

Development of Discharge Planning Model in an Effort to Improve Skills and Management of Nursing Care in Mental Hospitals

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ABSTRACT

Purpose: This study aims to develop a discharge planning model and test its effectiveness on the skills and management of nursing care performed by nurses on patients with behavior violence in mental hospitals.

Methods: The model is developed by R&D method through combining field analysis and concept analysis. The effectiveness of the model was tested using a quasi-experimental design with a non-equivalent control group design on 52 nurses (27 treatments and 27 control nurses). The data were analyzed by non-parametric tests (Wilcoxon and Mann Whitney).

Results: The discharge planning model developed covers three domains (assessment, evaluation and discharge patient record plan). Format discharge planning that has been developed significantly improves nursing care skills and management ($p < 0.05$). The development of the discharge planning model has also proven effective in improving nursing care management ($p < 0.05$) although for nurse skill variables have not been proven effective when compared to the previous format.

Conclusion: Form discharge planning in violent behavior patients have been developed and have an effect on nurse skills and nursing care management.

Keywords: Development of discharge planning models; Nurse skills; Nursing care management.

INTRODUCTION

Public demands for the quality of health services are important in the current era. Quality health care is a service that not only requires the provision of patient services in the treatment room but the services provided must be until the time the patient is back at home. Optimal family participation can help improve the success of nursing services, especially in preventing recurrence of patients with mental disorders, a condition that must be corrected through good planning on an ongoing basis. Family participation in routine visits to the health center, family regularity and lack of family support in caring for schizophrenia patients have a 50% influence on the occurrence of schizophrenia relapse. (Langhorne et al., 2014) [Click or tap here to enter text.](#)

Discharge Planning is an effort to prepare the patient to go home and is the transition period in the hospital until the patient returns to his home. This process is very complex and requires special attention, is part of the communication medium between nurses, families and patients in carrying out nursing care. The implementation of adequate discharge planning by nurses on patients can prevent recurrence and maintain the condition or health status of patients and their families through health education on the prevention of violent behavior provided by nurses extending the average distance of recurrence of schizophrenia (Nordmark et al., 2016)renia with violent behavior (Keliat, 2003). Clients failing to take medication regularly is one of the causes of client relapses and needs to be hospitalized. (Joseph, 2010) Patient assessment, development of a plan that is tailored to the patient's needs, provision of services, family education and referral, and patient follow-up are important elements of discharge planning (Yam et al., 2012).

In Indonesia, Dadi Mental Health Hospital Makassar is one of the hospitals that provides special mental care services for mental patients. Data that can be obtained in the last 2 years that in 2016 there were 1060 cases of violent behavior patients while in 2017 there were 1352 cases, this data shows that the increase in the number of special cases of violent behavior has increased significantly, where cases of violent behavior are one of the cases that are of special concern from various parties because they are included in psychiatric emergencies. The recurrence rate in these patients has also increased from year to year, one of the factors that contribute to patient recurrence is the process of planning patients to go home.

Based on data from the annual report that the recurrence rate of mental patients in the last 2 years is 55%, then the number of patients dropping or discharged is 5-10 people / month, as for the nurse-patient ratio of 1: 10 means that 1 nurse serves 10 patients, this shows that there is an excess of nurse workload that is not in accordance with the range of services provided in accordance with the minimum standard patient nurse ratio 1: 5. From the initial study conducted by the author to 5 nurses in January 2020 in the intermediate inpatient room, it was found that the preparation for the patient to go home had actually been carried out in accordance with the SOP in the hospital, but the following data that need to be explored again in this study are; standards for patient assessment at the time of discharge, the level of care needs of clients who require continued intensive care or minimal care, assessing the level of knowledge and abilities of clients and families, determining the standards of problems and actions to be taken and determining evaluation standards in identifying the condition of patients to be discharged and follow-up plans and follow-up after the patient is discharged, besides that there is no standard format used by nurses to plan follow-up care strategies through post-discharge care home care. One of the obstacles that nurses often get when patients go home is the absence of family members, where the family is an object of education that must be improved in their knowledge and skills in caring for family members.

The results of the trial application of the Discharge Planning format conducted by Tage (2018) only reached 92% due to weak supervision carried out by nursing managers, poorly documented health promotion carried out by nurses in the first 48 hours at the time of patient admission, 53% of health promotion provision did not involve families in discussing prevention of problems that could occur at home and did not document properly. Obviously, the effect of improving cognitive, affective, psychomotor families, in caring for schizophrenic patients after being given Discharge Planning is only a suggestion given that this Discharge Planning model still needs to be developed in other studies developed by looking at other variables that can affect Discharge Planning (Purwanti et al., 2017).

From some initial information and data obtained by researchers, one of the solutions that can be offered by the author in an effort to reduce the recurrence rate of violent behavior patients is to optimize and develop a model of use of the Discharge Planning format that is structured, systematic and integrated with mental nursing care service management and relevant to hospital policies in general and intact. A structured and systematic discharge planning system should be supported and collaborated with relevant experts such as nurses, doctors, psychologists, therapists and families in implementing it.

Based on several previous descriptions, researchers are encouraged to develop a Discharge Planning model in an effort to reduce the recurrence rate of violent behavior patients in Indonesia and especially in RSKD Dadi, Makassar City, South Sulawesi Province. The reason for the importance of planning the development of the Discharge Planning model in a structured and systematic manner is to be able to improve nurses' skills in planning discharge patient preparation guided by standardized formats and guidelines and in accordance with the expected operational procedures in order to improve the quality of mental nursing care management that can have an impact on improving cognitive aspects (knowledge) Affective (Attitude) and Psychomotor (skills) both in Nurses and patients' families, which ultimately has an impact on increasing the independence of patients and their families, especially in meeting personal hygiene needs, compliance in following treatment programs, increasing the ability of patients and families to identify signs and symptoms and handling them when patients return home and provide feedback or feedback on the post-patient referral service system Returning home from the hospital in planning and coordinating follow-up patient care between the Puskesmas and the hospital, so that this is in line with the promotive and preventive program in reducing the recurrence rate of patients returning to mental hospitals. This study aims to develop discharge planning model and test its effectiveness on the skills and management of nursing care carried out by nurses in patients with violent behavior in mental hospitals.

MATERIAL AND METHOD

This research is carried out in two stages:

- 1) The first time used Research and Development (R&D) design to develop a discharge planning format. This is done by needs analysis : a) field analysis through identification of problems, use and availability of Discharge Planning (DP) format, followed by patient identification of violent behavior the relapse then identifies the Standard Operating Procedure (SOP) for preparing to return home and identifies the documentation of mental nursing care management; b) analysis of the concept of discharge planning components through theoretical studies of the Discharge Planning sheet used adopted from Nursalam and (2002) juxtaposed with the performance observation sheet instrument from Asmirajanti. (2017) The results of field analysis and concept analysis were combined and formed the development of the DP model.
- 2) The second time using a quasi-experimental design with a non-equivalent control group design aims to examine differences in skills and care management before and after socialization of the discharge planning development model in nurses. 52 nurses working at Dadi Mental Health Hospital Makassar were used as subjects (27 treatment group nurses who were given socialization and 27 control group nurses without socialization). Pre-

test data collection was carried out in both groups, then the treatment group was given education and training on the development model and the control group was educated on the DP format. valid at the hospital. After that, a post-test was conducted to measure the skills and management of nurse care in both groups. The collected data were analyzed using the Wilcoxon test with the SPSS program. To see the effectiveness of the model, a Mann Whitney test was carried out by comparing the difference in skills and management of care between groups of control and treatment.

RESULT AND DISCUSSION

1. Model discharge planning Development

The discharge planning model in this study is interpreted as a new format model filled in by nurses before patients are discharged. From the results of the needs analysis and juxtaposed with the concept, the new organization that has been successfully developed contains three domains, namely 1) assessment includes assistance needed at this time, education provided by patients and families and discussions carried out; 2) evaluation of the ability of patients and their families to repeat the education provided and be able to demonstrate ; 3) The discharge patient's record plan includes prescriptions, veins, referrals and educational media. Model development is detailed as follows:

Assessment
1. Help needed at this time <ul style="list-style-type: none"> <input type="checkbox"/> Taking medication <input type="checkbox"/> Eat <input type="checkbox"/> Bathe <input type="checkbox"/> Dress <input type="checkbox"/> Knowledge of the disease <input type="checkbox"/> Transportation
2. Education provided to patients and families <ul style="list-style-type: none"> <input type="checkbox"/> Health counseling about disease processes, risk factors and complications <input type="checkbox"/> Health counseling on medicine <input type="checkbox"/> Health counseling about diet <input type="checkbox"/> Health counseling on nutrition <input type="checkbox"/> Health counseling on personal hygiene <input type="checkbox"/> Health counseling on activity patterns, rest and relaxation techniques <input type="checkbox"/> Health counseling about lifestyle <input type="checkbox"/> Health counseling about smoking <input type="checkbox"/> Health counseling on alcohol and drug use
3. Discussions conducted. <ul style="list-style-type: none"> <input type="checkbox"/> Is there anything above that can help? <input type="checkbox"/> Whether the patient requires assistive devices (canes, wheelchairs etc.) <input type="checkbox"/> Whether the patient needs assistance after discharge from the hospital (home care/home visit) <input type="checkbox"/> Is there a problem in meeting ADL needs after discharge from the hospital <input type="checkbox"/> Does the patient still need education after discharge from the hospital <input type="checkbox"/> Does the patient know any special skills after discharge from the hospital (wound care, injections etc.) <input type="checkbox"/> Does the patient receive family system support (financial/transportation)
Evaluation
<ul style="list-style-type: none"> <input type="checkbox"/> Able to repeat knowledge about the disease process. <input type="checkbox"/> Able to repeat about medication, prevention and side effects of drugs. <input type="checkbox"/> Able to repeat information related to the topic taught. <input type="checkbox"/> Begin to demonstrate the knowledge taught in self-care. <input type="checkbox"/> Able to demonstrate the skills taught. <input type="checkbox"/> Start to use the knowledge taught to change behavior. <input type="checkbox"/> Haven't understood the explanation given <input type="checkbox"/> Understand what is being taught but are unable to do so.
Patient record plan discharge

Assessment	
1.	Prescriptions/medications
2.	Control letter
3.	Rehabilitation Referral
4.	Leaflet
5.	Additional notes
.....	

The new model developed is signification contrast to the existing format, which consists of three main phases, namely stage 1 is the phase of the patient entering, stage 2 is the diagnostic phase and stage 3 is the stabilization phase. The old format contained a total of 15 activities with 8 evaluation points and closed with a return note. (Nursalam, 2002) Discharge Planning is a dynamic service process so that the health team and nurses to prepare patients to carry out independent care planning at home and the results of professional nurse interactions with patients and their families in collaboration to obtain continuity of nursing services.(Nursalam, 2002)

The purpose of Discharge Planning is to prepare patients and their families physically, psychologically, and socially in an effort to increase independence for patients and families to get sustainable care and help referral patients to the health care system. In addition, families are expected to have knowledge and skills and attitudes in an effort to maintain their health status throughout the period of treatment between the hospital and the community,(Kozier et al., 2019). Fa et al stated that the ability of the discharge planning format to be applied is very influential on the effectiveness of the implementation of discharge planning.(2016)

Rudd and Smith found that more proactive discharge planning can reduce length of stay and lower costs. In addition, it also increases patient readiness for which will greatly help achieve discharge planning, especially for patients with mental health disorders.[Click or tap here to enter text.](#)(Watts et al., 2005)

2. Differences in skills and management of nursing care before and after the development of the discharge planning model.

Skills and care management are measured twice, namely before the development of the discharge planning model and so on. The result is presented as follows:

Table 1. Differences in skills and management of mental nursing care before and after the development of the discharge planning model

Variable	Pre-post changes	n (%)	p-value*
Nurse skills	Decreased	3 (11,1%)	<0.001
	Increase	24 (88,9%)	
	Settled	0 (0,0%)	
Nursing care management	Decreased	3 (11,1%)	<0.001
	Increase	24 (88,9%)	
	Settled	0 (0,0%)	

*Wilcoxon text

Table 1 shows a significant difference in nurses' skills using the developed discharge planning format (p<0.05) and the majority of nurses have improved skills Although there are some nurses whose skills decline before and after the development of the discharge planning model. When viewed from the management of nursing care also shows a significant difference in discharge planning (p < 0.05) and the majority of nurses have improved in nursing care management .

The Discharge Planning training process is a theoretical and practical learning process aimed at improving and developing academic, social and personal potential in the fields of knowledge, skills and attitudes in improving performance on tasks and work to be their responsibility (Nursalam, 2012). The results of the training obtained by nurses are implications that nurses manifest in everyday life through concrete evidence of performance results shown in improving the care of mental nursing services. In order for the results of this Discharge Planning development training to be obtained efficiently and effectively, feedback and evaluation are needed in an effort to improve the ability of patients and their families.

The assumption of researchers from the Discharge Planning training needs to be followed up by compiling a guide or Discharge Planning guideline that can be used by nurses in preparing patients to go home and after the patient is discharged, and an evaluation is carried out in order to obtain accurate information about the patient's health status in an effort to anticipate a recurrence of patients to be readmitted to mental hospitals.

3. The effectiveness of the discharge planning development model in improving the skills and management of nursing care carried out by nurses in patients with violent behavior

Table 2. Comparison of nursing care skills and management between the practice group and the control group after the development of the discharge planning model

Variable	Group	Mean rank	p-value*
Nurse skills	Practice group	24.02	0,218
		29.18	
Nursing care management	Control group	22.76	0,039
		30.54	

*Mann Whitney test

Table 2 shows no significant difference in nurse skills in the treatment and control groups ($p > 0.05$), which means that the development of discharge planning models has not been proven effective when compared to the old format because the difference in skills does not differ significantly. When viewed from nursing care management, there is a significant difference between the treatment group and the control group ($p < 0.05$) which means that the development of a discharge planning model is proven effective in improving nursing care management.

The results of this study are in line with previous research that nurses who have been trained in discharge planning methods and concepts have proven to be more effective in carrying it out compared to untrained nurses (Mohamed et al., 2014).

The discharge planning development model that has not been effective compared to the old model may be due to several inhibiting factors in implementation such as lack of coordination between health workers with different disciplines also play a role in discharge planning and in accordance to Nursalam (2022) concept that to provide nursing care professionally, a process of cooperation through other people is needed in a nursing management process. In order for nursing care to be carried out effectively and efficiently, a nursing manager can plan well starting from the stage of planning, organizing, being able to lead and manage nursing care management by utilizing available facilities and infrastructure.

One of the obstacles that can be found by a nursing manager if there are stages of the process that are not passed and not done by nurses on an ongoing basis, so that it will affect the process of an efficient organizational flow. Wong et al. Explaining that potential barriers include the lack of a standard policy-based discharge planning program, and a lack of communication and coordination between different health care providers and patients in acute and sub-acute care settings, identified primarily as system problems. (2011)

The obstacles found in the development of Discharge Planning at the education stage are the difficulty of presenting the patient's family, sometimes the time contract that has been planned by the nurse becomes backward or delayed which is not in accordance with the patient's discharge schedule, so this hampers the work of nurses in the treatment room, therefore this needs attention from the management of mental hospitals to find strategies and solutions in the process of discharge of the patient.

CONCLUSION

Form discharge planning in patients violent behavior has been developed based on patient needs. The development of the discharge planning model has an effect on improving nurses' skills in documenting accompanied by improved nursing care management. There is a need for refreshment for nurses through education and training related to the application of the development of the Discharge Planning model to be able to update the latest information and knowledge.

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Ethical statement:

This research is bound to the requirement from the Health Research Ethics Committee of Health Polytechnic Makassar. Therefore permission from committee and conditions was meet and approved by the panel under the ethic category "Human" approval number 0048/KEPK-PTKMKS/III/2021.

Conflicts of Interest:

None.

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REFERENCES

1. Asmirajanti, M. (2017). Nursing Activity Based on Documentation. The 6th Biennial International Nursing Conference.
2. Nurul, F., Sjattar, E. L., & Hadju, V. (2016). The Effect of Discharge Planning Implementation on Family Psychosocial Support for Treating Stroke Patients at Dr. Wahidin Hospital. *JST Health*, 6, 172–178.
3. Keliat, B. A. (2003). Empowering clients and families in the treatment of schizophrenic clients with violent behavior at RSJP Bogor. Dissertation. London.
4. Koziar, B., Erb, G., Berman, A., & Snyder, S. J. (2019). Buku Ajar Fundamental Keperawatan 1.
5. Langhorne, P., Jepsen, B. G., & Larsen, T. (2014). Early home-supported discharge after stroke: a brief report on the practical implementation. *International Journal of Rehabilitation Research*, 37(2), 192–194.
6. Nasir, A., & Muhith, A. (2011). Fundamentals of psychiatric nursing: introduction and theory. Jakarta: Salemba Medika.
7. Nordmark, S., Zingmark, K., & Lindberg, I. (2016). Process evaluation of discharge planning implementation in healthcare using normalization process theory. *BMC Medical Informatics and Decision Making*, 16(1), 1–10.
8. Nursalam, M. K. (2002). Application in Professional Nursing Practice. Salemba Medika, Jakarta.
9. Purwanti, N., Yusuf, A., & Suprajitno, S. (2017). The effect of video-based discharge planning with a family-centered nursing approach on the family's ability to care for schizophrenic clients. *Journal of Health Sciences*, 10(2).
10. Rudd, C., & Smith, J. (2002). Discharge planning. *Nursing Standard (through 2013)*, 17(5), 33.
11. Tage, P. K. S. (2018). Optimization of Discharge Planning Implementation Structured and Integrated. *CHMK Nursing Scientific Journal*, 2(1), 1.
12. Watts, R., Gardner, H., & Pierson, J. (2005). Factors that enhance or impede critical care nurses' discharge planning practices. *Intensive and Critical Care Nursing*, 21(5), 302–313.
13. Wong, E. L. Y., Yam, C. H. K., Cheung, A. W. L., Leung, M., Chan, F. W. K., Wong, F. Y. Y., & Yeoh, E.-K. (2011). Barriers to effective discharge planning: a qualitative study investigating the perspectives of frontline healthcare professionals. *BMC Health Services Research*, 11(1), 1–10.
14. Yam, C. H. K., Wong, E. L. Y., Cheung, A. W. L., Chan, F. W. K., Wong, F. Y. Y., & Yeoh, E. (2012). Framework and components for effective discharge planning system: a Delphi methodology. *BMC Health Services Research*, 12(1), 1–16.
15. Joseph, I. (2010). Soul nursing.