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# Relationship of discharge planning action with relapse rate in schizoprenia patients

#### Dwi Indah Iswanti

Doctoral Program in Nursing, Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia
Corresponding author email: dwi.indah.iswanti-2021@fkp.unair.ac.id

# Nursalam

Professor Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia

#### Mei Wulan Sari

Faculty of Nursing and Health Sciences, University of Karya Husada, Semarang, Indonesia

# Livana P. H

STIKes Kendal, Kendal, Indonesia

**Abstract**---Background: A total of 15.81% of patients of the Regional Psychiatric Hospital Dr. Amino Gondohutomo in 2020 who had been declared healthy had a relapse. The high rate of relapse caused by discharge planning given by nurses is still not in accordance with Standard Operational Procedures, causing patients to experience relapse. Objective: This study aims to analyze the relationship between discharge planning measures with the relapse rate in patients with schizophrenia. Methods: This research is analytical observation research using retrospective design. Samples were selected using cluster random sampling technique and obtained samples of 67 nurses. The research instrument used a checklist of Standard Operational Procedures for discharge planning and the relapse rate of schizophrenic patients based on medical records. Statistical data analysis using chi square test. Results: There is a relationship between discharge planning measures with the relapse rate in patients (p-value=0.000). Most (88.1%) nurses have carried out discharge planning actions according to Standard Operational Procedures. A total of 81.35% of nurses who perform discharge planning actions have patients with relapse rates > 30 days. This study concluded that there is a relationship between the act of discharge planning with the relapse rate in patients.

**Keywords**---discharge planning, relapse rate, schizophrenia.

# Introduction

The prevalence of schizophrenia continues to grow with significant impacts on health and social, human rights and economic consequences worldwide. The World Health Organization (WHO) in 2019 noted that globally 264 million people are affected by depression, 45 million people have bipolar disorder, 20 million people have schizophrenia, 50 million people have dementia.1 in this case in Indonesia schizophrenics currently do not get adequate support as they are only given medication and control to a psychiatric doctor one month for one to two times, after which the recovery process is handed over to the family.

Discharge planning is one of the important elements in nursing services. Discharge planning is the process of preparing hospitalized patients to be able to independently care for themselves after treatment.<sup>2</sup> Nurses are one of the health workers who are directly involved in the implementation of discharge planning which also determines the success of the discharge planning process. The role of nurses in the implementation of discharge planning is to identify specific patient needs, as well as maintain or restore optimal patient conditions and evaluate the continuity of nursing care. Implementation of good discharge planning will affect the improvement of patient health quality.<sup>3</sup>

Discharge planning implementation is influenced by nurse performance factors. 6 factors that affect the implementation of discharge planning, namely: 1) characteristics of nurses (age, gender, education level, marital status, length of work) 2) the attitude of nurses in implementing discharge planning 3) motivation of nurses in implementing discharge planning 4) the role and support of other health workers, patients, families 5) communication between nurses and patients 6) the time the nurse has to carry out discharge planning.<sup>5</sup>

Discharge planning that is given early will have an impact on shortening the length of patient care in the hospital, can have an impact on reducing the hospital budget, can reduce the relapse rate after they return from the hospital, and can allow the intervention of the discharge plan to be carried out on time.<sup>3</sup> Disharge Planning can reduce patient care time, prevent relapse, improve patient health conditions, reduce patient family burdens, and reduce mortality and morbidity. See the importance of discharge planning implementation and the impact of not optimal discharge planning.<sup>4</sup>

Many factors influence or cause relapse, such as parenting, medication adherence and socioeconomic factors of the patient. The cause of relapse is due to drug withdrawal, closed personality, and failure. This study recommends efforts to overcome the factors that can lead to relapse. The factors that affect the delay in the discharge of patients revealed that since the patient was decided to go home medically until out of the inpatient runag require a waiting time of more than 3 hours.

Based on the records of the Amino Gondohutomo hospital, the number of schizophrenia patients hospitalized is quite large. However, relapsing patients continue to occur the relapse rate in 2020 is quite high. In 2019 the total number of patients hospitalized with schizophrenia was 8,329 and then as many as 4,175

patients had been declared discharged or healthy but patients had relapses and re-entered as many as 551 patients. The number of patients increased in 2020 with a total of 9,864 patients and 5,835 patients declared healthy but patients returned to the hospital due to relapse of 923 patients. There are several things that can trigger a relapse, including patients not taking medication and not control to the doctor regularly, stopping their own medication without doctor's approval, lack of support from family and community, as well as severe life problems that create stress so that patients relapse and need to be hospitalized.

Based on preliminary research with interview techniques, patient discharge planning has been implemented. Discharge planning Form at the mental hospital is only a recommendation for families, namely: 1) take regular medication 2) given activities/busyness, 3) Control regularly at the nearest health center or hospital. The third components of the recommendation for families that have been given did not rule out the possibility that patients would return to hospitalization due to relapse. Based on this background, the author is interested in conducting a study entitled "The relationship of Discharge Planning actions with the relapse rate in schizophrenia patients".

# **Methods**

The type of research used in this study is analytical observation. Analytical observation, which is research that explains the relationship between variables through hypothesis testing. The study used a retrospective design, where the dependent variable data collection is done first, then measured the independent variables that have occurred in the past. This research will be directed to explain a situation or situation.<sup>8</sup> Researchers tried to find the relationship between the application of discharge planning nurses with relapse of patients with schizophrenia to determine the presence or absence of a relationship between variables, where the action of discharge planning as a dependent variable and the relapse rate as an independent variable.

Respondents in this study were nurses who worked at the Regional Psychiatric Hospital Dr. Amino Gondohutomo. Sampling using cluster random sampling technique based on inclusion criteria (nurses who are in RSJD, willing to be a respondent, have done discharge planning) and exclusion (not working/on leave, doing actions outside discharge planning) to the total population to obtain a sample of 67 nurses. The research instrument consists of a checklist of standard operational procedures for discharge planning and the relapse rate of schizophrenic patients based on medical records. Statistical analysis using chi square test used to test the relationship between the independent variable with the dependent variable. To make a Test decision, the degree of meaningfulness is used with meaningful provisions if the significant value < 0.05, it can be said that the nurse's discharge planning action affects the patient's relapse rate.

#### Results

# Distribution Of Action Discharge Planning

The results of the checklist sheet distributed to nurses about discharge planning actions obtained the following results:

No	Discharge Planning	Frequency	Persentase
	Actions		(%)
	Not implemented	8	11,9
1	according to Standard		
	Operating Procedure		
	Implemented according	59	88,1
2	to Standard Operating		
	Procedure		

Table 1. Frequency Distribution Of Discharge Planning Measures

Based on the table above, it can be seen that the discharge planning action carried out by nurses shows 88.1% or 59 nurses have carried out discharge planning actions according to Standard Operational Procedures.

# **Distribution Of Relapse Rate**

The results of observation of medical records on the relapse rate of patients in each nurse who became the respondents of the study obtained the following results:

Table 2. Frequency Distribution Of Relapse Rate

No		Frequency	Presentase
	Patients		(%)
1	< 30 days	19	28,36
2	> 30 days	48	71,64

Based on the table above, it can be seen that 48 nurses who performed discharge planning actions according to Standard Operational Procedures, the relapse rate of their patients was more than 30 days. This shows that the discharge planning action given by nurses affects the relapse of patients for a long time.

# Relationship of Discharge Planning Action with Relapse Rate in schizophrenia patients

Table 3 Relationship of Nurse Discharge Planning Action with Patient Relapse
Rate

	Patient Relapse Rate			P-
Discharge				Value
PlanningActions	< 30 days	> 30	Total	
		days		

	N	%	N	%	N	%	
Not Implemented	8	100	0	0	8	100	
Implemented	11	18,6	4	81,3	5	100	
		5	8	5	9		0,000
Total	19	28,3	4	71,6	6	100	
		6	8	4	7		

Based on the table above shows that respondents with discharge planning actions in the category not implemented in accordance with *Standard Operating Procedure* as many as 8 respondents where all (100%) had a relapse of patients < 30 days. Respondents with discharge planning action in the category carried out according to *Standard Operating Procedure* as many as 59 respondents where the relapse of patients < 30 days as many as 11 respondents (18.65%) and relapse of patients > 30 days as many as 48 respondents. Chi square test results showed a significant value of significance or p-value of 0.000 is less than 0.05 which means there is a relationship between the action of discharge planning with the relapse rate of patients. Therefore, it can be concluded that there is a relationship between discharge planning actions with the relapse rate of patients in the Regional Psychiatric.

# Discussion

# **Discharge Planning Actions**

Based on the results of the document review action discharge planning conducted nurses obtained results stating that most or 59 nurses (88.1%) have carried out discharge planning actions in accordance with *Standard Operating Procedure*. Discharge planning action performed by nurses can be said to be in accordance with the *Standard Operating Procedure* in its implementation. However, the implementation of discharge planning is still considered less than optimal because the small details of discharge planning are sometimes ignored by nurses such as offering patients to prepare all personal items to take home and providing studies to patients or patient families about a good environment for patients.

Whereas discharge planning is a process that begins with the patient receiving health services followed by the continuity of care both in the healing process and in maintaining the health status until the patient feels ready to return to his / her environment. In the process of discharge planning actions, discharge planning is carried out on each patient under management from the patient enters until the patient goes home, each discharge planning implementation is equipped with making nursing resumes, filling discharge planning sheets, control letters and leaflets in accordance with the nurses diagnosis.<sup>8</sup>

Discharge planning steps are Assessment, Nursing Diagnosis, planning, implementation, and evaluation. Meanwhile, based on *Standard Operating Procedure* Regional Mental Hospital (RSJD) Dr. Amino Gondohutomo that the implementation of discharge planning by nurses is to conduct an assessment, provide health education and fill in the discharge planning format and also record the evaluation of patients returning home on the nursing care sheet.

Discharge planning action performed by nurses can already be said to be good because 88.1% of nurses have carried out discharge planning according to *Standard Operating Procedure* compared to the results of research conducted by Rezkiki & Fardilah, (2019) which states that the implementation of discharge planning in Ambun Suri Dr. Achmad Mochtar Bukittinggi 50.8% good can be said to be the implementation of discharge planning in the inpatient room is less than optimal.<sup>10</sup>

# Patient Relapse Rate

Based on the results of the study document relapse rate of patients obtained results stating that 48 nurses who perform discharge planning actions according to *Standard Operating Procedure*, the relapse rate of patients more than 30 days. This shows that the discharge planning action given by nurses affects the relapse of patients for a long time. Relapse is a patient's condition where the same symptoms appear as before and result in the patient having to be treated again. Stressful situations can trigger depression in people who are prone to depression, where it can be found that people who experience relapse are more likely than people to experience adverse events in their lives. In chronic schizophrenia it is estimated that there is a relapse of 50% in the first year, and 70% in the second year. Relapses usually occur because of bad events before they recur. <sup>12</sup>

Based on this theory, it can be concluded that relapse is not only influenced by discharge planning actions performed by nurses but the environment around the patient is the main factor that affects the relapse of patients. After the discharge planning procedure, the patient will be returned to the family. Acceptance of the family back holistically is very significant in the healing process of mental illness patients. The Diagnosis and administration of drugs carried out by medical personnel is not the only determinant of the success of the treatment of patients with mental illness. The family should also be involved in giving attention to things that can affect the patient when the treatment process is carried out, such as the condition that the patient is experiencing and also the support from the surrounding environment.

Furthermore, research conducted Sebayang states that mental patients experience relapse counted > 1 month or no relapse at all, it is due to the implementation of discharge planning that has been in accordance with the existing *Standard Operating Procedure*. In addition, the number of respondents who do not experience relapse due to the client, the client's family and nurses have synergized well, so that the relapse rate can be minimized.<sup>13</sup>

# Relationship of Nurse Discharge Planning Action with Patient Relapse Rate

Based on the research that has been done, discharge planning actions in the category are not implemented according to Standard Operating Procedure as many as 8 respondents where all of them (100%) Experience patient relapse < 30 days. Respondents with discharge planning actions in the category carried out in accordance with *Standard Operating Procedure* as many as 59 respondents where the relapse of patients < 30 days as many as 11 respondents (18.65%) and relapse of patients > 30 days as many as 48 respondents. Chi square test results

showed a significant value or p-value of 0.000 is less than 0.05 which means there is a relationship between the action of discharge planning with the relapse rate of patients.

Discharge planning is a coordinated process that aims for patients to receive follow-up care at home after discharge from the hospital and help the patient adapt to the environment around his home. Discharge planning is planned from the beginning of the arrival of patients to the hospital which aims to shorten the number of days of treatment of patients, reduce the number of patients who return to the hospital after being discharged, and provide good intervention for patients. The purpose of discharge planning will be achieved if the cooperation of nurses, patients and families who interact with each other for the healing of patients.

This study found that there were 11 respondents who experienced relapse < 30 days, but it is not only influenced by the action of discharge planning but also influenced by the patient's family. After the patient and family are given discharge planning measures, the patient is allowed to go home and then the family has an important role in the patient's health. In this study there are families who have not been able to perform optimal health care to patients in the form of drug noncompliance and relapse management. In addition, families have not been able to receive patients and provide optimal social support and have not been able to provide a good environment for patients. This is what makes the patient more quickly experience a relapse after being discharged from the hospital.

It is clear from the above explanation that there are several factors that can trigger relapse in schizophrenic patients in addition to discharge planning actions, namely the client himself, the doctor who has prescribed, the client's family, the environment around the client's residence and the person in charge of the client during the hospital or nurse responsible for the client's health. Nurses here have a role as a provider of nursing care from the first client to enter the hospital until discharge planning. In addition, providing family education about diseases/disorders, teaching petechnical coping techniques to families that will help families change client behavior, and strengthening family strength also affects patient relapse.

Discharge planning should be done since the patient is admitted to a health care agency, especially in hospitals where the patient's time span to stay is shortened. Effective Discharge planning should include ongoing assessment to obtain comprehensive information about the changing needs of the patient, statement of Nursing Diagnosis, planning to ensure patient needs in accordance with what is done by health care providers.<sup>11</sup>

Discharge planning is often inadequate. Only half of all patients who have been discharged successfully undergo discharge planning and forward to outpatient treatment. Discharge planning should be prepared comprehensively and implemented properly by nurses considering nurses are one of the professional services that can prevent relapse in patients. Relapse itself is a condition where the patient experiences the same symptoms that cause the patient to be treated again. Discharge planning should be done with good communication and directed

so that patients and families get a good understanding that can be useful when they have returned home. <sup>11</sup> This is in line with research conducted by Pangestu which states that there is a relationship between the act of discharge planning with relapse rate in patients with schizophrenia, with a p-value = 0.048. So it can be explained that the better the nurse's actions or Discharge Planning, the average patient relapse rate decreases.<sup>5</sup>

# Conclusion

Based on the results of research and discussion above, it can be concluded that:

- 1. Discharge planning action performed by nurses obtained results stating that most or 59 nurses (88.1%) have carried out discharge planning actions in accordance with *Standard Operating Procedure*.
- 2. The relapse rate of patients obtained results stating that 48 nurses handled patients relapse after > 30 days given discharge planning action.
- 3. There is a relationship between discharge planning actions with the relapse rate of patients (p-value of 0.000)

# Suggestions

Based on the above conclusions, the researchers gave the following advice:

- 1. For the Regional Psychiatric Hospital (RSJD) Dr. Amino Gondohutomo It should be considered to increase knowledge and insight to nurses in the discharge planning action so that nurses can carry out discharge planning in accordance with the Standard Operating Procedure that has been set to prevent relapse of patients who cause increasing the frequency of schizophrenic patients.
- 2. For nurses.
  - Efforts to involve patients and families in the implementation of discharge planning and efforts to involve a good outlook in relation to the patient's current condition which simultaneously will also reduce the relapse rate of patients.
- 3. Subsequent research
  It is recommended to do further research with a longer time and a larger
  number of samples in order to obtain more significant results.

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