 hours. Participants were selected by keeping in mind the inclusion and exclusion criteria. Self-introduction was given and rapport was established with the participants and the purpose of the study and other information was explained to the participants. Prior written informed consent were explained and obtained from the participants and verbal consent were taken from the child. Anonymity and confidentiality of the participants were assured. Self-reporting background information questionnaire and 5 point Likert scale was provided to them and they were requested to complete it as per the given instructions. At last heartfelt gratitude was conveyed to the participants and children for their active participation and kind co-operation.

**Statistical analysis**

The collected data were analyzed by using descriptive and inferential statistics according to the stated objectives. Frequency and percentage were used to analyze the background information, parent satisfaction level regarding nursing care behavior provided in terms of three domains such as Care and cure, Parental participation and Professional attitude. Chi square test were done to find out the association between parent satisfaction level and selected demographic variables such as, age of parents, education, occupation and monthly income of parents, age, birth order of children, mode of admission to the hospital and history of previous hospitalization.

**Result**

In the present study the obtained data was organized, tabulated, analyzed and interpreted under 3 sections.

**Section-I: Description of sample characteristics**

**Table 1:** Findings related to frequency and percentage distribution of background information of the parents of children admitted in the pediatric ward

**N=100**

Sl. No.	Characteristics	Frequency	Percentage (%)
1.	Age of parents (in years)		
	23-31	38	38
	32-40	42	42
	41-49	20	20
2.	Religion		
	Hindu	79	79
	Muslim	18	18
	Christian	03	03
3.	Language spoken (Preferably)		
	Bengali	63	63
	English	08	08
	Hindi	29	29
4.	Area of living		
	Rural	27	27
	Semi urban	33	33
	Urban	40	40
5.	Educational qualification of parent		
	Primary	05	05
	Secondary	21	21
	Higher Secondary	20	20
	Graduate	34	34
	Post graduate and above	20	20
6.	Occupation of parent		
	Business	14	14
	Service	17	17
	Self employed	15	15
	Homemaker	54	54
7.	Monthly family income		
	Above Rs.50000	19	19
	Rs.40001 – 50000	09	09
	Rs.30001 – 40000	15	15
	Rs.20001 – 30000	25	25
	Rs.10001 – 20000	19	19
	Below Rs.10000	13	13

Data presented in Table 1 revealed that the majority of the parents (42%) were belong to the age group of 32-40 years. Maximum of the parents were Hindu (79%) and Bengali speaking (63%). Majority of the parents were from urban areas (40%). The table describes that in respect of educational qualification maximum parents were graduate (34%). Majority number of parents were home maker (54%). Maximum parents (25%) were having a monthly family income of Rs.20, 001 – 30,000/-

**Table 2:** Findings related to frequency & percentage distribution of background information of the children admitted in the pediatric ward

**N=100**

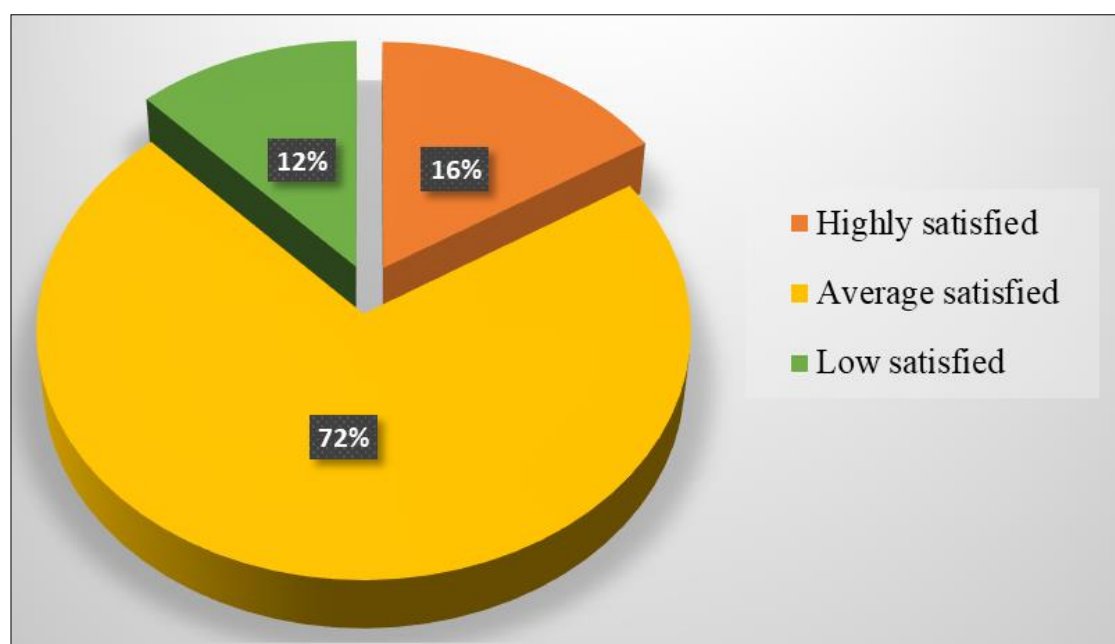
Sl. No.	Characteristics	Frequency	Percentage (%)
1.	Age of child		
	Toddler (1 year – 3 years)	28	28
	Pre-schooler (3 years – 6 years)	29	29
	Schooler (6 years – 12 years)	26	26
	Adolescent (12 years – 15 years)	17	17
2.	Gender of child		
	Boy	48	48
	Girl	52	52
3.	Birth order of the child		
	Single child	38	38
	1 <sup>st</sup> child	30	30
	2 <sup>nd</sup> child	23	23

	3 <sup>rd</sup> child or more	09	09
4.	Reason for admission		
	Neurological disorder	18	18
	Cardiac & respiratory disorder	10	10
	Gastrointestinal disorder	12	12
	Renal disorder	06	06
	Orthopedic disorder	07	07
	Metabolic disorder	08	08
	Accidental injuries	13	13
	Fever	18	18
	Others	08	08
5.	Mode of admission to the hospital		
	Planned	30	30
	Unplanned/Emergency	70	70
6.	History of previous hospitalization at Apollo Gleneagles Hospitals, Kolkata		
	Yes	41	41
	No	59	59
7.	Satisfaction level of parents with the nursing care provided to the children during previous hospitalization		
	Very satisfied	06	14.63
	Satisfied	29	70.74
	Neither satisfied nor dissatisfied	06	14.63

Data presented in Table 2 depicts that maximum number of children were of pre-schooler age (29%). Among the total children 52% were girl and 48% were boy child. Majority of the children were single child (38%). Maximum number of the children were admitted with complain of fever (18%) and neurological disorders (18%). Among all of the children maximum were admitted to the hospital due to emergency condition (70%) and rest were the planned admission (30%). Majority of children (59%) had no history of previous hospitalization at Apollo Gleneagles Hospitals, Kolkata and those who had history of previous hospitalization at the same hospital 70.74% of parents were satisfied with nursing care during previous hospitalization.

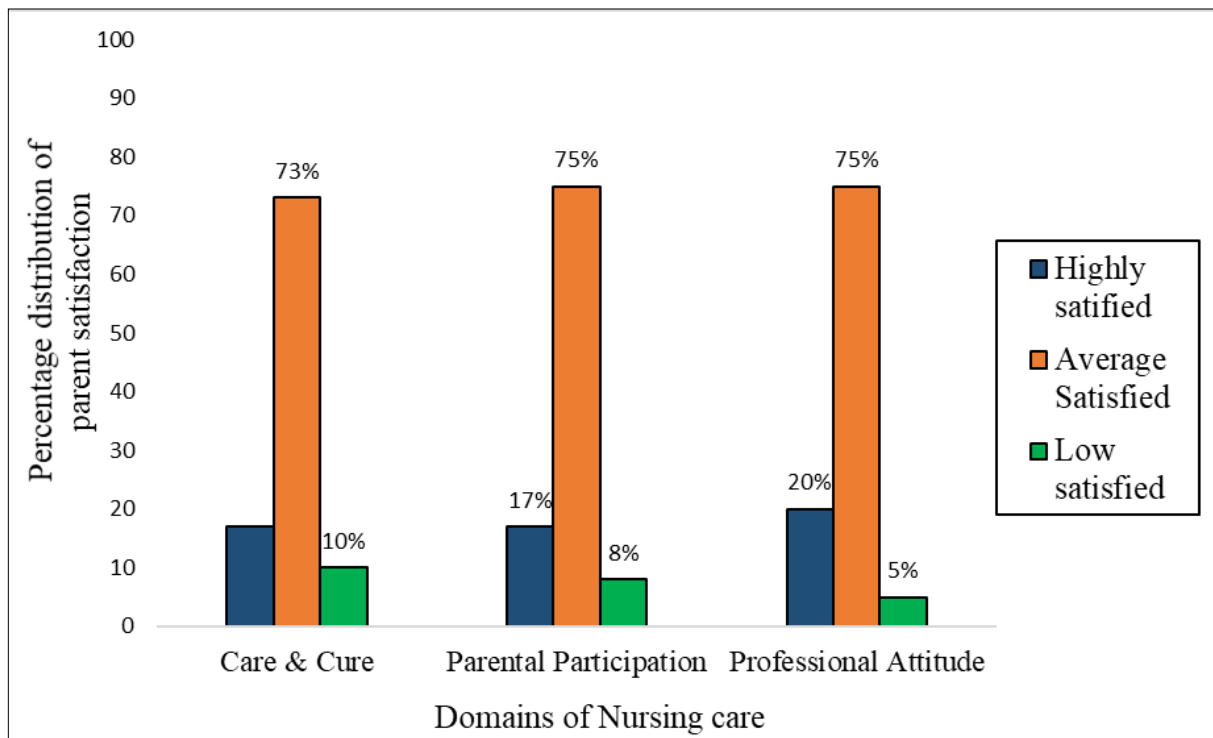
## Section – II: Description of the parent satisfaction as an outcome of nursing care behavior provided in terms of three domains such as Care and cure, Parental participation and Professional attitude to the children admitted in the pediatric ward

The mean score and SD of total satisfaction score and of each domain were calculated and the parent satisfaction levels were classified into “Highly satisfied”, “Average satisfied” and “Low satisfied” on the basis of Mean  $\pm$  1SD.



**Fig 1:** Pie diagram showing percentage distribution of satisfaction level of parent with the nursing care provided to the children admitted in the pediatric ward

Data presented in the Figure 1 depicted that majority of parents were average satisfied (72%) with the care provided to the children admitted in the pediatric ward.



**Fig 2:** Bar diagram representing domain wise percentage distribution of parent satisfaction level

Data presented in the Figure 2 depicts that, in the domains of “Parental Participation” and “Professional Attitude” highest number of parents were average satisfied (75%) and in the domain of “Care & Cure” maximum parents were average satisfied (73%). Maximum number of parents were highly satisfied in the domain of “Professional Attitude” (20%).

**Table 3:** Mean, mean percentage, median and Standard Deviation of parent satisfaction level as an outcome of nursing care

N=100					
Variable	Range	Mean	Mean percentage	Median	Standard Deviation
Parent satisfaction	41 (83 – 124)	103.76	83	102.5	9.53

The data of Table 3 revealed that the mean score of parent satisfaction level was 103.76, and median was 102.5

**Table 4:** Domain wise Mean, mean percentage and Standard Deviation of parent satisfaction level as an outcome of nursing care

N=100				
Domains of nursing care	Range	Mean	Mean percentage	Standard Deviation
Care and Cure	18 (32-50)	42.00	84	4.00
Parental participation	11 (14-25)	19.20	76.8	2.86
Professional Attitude	15 (35-50)	42.47	84.94	3.74

Data depicted in Table 4 explains that the mean percentage score is highest for the domain of professional attitude (84.94) and lowest for parental participation (76.8). The mean score of professional attitude is 42.47 which is highest and SD of Care and cure is highest that is 4.00.

**Section-III: Association between parent satisfaction level with selected demographic variables such as age of parents, educational qualification and occupation of parents, monthly family income; age and birth order of children; mode of admission to the hospital and history of previous hospitalization.**

**Table 5:** Association between parent satisfaction level and selected demographic variables of parents of children admitted in the pediatric ward

N=100						
Sl. No.	Variables	≤ Median (≤102.5)	> Median (>102.5)	Calculated $\chi^2$ value	df	p value
1.	Age of parent					
	23-31	17	21	0.802	2	0.67
	32-40	23	19			
	41-49	10	10			
2.	Educational qualification of parent					
	Up to Higher Secondary	17	29	6.801*	2	0.033
	Graduate	19	15			
	Post graduate and above	14	06			
3.	Occupation of parent					
	Business	11	03	7.897*	3	0.048
	Service	09	08			
	Self employed	09	06			
	Homemaker	21	33			
4.	Monthly family income					
	Above Rs.40000	17	11	2.411	2	0.30
	Rs.20001 – 40000	20	20			
	Below Rs.20000	13	19			

$\chi^2$  value at df (2) = 5.99,  $\chi^2$  value at df (3) = 7.82,  $p < 0.05$ , \*Significant

Data presented in Table 5 depicted that there was a significant association between parent satisfaction level and educational qualification ( $\chi^2 = 6.801$ ,  $df=2$ ) at 0.05 level of significance and parent satisfaction level is associated with occupation of parent ( $\chi^2 = 7.897$ ,  $df=3$ ) at 0.05 level of significance.

There was no association between parent satisfaction level and age of parents, monthly family income, age of children birth order of children, mode of admission and history of previous hospitalization of the children at 0.05 level of significance.

## Discussion

The major findings of the present study are discussed in relation with the findings of other studies.

In the present study 72% of parents were average satisfied, 16% parents were highly satisfied and 12% of parents were low satisfied with the care provided to the children admitted in the pediatric ward. The findings were supported by the study conducted by Prasannan S and Thomas D who stated that 83% of the parents were Partially Satisfied and 17% were satisfied with nursing care provided to their children [2]. A study by Hagen I H *et al* shows that 76% parents reported Moderate to high satisfaction level with the nursing care provided to their children [7]. Study carried out by Lee J and Korczak D stated that majority of parents were satisfied (40.2%) or very satisfied (40.2%) with the care provided by the nurses to their children [8].

The present study revealed that 73% parents were average satisfied, 17% were highly satisfied and 10% were low satisfied with the “Care and Cure” aspect of nursing care which included the questions related to environmental cleanliness, medication, diet, pain management, safety and attention given to the child by the nurses. The findings were consistent with the study conducted by Kaur M, Charan G S and Selvi T stated that 86.0% parents were satisfied and 14.0% were more satisfied about the hospital environment and about patient care 77.0% and 23.0% parents were satisfied and more satisfied respectively [9].

The present study showed 75% of parents were average satisfied, 17% were highly satisfied and 08% were low satisfied with the “Parental participation” aspect which included the parental involvement by the nurses in the care of child. The findings were similar to the findings of the study by Krowka A K *et al* which stated a lower score was obtained for the criterion of “Parental participation” in the assessment of parental satisfaction regarding nursing care [1].

In the present study 75% of parents were average satisfied, 20% were highly satisfied and 05% were low satisfied with the “Professional attitude” aspect which included the information provided to the parents, knowledge and skill of nurses and behavior of the nurses towards the parents. The findings were partially supported by the study of Kaur M, Charan G S and Selvi T which showed, in communication/information 53.0% parents were satisfied and 47.0% more satisfied [9].

The present study stated that the parent satisfaction level was significantly associated with the educational qualification of the parent, ( $\chi^2 = 6.801$ ,  $df= 2$ ,  $p= 0.033$ ) and occupation of the parent, ( $\chi^2 = 7.897$ ,  $df= 3$ ,  $p= 0.048$ ) at 0.05 level of significance. This finding were congruent with the findings of the study conducted by Kaur M, Charan G S and Selvi T which showed a significant association of total parent satisfaction level with educational status of mother ( $\chi^2 = 12.092$ ,  $df = 3$ ,  $p = 0.007$ ) and occupational status of mother ( $\chi^2 = 10.843$ ,  $df = 3$ ,  $p = 0.013$ ) at 0.05 level of significance [10].

## Conclusion

On the basis of study findings it can be concluded that the overall parent satisfaction level was average regarding the nursing care behavior provided to the child admitted in the pediatric ward. The study findings also revealed that the satisfaction level of the parents in the three domains namely, care & cure, professional attitude and parental participation were average. Parent satisfaction regarding nursing care provided to the children was associated with education and occupation of parent. So, it is need to be mentioned that to improve parent satisfaction level nurses must be trained adequately in the above mentioned domains.

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