

Original Article

Parent Satisfaction with Nursing Care Provided to Children at A Pediatric Unit in Ghana

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Abstract - The study assessed parental satisfaction with nursing care rendered to their children in a pediatric ward in Ghana. The descriptive cross-sectional study design was adopted. A total of 238 parents of children admitted to the pediatric unit of a regional hospital in Ghana who met the inclusion criteria were conveniently sampled. Data were obtained using the Parent Satisfaction Survey (PSS) at the end of their child's admission. Data collected were coded, entered, and analyzed using Statistical Product AND Service Solution (SPSS) version 29.0, and results were summarized using descriptive statistics. Bivariate and multivariate logistic regression analysis was used to determine the factors associated with parental satisfaction with nursing care. The results were presented in adjusted odds ratios (aOR) with their Confidence Intervals (CIs). Overall, 60.1% of parents were satisfied with the nursing care provided to their children. The results of the multivariate logistic regression showed that parents who had children who were 5 to 7 years (aOR= 0.07, 95%CI: 0.01-0.780) and 8 years and older (aOR= 0.03, 95%CI: 0.00-0.62), parents residing in urban area were less likely to be satisfied (aOR= 0.19, 95%CI: 0.04-1.02). On the other hand, parents who had higher expectations were more likely to be satisfied with nursing care (aOR= 1.4, 95%CI: 1.24-1.57). Information sharing on the child's condition and treatment and respect for privacy were also determinants of satisfaction in this study.

Keywords - Factors, Nursing care, Parents, Pediatric, Satisfaction.

1. Introduction

Customer satisfaction has been key to the evaluation of service and an integral part of improving, maintaining, and transforming the quality of healthcare services [1], [2]. In the case of healthcare facilities, the satisfaction of the patients and their relatives is a key indicator of the overall quality of care rendered [1]. The direct involvement of the patient in the evaluation of healthcare interventions, assessing the quality of care, and developing strategies for improving them is significant in the overall evaluation of healthcare services [3], [4]. The main predictor in the evaluation of the overall quality of health services by patients is their satisfaction with nursing care. This is partly because, among the health care team, nurses spend the most time with patients during their stay, thus having a lot of time and contact with patients or their families [5]. Al-Mailam, in 2003, suggested that the more patients are satisfied with their nursing care, the more satisfaction they express with the overall quality of health service.

Furthermore, the capacity of nurses to meet the expected health needs of patients, families, and caregivers reflects the

overall quality of healthcare at the hospital or health agency [6]. Many research studies in several countries have focused on adult patients' satisfaction with nursing care. However, relatively few studies have explored parental satisfaction with nursing care rendered to children in pediatric wards [4], [5], [6], [7].

Pediatric nursing care is built on family-centered care, where there is a need for partnership between the child's family - most often represented by their parents - and the healthcare team. Creating an atmosphere that fosters collaboration between the parent or caregiver and the healthcare team in each stage of pediatric care is critical to providing holistic care for children [4], [5]. The parent of the child plays a focal role at every stage of the therapeutic process because the child is considered a minor who is legally incapable of making decisions related to their health care; thus, the parents assume the role of co-decision makers and provide consent with relevant information provided by the healthcare team [8]. This collaboration requires the values, traditions, and beliefs of the family to be respected during the hospitalization of the child [8].



Satisfaction can be explained as the level to which one's expectation is met by their experience[9]. According to Alle and colleagues, satisfaction is a belief and attitude about a specific service provision of an institution[10]. Evidence has shown that parents play a critical role in the therapeutic process of their children during hospitalization; thus, their satisfaction with the care provided by healthcare providers, including nurses, has been used in different settings as a metric for evaluating a healthcare system's quality, feedback for generating strategies to improve care, as well as providing accessible, sustainable, economical as well as acceptable pediatric care[10], [11], [12] It is also the sole mandate of every hospital that provides pediatric care to make sure their services meet the expectations and perception of parents and families during evaluation[12].

Few studies have investigated parental satisfaction with nursing care in different settings in sub-Saharan Africa. Most of these studies found that the continuous utilization of child healthcare services is influenced by parents' or caregivers' satisfaction with the services rendered [2].

In a study conducted by El-Gammal and colleagues to examine mothers' satisfaction with childhood immunization services in a primary health center in Egypt, it was found that 95.2 % of mothers were highly satisfied with childhood immunization services provided by healthcare providers, including nurses. Factors that influenced this high level of satisfaction level included providing information on the child's health care and procedures and paying attention to the needs and priorities of the parent[2]. Evidence from this study also showed that the majority of mothers who agreed that they were satisfied with the study was not mainly attributed to their knowledge about the vaccination services sought but rather factors such as providers' attitude, less waiting time, and affordability of the service. One main recommendation of this study from mothers to enhance the service they receive was to encourage nurses and physicians to be involved in providing contextual information about the services they sought [2].

A previous study in Nigeria revealed that trustworthiness, observed group cohesion, a sense of teamwork, competency, and professionalism were qualities of nurses guiding their satisfaction with nursing care. In addition, the mothers admonished nurses to provide information and education about their child's condition, treatment, and therapeutic process using easily understandable materials. Another recent study was conducted in Nigeria to evaluate the caregivers' perception of the quality of nursing care in child health services. Caregivers and guardians who attended the hospital concluded that their perception of the quality of nursing care was average[14]. About half of the participants agreed that they had a fair perception of care and concern shown by nurses and fairly agreed that nurses were fairly flexible in meeting their children's needs. In addition, most caregivers perceived nurses' skills and competence in procedures such as

immunization, administration of medication, and health education to be good. Other factors that contributed to the good perception of the quality of nursing care by caregivers in this study included good interpersonal relationships, clear and concise instructions and information about a child's condition and treatments, and acknowledgment of caregivers as decision-makers in the healthcare of their children[14]. In Southern Ethiopia, where the researchers evaluated parental satisfaction towards care received at a neonatal intensive unit and related factors, only two-thirds of parents in this study were satisfied with the care they received at the unit. Factors associated with satisfaction included the availability of significant information using direction indicators, the level of education of parents, and the availability of adequate chairs in the waiting area. Even though a few research have been conducted within the context of Sub-Saharan Africa on this topic, there is still a need for research in assessing parental satisfaction with nursing care rendered to children to improve the quality of care and inform policy-making concerning pediatric nursing care in Africa. In Ghana, the evaluation of parents' and guardians' satisfaction with childcare in pediatric units is a relatively new research area; at the same time, it is one of the priority recommendations from the Ghana Health Service(GHS) to healthcare providers. National research in the area of evaluating nursing care conducted so far has been focused on adult patient satisfaction[15], [16], [17], [18], [19] [16], [17], [18], [19]. The study by Afaya and colleagues aimed at examining patients' perception of nursing caring behaviors found that patients had a positive perception of caring behaviors; however, their study population was limited to only adult patients.

The authors strongly recommended that further studies should be centered on the perception of caring for children, which their parents can evaluate to gain additional information since children might have specific needs in relation [15]. According to the Child Health and Standard Strategy for 2017-2025 policy document by the Ghana Health Service (GHS), caregivers complained of poor attitudes and communication among nurses during their visit to the hospital for child healthcare services; thus, the GHS has emphasized the need to improve care behaviors among health providers including nurses[20] Even though, the findings of this national policy document stated the poor attitudes of nurses leading to the dissatisfaction of care there a is paucity of evidence on parental satisfaction of nursing care rendered to children in hospitals to support this claim. Therefore, there is a need for a rapid study to assess parental satisfaction with nursing care rendered to their children due to the described benefits and the aim of improving pediatric nursing care. Thus, this study aimed to assess the satisfaction of parents with nursing care rendered to their children at a pediatric unit in a regional hospital in the southern part of Ghana. Satisfaction in four areas was examined; these included parents' perceptions, experiences, expectations, and overall satisfaction with nursing care rendered to their children.

2. Materials and Method

2.1. Study Design

This was a cross-sectional study that assessed parents' satisfaction with nursing care in a pediatric unit. Data were collected at the point of patient discharge. A cross-sectional design was selected to optimize the number of participants and to provide an opportunity for comparison with studies of similar designs.

2.2. Study Population and Setting

The sample size was determined using the Cochran Formula. A sample size of two hundred and thirty-eight(238) parents or guardians who had children admitted to the pediatric unit was determined to be sufficient to answer the research questions.

The study took place in a tertiary care hospital, which is the main referral hospital in Ghana. This facility has been in operation for the past 20 years and admits several thousands of patients from Ghana and neighboring West African countries. It caters to patients with wide medical, surgical, and psychological problems. The 240-bed capacity hospital has specialized doctors and working staff in various health specialties.

2.3. Inclusion and Exclusion Criteria

Inclusion criteria consisted of (a) a parent or guardian who was at least 18 years old, (b) a parent of a child who was inpatient for at least 24 hours, and (c) Parents who can read and write in the English language.

Exclusion criteria consisted of (a) parents who declined to complete the survey, (b) parents in which completion of the study may have caused harm or added stress to a parent or child, such as time or positive attention taken away from the child, (c) parents whose child was admitted to the pediatric ward for less than 24 hours (d) parents whose child had died.

2.4. Sampling Procedure

A convenience sampling technique was employed. Participants were recruited during their leisure time, either when the healthcare team was not attending to them or when it was not visiting time. The research team approached them. Details of the study were explained to the participants. After the consent process, the questionnaire was administered. Questionnaires were either self-administered or with the help of the researchers. All questionnaires were administered individually. Questionnaires were retrieved at the point of discharge after the participants completed the questions.

2.5. Study Instrument/ Tools

Data was collected using a modified version of the Parent Satisfaction Survey (PSS) tool. This survey was developed by Dr Mona McPherson of Baylor University in Houston, TX, in 1999[21]. Parental satisfaction with care in a pediatric setting is measured using the PSS, which was initially created

especially for pediatric settings. The scale was developed after a literary search for an appropriate tool to measure parent satisfaction with medical care in a Pediatric Intensive Care Setting (PICU). McPherson modified a Neonatal Intensive Care (NICU) survey and used the NICU Parent Satisfaction Survey (NPSS) as a guide to developing the PSS. Originally, the PSS had 24 items that could be used to evaluate parent satisfaction in any inpatient pediatric setting[21]. With a reliability value of 0.8275, this instrument produced a survey with acceptable reliability. In this current study, the internal reliability of this instrument was acceptable as the coefficient of the Cronbach alpha was recorded as having 0.802 (see Table 1)[22]. Additionally, test-retest reliability indicated good answer correlation. By including parents in the selection of survey topics, validity was partially established. In our study, PSS measured four domains of care: (a) Perception, (b) Experiences, (c) Expectation, and (d) Satisfaction. The PSS includes domains including perception, experiences, and expectation, which were scaled on a five-point Likert scale, with one equaling strongly disagree and five representing strongly agree. Total scores were calculated; a higher score depicted a higher satisfaction in the domains, while a lower score depicted a lower satisfaction. Overall satisfaction of nursing care was asked at the end of the questionnaire and was reported as either satisfied or not satisfied.

Demographic data included information regarding the parent's gender, parent's age, ethnicity, child's length of stay in the unit, number of hospitalizations, education, and income levels.

2.6. Description of Domains of Nursing Care

The questions on assessment of parents' perception of nursing care their children received focused on perceptions of caring attitudes, responsiveness, organized state of care, and how well they felt nurses were treating their children. Questions on parents' experiences about nursing care focused on experiences they had on getting help from nurses. In the PSS component of the assessment of parents' expectations of pediatric nursing care, questions were centered around perceptions of respect of beliefs and values, knowledge and competency, and rudeness. Finally, the domain of satisfaction included questions on satisfaction with care, reduction of anxiety and stress, sharing information, cleanliness of the child's room, and respect for privacy when parents were with their children.

2.7. Pretesting of the Study Instrument

The questionnaire was pretested among 20 parents of children receiving care at a Municipal Hospital, a nearby hospital that can be classified as a secondary-level hospital in Ghana. The purpose of the pretesting was to assess the flow of questions, the presence of sensitive questions, and the appropriateness of the categorization of variables. To determine the applicability of the study instrument in a local Ghanaian setting. Finally, it also helped to estimate the time

that was taken to respond to the questionnaire. After the pretesting, the 20 participants agreed that the format, flow, sensitivity, appropriateness, and cultural competency of the questions were adequate. Thus, the questionnaire was agreed to be used for this study.

2.8. Ethical Consideration

Ethical clearance for this study was sought from the Ethical Review Committee of the University of Health and Allied Sciences (UHAS-REC A.5 [14] 18-19). Also, permission to carry out this pretesting of the study instrument for the main research study was sought from the Municipal Health Directorate. Finally, permission was sought from the nursing director of the tertiary hospital and the charge nurse of the pediatric wards to conduct this study.

Written informed consent was obtained from participants. Participation in this study was voluntary, and participants were not under any obligation to respond to questions or participate in the study if they did not want to. Participants were made to understand that even with the consent to participate in the study, they are at liberty to withdraw at any stage without any sanctions. The questionnaire was administered in a designated room to ensure privacy. Participants were assured of the confidentiality of the data provided.

2.9. Data Analysis

Data was entered and analyzed using the Statistical Package for Social Sciences version 29.0 for cleaning, coding, and analysis. Descriptive analysis was performed using frequencies and percentages and was presented in tables. The total score for each component (at least 70 percent of questions in each section(perception, expectation, experiences, and satisfaction) needed to be answered) was calculated for each parent. It was taken into account in the statistical analysis. The outcome variable was the final overall satisfaction question,

which had categories such as satisfied or not satisfied. Bivariate and multivariate analyses were done in binary logistic regression to identify factors associated with parent satisfaction with nursing care. All assumptions of binary logistic regression were checked. p -value < 0.05 in the multivariate analysis was considered to take a candidate variable e for the final model. The Hosmer Goodness fitness was done to check model fitness. The significant explanatory variables at the bivariate were assessed for multicollinearity, and none of the explanatory variables had a variance inflation factor exceeding 10. This was necessary for exclusion from multivariate analysis. The odds ratio with 95% confidence was used to determine the level of significance. A multivariate binary logistic regression analysis was performed to examine the factors associated with parent satisfaction with nursing care. The results of the multivariate binary logistic regression were reported in adjusted odds ratio (OR) with their 95% confidence intervals (CI). Statistical significance was declared at P -value < 0.05 . The result was presented using tables.

3. Results

3.1. Reliability Analysis Results

Table 1 shows the descriptive statistics of each component of the question and the results of their reliability analysis. The mean score for parents' perception of nursing care rendered to their children was 31.093 ± 4.313 , the expectation score was 53.165 ± 7.441 , and the overall mean for satisfaction score was 48.0 ± 8.715 . Table 3 shows more details. The PSS showed a great internal consistency of the subscales as Cronbach's alphas ranged from 0.802 to 0.792. For the component perception, 0.864 is for expectation, 0.917 is for overall satisfaction, and -0.312 is for experiences.

Table 1 shows more details. The lower score for the component experiences can be explained by the small number of items and the open-ended questions in this subscale.

Table 1. Reliability analysis of components and total score

	Expectation	Perception	Experiences	Satisfaction	Total
Number of items that converged	16	9	2	15	51
Mean	53.165	31.093	1.533	48.050	
Minimum	33	18	0	22	
Maximum	73	45	3	73	
Standard Deviations	7.441	4.313	0.790	8.715	0.807
Cronbach's alpha	0.864	0.792	-0.352	0.917	0.802

3.2. Sociodemographic Information of the Participant and Child

Table 2 below shows the sociodemographic characteristics of participants. The study participants consisted of 238 parents. As illustrated in Table 2, 194(81.5%) were women, and 39(16.4%) were men. 41(17.2%) of the

parents were between 18-24 years, 129(54.2) were between 25-34 years, and 65(27.3%) were 35 and above. The mean age of parents was 31.86 ± 8 . In addition, 15(6.3%) parents had children who were 0-1 year, 197(82.8%) had children who were 2-5 years old, and 25(10.5%) had children who were 6 years and above. The mean age of children was 2.90 ± 1.77 .

Furthermore, 25(10.5%) of the participants had no formal education, 52(21.8%) had basic education, 108(45.4%) had secondary education and 51(21.4) had tertiary education. Concerning occupation, 27(11.3%) were unemployed, 151(63.4%) engaged in either trading, business, or farming, 15(6.3%) were students, and 45(19%) were civil servants . 24 (10.1%) of parents said their children had never been hospitalized previously, 148(62.2%) recorded 1-3 times hospitalizations in the past, and 29 (12.2%) reported more than

four hospitalizations in the past. Regarding participants marital status, 56(23.5%) were single, 142(59.7%) were married and 37(15.5%) were either divorced or widowed. 106(44.5%) of the participants were living in rural communities, 101(42.4%) were in urban communities and 28(11.8%) were in semi-urban communities. Other relevant sociodemographic characteristics of the sample are displayed in Table 2.

Table 2. Sociodemographic information of the participant and child N=238

Variables	Categories	n (%)	Mean(SD)
Gender	Male	39 (16.4)	
	Female	194 (81.5)	
Parent's Age			31.86±8.852
	18-24	41 (17.2)	
	25-34	129 (54.2)	
	35 and above	65 (27.3)	
Child's Age			2.90±1.768
	0-1 year	15 (6.3)	
	2-5 years	197 (82.8)	
	6 years and above	25 (10.5)	
Marital Status			
	Single	56 (23.5)	
	Married	142 (59.7)	
	Widowed or divorced	37 (15.5)	
Educational Status			
	None	25 (10.5)	
	Basic	52 (21.8)	
	Secondary	108 (45.4)	
	Tertiary	51 (21.4)	
Occupation			
	Not Employed	27 (11.3)	
	Trading/Business/Farming	151 (63.4)	
	Student	15 (6.3)	
	Civil/Public Servant	45 (19)	
Habitat			
	Rural	106 (44.5)	
	urban	101 (42.4)	
	Semi-urban	28 (11.8)	
Number of times the child has been hospitalized			
	Never	24 (10.1)	
	1-3 times	148 (62.2)	
	4 or more times	29(12.2)	

3.3. Participants' level of Satisfaction with Nursing Care Error! Reference source not found. shows the p participants the level of satisfaction with various aspects of nursing care received. Regarding the aspect of how nurses welcomed participants on their admission to the ward, 57(23.9%) were not satisfied, 66(27.7%) were neutral, and 115(48.5%) were satisfied. Likewise, for how nurses listened to the concerns and worries of parents, 58(24.4%) were not

satisfied at all, 99(41.6%) were neutral, and 81(34.0%) reported that they were satisfied. Regarding how nurses were/are willing to respond to parents' concerns/requests, 43(18.1%) were not satisfied, 99(41.6%) were neutral (34.0%) were satisfied. In the area of information provided about the condition and treatment of the child condition and treatment, 67(28.2%) were not satisfied, 70(29.4%) were neutral, and 101(42.4%) were satisfied. Furthermore, regarding how

nurses respected parents’ privacy while with their children, 42(17.6%) were not satisfied, 93(39.1%) were neutral, and 101(42.4%) were satisfied. Concerning how nurses relieved parents’ anxiety and stress 61(25.6%) reported not satisfied, 49(20.6%) were neutral while 128(53.8%) were satisfied.

Responses on how parents were satisfied in other areas can be found in Table 3. Data on overall satisfaction with nursing care shows 143(60.1%) participants were satisfied, while 89(37.4%) were not satisfied with the nursing care rendered to their children (see Table 4).

Table 3. Participants level of satisfaction with nursing care

Statement	Not Satisfied F(%)	Neutral F(%)	Satisfied F(%)
The way nurses welcomed me on my admission to this ward	57(23.9)	66(27.7)	115(48.5)
The nurses’ approach when they were examining	44(18.5)	91(38.2)	103(43.3)
The way nurses were/are talking to me	52(21.8)	91(38.2)	121(50.8)
How nurses listened to my worries and concerns	58(24.4)	99(41.6)	81(34.0)
How nurses treated me as an individual	36(15.1)	90(37.8)	112(47.1)
How nurses were/are willing to respond to my concerns/requests	43(18.1)	99(41.6)	96(40.3)
Information provided about my child’s condition and treatment	67(28.2)	70(29.4)	101(42.4)
My child’s room is clean and comfortable	39(16.4)	78(32.8)	121(50.8)
How nurses respect my privacy	42(17.6)	93(39.1)	103(43.3)
How nurses helped me with my child’s pain	26(10.9)	128(53.8)	84(35.3)
How nurses assisted my child in bed	43(18.1)	82(34.5)	113(47.5)
How nurses helped me with bed-making	57(23.9)	67(28.2)	114(47.9)
How nurses helped with wound dressing	18(7.6)	114(47.9)	106(44.5)
My anxiety and stress were alleviated by nursing care	61(25.6)	49(20.6)	128(53.8)

F= Frequency. %=Percentage

Table 4. Overall Percentage of Parents Satisfied with Nursing Care N=232

Satisfaction level	n (%)
Satisfied	143 (60.1)
Not Satisfied	89 (37.4)

children who were 5 to 7 years (aOR= 0.07, 95%CI: 0.01-0.780) and 8 years and older (aOR= 0.03, 95%CI: 0.00-0.62) were less likely to be satisfied with nursing care as compared to those who had children between 0–1-year-old (aOR 0.07, 95%CI: 0.01-0.780). Participants who resided in urban areas were 19% less likely to be satisfied with nursing care rendered to their children as compared to parents who resided in semi-urban areas(aOR= 0.19, 95%CI: 0.04-1.02). Participants who had higher expectations about nursing care rendered to their children were 1.4 times more likely to be satisfied with the nursing care that was rendered to their children than those who had lower expectations (aOR= 1.4, 95%CI: 1.24-1.57)

3.4. Factors Associated with Satisfaction of Parents with Nursing Care

Results of the multivariate logistic regression revealed that the child’s age, place of residence, and expectation were the three independent factors that were significantly associated with parents’ satisfaction with nursing care rendered to their children (See Table 5) Parents who had

Table 5. Factors associated with the satisfaction of parents with nursing care rendered to their children

Satisfaction	B	SE.	Wald	df	F	p-value	OR [95% CI]
Educational status							
None			2.984	3	19	.394	Ref
Basic	-.892	1.009	.781	1	45	.377	0.41[0.6-3.00]
Secondary	.625	.782	.639	1	80	.424	1.868[0.40-8.65]
Tertiary	-.101	.608	.028	1	40	.868	0.90[0.30-3.00]
Child’s Age							
0-1 year			8.919	3	8	.030	Ref
2-4 years	-.465	1.577	.087	1	161	.768	0.63[0.03-13.83]
5-7 years	-2.716	1.260	4.647	1	10	.031**	0.07[0.01-0.78]
8 and above	-3.504	1.548	5.127	1	5	.024**	0.03[0.00-0.62]

Number of Hospitaliza								
	None			2.106	2	23	.349	Ref
	1-3 times	-1.354	.978	1.918	1	125	.166	0.26[0.40-1.76]
	4 or more	-0.944	0.749	1.588	1	26	0.208	0.39[0.90-1.689]
Place of Residence								
	Semi-urban			3.748	2	76	.154	Ref
	Urban	-1.638	.846	3.747	1	88	.050**	0.19[0.04-1.02]
	Rural	-1.291	.884	2.135	1	20	.144	0.28[0.05-1.55]
Times got Help								
	Never			1.435	3	10	.697	Ref
	Usually	4.760	4.494	1.122	1	103	.290	116.78[0.02-781505.0]
	Sometimes	3.607	3.723	.939	1	41	.333	36.86[0.03-54376.49]
	Always	2.115	1.951	1.176	1	30	.278	8.29[0.181-379.32]
	Experience Score	2.122	1.837	1.334	1		.248	8.35[0.23-305.46]
	Expectation Score	.333	.059	31.599	1		<.001**	1.40[1.24-1.57]
	Perception Score	-.062	.073	.708	1		.400	0.94[0.82-1.10]

a. Variable(s) entered on step 1: participants' highest level of education, Child's Age, Number of times hospitalized, place of residence, often got help, Experience Score, Expectation Score, Perception Score. **: statistical significance

F=Frequency df= degrees of freedom OR= Odds Ratio p-value=probability value

4. Discussion

This was the first study in Ghana assessing the satisfaction of parents with nursing care rendered to their children at a pediatric unit in Ghana. The study sample was composed of 238 parents whose children were admitted to a pediatric unit at a selected hospital in Ghana. Overall, 60.1% of parents were satisfied with the nursing care rendered to their children in the pediatric unit. The multivariate logistic regression showed that the child's age, place of residence, and parent's expectation of nursing care were statistically associated with parents' satisfaction with the nursing care rendered to their children. In addition, descriptive statistics also showed that the explanation of information regarding the child's condition and treatment and the respect for privacy when parents were with their children influenced the satisfaction levels of parents.

Our findings showed that more than half of the parents were satisfied with the nursing care rendered to their wards. This finding is nearly similar to a study conducted in a tertiary hospital in India, where they found that 69.0 % of parents were satisfied with the nursing care provided to their children[23]. Contrary to this study finding, a study done in Poland considered parents to be highly satisfied (90%) with the care rendered to their children[6], and a study in Greece considered 93.9 % of parents rated the nursing care rendered to their children as excellent to quite good [24]. The reason that is attributed to the lower satisfaction rate in our study can be attributed to the complaints shared in the open-ended part of the questionnaire on the issue of accommodation during their children's admission. The majority of parents shared their concerns about the lack of sleeping places for them during

their child's hospitalization and had to resort to sleeping on the walkways of the hospital at night and, sometimes, after discharge, are hospitalized with a diagnosis of Malaria. Because the setting of the study is a major referral center, most parents referred are very distant from the hospital and may not have enough money to afford a guest house or hotel. There is a need for a qualitative study exploring the accommodation challenges of caregivers of patients on admission and the hospital management looking at possible ways to put up some temporary structures for accommodating caregivers from far places whose children or relatives are on admission.

The results of this study showed that parents' expectation was a highly significant factor in determining their overall satisfaction with nursing care. This study finding is consistent with the findings of several studies [25], [26], [27], [28]. For instance, Hosseinian and colleagues in 2015 found that higher parent satisfaction was reflected in how well their children's care was suited to their child's needs, how well it was delivered, and how attentive the healthcare professionals, including nurses, were responsive and attentive to their children's preferences, expectations, and biopsychosocial requirements during admission[25]. Thus, if the nurses were attentive to their needs during the length of stay in the hospital and provided adequate information about their child's treatment and condition, there was a higher probability that the parents would be satisfied with the nursing care they rendered. In another study, parents, specifically mothers whose needs were met, were more likely to be satisfied with nursing care after discharge [28]. These needs were professional pediatric nursing care, nurses paying pertinent attention to their healthcare needs, and shorter wait times before health

examinations were given to their children. [28]. From our study findings and that of Hosseinian and others, Uysal and Cirlak suggest that meeting the healthcare expectations of parents whose children are on admission highly influences satisfaction levels[25], [28]. Therefore, it is necessary for nurses caring for children to be aware of these healthcare expectations, which may include needs for information, psycho-emotional needs, physical needs, and parent involvement in taking care of the child and finding strategies to cooperate with them in their care or the services they provide since it affects the quality of nursing care [26], [27] Salmani et al. explain that the failure to do this may result in heightened anxiety, insecurity, and dissatisfaction among parents whose children are on admission[26].

Furthermore, in evaluating the sociodemographic factors that may influence parents' satisfaction, a child's age was reported in our study to be a significant determinant of satisfaction with nursing care. Specifically, in our study, increasing the child's age (5 years and above) decreased the satisfaction levels of parents. Older children can communicate their signs and symptoms, including pain and also their recovery process, to their parents, consequently either lowering or heightening their anxiety concerning the nursing and health care their child is receiving.

Thus, if the child communicates to the parents about the worsening of signs and symptoms, it might make parents less likely to be satisfied with nursing care. Also, in an integrated review, school-aged children were found to be more often able to provide information on the nursing care they received, especially when their parents were not present, thus may cause their parents to be either more or less satisfied and believe that their children are either receiving or not receiving adequate care in the unit [29] In this current study, children above 5 years likely complained about the nursing care they received when their parents were out of the units thus making parents believe that their children were not receiving adequate nursing care.

Another significant determinant of parents' satisfaction with nursing care in this current study was their place of residence. Parents who resided in urban areas were less satisfied with the nursing care rendered to their children than parents from rural and semi-urban areas. This finding is consistent with the findings of a systematic review and meta-analysis in Ethiopia[30]. On the contrary, the place of residence has been found by most studies to be an insignificant predictor of parents' satisfaction with nursing care [5], [6], [31]. In our study, it can be explained that parents from urban areas may have lower expectations of nursing care since they were likely to be frequent visitors of the hospital since the tertiary hospital was in the urban area and was close to them. Thus, since their expectation were lower, they were less likely to be satisfied with the nursing care as compared to parents from rural areas and semi-urban areas who would have a

higher expectation of the nursing care their children were to receive since it might have been the first time, they were referred to this hospital.

In addition to the statistically significant predictors of parents' satisfaction in this current study, our study found that the majority of parents were not satisfied with how nurses respected their privacy when with their children and the information on the treatment and condition of their children (See Table 3) This finding is similar to the study of Gilmer and others in Benin, who found that only 42% of parents were in agreement that nurses explained issues about the treatment of their wards to them[32]. The information-sharing component is an important aspect of satisfaction with nursing care, either by caregivers or patients. Sharing of information helps parents, who were the primary caretakers of children in this study, in diverse ways [26], [27], [33]. First of all, it empowers parents regarding the condition and treatment of their children and helps reduce their anxiety[26], [27], [33]. Because the parents are not nursing experts, they rely on the nurses to arm them with information on the health status of their wards, as such information sharing and explanation are good things in the right direction. Thus, a collaboration between nurses and parents/caretakers has become a highlight of contemporary nursing. Information sharing builds trust between nurses and parents as well[26]. With the aspect of respect to privacy, our finding was contrary to that of Okumu and Oyugi in Kenya, who found that 73.6% were completely satisfied with how nurses respected their privacy when with their children[13]. Privacy pertains to the measures that nurses take to ensure that their clients are not exposed to third parties when a procedure is being on the client. The reason why most participants were not satisfied with privacy in our study could be because of how the pediatric unit is built with fewer partitions or divisions from one bed to another[13].

5. Conclusion/ Recommendations/Implications

Overall, parents' satisfaction with the nursing care rendered to their children was a little above average. The finding of this current study showed that factors including the child's age, parents' expectations of nursing care, and place of residence were statistically significant to parents' satisfaction with the nursing care rendered to their children. In addition, we found out that respect for parents' privacy and providing information on the treatment and child's condition were equally important to determine satisfaction with nursing care since parents were not satisfied with these two factors. Therefore, improvements need to be made in the communication and information-sharing aspects of nursing care, and more effort should be put in place for the privacy of clients to be respected.

This study was conducted in only one unit of the Regional Hospital, and therefore, the findings of this research cannot be generalized. We were unable to establish a causal relationship between the outcome and explanatory variables since the

study was cross-sectional. In this single-site study, just one parent or guardian from each family was involved. It's feasible for parents from the same family to report varying levels of satisfaction.

This was a novel study in the area of assessing parents' satisfaction with nursing care rendered to children in Ghana; thus, it serves as a basis for knowledge in the area and a foundation for future researchers to continue work in this area, especially in recruiting a larger sample and conducting a multi-center study. Our study findings have several implications. Hospital management in Ghana should work towards providing sleeping places for parents at night. In addition, nursing management should develop effective measures that ensure that the privacy of clients is respected, encourage nurses to communicate with parents more on the condition and treatment of their children and encourage nurses to use the standard operating procedures on how to welcome

parents on their admission to ward and develop policies that enhance culturally competent nursing care. Nurses are also encouraged to stick to the professional standard of practice and involve parents or caregivers during each stage of the nursing process.

This study serves as the basis of findings or evidence for the regional hospital to improve the quality of pediatric nursing care. It can be used as a source of information to assist in designing pediatric nursing care policies in this hospital or other hospitals.

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