

ORIGINAL ARTICLE

Discharge Planning on Congestive Heart Failure Patients who had Readmission after Hospitalization

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ABSTRACT

Introduction: Congestive Heart Failure is the inability of the heart to maintain adequate cardiac output to meet metabolic and oxygen requirements in the tissues despite fair venous return.

Objectives: To analyze a correlation between Congestive Heart Failure patients' discharge planning and readmission after hospitalization.

Methods: The study was conducted at ICCU Tidar Magelang hospital with 27 Congestive Heart Failure (CHF) patients who had readmission after hospitalization. A consecutive sampling technique was chosen. Data analysis in this study used Chi-square.

Results: The results of the statistical test (Chi-Square) show that one cell (25.0%) with an expected value <5 means that the cell (box) with the expected value is below 5 is 25.0%. The minimum expected value is 2.96, meaning that there is no expected value <1. Continuity correction with p-value = 0.002. The p-value of Fisher's Exact Test = 0.001. The results of the Symmetric Measure table (correlation test) obtained the value of the Contingency Coefficient (r) = 0.561 with a value of p = 0.000.

Conclusions: This statistical test concludes a correlation between Congestive Heart Failure (CHF) discharge planning and readmission after hospitalization.

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1. Introduction

Congestive Heart Failure is the inability of the heart to maintain adequate cardiac output to meet metabolic and oxygen needs in the tissues despite adequate venous return (Smeltzer & Bare, 2013; Hidayah & Wahyuningtyas, 2018). Congestive Heart Failure is a heart disease that continues to increase in incidence and prevalence every year. This condition may result in Congestive Heart Failure morbidity and mortality continuing to grow (Ardiansyah, 2012; Hidayah & Wahyuningtyas, 2018). Poor management of aid in the pre-hospital area of Congestive Heart Failure patients is still challenging to solve (Rosjidi, 2020). Prehospital Care provides services where the victim is first found during the transportation process until the patient arrives at the hospital (Margaretha, 2012). In the pre-hospital period, if, in the first place, the patient does not receive optimal assistance according to their needs; therefore, the risk of disability and even death cannot be avoided (Ambarika, 2017).

The necessity of short aid is one of the obstacles in minimizing the death rate due to Congestive Heart Failure (Waly & Pujo, 2014). Early and appropriate pre-hospital treatment for cardiac arrest patients is essential because it will reduce the mortality and morbidity of patients (Prawesti, Emaliyawati, Trisyani, & Adimiharja, 2018). Death due to Congestive Heart Failure is 20-50% per year. Besides that, Congestive Heart Failure is a disease that causes rehospitalization even though outpatient treatment has been given optimally. The frequency of rehospitalization of Congestive Heart Failure patients is 45% per year (Hidayah &

Wahyuningtyas, 2018). Congestive Heart Failure patients underwent worldwide rehospitalization of 1,094,000 respondents (Padila, 2012). The delay in Congestive Heart Failure patients being brought to the hospital depends on the patient and emergency medical service organizations (Emergency Medical Service), but there are still many people who do not know it (Rosjidi, 2020). Fast and precise management is needed when congestive heart failure occurs, but what often happens is a long pre-hospital time, which causes delays to the hospital (Sibil, 2013).

The high number of rehospitalizations in Congestive Heart Failure patients is influenced by discharge planning (Ong et al., 2016). The provision of discharge planning in question is since the patient enters, undergoes treatment, and prepares to return home, where the ability of the patient and family to cope with the disease has the potential to reduce the length of stay, risk of severity, and risk of rehospitalization within 30 days after being treated at home—pain (Ong et al., 2016). Discharge planning also reduces the incidence of rehospitalization and emergency conditions in patients with Congestive Heart Failure. The form of emergency can vary, from mild to death (Hidayah & Amin, 2017). Thus, nurses have an essential role in the management of Congestive Heart Failure in the hospital. Therefore, it is imperative to improve nurses' ability to handle Congestive Heart Failure (Suharsono, Fahrozi, & Sargowo, 2015).

2. Methods

This research was conducted at ICCU Tidar Hospital, Magelang City, using data from 27 respondents. The samples of this study were all Congestive Heart Failure patients who were readmission after hospitalization by fulfilling the inclusion and exclusion criteria. The sampling technique was carried out by consecutive sampling, while the data analysis used Chi-square.

3. Results and Discussion

The results of the data analysis on the characteristics of respondents based on Table 1. showed that 17 people (63%) did not get discharge planning while being treated in the hospital. There were 20 people (74.1%) who had a frequency of > 1-time rehospitalization. From Table 2, the results of the statistical test show that 16 respondents did not have discharge planning (94.1%) with a rehospitalization frequency of > 1 time, while there were three people (30.0%) who had discharge planning with a rehospitalization frequency of > 1 time. Respondents who did not have discharge planning were one person (5.9%) with one rehospitalization frequency, while seven discharge planning respondents (70.0%) with one rehospitalization frequency.

The results of the statistical test (Chi-Square) show that 1 cell (25.0%) with an expected value of <5 means that cells (boxes) with an expected value of below 5 are 25.0%. The minimum expected value is 2.96, meaning that there is no expected value <1. Continuity correction with p-value = 0.002. The p-value of Fisher's Exact Test = 0.001 (Table 3).

The results of the Symmetric Measure table (correlation test) obtained the value of the Contingency Coefficient (r) = 0.561 with a value of p = 0.000. This statistical test concludes a relationship between discharge planning and the rehospitalization of Congestive Heart Failure (CHF) patients.

Discharge planning is one of the factors that can affect the incidence of rehospitalization of Congestive Heart Failure patients. Several factors may influence the occurrence of rehospitalization; they were the absence of discharge planning when a patient with Congestive Heart Failure returns from the hospital, use of inappropriate drugs, lack of communication from health service providers (caregiver), and the absence of health education to Congestive Heart Failure patients and their families how to do care after being discharged from the hospital (Blauer, Frei, Schnepf, & Spirig, 2015). Health education is also an effort to develop a person's personality, and abilities that can influence behavior change, a person's knowledge of an object contains two aspects, positive and negative aspects (Riyanto, 2014).

Table 1. Characteristics of Respondents Based on Discharge Planning And Rehospitalization Frequency

Characteristics of Respondents	Frequency (n)	Percentage (%)
<i>Discharge Planning</i>		
Yes	10	37%
No	17	63%
<i>Rehospitalization Frequency</i>		
1 time	7	25,9%
> 1 time	20	74,1%

Table 2. Discharge Planning and Rehospitalization Crosstabulation

		Rehospitalization		Total	
		> 1 time	1 time		
Discharge Planning	No	Count	16	1	17
		Expected Count	12,0	5,0	17,0
		% within RTL	94,1%	5,9%	100,0%
	Yes	Count	3	7	10
		Expected Count	7,0	3,0	10,0
		% within RTL	30,0%	70,0%	100,0%
Total	Count	19	8	27	
	Expected Count	19,0	8,0	27,0	
	% within RTL	70,4%	29,6%	100,0%	

Table 3. Statistical Test Results Based on Chi-Square Test Analysis

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12,414 ^a	1	,000		
Continuity Correction ^b	9,530	1	,002		
Likelihood Ratio	12,992	1	,000		
Fisher's Exact Test				,001	,001
Linear-by-Linear Association	11,955	1	,001		
N of Valid Cases	27				

a. 1 cells (25,0%) have an expected count of less than 5. The minimum expected count is 2,96.

b. Computed only for a 2x2 table

Table 4. Statistical Test Results Based on Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	,561	,000
N of Valid Cases		27	

The patient's lack of understanding about Congestive Heart Failure is the cause of the high incidence of these patients being rehospitalized in a relatively short time. This situation may cause Congestive Heart Failure patients to get optimal treatment by providing health education. Information sharing aims to increase knowledge, understanding, change patient and family behavior to prevent complications and reacceptance (Mosalpuria, 2014). The high rate of rehospitalization of Congestive Heart Failure patients at the hospital indicates that the patient

has a poor experience with Self Management Education and the patient's ignorance of Congestive Heart Failure disease itself (Blauer, Frei, Schnepf, & Spirig, 2015).

Mazimba (2011) explained that Congestive Heart Failure patients who can manage their disease have the potential to reduce the incidence of rehospitalization and reduce mortality due to complications suffered. A total of 26% of patients discharged from the hospital will return to rehospitalization within 30 days if the patient is not given a discharge planning when the patient will be released from the hospital. The non-optimal discharge planning will cause the patient to be confused and not manage changes in his medication while at home. The use of drugs in patients with Congestive Heart Failure is a condition that must always be evaluated. Compliance with the help of drugs is attached to the self-care behavior of patients with Congestive Heart Failure. The nurse's role here is to instill awareness of patients with Congestive Heart Failure by complying with the way of using drugs and giving discharge planning so that the incidence of rehospitalization can be minimized (Hidayah & Wahyuningtyas, 2018).

Discharge planning is an interdisciplinary approach to continuity of care and a process that includes prediction, goal setting, planning, implementation, coordination, and evaluation and is a quality relationship between hospitals, public health services, non-governmental organizations, and other health care agencies (Wulandari & Hariyati, 2019). Another definition of discharge planning is a complex process that aims to prepare a patient for the transition in the hospital until the patient returns home. Discharge planning must be done when the patient comes to health services (Nordmark, Zingmark, & Lindberg, 2016). The success of discharge planning is influenced by several factors, including patient involvement, family and participation of other health workers, communication between nurses and patients, time taken by nurses to carry out discharge planning, agreements and consensus, and discharge planning personnel (Poglitsch, Emery, & Darragh, 2011).

Discharge planning will ensure that patients and their families can safely carry out an action at home after being discharged from the hospital. Discharge planning is a measure of the ability of Congestive Heart Failure patients to understand the explanation of health education when it is given by the health service provider (caregiver) at the hospital as preparation for treatment when the patient returns home. Discharge planning components include: control time, continued care while at home, limit diet, and activity limits in Congestive Heart Failure patients. The understanding of Congestive Heart Failure patients on discharge planning will reduce the number of rehospitalization (Azimatunnisa, 2011). Hamel (2016) explains that the factors related to discharge planning are nurses' attitudes and nurse communication. Discharge planning is significant for the continuity of patient health care. It should be an implementation that must be carried out by nurses properly.

Discharge planning is also influenced by hospital infrastructure. The absence of health education can affect the implementation of discharge planning because health education functions as a source of information that can be used when the patient is at home (Azizah, 2017). Discharge planning carried out from the start can reduce rehospitalization rates and complications in Congestive Heart Failure patients (Graham, Gallagher, & Bothe, 2013). Discharge planning is essential for patients and families, nursing management, and hospital management (Iskandar, 2016). Thomas (2018) states that discharge planning positively impacts Congestive Heart Failure patients and their families. Discharge planning helps increase knowledge, thereby reducing the rehospitalization of Congestive Heart Failure patients. Mazimba (2011) states a relationship between the rehospitalization of Congestive Heart Failure patients with discharge planning.

4. Conclusion

The results of this study showed that 16 respondents did not have discharge planning (94.1%) with a rehospitalization frequency of > 1 time, and the respondents without discharge planning were one person (5.9%) with a rehospitalization frequency of 1 time. The results of the statistical test (Chi-Square) show that one cell (25.0%) with an expected value of <5 means that cells (boxes) with an expected value of below 5 are 25.0%. The minimum expected value is 2.96,

meaning that there is no expected value <1 . Continuity correction with $p = 0.002$. The p -value of Fisher's Exact Test = 0.001. The results of the Symmetric Measure table (correlation test) obtained the value of the Contingency Coefficient (r) = 0.561 with a value of $p = 0.000$. This study concludes a relationship between discharge planning and the rehospitalization of Congestive Heart Failure patients at ICCU Tidar Hospital, Magelang City.

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