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RELATIONSHIP BETWEEN NURSE SUPPORTS AND FEARS OF HOSPITALIZED SCHOOL AGE CHILDREN IN PKU MUHAMMADIYAH HOSPITAL, YOGYAKARTA, INDONESIA

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ABSTRACT

Background: Being hospitalized is usually related to the fear, especially for children. Nurse supports should be able to help the children to deal with the fears related to nurse and medical services.

Objective: This study aims to examine the relationship between nurse support and the fear of school-age children being treated in the PKU Muhammadiyah hospital, Yogyakarta.

Methods: This study employed a cross sectional correlation design, which was conducted from October to December 2016 in PKU Muhammadiyah Hospital, Indonesia. The samples of the study were 49 mothers and school-aged children who were admitted to the children ward. A consecutive sampling was applied to determine sample size. The instruments used in this study were nurse support and CMFS-R (Child Medical Fear Survey-Revised) questionnaires. Chi square test was performed with significance level p = 0.05 and level of trust = 95% for data analysis.

Results: Findings showed 42.9% of respondents had medical fear and 36.7% of them had medical fear related-behavior responses. The nurse support was in a high category (73.5%). Chi square test showed p-value 0.038 (>0.05), which indicated that there was statistically no significant relationship between nurse support and children fear. There was only age of the children had a significant relationship with fear with p-value 0.035 (<0.05).

Conclusions: There was no significant association between nurse support and fear of school-age children.

Keywords: nurse support, fear, hospitalization

INTRODUCTION

Hospitalization is admittance to the hospital as a patient.[1] Patients are admitted to the hospital for a variety of reasons, including scheduled tests, procedures, or surgery; emergency medical treatment; administration of medication; or to stabilize or monitor an existing condition.[1] Being hospitalized is not an easy or a

regular occurrence, and may even be terrifying, traumatic, to the child. Hospitalization is a stressful event with potential untoward consequences for children and their families, which triggers the emergence of a fear reaction in children.[2]

The fearful reaction that arises in relation to this hospitalization process is a normal response to the child. Child expresses his/her fear by crying, shouting, saying verbally, mocking around, as well as expressing fears around him through a drawing object.[3]

Fear of school-aged children during the hospitalization process can be attributed to or influenced by several factors. Getting a shot/bodily injury is the most feared thing for school-aged children during hospitalization.[4] This fear, if not observed, will have a negative impact on the child's perception, health care, and health care workers. Some children reported physical symptoms (60%), negative thoughts (81%), and avoidance behavior (75%) when meeting with the most fear situation or stimulus.[5] Thus, support from health care teams, especially nurses, is one of the things that families and children needed during the hospitalization process. The nurse support can help the child deal with the fear of separation associated with hospital care, especially during painful procedures.[6-9]

However, little is known about the study of children fear during hospitalization in Indonesia, especially in Yogyakarta. Therefore, this study aimed to examine the relationship of nurse support with the fear of school-aged children being hospitalized in the child's ward.

METHODS

Study design

The study was conducted from 17 October to 18 December 2016, using correlation study with cross-sectional design. The subjects of this study were mothers and school-aged children who were hospitalized in the children's ward of PKU Muhammadiyah Yogyakarta Hospital.

Sample

There were 49 children selected using consecutive sampling. The inclusion criteria of the samples were the children aged 6-12 years who have been hospitalized at least 1x24 hours, full consciousness and able to communicate verbally or non-verbally, their mothers were able to read and write Latin letters in the Indonesian language, and agreed to let their children became respondents of the study.

Instruments

The instruments used in this study were a nursing support questionnaire modified from Suwanti (2010)[10] based on Friedman (2008)[11], a fear questionnaire to measure fear of school-aged children modified from Child Medical Fear Survey Revised (CMFS-R), and observation sheet of child's fear referring to Ramdaniati (2011)[12]. Validity and reliability of nurse support and fear instruments were tested at 30 respondents prior to data collection. The results showed good validity and reliability with correlation coefficients r = 0.39-0.70 and Cronbach alpha at intervals of 0.832-0.901.

Data analysis

Data were analyzed using univariate and bivariate analysis using SPSS. The chi-square test was used to see the relationship between variables.

Ethical consideration

Ethical approval was obtained from the Ethics Committee of Faculty of Medicine, Gadjah Mada University in September 2016. Prior to the data collection, informed

consents were obtained from the respondents

RESULTS

Of 49 respondents included in this study, as shown in the Table 1, 77.6% of respondents aged 6-9 years and 22.4% aged 10-12 years. The ratio between boys and girls was not much difference, and 49% of them have never been hospitalized before. Most of them (71.4%) had a short duration of stay.

Table 1 Characteristic of the school age children (n=49)

Characteristics		Frequency	
		n	%
Age	6-9 years	38	77.6
	10-12 years	11	22.4
Gender	Female	22	44.9
	Male	27	55.1
Hospitalization experience	Yes	25	51.0
	No	24	49.0
Length of stay	Short (≤2 days)	35	71.4
	Long (>2 days)	14	28.6

Table 2 Characteristic of parents (n=49)

Characteristics		Frequency	
		n	%
Family income	Under Regional Minimum Wage	10	20.4
	Above Regional Minimum Wage	39	79.6
Mother's education	Primary education (Elementary to junior high school)	5	10.2
	Secondary education (High School)	29	59.2
	College education	15	30.6

Table 2 shows that the majority of parents (79.6%) had family income above the regional minimum wage and half of them (59.2%) had secondary background education.

Table 3 Distribution frequency of nurse support (n=49)

Attributes		Frequency	
		n	%
Information and Communication Support	Moderate	16	32.7
	High	33	67.3
Emotional Support	Moderate	5	10.2
	High	44	89.8
Appraisal Support	Moderate	15	30.6
	High	34	69.4
Instrumental Support	Low	2	4.1
	High	47	95.9
Total	Moderate	13	26.5
	High	36	73.5

Table 3 shows that nurse supports in terms of communication (67.3%), emotional (89.8%), appraisal (69.4%), and instrumental information (95.9%) were mostly in the high category. The total percentage of nurse support was 73.5.

Table 4 Distribution frequency of child medical fear scale (n=49)

Characteristics		Frequency	
		n	%
Child Medical Fear	No fear	28	57.1
	Fear	21	42.9
Medical Fear related-behavior responses	No fear	31	63.3
	Fear	18	36.7

Table 5 Child medical fear scale items (n=49)

Specific Fears	Not at all (%)	A little (%)	A lot (%)
Hurting myself	8 (16.3)	**28 (57.1)**	13 (26.5)
Getting an injection	12 (24.5)	16 (32.7)	**21 (42.9)**
Seeing blood come out of me	16 (32.7)	**24 (49)**	9 (18.4)
Going to the hospital	**25 (51)**	14 (28.6)	10 (20.4)
Having my finger stuck	13 (26.5)	15 (30.6)	**21 (42.9)**
Missing school if I am sick	5 (10.2)	22 (44.9)	**22 (44.9)**
Crying when I get hurt	10 (20.4)	**24 (49.0)**	15 (30.6)
Having to stay a long time	11 (22.4)	16 (32.7)	**22 (44.9)**
My friends/family will know if I am sick	**30 (61.2)**	16 (32.7)	3 (6.1)
Being away from my family	5 (10.2)	20 (40.8)	**24 (49)**
Doctors put a tongue blade in my mouth	4 (8.2)	21 (42.9)	**24 (49)**
Talking to strangers at the hospital	**33 (67.3)**	12 (24.5)	4 (8.2)
Doctors / nurses say not to shout or cry	23 (46.9)	**24 (49)**	2 (4.1)

Table 4 shows that children fear in both medical fear and fear behavior responses are mostly in the non-fear category. While table 5 shows that the majority of sources of fear of school-age children related to medical services included fear of getting injection (42.9%), having a finger stuck (42.9%), missing school (44.9%), long-term stay (44.9%), being away from family (49%), being afraid of doctors' tongue depressor (49%).

Table 6 Relationship between characteristics of children and child medical fear (n=49)

Characteristics of children		Child medical fear				p value	Medical fear related-behavior responses				p value
		No Fear		Fear			No Fear		Fear		
		n	%	n	%		n	%	n	%	
Age	6-9 years	21	55.36	17	44.7	0.737	21	55.3	17	44.7	0.038*
	10-12 years	7	3.6	4	36.4		10	90.9	1	9.1	
Gender	Female	13	59.1	9	40.9	0.804	14	63.6	8	36.4	0.961
	Male	15	55.6	12	44.4		17	63	10	37	
Hospitalization experience	Yes	17	68	8	32	0.117	16	64	9	36	0.913
	No	11	45.8	13	54.2		15	52.5	6	37.5	
Length of stay	Short (≤2 days)	21	60	14	40	0.523	21	60	14	40	0.453
	Long (>2 days)	7	50	7	50		10	71.4	4	28.6	

*significant if *p value*<0.05

Table 7 Relationship between characteristics of family and child medical fear (n=49)

Characteristics of parent		Child medical fear				p value	Medical fear related-behavior responses				p value
		No Fear		Fear			No Fear		Fear		
		n	%	n	%		n	%	n	%	
Family income	Low	8	80	2	20	0.155	7	70	3	30	0.726
	High	20	51.3	19	48.7		24	61.5	15	38.5	
Mother's education	Primary and secondary education	3	60	2	40	1.000	2	40	3	60	0.342
	Collage education	25	56.8	19	43.2		29	65.9	15	34.1	

From children characteristics (age, gender, hospitalization experience, and length of stay), and parental characteristics (family income and mother's education) as shown in Table 6 and 7, only age of the children had a significant relationship with fear with p-value 0.035 (<0.05).

Table 8 Relationship between nurse support and child medical fear (n=49)

Nurse Support (4 dimensions)	Child medical fear				p value	Medical fear related-behavior responses				p value
	No Fear		Fear			No Fear		Fear		
	n	%	n	%		n	%	n	%	
Moderate	6	46.2	7	53.8	0.350	8	61.5	5	38.5	1.000
High	22	61.1	14	38.9		23	63.9	13	36.1	

Table 8 shows that there were no significant relationships between nurse supports (both moderate and high supports) with child medical fear and medical fear related-behavior responses with p-value 0.350 and 1.000 (<0.05)

DISCUSSION

The experience of being hospitalized is usually a fear-provoking and even traumatic experience for children. In this study, 42.9% of respondents had medical fear and 36.7% of them had medical fear related-behavior responses. This is in line with Monteiro et al. found that a small percentage of school-aged children have a high degree of fear and almost all have moderate fears during hospitalization.[13] It is also similar to Ginimol revealed that most of the school-aged children have a low fear and a small percentage of children have moderate fear during hospitalization.[14]

Findings of this study revealed that the majority of sources of fear of school-age children related to medical services included fear of getting injection, having a finger stuck, missing school, long-term stay, being away from family, being afraid of doctors' tongue depressor. The fear of separation from family or parents is the highest score of fear in this study.

The fear of the highest score is the fear of separation from parents, which in line with the previous study stated that being away from parents a very difficult experience for the children.[15,16] It might be normal, but the strategies to avoid persistent separation is necessity.[16] With the nurse supports during hospitalization, children might be able to deal with the fear of nursing and medical interventions and have more confidence in their daily behavior in facing the situation/stressor in hospitalization. As Ratna stated that the support obtained by someone is able to improve the life and health of someone.[17]

In contrast, the results of this study revealed that nurse support was significantly not related to children fears ($p>0.05$). But, based on the descriptive results as shown in the Table 8, it could be seen that the percentage of non-fear condition is much higher in the children who received high support compared with those who received moderate support. Thus, it can be explained that the meaningless relationship of nurse support with fear and fear related- behavior of children statistically occurred due to several things, such as lack of sample size, influence of intervening variables and outliers, and etc.

CONCLUSION

It can be concluded that the fear of children in this study was in the low category, and the support from nurses remains high. However, there was no significant relationship between nurse supports and the fear in school-age children in PKU Muhammadiyah Yogyakarta. Further research is needed to examine other internal and external factors related to the child medical fears during hospitalization.

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Declaration of Conflicting Interest

None declared.

Author Contribution

This is the original work of the corresponding author.

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