

Length Of Hospital Stay Of Patients In The Icu Of Dr. Loekmono Hadi Regional Hospital Kudus

Emma Setiyo Wulan*, Novita Kristiya Ayu

Institut Teknologi Kesehatan Cendekia Utama Kudus, Indonesia

*Corresponding Author : emmawulan8@gmail.com

Abstract. Length of stay is the average length of stay of a patient in an inpatient care unit at a hospital from the time they are registered as an inpatient until the patient is discharged from the hospital. Length of stay is often an important indicator to improve the efficiency of health services, it is known that the shorter the patient's stay, the more effective the resources are used, but a longer stay in the intensive care unit causes higher costs and can be a burden for their families. The purpose of this study was to determine the description of the length of stay of patients in the ICU. This type of research used is a non-experimental quantitative study with a correlational method using a cross-sectional approach. The population in this study were patients treated in the ICU Room of Dr. Loekmono Hadi Kudus Hospital. The sampling method was carried out by purposive sampling by paying attention to the inclusion and exclusion criteria so that 63 respondents were obtained, then the data obtained was processed using product moment correlation analysis with a p value of 0.000 with a correlation coefficient of 0.633. The results of the study on patient families, reviewed in terms of length of stay, showed that the majority of patients were treated in the ICU for ≤ 3 days (41 respondents (65.1%), and those treated for > 3 days (22 respondents (34.9%). It can be concluded that the majority of patients were treated in the ICU for ≤ 3 days. It is recommended that nurses always coordinate with the patient's family regarding patient actions.

Keywords: Intensive Care Unit (ICU), Length of Stay

INTRODUCTION

Length of stay is the average length of time a patient is treated in an inpatient care unit in a hospital from the time they are registered as an inpatient until the patient is declared discharged from the hospital. (Nisak & Cholifah, 2020) According to the Barber-Johnson chart (international standard), the average length of patient care is between 3-12 days. (Samarang *et al.*, 2023). Based on research conducted by Intani *et al* (2023) The results showed that most respondents had a treatment period of 5 days, with a standard deviation of 29.11. The shortest ICU stay was 2 days, and the longest was 11 days. Therefore, the longer a patient's ICU stay, the more unstable the family's anxiety levels.

The length of stay is often a key indicator of improving efficiency in healthcare. It's well known that shorter patient stays result in better resource utilization. However, prolonged intensive care stays increase costs and become a burden on patients and their families. To improve the quality of healthcare, the primary goal of intensive care is to shorten hospital stays and reduce costs. (Berutu & Lubis, 2021). A critically ill patient is an individual experiencing failure of one or more vital organs, requiring intensive monitoring and intervention to maintain survival. Impairment of various organ systems reduces the risk of complications and improves the patient's prognosis. (Sasmito *et al.*, 2024). Critical patients are patients with critical illnesses, where the health condition is poor with vital organ dysfunction, high risk of immediate death if treatment is not given, potential for reversibility, and requires long-term treatment to prevent death. (Muhsinah *et al.*, 2023).

Critically ill patients treated in the ICU have an impact on both the patient and their family. For the patient, the psychological impacts include feelings of restlessness, anxiety, and discomfort. Furthermore, the impact on the family can be physical, psychological, social, spiritual, and economic. (Seriaka *et al.*, 2023) For families, the ICU is an unpleasant place because the family's emotional response is required to be higher than in other rooms and accuracy in making decisions regarding the survival or quality of life of their family members is required (Riyanto, 2022).

METHODS

This study design uses an observational method with a cross-sectional approach. Observational research aims to observe the relationship between variables, namely the relationship between the length of stay and the level of anxiety of patient families in the ICU room of Dr. Loekmono Hadi Hospital, Kudus. The population in this study was the nuclear family waiting for patients in the ICU waiting room of Dr. Loekmono Hadi Hospital, Kudus. The sampling technique in this study used purposive sampling,

with a sample size of 63 respondents. In this study, respondents were identified by the length of stay of patients, then the level of anxiety of the families waiting for them was measured using the HARS questionnaire.

RESULTS AND DISCUSSION

Table 1 Frequency Distribution of Respondent Characteristics Based on Length of Patient Treatment Days

Length of Treatment Day	Frequency	Percent (%)	Valid Percent (%)
≤ 3 Days	41	65.1	65.1
> 3 Days	22	34.9	34.9
Total	63	100.0	100.0

Table 1 shows that respondents based on the length of stay of patients in the ICU with a length of stay of ≤ 3 days were 41 respondents (65.1%), and patients in the ICU with a length of stay of > 3 days were 22 respondents (34.9%).

The results of the study showed that respondents based on the length of stay of patients in the ICU with a length of stay ≤ 3 days were 41 respondents (65.1%), and patients in the ICU with a length of stay > 3 days were 22 respondents (34.9%). So the results obtained that the length of stay of patients in the ICU room of Dr. Loekmono Hadi Kudus mostly had a length of stay for ≤ 3 days.

Research conducted by Siringoringo & Sigalingging (2023) The results showed that the majority of patients in the ICU were 1 day long, with a total of 16 people (50%), and a minority were 12 days long, with a total of 1 person (3.10%). This is in line with research conducted by Amelia (2021) The results showed that the longest length of stay for patients in the ICCU of Ulin Regional Hospital was 11 days and the shortest was 1 day, with an average length of stay of 3.14 days. Meanwhile, research conducted by Rosidawati *et al.*, (2019) Length of stay in the ICU is divided into two categories: existing patients and new patients. Existing patients were treated in the ICU for more than 3 days, while new patients were treated in the ICU for less than 3 days.

This is in line with research results Hardisman, (2018) showed that the length of stay varied from less than 1 day to 34 days, but was generally less than 7 days (85.2%). The mortality rate for patients in the ICU was quite high, at 25.6% of all cases treated in the ICU. Patients aged >50 years tended to require longer treatment. In addition, patients aged <10 years and >50 years who required intensive care in the ICU tended to have a higher risk of mortality.

ICU patient mortality rates can vary widely, with reports from several hospitals in Indonesia indicating mortality rates ranging from approximately 25% to nearly 50%. For example, a study at Dr. Kariadi General Hospital recorded a mortality rate of 49.5%, with the main causes of death being sepsis, respiratory failure, and septic shock. Key risk factors for death include advanced age, low level of consciousness, unstable blood pressure, and the number of comorbidities the patient has. (Oktoria *et al.*, 2025).

ICU patients often experience serious health complications such as multiple organ failure (e.g., heart, kidney, or lung failure), severe infections including ventilator-associated pneumonia (VAP), and impaired consciousness. These morbidities significantly contribute to the burden of disease and increase the risk of death. (Wicaksono *et al.*, 2022).

CONCLUSION

The results of the Length of Stay study showed that the majority of length of stay was ≤ 3 days, as many as 41 respondents (65.1%), and patients in the ICU with length of stay > 3 days were 22 respondents (34.9%).

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