A Cross-Sectional Study on the Relationship Between Length of Hospitalization and Anxiety among Family Caregivers

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ABSTRACT: Patients receiving care in the room can influence the psychological conditions of their families, particularly by causing anxiety due to the uncertainty surrounding the patients' conditions and the limitations of information available. The anxiety experienced by families can significantly impact their medical decision-making processes and the quality of support they provide to the patients, largely stemming from the uncertainty related to the patients' conditions and the information constraints. This research employs a quantitative correlational design along with a cross-sectional approach. The study population consists of 140 families accompanying their patient members in the HCU. A sample of 104 respondents was determined using Slovin's formula, was selected through simple random sampling technique. Data collected use sheet observation for length of stay and questionnaire. Analysis done in a way univariate and bivariate using the Pearson correlation test with significance $p < 0.05$. Length of stay most patients in the category long stay (> 8 days). Anxiety level family show distribution anxiety severe (34%), no there is anxiety (21%), panic (12%), and moderate (9%). Analysis bivariate show connection very strong and significant positive between length of stay and level anxiety family ($r = 0.775$; $p = 0.000$). Research result prove that the longer the patient treated in the HCU, increasingly tall level anxiety family. Findings This emphasize importance intervention in the form of education , communication effective , and support psychosocial by human resources health For help family face anxiety during maintenance patient .

KEYWORDS: Anxiety , Family patient , length of stay

INTRODUCTION:

Patients with chronic illnesses require comprehensive, multifactorial care and treatment (Hariyono, 2021). During nursing, intensive care in a coma can be provided . cause concern Which cause flavor discomfort so that the family experiences anxiety. Patients and family members have a mental burden and different emotions. Activities giving service action medical and care The fast-paced nature of nursing in a busy intensive care unit (HCU) makes it difficult for families to communicate with patients, nurses, and other staff, making it difficult for them to easily understand the patient's condition. This situation can lead to anxiety (Sudarsih , 2022). Impact psychological to family often make patient feel worried . Anxiety is closely related with feeling No certain and not powerless ,state emotion This No own specific object . Anxiety different with fear , which is evaluation intellectual to something dangerous . (Karima, A & Setyorini, Y, 2017).

Anxiety will also impact on
physiological and psychological . In physiological will result in heart
pounding , palpitations , pressure blood increase sometimes it also decreases , breath
fast and shallow , and in psychological will result in anxiety , disorientation , and decreased concentration (Stuart & Sundeen, 2002). Research by Rosidawati & Hodijah (2019) regarding the relationship between length of stay and anxiety level patient's family in The ICU of Dr. Soekardjo Regional Hospital, Tasikmalaya City, found that the average length of stay was 3.81 days. The anxiety level of the patient's family was mostly anxious (11 people (69%), and those who were not anxious (5 people (31%). The Chi-Square test results showed a p-value of 0.005, indicating a relationship between length of stay and The level of anxiety of patient families. The results of this study indicate that family members of adult patients in the ICU experience significant emotional distress, but they value involvement in care, clear communication, and participation in decision-making within a family-centered care framework. Effective communication, flexible visiting policies, and support from healthcare professionals are key factors in improving family experiences and satisfaction with ICU care (Liu, S., Yang, X., Xie, W., Huang, S., Xiao, W., Deng, Y., & Zhang, C. (2025)

Based on studies introduction Which researchers do on date February 20, 2025 by interviewing 10 families of patients treated in

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the High Room In the Hospital Care Unit (HCU), eight family members of patients reported experiencing anxiety. Two felt tense, tired, and anxious, two felt afraid and uneasy in the hospital, two felt inadequately rested and unable to sleep, and two others reported feeling restless, uneasy, or frequently pacing back and forth, as well as fearful of the actions taken against their family members. Of the 10 families, four stated that their family members had been hospitalized for 5 days. days with composmetis awareness , 2 people said > 7 days with awareness somnolent , 3 people < 5 days with awareness composmetis , and 1 new person entered with delirium awareness.

Data obtained through studies introduction that The average number of patients over 3 months was 87 patients. Most of the patients' families were waiting there. the HCU room is experiencing anxiety, especially when the length of treatment increases increase. A number of family complain flavor worried This arises from uncertainty regarding the patient's condition and uncertainty about when the patient will recover or be discharged. A preliminary study was conducted through direct observation in the HCU waiting room and brief interviews with 15 patient families accompanying their family members. Based on the background above, the researcher is interested in conducting research with the title: "The Relationship Between Length of Hospitalization and the Level of Anxiety of Patients' Families in the High Intensity Ward" Hospital Care Unit (HCU)

METHOD

The type of research used in this study is quantitative research. with design used on this research is A *cross -sectional* correlational *analytical* research design is a type of research that aims to determine the level of anxiety at the time of measurement/observation of the independent and dependent variables only once (Nursalam, 2013). The population is all subjects or individuals who have the same characteristics. certain And become object research (Notoatmodjo, 2018). In this study, the population used is the entire family patient Which currently undergoing treatment in the room HCU Superior Karsa Hospital medical on period time study. Amount flat The average number of patients in the HCU during the last 3 months (March-May 2025) was 140. This population was chosen because own relevance direct to The phenomenon of anxiety in patient families during treatment in the HCU. A sample is a portion of the total number and total number of objects being studied and is considered representative of the entire population (Setiadi, 2013). A sample is the number and characteristics of a population. If the population is large and it is impossible to reach all of them, the research can be carried out use the sample that taken from population (Sugiyono, 2015). This study uses the *Simple Random Sampling technique* because the sampling of sample members is done randomly without considering the strata in the population members. The formula for determining the sample to be used is the *Slovin formula* (Sugiyono, 2016). In this study, the test used is the *Spearman Rank . Spearman Rank* is used to determine the relationship or correlation between two variables . *Spearman Rank* not only shows whether there is a relationship, but also provides information about the direction of the relationship (positive or negative) as well as the strength of the relationship. (very weak, weak, medium, strong, or very strong).

RESULT:
LENGTH OF TREATMENT
Table 1 Length of Patient Stay

Length of Treatment Category	Frequency	Percentage (%)
Short (1-3 days)	31	30
Medium (4-7 days)	29	28
Long (8 days)	44	42
Total	104	100

Based on table 1 part from The respondents' length of stay in the HCU room was Long Stay (>8 Days) as many as 44 people (42%).

ANXIETY LEVEL
Table 2 Anxiety Levels
Family Patient

Criteria	Frequency	Percentage (%)
No anxiety	22	21
Mild Anxiety	26	25
Moderate anxiety	9	9
Severe anxiety	35	34
Panic	12	12
Total	104	100

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Based on table 2 part small of respondents felt anxiety weight as many as 35 people (34 %) , no There is anxiety 22 (21%).

Analysis Long-term care relationship with anxiety level family patient
Table 3. Relationship between Length of Stay with anxiety level family patient

			Length of stay	Anxiety level
		Correlation		
Spearman's Rho	Length of stay	Correlation coefficient	1,000	.773**
		Sig.(2 - Tailed)		.000
		N		.104
	Anxiety level	Correlation coefficient	.773**	1,000
		Sig. (2 Tailed)	.000	104
		N	104	104

Based on Table 3 Based on results correlation test analysis *Spearman Rank* in research This obtained mark p-value = 0.000 which is more small from level significance (α = 0.05) **,** which means There is connection between length of stay and anxiety family patient At home Sick .

DISSCUSION
IDENTIFYING PATIENT LENGTH OF STAY
Based on results research shown in the results study show that part big patients in the High Care Unit (HCU) are undergoing maintenance with relatively long duration . Based on Table 1, the categories long-term care (>8 days) is group the largest , namely 44 patients (42%). This shows that almost half patient need maintenance intensive more from One week . Category care short (1–3 days) occupy order second with 31 patients (30%), while care moderate (4–7 days) totaling 29 patients (28%). Research Aprilina , ZR (2025) stated that flat average length of stay long more Lots compared to length of stay medium and short Because patient experience a state of tending worsening and sudden and contributing factors like type disease , thing the of course, it will affect the length of treatment in the ICU . just matter the influence anxiety from family Because in time certain No can meet patients (Saleh, et al., 2020).

IDENTIFICATION ANXIETY FAMILY PATIENT
Based on . distribution level anxiety experienced by the family patients in the High Care Unit (HCU) of the Hospital show that part big respondents experience anxiety heavy as much as 35 people (34%) **,** then anxiety light as many as 26 people (25%) **,** and No There is anxiety as many as 22 people (21%) **.** Meanwhile That , level anxiety currently only experienced by 9 people (9%) **,** and as many as 12 people (12%) experienced panic as form the most extreme anxiety . Anxiety heavy more Lots compared to anxiety levels medium and light .
There is a number of things that can cause anxiety covering factor age , knowledge , environment as well as support . Someone with increase age so will knowledge also increases as well as his experience about treatment in the ICU so that Can reduce level anxiety . Supportive environment , support social economy can also influence level anxiety someone . With comfortable environment , support adequate social Can lower level anxiety will maintenance member families in the ICU (Amalia, 2018). In the study This is the anxiety felt by the family patient can caused by the length of treatment and the level of severity patient . At the time data collection , family patient say that they worried and anxious will condition patient and afraid his condition the more severe and even Afraid patient died (Amelia, NV, Hafifah, I., & Rizany , I. (2021).
Stuart (2006) explains that anxiety is unfounded worries clear and diffuse , which are related with squeeze No certain and not powerless.Anxiety can viewed through a number of approach like approach psychoanalytic , cognitive , behavioral and physiological approaches psychoanalytic state that disturbance anxiety arise Because existence conflicts at the time individual face the situation that is considered threatening , then in a way general He will own reaction in the form of fear .

ANALYSIS OLD RELATIONSHIP CARE WITH LEVEL FAMILY ANXIETY PATIENT
Based on the statistical analysis, it was found that there is a very strong relationship between the length of stay of patients in the High Care Unit (HCU) and the level of anxiety of the patient's family. This is indicated by the Pearson correlation coefficient value

of . The alternative hypothesis stating a significant relationship between the length of stay and the level of anxiety of the patient's family in the HCU is accepted. The analysis results show a strong and statistically significant relationship, thus supporting the research hypothesis. Other studies in line with this hypothesis from Widiastuti, L., Gandini, ALA, & Setiani, D. (2023). Research results show that There is connection between length of stay with anxiety level family patients treated in the ICU situation This will allows family feel worried Because member family experience maintenance critical and acquire challenges that are factor stress as well as anxiety Because treated in intensive care. Caring is one of the actions taken to reduce family anxiety in waiting for a family member who is being treated for a long time (Agustin, WR (2020). The length of hospitalization will have an impact on the family who is caring for them, such as causing feelings of anxiety in the family who is being treated, which means that the longer the patient is treated, the more anxiety the patient's family members will increase (Saragih, & Suparmi, 2017). The environment can have a big influence on individuals. The environment can provide satisfaction, reduce tension, can cause disappointment and feelings of insecurity for the individual himself (Saragih, & Suparmi, 2017). Research by Sarah J. Beesley et al. in the journal Critical Care Medicine (2018) showed that family members of ICU patients experiencing acute physiological stress were at higher risk of developing anxiety after the intensive care period. Initial stress responses, such as increased heart rate and blood pressure, were significantly correlated with the subsequent emergence of anxiety symptoms in the patient's family. Family stress arises when demands or pressures exceed the family's resources, whether emotional, social, or economic. The results of the study in this book indicate that family responses to stress are strongly influenced by communication patterns, social support, and the meanings they construct collectively regarding a crisis event.

CONCLUSION

This study found that the length of a patient's stay was closely related to the level of anxiety experienced by the patient's family. The longer the patient was treated, the higher the level of anxiety felt by the family. seen from p -value = 0.000 . This value indicates a very strong and statistically significant positive relationship ($p < 0.05$), which means that the longer the patient is treated in the ICU, the higher the level of anxiety experienced by the patient's family.

SUGGESTION

Research This direct existence response psychological anxiety in the family that can occurs in patients especially in the high care unit, the need role education nurses and the existence of a management program subtraction anxiety by field nursing Good in the form of consultation medical , caring for family and patients , as well as therapy subtraction anxiety other things done to family patient .

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