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Analysis of structured discharge planning implementation for discharged inpatients: a multicenter study

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Abstract

Discharge planning is an approach taken by the nurse, patient, and family that includes a needs assessment that will address a detailed care plan after the patient is discharged from the hospital. Discharge planning is essential for patients to prevent re-visiting patients with the same complaints or symptoms that require new treatment and to reduce length of stay for patients. In addition, a structured discharge planning can improve the quality of nursing care. This study aimed to analyze the implementation of structured discharge planning in inpatients. The method employed is a descriptive quantitative carried out in 9 hospitals. The results show that 78.03% of discharge planning has been carried out on inpatients. 54.3% of discharge planning was carried out since the patient's admission, and 45.7% was carried out when the patient was about to be discharged. Discharge planning is carried out ranging from assessment, diagnosis, intervention, implementation and evaluation. Discussion and conclusion state that the discharge planning has been carried out in a structured manner but the implementation has not been optimal and has not been fully performed when the patient is admitted to undergo treatment at the hospital.

Introduction

The demand for high-quality health services is growing. Currently, health services are no longer provided only when the patient is in the hospital ward, but must also continue to be provided until the patient returns home. The process of transitioning patients from the hospital to returning home is a very important part of health care, to reduce the number of relapses that might occur when patients are at home.[1,2] Discharge planning is an approach taken by nurses, patients, and families that includes a needs assessment that will discuss a detailed care plan after the patient is discharged from the hospital. Discharge planning is essential for patients to prevent re-visiting with the same complaints or symptoms that require new treatment and to reduce LOS for patients. In addition, a well-structured discharge planning boosts patient satisfaction.[3,4]

Discharge planning must include assessment, diagnosis, planning, implementation, and evaluation Assessment plays a very important role in determining the right nursing diagnosis, planning nursing actions, implementing procedures, and evaluating nursing care. Incomplete and inaccurate.[5] Assessment data lead to unachieved nursing care's optimal goals. Assessment is carried out at the

beginning of nursing care provided to patients. Discharge planning provided to patients by nurses must be consistent with the patient's health condition and home care needs.[6]

The benefits of discharge planning for patients are shortening the duration of treatment, reducing medical costs for hospitals. A well-structured discharge planning will increase patients' safety and satisfaction, thus improve the quality of service and nursing care. However, some research results show that the implementation of discharge planning is not optimal. Inappropriate discharge planning methods and inactive experts' role in carrying out discharge planning are the main factors causing suboptimal implementation of discharge planning. It is in line with the results of research conducted which show that discharge planning is carried out when the patient will return home and only includes home care instructions and control times.[7]

Discharge planning carried out immediately after the patient is admitted to the hospital aims to help patients and families understand the problems faced by physical, psychological and social readiness. It also ensures the achievement of patient and family independence, the implementation of ongoing patient care, and the improved patients and families' attitudes and skills in maintaining the patient's health status. Besides, it also understands the preventive efforts that must be made so as to reduce the risk of recurrence and complications of the disease. Successful discharge planning is a process that is centralized, coordinated, and consists of various disciplines providing certainty that the patient has a plan to get ongoing care after leaving the hospital. Discharge planning that is not implemented optimally can result in failure in the patient's home care planning program which will affect the level of dependence and severity of illness, life threats, and physical dysfunction.[8,9]

Systematic, structured, and applicable discharge planning provides benefits in maintaining continuity of follow-up care for fifteen patients, especially patients with palliative diseases. The discharge planning format must be structured and integrated, so that the continuity of health services can work optimally.

Most hospital nurses have not implemented a structured discharge plan yet. In the field, discharge planning is only carried out in certain parts that are considered important. Assessment of discharge planning needs is often neglected in terms of assessing patient needs, educating post-discharge activities, recommending the diets, and addressing signs and symptoms need immediate treatments.[10,11] This is due to a lack of understanding of the discharge planning process, nurse workload, health workers' varied schedules, lack of trained staff, ineffective communication, and lack of clarity of roles and routines in the absence of SOPs for Discharge planning implementation. Research conducted by Mustikaningsih in 2020 shows that the implementation of structured discharge planning which includes assessment, diagnosis, intervention, implementation and evaluation carried out by nurses is generally in the good category, 44.87%.[12] Discharge planning is an important component of patient-centered care to promote patient transition. By prioritizing

patient needs and preferences, healthcare professionals can ensure a safe transition from hospital to community, ultimately improving patient satisfaction as well as overall healthcare outcomes. The aim of this study is to assess the implementation of structured discharge planning in hospitalized patients.

This study aims to analyze the implementation of structured discharge planning in inpatients undergoing treatment.

Materials and Methods

The research was conducted in 9 hospitals and data were collected during 2022-2023. The research method employed was descriptive quantitative research. The research variable was the implementation of structured discharge planning by nurses, while the sample size in this study was 92 nurses who served in the inpatient room. The sampling method uses a purposive sampling technique. The research instrument is a questionnaire sheet containing statements of discharge planning implementation carried out by nurses, including assessment, intervention, diagnosis, implementation and evaluation, totaling 33 question items. The instrument has been tested for validity with a result of 0.851 and a reliability test with a result of 0.956. Data analysis techniques employed frequency distribution to find out the implementation of discharge planning carried out by nurses in patients undergoing hospitalization.

Results

The implementation of structured discharge planning is divided into the implementation of discharge planning at the assessment, intervention, implementation and evaluation stages, as well as the implementation of discharge planning implementation. Discharge planning activities carried out by nurses as a whole can be seen in the following table.

Table 1 shows that out of 92 respondents (100%) work in the inpatient room with more than 5 years of work experience is 42.4% of nurse respondents, while the age of the nurses is mostly at the age of 20-30 years, namely 53.3%.

The study found that the implementation of discharge planning has been carried out since the beginning of the patient's hospitalization and is mostly carried out by nurses as shown in the table below.

Based on the table above, 54.3% of discharge planning is carried out since the patient is admitted to the hospital and 45.7 percent is done when the patient is about to be discharged. Table 2 also shows that 79.3 percent of those who carry out discharge planning are nurses.

Table 3 shows the results of the question analysis items on the implementation of discharge planning. Assessment is shown in question items number 1-15, diagnosis in question 16, interventions in 17-21, implementation in questions 22-26, and evaluation of discharge planning implementation in question items number 27-33.

Table 4 shows the implementation of discharge planning at each stage. The highest achievement is the assessment, at 83.33%, while the lowest value is at the intervention stage, 72.5%. The table also shows the overall success of implementing structured discharge planning, which is 78.03%.

Discussion

Implementing structured discharge planning in hospitalized patients, 78.03% has been done, 54.3 has been done since the patient was admitted to the hospital, and 45.7 has been done when the patient is about to be discharged. Potter and Perry state that patients admitted to the hospital in less than 23 hours should receive education or instruction on priority issues before patients and their families go home[13]. In this sense, it shows that discharge planning must be carried out from the beginning of the patient to the hospital. The results of the study indicate that it is necessary to optimize the implementation of discharge planning and to carry it out at the beginning of the patient's admission to the hospital. This can be used as a trigger for nurses on duty in the inpatient room to make discharge planning more optimal.[14-16]

Optimizing the implementation of discharge planning in hospitalized patients is influenced by several factors, including the lack of understanding of nurses about the implementation of structured discharge planning to patients. Research conducted by Hayajneh *et al.* in 2020 shows that some of the things that affect the implementation of discharge planning are low knowledge of discharge planning activities; inability to define discharge planning; debate about starting time, implementation and preparation for discharge; negative attitudes of patients and their family members towards discharge planning; and consideration that discharge planning is an excessive and time-consuming document which is the responsibility of the doctor. Better time management during work improves discharge planning in acute care settings.[17,18]

The implementation of discharge planning begins when the patient is first admitted to the hospital, namely when the patient first receives health services. The assessment carried out by the nurse is in the form of the patient's discharge needs. Nursing diagnoses are determined based on the development of the patients' and their families' needs. Planning is made to enable the patient to be

self-sufficient after hospitalization. There are two types of implementation, namely implementation before discharge and on the day of discharge. Prior to discharge, the nurse will educate the patient and family about healthcare services, while on the day of discharge, the nurse will provide support in preparing for the patient's discharge by allowing the family and patient to ask questions about home care, reviewing doctor's instructions, therapies and medications, and providing a vehicle for the patient and family. Evaluation is seen by assessing the patient and family's ability to carry out the treatment plan that will be carried out at home.[19-21]

The discharge planning assessment describes the name, date, place of residence, family caregiver data, transportation needs, activities, follow-up medical care and nursing and special needs for patients. Then the next step is to determine the diagnosis and develop an action plan. After planning, nurses carry out nursing implementation which is a necessary action in achieving complete goals and results. Implementation activities are undertaken through health education activities for patients to provide knowledge, skills and provide services to meet ongoing care needs. This health education and service delivery is the responsibility of all members of the Healthcare team[2].

The discharge planning intervention has the lowest result, 72.5%. This suggests that the use of discharge planning interventions in the nursing process is still low. The discharge planning in NIC has proven to be effective for increasing patient knowledge as in research conducted by *Lemos et al.*, where this study was conducted to evaluate discharge planning in patients who were treated based on the NANDA-International taxonomy, the classification of nursing interventions (NIC) and the classification of Nursing Outcomes (NOC). The results showed significant results with a p value (0.00).

Conclusions

The findings of the above study indicate that the implementation of discharge planning is carried out starting from assessment, diagnosis, intervention, implementation and evaluation. Discharge planning has been carried out in a structured manner but the implementation has not been optimal and has not been fully carried out when the patient is admitted to undergo hospitalization.

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Table 1. Respondents' characteristics (n=92).

Respondents' Characteristics	Frequency	%
Service room		
Inpatients	92	100
Length of service		
< 5 years	39	42.4
5 – 10 years	33	35.9
> 10 years	20	21.7
Age		
20 – 30 years	49	53.3
31 – 40 years	39	42.4
41 – 50 years	4	4.3

Table 2. The distribution of discharge planning (n-92).

Discharge Planning	Frequency	%
Time		
In the beginning of inpatient treatment	50	54.3
When the patient is discharged	42	45.7
Discharge Planning Executor		
Nurses	73	79.3
Doctors	6	6.5
Nurses, doctors	2	2.2
Nurses, doctors, nutritionists	1	1.1
Nurses, pharmacist, nutritionists	1	1.1
Nurses, doctors, pharmacist, nutritionists	4	4.3
Nurses, doctors, pharmacist, nutritionists, others	4	4.3
Others	1	1.1

Table 3. Discharge planning implementation (n=92).

Discharge Planning Implementation	Never		Sometimes		Often		Always	
	n	%	n	%	n	%	n	%
1	0	0	1	1.1	7	7.6	84	91.3
2	1	1.1	1	1.1	26	28.3	64	69.6
3	1	1.1	8	8.7	33	35.9	50	54.3
4	5	5.4	1	1.1	19	20.7	67	72.8
5	0	0	15	16.3	31	33.7	46	50.0
6	0	0	13	14.1	33	35.9	46	50.0
7	0	0	4	4.3	33	35.9	55	59.8
8	0	0	14	15.2	33	35.9	45	48.9
9	1	1.1	14	15.2	34	37.0	43	46.7
10	7	7.6	22	23.9	31	33.7	32	34.8
11	4	4.3	18	19.6	29	31.5	41	44.6
12	1	1.1	12	13.0	32	34.8	47	51.1
13	1	1.1	8	8.7	36	39.1	47	51.1
14	0	0	9	9.8	35	38.0	48	52.2
15	8	8.7	22	23.9	33	35.9	29	31.5
16	2	2.2	15	16.3	37	40.2	38	41.3
17	1	1.1	23	25.0	40	43.5	28	30.4
18	4	4.3	24	26.1	43	46.7	21	22.8
19	8	8.7	32	34.8	32	34.8	20	21.7
20	1	1.1	18	19.6	42	45.7	31	33.7
21	5	5.4	37	40.2	29	31.5	21	22.8
22	2	2.2	23	25.0	43	46.7	24	26.1
23	5	5.4	24	26.1	41	44.6	22	23.9
24	5	5.4	36	39.1	32	34.8	19	20.7
25	1	1.1	19	20.7	42	45.7	30	32.6
26	4	4.3	32	34.8	38	41.3	18	19.6
27	2	2.2	27	29.3	37	40.2	26	28.3
28	4	4.3	27	29.3	37	40.2	24	26.1
29	5	5.4	35	38.0	33	35.9	19	20.7
30	1	1.1	25	27.2	36	39.1	30	32.6
31	4	4.3	32	34.8	34	37.0	22	23.9

32	1	1.1	13	14.1	29	31.5	49	53.3
33	2	2.2	14	15.2	34	37.0	42	45.7

Table 4. Structured discharge planning implementation analysis (n=92).

Discharge planning implementation	Mean ± SD	Median (min – max)
Assesment (%)	84.49 ± 11.04	83.33 (56.67 – 100)
Diagnosis (%)	80.16 ± 19.80	75 (25 – 100)
Intervention (%)	72.23 ± 17.39	72.5 (30 – 100)
Implementation (%)	72.01 ± 17.81	75 (25 – 100)
Evaluation (%)	75.04 ± 17.68	75 (35.71 – 100)
Discharge planning (%)	78.61 ± 13.04	78.03 (45.45 – 100)