



ANALYSIS OF THE IMPLEMENTATION OF FAMILY-CENTERED CARE (FCC) ON THE WORKLOAD OF NURSES IN PEDIATRIC INPATIENT AREAS

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ABSTRACT

The implementation of Family Centered Care requires collaboration between nurses and patient parents with a holistic approach and philosophy in preventing hospitalization. However, nurses in pediatric inpatient settings have high work responsibilities due to their complex role in the care process which must focus on pediatric patients and parents, which causes nurses to have an increasingly heavy workload. This study aims to analyze the implementation of Family Centered Care on nurses' workload. Method: This study used a cross-section design with a sample of 92 patients and pediatric nurses at RSUD Dr. Soetomo. This research used a purposive sampling technique for pediatric nurses and a simple random sampling technique for families of patients in the pediatric ward. Research data was collected through questionnaires from the variables of implementing family center care and nurse workload. Data on the variables of FCC implementation and workload were analyzed using a description test and the relationship between FCC implementation and workload was tested using a logistic regression test. Research data was processed using the description test and logistic regression test with a p-value ≤ 0.05 . Results: The research results show that the implementation of family center care has a relationship with workload (0.001). Conclusion: The implementation of family-centered care can form a collaboration with patients and patient families thereby reducing the workload of pediatric nurses in providing nursing care.

Keywords: FCC; nurse; pediatric; workload

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INTRODUCTION

Family-Centered Care (FCC) is an approach that involves families and nurses in providing nursing care to children undergoing treatment in hospitals (Maria et al., 2021). Implementing Family Centered Care requires collaboration between nurses and patient parents with a holistic approach and philosophy in preventing hospitalization (Toivonen et al., 2020). However, in the process of implementing Family Centered Care, there are still parents of patients who are less cooperative in being invited to work together in providing care for their children, which causes a work environment that is not conducive (Ratnasari et al., 2022). Nurses in pediatric inpatient settings have high work responsibilities due to their complex role in the care process which must focus on pediatric patients and parents. The high work responsibilities of nurses cause nurses to have increasingly heavy workloads (Indah Sari et al., 2019). Therefore, analysis is needed regarding the application of Family Centered Care to the workload of nurses in pediatric inpatient rooms.

According to 2018 World Health Organization (WHO) statistics, 3-10% of hospitalized US pediatric patients suffer from stress (de Souto Barreto, 2019). The same applies to around 3%-7% of school-age children in Germany who receive treatment, and around 5-10% of pediatric patients in Canada and New Zealand (Martínez-Velilla, 2019). More than 45 percent of young Indonesians are affected by childhood diseases every year. In Indonesia, the 2012 maternal and child health survey found that of 1,425 children who were hospitalized, 33.2% were hospitalized seriously, 41.6% were hospitalized moderately, and 25.2% were hospitalized light. This figure is based on a survey conducted by the World Health Organization (WHO) between 2012 and 2013 (Vlake et al., 2021). Child hospitalizations in Indonesia rose 13% in 2018 compared to the previous year, according to statistics from the Central Statistics Agency (BPS) (Utami, 2019).

A preliminary study by conducting interviews and looking at data in the children's ward at RSUD Dr. Soetomo Surabaya in January 2023. The results of the preliminary study showed that the total capacity in the low-care children's inpatient room was 146 beds with only 96 children's nurses in the low-care children's inpatient room. Data from October to December 2022 shows that the number of BORs in BOBO children's inpatient rooms exceeds capacity, namely a three-month average of 123.3%. Apart from that, the caring level of nurses from October to December 2022 is at 95.4%. Family Centered Care is applied to several independent actions of nurses such as bathing, performing oral hygiene, giving food and drink, and giving oral medication. Other actions that require special education and supervision in their implementation by the family for continued care at home such as giving sondes, giving nebulizers, giving inhalation drugs, tracheostomy care, and so on. This shows that the ratio of patients to nurses is unbalanced, causing a heavy burden and providing less standard care.

When a child is hospitalized, they must receive care that is focused on their family and that is informed by their participation in the planning, delivery, and assessment of that care (Dhurjati et al., 2019). During the implementation of Family Centered Care, nurses act as facilitators and collaborators with families to provide the best hospital experience for the child. For Family-Centered Care to be effective in reducing the anxiety caused by a hospital stay, nurses and parents must work together. The Family Centered Care process can be accelerated with the help of parents who are familiar with child care in hospitals (Franck et al., 2022). Apart from that, Family Centered Care aims to minimize the impact of trauma on children during hospital treatment and increase family independence in the childcare process (Article et al., 2021).

The implementation of Family Centered Care has an impact on the focus of nurses' work on children and parents. This causes the workload of nurses to increase. Previous research has shown that when Family Centered Care is used to care for preschool children, all aspects of policy, facilities, and nurses (staff) work together as one cohesive unit (Bastani et al., 2015; Krajnc & Berčan, 2020). Another study shows that Family Centered Care causes nurses' workload to focus on patients and families in providing nursing care (Rostami, 2019). Another study also showed that the implementation of Family Centered Care caused nurses' workload to increase because nurses had to focus on patients and families in providing nursing care (Lloyd et al., 2018). Nurses' high work responsibilities lead to a complex role in the care process which focuses on pediatric patients and the elderly (Ratnasari et al., 2022).

Family Centered Care has the benefit of improving the quality of children's health when facing the hospitalization process. Research (Mukmim et al., 2022), explains that the Family

Centered Care approach has a significant effect on nurses' job satisfaction. However, the impact of implementing Family Centered Care on the workload and caring of nurses in providing comprehensive nursing care to pediatric patients and families has not been analyzed. Therefore, this study aims to examine the implementation of Family Centered Care in pediatric inpatient rooms.

METHOD

The design of this study is a cross-sectional study that links the implementation of Family Centered Care with the workload of nurses and caring for nurses in the children's room. The population of this study was 120 pediatric nurses and all families of pediatric patients in November 2024 at RSUD Dr. Soetomo. This research used a purposive sampling technique for pediatric nurses and a simple random sampling technique for families of patients in the pediatric ward, so the sample for this study was 92 nurses and 92 patient families. Research data was collected through questionnaires from the variable implementation of Family Centered Care, and nurse workload. This research instrument uses the Family Centered Care questionnaire with a validity test range of 0.663 - 0.969 and a Cronbach's alpha value of 0.959 (Fradika, 2020) which develops Friedman's theory and the nurse workload variable uses the workload questionnaire by (Izzata et al., 2021) with a validity test range of 0.870-0.982 and a reliable Cronbach's alpha value of 0.785. Research data was processed using the description test and logistic regression test with a p-value ≤ 0.05. This research was approved by the Health Research Ethics Committee of RSUD Dr. Soetomo Surabaya on January 12, 2024, with letter number 0886/KEPK/I/2024.

RESULTS

Table 1.
Demographic Characteristics of Patient Families

Demographic	Category	f	%
Age	21-30 years	35	38
	31-40 years	38	41,3
	41-50 years	17	18,5
	51-60 years	2	2,2
Last Education	Collage	26	28,3
	SHS	51	55,4
	JHS	8	8,7
	ES	7	7,6
Work	Civil Servant	9	9,8
	Private	30	32,6
	Entrepreneur	7	7,6
	IRT	46	50
Unit	Bobo	28	30,4
	Nakula Sadewa	22	23,9
	Bona 1	18	19,6
	Bona 2	24	26,1
Length of Treatment	1-5 days	41	44,6
	6-10 days	33	35,9
	11-15 days	11	12
	16-20 days	4	4,3
	21-25 days	3	3,3

Table 1 contains information regarding patient demographics for 92 respondents who represent patients in the pediatric inpatient installation at RSUD Dr. Soetomo Surabaya. Almost half of the respondents in this study were aged 31 - 40 years, 28 (41.3%), half of the respondents had a high school education, 51 people (55.4%). Half of the respondents work as housewives, namely 46 people (50%). Almost half of the respondents were patients from the

sleeping room with a total of 28 people (30.4%). Almost half of the patients underwent treatment for 1-5 days, 41 (44.6%).

Table 2.
Demographic Characteristics of Nurses

Demographic	Category	f	%
Age	21-30 years	28	30,4
	31-40 years	45	48,9
	41-50 years	12	13,0
	51-60 years	7	7,6
Gender	Male	12	13,0
	Female	80	87,0
Marital Status	Married	79	85,9
	Not Married	13	14,1
Education	D3	49	53,3
	S1	42	45,7
	S2	1	1,1
Lenght of Work	1-7 years	33	35,9
	8-14 years	37	40,2
	15-21 years	11	12,0
	22-28 years	3	3,3
	29-35 years	7	7,6
	36-40 years	1	1,1
Employment Status	Civil Servant	40	43,5
	Non Civil Servants	51	56,5
Unit Work	Bobo	25	27,2
	Nakula Sadewa	23	25,0
	Bona 1	25	27,2
	Bona 2	19	20,7

Table 2 contains information regarding the demographics of nurses from 92 respondents who represent nurses from the pediatric inpatient installation at Dr. RSUD. Soetomo Surabaya. Nearly half of the respondents in this study were aged 31 - 40 years, 45 (48.9%), and most were female, 80 (87%). Most of the nurse respondents were married, 79 (85.9%). Most of the respondents had a D3 education, 31 (53.3%). Most of the respondents had 8-14 years of work experience, 37 people (40.2%). Most of the respondents had non-PNS employment status 51 (56.5%). Also, almost half of the respondents were nurses from Bobo and Bona 1, totaling 25 people (27.2%).

Table 3.
Hypothesis Analysis Regression Test Implementation of Family Centered Care on Nurse Workload in Children's Inpatient Rooms

Variable	Regression Coefficient (B)	S.E	Regresi Wald	dF	Sig.	Exp (B)	Description
Nurse Workload	1.245	0,389	10.274	1	0,001	3.475	Significant

Table 3 contains information on hypothesis analysis using regression tests on the implementation of family centered care on the workload of nurses in the Children's Inpatient Room at Dr. RSUD. Soetomo Surabaya. Based on the results of the regression test, it shows that there is a relationship between the implementation of family centered care and nurses' workload (0.001). This shows that the p value is <0.005, so it is declared significant and the hypothesis in this study can be accepted. The regression coefficient value (B) shows positive results on nurses' workload so that the relationship between the implementation of family centered care and nurses' workload is in line. If the implementation of family centered care is good then it will be followed by a low nurse workload.

DISCUSSION

Based on the results of the regression test, shows that there is a relationship between the implementation of family-centered care and nurses' workload with a p-value of 0.001. This shows that the p-value is <0.005 , so it is declared significant and the hypothesis in this study can be accepted. The regression coefficient value (B) shows positive results on the workload of nurses which means that the relationship between the implementation of family-centered care and the workload of nurses is in line. If the implementation of family-centered care is good then it will be followed by a low nurse workload. The application of family-centered care in child care in hospitals is based on the understanding that the family is the main source of strength and support needed by children (Deepika et al., 2020). The implementation of family-centered care includes respect for children and families, flexibility in organizational policies and practice procedures, providing complete and honest information, providing formal and informal support for children and families, collaborating with patients and families, and developing the individual strengths of children and families.

The implementation of family-centered care is influenced by the role of the patient's family. In the patient's family, family-centered care is implemented based on age, occupation, and length of treatment days. Many families of patients over 30 years of age have good implementation of family-centered care. Apart from that, some of the jobs as housewives have a good implementation of family-centered care. Nearly half of patients undergo treatment for 1-5 days. In line with research by Noviana and Ekawati, (2021), the success of implementing family-centered care is influenced by age, occupation, and length of care. Parents aged 31-40 years have emotional maturity and maturity in thinking so that parents can provide good care and respond well when their child is hospitalized. Parents with housewife jobs have free time to take care of and focus on the treatment of their children who are being treated, thus helping in the process of implementing family-centered care.

Apart from that, the implementation of family-centered care is influenced by the role of pediatric nurses in hospitals. Factors for the success of implementing family-centered care in pediatric nurses are influenced by age, gender, level of education, and length of work. The application of family-centered care in this category is quite often found in nurses aged 21-25 years and have worked for 1-7 years. The implementation of family-centered care in the good category is mostly owned by nurses with a bachelor's degree in nursing and female. This research is in line with (Silalahi et al., 2021), explaining that the implementation of family-centered care is influenced by the age of the nurse, the gender of the nurse, the level of education, and the length of work of the nurse. The age range of 20-40 is the stage of early adulthood where mature individuals tend to have skills and abilities as well as good work performance compared to those below their age. Women have advantages in caring for and establishing good communication with other people, so they are very influential in therapeutic communication and the nature of influence is higher than men. Education influences a learning process, the higher a person's level of education, the better their level of knowledge. Education is also able to form humans who have discipline, never give up, are not arrogant, respect other people, and are devout, creative, and independent. Working for a long time can result in someone gaining knowledge both directly and indirectly, knowledge can be obtained from experience while working. Researchers believe that work experience can influence a person's knowledge because the longer a person works, the more skilled a person will be in the field they know. Long work experience will make a nurse care about the environment. The environment in question is the patient, family, patients, colleagues, and other health workers.

The workload is the difference between worker capacity and the job demands that must be faced (Rohmia, 2019). Nurse workload is the amount of work that must be carried out beyond the limits of the nurse's capabilities. The workload felt by nurses arises due to internal factors that arise from within the body and external factors that arise from outside the nurse's body (Wahyuningsih et al., 2021). This research shows that nurses who have a light workload are nurses aged 31-40 years and who have worked for more than 7 years. Apart from that, nurses with a heavy workload have less than 5 years of work experience. Education also shows that there is a difference between S1 and S2, mostly held by nurses with a light workload. This is in line with research by Indah Sari, Windyastuti and Widyaningsih, (2019), regarding the workload of nurses in childcare services. A good workload for pediatric nurses is mostly experienced by nurses aged 26-35 years. Age is related to performance because increasing age will be followed by a process of organ degeneration so that the ability of the body's organs decreases. So, as you get older you will experience muscle decline which results in fatigue and a heavier workload. The predisposing factor in nursing care for pediatric patients is the work period. The longer you work, the better your skills will be, so the work done will be lighter. Of course, improving these skills has an impact on reducing workload.

The workload of pediatric nurses is different from the workload of nurses in general. According to researchers' assumptions, pediatric nurses have a light workload because they have more knowledge, motivation, and a balance between the number of nurses and patients. Usually, nurses have a high workload but provide good performance in carrying out treatment actions for pediatric patients because of individual factors that the nurses themselves have such as skills, abilities, and motivation. This also does not escape the supervision of the head of the room and demands from the hospital which requires nurses to always provide quality nursing care according to the hospital's vision and mission. There are two workloads including physical and mental work. In physical form, examples include helping patients go to the bathroom, helping with bathing, providing a place for patients to lie down, carrying various health equipment, and so on. However, mental workloads include, for example, providing care to patients based on their cognitive abilities, communicating with patients, taking part in carrying out actions when the patient's condition is critical, carrying out work shifts, and so on. A high workload accompanied by various additional tasks apart from their core work can increase the burden on nurses, resulting in a decrease in performance.

Many nurses have good implementation of family-centered care with a light workload, 35 nurses (38%). The implementation of family-centered care is quite common among nurses with a heavy workload, as many as 3 nurses (3.3%). This research is in line with research by Merisdawati, Winarni and Rachmawati, (2015), which states that family-centered care is related to nurses' workload. The implementation of family-centered care has barriers to family trust, extended family involvement, knowledge inequality, self-distrust, and complexity of administrative services. This causes the collaboration process between the patient and the patient's family to require more effort. Apart from nurses having the main task of carrying out nursing actions and care, they still need to provide and facilitate the patient's family in dealing with several of these obstacles. So, if the implementation of family-centered care is well established, the workload level of pediatric nurses will be light. Implementing family-centered care requires collaboration between patients, families, and nurses (Silalahi et al., 2021). For the implementation of family-centered care to run well, it is necessary to increase nurses' knowledge by providing pediatric nursing training programs, as well as an understanding of collaborative interventions related to the application of family-centered care to patients and patient families. The hope is that by establishing collaboration between nurses and patients and patient families in implementing family-centered care, actions can be

made easier so that nurses' workload will decrease and children's recovery can be more optimal.

CONCLUSION

The implementation of Family Centered Care forms collaboration between nurses and the patient's family, so that in this case the nurse provides understanding, presence, provides comfort, and enables the patient through collaboration with the family. This makes nurses increase caring behavior in collaborating with patient families

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