## The Relationship Between Response Time and The Effect of Hospitalization on Preschoolers

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#### **ABSTRAK**

Waktu respons adalah kecepatan tenaga kesehatan dalam merawat pasien mulai dari saat pasien datang ke ruang gawat darurat hingga mendapatkan perawatan kesehatan. Indikator keberhasilan adalah kecepatan petugas dalam memberikan pendampingan kepada pasien gawat darurat ≤ 5 menit. Salah satu unit pertama yang harus dikunjungi di rumah sakit adalah ruang gawat darurat. Pada anak-anak, tidak semua perawatan yang diberikan dapat diterima dan bahkan perawatan ini dapat berdampak atau berpengaruh pada rawat inap anak. Penelitian ini bertujuan untuk menganalisis korelasi antara waktu respons dan pengaruh rawat inap pada anak prasekolah di ruang gawat darurat RSUD Gresik Muhammadiyah. Jenis penelitian ini bersifat analitik dengan pendekatan cross sectional dengan populasi pasien anak prasekolah (3-6 tahun) yang datang ke IGD RSUD Muhammadiyah Gresik dengan total 132 anak sebagai responden, Dan menggunakan metode purposiye sampling, Analisis data dalam penelitian ini menggunakan uji Chi-Square untuk mengetahui hubungan antara waktu respons dengan pengaruh rawat inap pada anak prasekolah dengan nilai p signifikan = <0,05. Anak-anak prasekolah di ruang gawat darurat RSUD Gresik Muhammadiyah Sebagian besar (54,5%) mengalami efek rawat inap yang cemas, yakni sebanyak 72 anak. Waktu respon perawat terhadap anak prasekolah di ruang gawat darurat RSUD Muhammadiyah Gresik, hampir seluruhnya cepat (89,4%), yakni 118 anak.. Tidak ada korelasi antara waktu respons dan efek rawat inap pada anak prasekolah dengan p- value = 0,056

Kata Kunci: Efek Rawat Inap, Waktu Respons

#### **ABSTRACT**

Response time is the speed of health workers in treating patients from when the patient comes to the emergency room until he gets health care . The indicator of success is the speed of officers in providing assistance to emergency patients ≤ 5 minutes. One of the first units to go to at the hospital is the emergency room. In children, not all treatments given are acceptable and even these treatments can have an impact or effect on the child's hospitalization. This study aims to analyze the correlation between response time and the effect of hospitalization on preschool children in the emergency room of the Muhammadiyah Gresik hospital. This type of research is analytic with a crosssectional approach with a patient population of preschool children (3-6 years) who come to the emergency room of the Muhammadiyah Gresik hospital with a total of 132 children as respondents. And using purposive sampling method. Data analysis in this study used the Chi-Square test to determine the relationship between response time and the effect of hospitalization on preschool children with a significant p value = <0.05. Preschoolers children in the emergency room of Muhammadiyah Gresik hospital Most (54.5%) experienced the effects of anxious hospitalization, namely as many as 72 children. Response time of nurses to preschool children in the emergency room of the Muhammadiyah Gresik hospital, almost all of them were fast (89.4%), namely 118 children.. There is no correlation between response time and the effects of hospitalization in preschool children with a p-value = 0.056

Keywords: Hospitalization Effect, Response Time

#### INTRODUCTION

The Emergency Installation (IGD) is one of the service units in the hospital that provides initial treatment (for patients who come directly to the hospital)/advanced (for patients referred from other health care facilities), suffering from illness or injury that can threaten their survival (Permenkes, 2018). The emergency room is the main gateway for emergency patients, Handling in the emergency room is based on the philosophy of Time Saving is Life Saving, which means that all actions taken during emergency conditions must be really effective and efficient. The need for an appropriate and efficient response time plays a very important role in every decision making from the beginning of the patient's arrival until the patient is transferred from the emergency room. An indicator of success in medical treatment of emergency patients is the speed of providing help to emergency (Sahensolar et al., 2021). The success of response time is highly dependent on the speed of providing help and the quality provided to save lives or prevent disability, this is in accordance with the indicators or standards of the Minister of Health's decision that emergency services must be served  $\leq 5$ minutes from the time the patient comes to the emergency room. In children, not all treatment measures provided are acceptable and even these treatment actions can result in the impact or effect of hospitalization on children.

Hospitalization is a crisis situation in children, when the child is sick and needs treatment in the hospital. This situation occurs because children are trying to adapt to a new environment, this condition is a stressor factor for children both for children and parents and families (Handriana, 2016). Children who undergo hospitalization will usually experience anxiety that is influenced by anxiety due to separation, loss of control, body injuries and pain (pain). One of the efforts to deal with anxiety in children who are hospitalized is to perform procedures quickly or response time, with the hope that a fast response time will

minimize the patient's anxiety level (Nurlaila, 2018).

Based on data from the World Health Organization (WHO) in 2018, it is stated that around 3%-10% of pediatric patients in the United States have an anxious reaction during hospitalization. In Indonesia, in 2020, as many as 3,188 children or around 4% of children underwent hospitalization (Utomo et al., 2021). Research by Ramdani (2016) shows that as many as 52.38% of preschool children (3-6 old) undergo hospitalization. vears Hospitalization can be considered a threatening and stressor, and can pose a crisis for children and families. The results of the study showed that children who were hospitalized had moderate to severe anxiety on average. The cause of this anxiety is influenced by many factors, both the child's age, the new environment and the family that accompanies him during treatment (Pawiliyah & Marlenis, 2019). The results of the study showed that the effect of hospitalization on moderate anxiety levels was 22 children (56.4%), at mild anxiety levels 11 children (28.2%), at severe anxiety levels as many as 6 children (15.4%) (Purnama et al., 2020).

Hospitalization can cause anxiety and stress at all ages, Fast response time is very necessary in handling patients in the emergency room because with a fast response time will minimize the patient's anxiety level, but research on the relationship between response time and the effect of hospitalization in children is still rare. Based on these considerations, researchers are interested in researching the relationship between response time and the effect of hospitalization on children.

#### LITERATURE REVIEW

According to Dina et al (2020), the majority (81.8%) of respondents accompanied by parents had light criteria, while those accompanied by other than their parents showed that most (72.7%) were in the heavy

category. The analysis results showed that using the Mann Whitney test, the value of p = 0.000 ( $\alpha \le 0.05$ ), which means there is a difference in the impact of hospitalization on children accompanied by parents and those other than parents in the Children's Room at Amelia Pare Hospital. Daud et al (2023) The results of statistical tests in this study obtained a p value (0.000) <  $\alpha$  (0.05), there was a significant relationship between response time and the patient's anxiety level in the hospital emergency room. The slower the Response Time, the more severe the level of anxiety the patient will experience.

#### **METHOD**

This research was conducted at the Emergency Room of Muhammadiyah Gresik Hospital in November-December 2022. The research design is descriptive analytical with a cross sectional approach. The population in this study is preschool-age children who come to the emergency room of the hospital. The sample was taken using the purposive sampling technique and 132 respondents were obtained according to the criteria determined by the researcher. The sample criteria are children aged 3-6 years with normal mental development and willing to be respondents. Data collection uses observation sheets and questionnaires containing questions about hospitalization. The measurement of response time starts from the time the patient comes to the emergency room until the patient receives health treatment. The response time is said to be fast if the difference between the time the patient comes and the time the patient receives health care is  $\leq 5$  minutes. The observation sheet of the effect of hospitalization was filled out by the researcher based on the results of observations and answers from several question items asked by the researcher to the parents or guardians of the respondents. Furthermore, the data was processed using the chi-square test to be able to obtain research results

#### RESULT

The results of the research are presented in the following table.

Table 1. Last Education of Nurses in the Emergency Room

 	•		
 it	Nurse	Frequency	Percentage
	education		
1	S1	4	50 %
2	D3	4	50 %
	Total	8	100 %

Source: Primary Data, 2022

Table2: Working Period of Nurses in Emergency Rooms

No	Nurse Employment Period	Frequency	Percentage
1	< 5 Years	1	12,5 %
2	5-10 Years	5	62,5 %
3	> 10 Years	2	25 %
	Total	8	100 %

Source: Primary Data, 2022

Table 3. Distribution of
Frequency of
Hospitalization Effects in
Preschool Children

	Preschool C	hildren	
No	Effects o Preschool Children's Hospitalization	Frequenc	Percentag e
	n		
1	Anxious	72	54,5 %
2	No Anxiety	60	45,5 %
	Total	132	100 %

Source: Primary Data, 2022

Table 4. Distribution of Nurse *Response Time* Frequency in the Emergency Room

No	Response	Frequency	Percentage	
	Time			
1	Fast	118	89,4 %	
2	Slow	14	10,6 %	
	Total	132	100 %	

Source: Primary Data, 2022

Table 5. Cross-tabulation of Children's Anxiety with *Nurse Response Time* in the Emergency Room *Response* 

								p-
Ti	me	Anxious		No Anxiety		Total		value
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	0,056
F	ast	61	51,7%	57	48,3%	118	100 %	
Sl	ow	11	78,6%	3	21,4%	14	100 %	
To	otal	72	54,5%	60	45,5%	132	100 %	

Source: Primary Data, 2022

Based on Table, it shows that half of the nurses' education level in the emergency room is S1 educated (50%). For the working period of nurses on duty, most of them work between 5-10 years (62.5%/ in Table 2). The level of anxiety shown in children when entering the emergency room mostly shows anxiety at 54.5% (Table 3). Nurses in providing a very fast response time of 89.4% (Table 4). The results of the Chi-Square test showed a significant value = 0.056 or > 0.05, meaning that there was no relationship between response time and the effect of hospitalization in preschool children in the hospital emergency department. Muhammadiyah Gresik.

#### **DISCUSSION**

## Effects of Hospitalization of Preschool Children in the Emergency Room

The results showed that most (54.5%) of preschool children experienced the effect of anxious hospitalization, which was 72 children and almost half (45.5%) of preschool children did not experience the effect of anxious hospitalization, which was as many as 60 children. Hospitalization is a crisis situation in children, when children are sick and need treatment in the hospital. The effect of hospitalization is the impact that arises as a result of the hospitalization of the child, The short-term impact is anxiety and fear which if not treated immediately will result in the child refusing any form of treatment provided., and the long-term impact is that the child is sick and treated which if not treated immediately will cause difficulties and poor reading skills, have language disorders and cognitive development, decreased intellectual and social abilities and immune function.

The impact or effect of hospitalization for preschool children is caused by separation anxiety. This is in line with previous research which states that preschoolers have a very close relationship with their mothers, as a result of which separation from their mothers will result in a sense of loss which will eventually cause feelings of insecurity and anxiety (Firmansyah et al., 2021). Preschoolers have a high ego, interpret words with active imagination, have fantasy and creativity, children also have limitations in understanding what is said. When being treated, the child will cry, refuse to eat, refuse to take medication and refuse to cooperate.

### **Nurses' Response Time in Providing Health Services**

The results of the study showed that almost all (89.4%) of preschool children got a fast response time, which was 118 children and a small part (10.6%) of preschool children got a slow response time, which was as many as 14 children. The results of this study show that the response time of nurses in handling patients is very fast, this is in accordance with the standard response time in the emergency room, which is  $\leq 5$  (five) minutes (Ministry of Health, 2008). Internal factors that affect nurses' response time include education. Higher education can influence nurses in providing treatment so that it is in accordance with response time standards (Mudatsir et al., 2017). The second factor is the working period which shows that most (62.5%) nurses have a working period of 5-10 years, which is as many as 5 nurses and a small number (12.5%) of nurses have a working period of less than 5 years, which is as many as 1 nurse.

A long working period or work experience can improve skills and methods in working so that they can have a lot of experience with problems or emergency cases that occur greatly affecting the response time of nurses (Karokaro et al., 2020). Emergency

training that nurses participate in has an important influence on the provision of emergency care, because the more knowledgeable and trained nurses are, the more nurses can provide maximum action (Hania et al., 2020). The results of this study show that the fast response time of nurses in providing health services is influenced by education, working period and emergency training. In addition, external factors that affect nurse response time are one of the nurses' attendance. In this study, the slow response time of nurses is caused because nurses have tasks that must be done at the same time. Nurse unpreparedness can occur because nurses have many tasks that must be completed at the same time. Nurses in the emergency room have a higher workload than nurses in other treatment rooms. Workload can affect the response time provided by nurses due to the increase in the workload owned by nurses at the same time, tasks that pile up so that nurses cannot provide maximum handling (Hania et al., 2020).

The need for an appropriate and efficient response time plays a very important role in every decision making from the beginning of the patient's arrival until the patient is transferred from the emergency room. The indicator of success is the speed and accuracy in providing help to emergency patients (Sahensolar et al., 2021).

# The Relationship Between Response Time and the Effect of Hospitalization in Preschool Children

The results showed that most (51.7%) of preschool children who received a quick response time, still experienced the effect of anxious hospitalization, which was 61 children and almost half (48.3%) of preschool children did not experience the effect of anxious hospitalization, which was 57 children. And almost all (78.6%) preschool children get a slow response time to experience the effect of anxious hospitalization, which is as many as 11 children and a small part (21.4%) of preschool children do not experience the effect of anxious hospitalization, which is as many as 3 children. Preschoolers who undergo treatment in hospitals will be afraid of bodily injuries or procedures that cause pain. This can be minimized by introducing the medical device to be used, performing procedures quickly and

maintaining the presence of parents during treatment actions (Nurlaila, 2018).

The results of the study show that the factors that affect the effect of hospitalization very influential on the effect of hospitalization of preschool children, in the age factor obtained almost half of the preschool children are 3 years old. The age of 3 years is the youngest age of preschool children so the level of anxiety of preschool children at this age is higher than the age above it because of limited understanding and coping mechanisms in overcoming stress while in the hospital, the second factor is gender, in this study most of the preschool children are female who have a higher level of anxiety than boys and the third factor is most of the children Preschools that undergo hospitalization do not have a history of previous treatment experience, which increases children's anxiety. who Preschoolers have had previous hospitalization experience will have lower anxiety than preschoolers who have not had previous experience. However, on the contrary, preschool children who are cared for with good previous care experience will be more cooperative than preschool children who have bad care experience (Rimar & Permatasari, 2022).

The results of the study show that the nurse's fast response time does not have a maximum impact on the effect hospitalization of preschool children, but the slow response time of nurses has an anxious impact on almost all preschool children when undergoing an examination at the emergency room. The results of the Chi-Square test showed a significant value = 0.056 or > 0.05, meaning that there was no relationship between response time and the effect of hospitalization in preschool children. These results show that the response time of nurses in the emergency room in providing health services is not related to the effect of hospitalization of preschool children, Response time is not a factor that affects the effect of hospitalization of preschool children but response time is an effort to reduce the effect of hospitalization on preschool children, From the results of the study show that there is no significant relationship between response time and the effect of hospitalization of preschool children, meaning Response time efforts to overcome the effects of hospitalization are not enough to affect the effects of hospitalization in preschool children, factors that affect the effects of hospitalization such as age, gender, and previous treatment history are more influential on the effects of hospitalization of preschool children so that a quick response time cannot overcome the effects of hospitalization as long as these factors still have a higher value. So other treatments are needed overcome the effects to hospitalization preschool children. for Preschoolers accept the situation of being admitted to the hospital with a little fear and some preschoolers consider it as punishment so that the child refuses to enter the hospital and openly cries about not wanting to be treated (Saputro & Fazrin, 2017).

Hospitalization in preschool children causes stress but hospitalization also provides good benefits for children and families, The role of nurses in dealing with the effects of anxious hospitalization in school children by preventing or minimizing separation by involving parents in child care to make care decisions, accompanying children during actions, and providing support to children, Minimizing loss of control by giving children freedom of movement, facilitate children's activity routines and encourage children's independence as well as increase understanding and prevent or minimize fear and bodily injury by introducing children to the medical devices to be used, maintaining the presence of parents during treatment actions and carrying out procedures quickly in the hope that response time can reduce children's anxiety (Nurlaila, 2018)

#### **CONCLUSION**

The results of the study found that the response time of health workers was almost entirely fast so that it could reduce children's anxiety due to the impact of hospitalization. Although the results of the study showed that there was no meaningful relationship, this fast and effective response time was very necessary for pediatric patients considering that they were adapting for the first time when they entered the hospital. For hospital institutions, it is necessary to improve SOPs that are effective and efficient response time so that health workers can carry it out effectively. Meanwhile, for health workers, it is also expected to be an input for nurses in providing

nursing care to children so that the effect of hospitalization can be minimized.

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