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Discharge Planning Model with Approach of Method in Improving Patients' Readiness for Discharge in Hospitals

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ABSTRACT

Background: Discharge planning is one form of nursing service that is still a problem in Indonesia. That is because its implementation has not shown the patients' readiness when returning from a hospital. One solution is to develop a discharge planning approach to *Medication, Environment, Treatment, Health teaching, Outpatient referral, Diet* (METHOD).

Aim & Objectives: This study aimed to analyze the discharge planning model with the METHOD approach in improving the readiness of patients returning from hospitals in Surabaya, Indonesia.

Method: The study used a quasi-experimental design with 40 patients whom were diagnosed with diabetes mellitus and were selected by purposive sampling. The data was collected with observation and interviews to assess the implementation of discharge planning and patients' readiness models. There were 18 questions using a Likert scale with answers 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. Moreover, patients' readiness was measured using 16 questions consisting of questions about readiness for control, treatment, diet, activity and rest.

Results: The Mann-Whitney test results showed p value = 0.000 ($p < 0.05$). The intervention group that applied the discharge planning model with METHOD approach had a greater influence on the patients' readiness behavior to go home compared to the control group.

Conclusion: The readiness of patients treated in hospitals in Surabaya, Indonesia before going home can be improved by applying a discharge planning model that used the METHOD approach.

Keywords: *Discharge planning, medication, environment, health, treatment, outpatient referral, diet*

INTRODUCTION

Discharge planning is a dynamic process to assess current and advanced care needs that are aimed to make patient independence. The current discharge planning implementation and provision of health education are still given for several hours before the patient returns home from a hospital. This can cause patient's anxiety about the care or activity done related to his condition after going home. Discharge planning is also still fragmented because nurses only carry out routine activities in the form of return control information. Moreover, nurses' compliance with policies and standard procedures are still low.

Discharge planning is very necessary in providing nursing care to patients in the hospital. Therefore, it needs to be prepared by the nurses and done as early as possible. Doing this earlier can reduce the length of hospital care, the cost of care, and the recurrence rates, also allow intervention home plans to be done on time. An important aspect of education and care coordination is to prepare patients and families to successfully manage themselves after hospital discharge. [1, 2]

The results of the study in the hospital wards of Islamic Hospital Surabaya showed that discharge planning was not carried out immediately when the patient was hospitalized. Thus, the length of treatment

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could not be confirmed. So far, the education that would be delivered in the discharge planning process has never been formulated before. The provision of health education was carried out on the day the doctor decided that the patient can go home. Evaluation on the patients' level of understanding is rarely done. The format of health education planning is incomplete. Hence, patients going home are less focused on METHOD. During this time, health education provided to patients during the hospital stay was not planned and documented because planning was only verbal.

The implementation of discharge planning has not been well implemented, causing the quality of service not in line with expectations. Besides that, there is no clear standard regarding discharge planning, which causes each hospital to have different discharge planning forms. The concept of the solution developed in this study is to develop discharge planning itself with the METHOD approach. METHOD is an abbreviation of aspects that need to be taught in the provision of health education. They aim to improve knowledge and understanding, also support for health conditions and follow-up care that must be done after patients go home. The purpose of this study is to analyze the effect of the discharge planning model with the METHOD approach in improving the readiness of patients returning home from hospitals in Surabaya, Indonesia.

METHOD

This is a quasi-experimental study. The research sample consisted of 40 patients whom were diagnosed with diabetes mellitus; there were 20 in the treatment group (Group A) and 20 in the control group (Group B). The sampling technique of purposive sampling was used to recruit respondents. The data were collected from participants who met the following inclusion criteria: (1) patients who need health education (2) patients who need continuity of care in Islamic Hospital of Surabaya, Indonesia, with a medical diagnosis of diabetes mellitus.

The data were collected by 18 questions using a Likert scale with answers 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree to assess the implementation of the discharge planning model. METHOD approach was used as measured by functionality, efficiency and usability. Meanwhile, patients' readiness was measured by using 16 questions about readiness to control, treatment, diet, activity and rest with yes = 1, no = 0.

Data analysis was used to determine the effect of discharge planning development with the METHOD approach on patients' readiness behavior using the Mann-Whitney test. The level of significance was set at $p < 0.05$.

RESULT

Table 1 shows the characteristics of respondents in the intervention and control group. Most of the respondents in the intervention group were aged between 40-59 years old (70%), women (80%), had primary school as the highest education (40%), and being hospitalized for the first time (55%). Whereas, age of the respondents in the control group were equally distributed between 40-59 and 60-79 years old. Most of the respondents in the control group were female (60%), had primary school as the highest education (50%), and being hospitalized for the second time (50%).

Table 1: Characteristics of respondents based on age, gender, latest education, hospital admission experience with the same disease

Characteristics of Respondents	Intervention Group		Control Group	
	n	Percentage	n	Percentage
Age				
40-59 Years	14	70.0	10	50.0
60-79 Years	6	30.0	10	50.0
Sex				
Female	16	80.0	12	60.0
Male	4	20.0	8	40.0
Education				
Elementary	8	40.0	10	50.0
Junior High School	4	20.0	7	35.0
Senior High School	6	30.0	2	10.0
Undergraduate	2	10.0	1	5.0
Experience of being hospitalized with the same disease				
Once	11	55.0	5	25.0
Twice	5	25.0	10	50.0
3 Times	2	10.0	2	10.0
More than 3 Times	2	10.0	3	15.0

Table 2 shows that there was an effect of discharge planning model with METHOD approach on patients' readiness behavior to go home. The mean rank value among the intervention group was 27.75, while among the control group was 13.25. The Mann-Whitney test results showed p value = 0.000 ($p < 0.05$). The results showed that the intervention group which was implemented with the METHOD approach as the discharge planning format, had a greater influence on the patients' readiness behavior to go home compared to the control group. It was concluded that statistically there were significant differences in the patients' readiness between the intervention group and the control group.

Table 2: Effect of discharge planning with the METHOD approach on the patients' readiness behavior to go home

	Group	N	Median (Min-Max)	p value
Patients' readiness behavior to go home	Intervention	20	93 (75-100)	0.000
	Control	20	75 (70-93)	
Mann-Whitney Test. *Mean rank* intervention group= 27.75; control group=13.25				

DISCUSSIONS

The implementation of the discharge planning model with the METHOD approach causes the patients to have a good readiness behavior in facing repatriation. The implementation of discharge planning with the METHOD approach was carried out since the patient was hospitalized. The discharge planning model with the METHOD approach contributed to the patients' willingness to go home. The METHOD aspects can provide an overview to the patients and families about drugs given. They also gave a good environment for patients, therapies and exercises necessary for patients' health, information on re-control and service in the community and diet [3].

The discharge planning helped the transition process of patients from one environment to another. The process can be seen with several indicators. Indicators of the results obtained should be aimed at the success of the patients' discharge planning, namely: (a) patients and families understand the diagnosis, anticipate the level of function, medication and treatment measures after the patients go home, advanced nursing, and the response taken in the emergency condition, (b) special education is given to patients and families to ensure proper care after the patients go home, (c) support systems in the community are coordinated to enable patients to go back to their homes, help patients and families coping with changes in the patients' health status, (d) conduct patients' relocation and coordination of support systems or move patients to other health services.

Discharge planning is a systematic process that is aimed to prepare patients to leave the hospital to continue ongoing care programs at home or with community care [4]. According to Almborg, [5] giving discharge planning before being discharged can improve patients' progress, and help patients achieve optimum quality of life. Patients who are not ready to face repatriation tend to return to the hospital (readmission), die or return to the emergency room within 30 days after discharge. The factors that caused unpreparedness of patients are lack of knowledge, low quality of service, low provision of health education and persistent symptoms [6]. According to Harrison, unpreparedness of patients in facing repatriation was due to lack of treatment plans and daily activities to be carried out at home [7].

The strategies that can improve patients' readiness to go home and patients' health are language use, use of leaflets or pictures. These are done to increase understanding, limit the provision of health information at one time, repeat instructions, use the teach back method, and have a respectful and sensitive attitude towards patient needs. [8] A simple strategy that can be implemented in a hospital is to improve repatriation planning. By developing a flexible planning that provides relevant information to anticipate future needs, it also tends to increase discharge planning and reduce long-term needs that are not met. [9]

The discharge planning was successful in improving patients' readiness in facing repatriation. It was a form of professional work from nurses because the implementation of good discharge planning was the duty of nurses. They played an important role in providing understanding and knowledge to patients and increasing patients' motivation to undergo the

optimal rehabilitation process. The patients' readiness to go home is an indicator of the success of discharge planning. Knowledge, understanding and skills of nurses in carrying out discharge planning affected the patients' readiness behavior to go home because nurses were educational providers and people who accompanied patients for 24 hours. Therefore, nurses were required to provide information needed by patients. Patients' readiness behavior to go home cannot be formed in a short time with short education. When individuals did not understand the health information, the consequences did not only affect the patients' perceived readiness for discharge, but can also lead to worse health outcomes, dissatisfaction, and medical errors. [10]

The level of readiness and awareness of patients and families in the involvement of patient care was an important factor in the discharge planning process. All things beyond the capacity of patients were the responsibility of health workers to communicate to be understood by patients or families. Communicating health information could be a challenge because health workers had to share complex information and included a lot of contents. The characteristics of patients with unique linguistic preferences, skills, cultural, physical and cognitive differences were related to changes in age, disability, and emotions. All these could influence the process of receiving education[11].

Less communication occurred in situations when health workers were in a hurry or patients were afraid, sick, and/or in various matters related to their disease problems. Combining the readiness scale of patients back into the discharge planning process can add alternatives to assess the risk of readmission events. This could be done by better identifying related characteristics of patients who tend to affect their ability to be involved in self-management at home. [12] The ability included symptoms reported, contacts that can be contacted, and control time [13].

The discharge planning implementation was carried out immediately when the patient was hospitalized. This could be one of the factors to improve the patients' readiness behavior to go home. Besides that, there were benefits obtained from the process of involvement and good coordination between nurses and patients in the planning activities. Ensuring that all patients understand and maintain actions for advanced home care was an important step in improving the patient's experience and reducing the incidence of readmission [4]. The discharge planning was needed by patients to ensure the smooth process of transferring patients from hospital to another environment. This was done so that the care provided while in the patients were in the hospital can be sustainable. The main key in the discharge planning process was communication between nurses and patients/ families in health education during the process. This would facilitate patients in receiving or understanding the instructions given while at home, so that the patients were able to independently maintain or improve their health.

CONCLUSION

The discharge planning implementation in Indonesia hospitals was still not effectively applied in the field as shown by the lack of patients' readiness to go home. The discharge planning model available in the hospital was complete, but the education aspect has not been planned and explained in detail to the patients. The intervention group that applied the discharge planning model with the METHOD approach had a greater influence on the patients' readiness behavior to go home compared to the control group. It was concluded that there were significant differences in the patients' readiness behavior to go home between the intervention group and the control group.

Recommendation: The METHOD approach can be used as an alternative to carry out discharge planning in hospitals, which focuses on the planning, implementation and evaluation stages.

Relevance of the study: Research findings have highlighted the problem of discharge planning whereby discharged patients were not well informed before they go home, so the incidence of recurrence is frequent.

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