Original Research

The Effect Of Discharge Planning Combines Audiovisual With The Family Centered Nursing Preparedness Caring For Acute Post Stroke Patients

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ABSTRACT

Background: The low level of family readiness in caring patients at home was caused by limited implementation of discharge planning (DP) when entered the hospital (EH) or before lefted the hospital (LH). This intervention has an impact on improving nursing services.

Methods: This study was mixed method study, the first stage used qualitative research with exploratory descriptive approach to 5 participants at RSI Sakinah. The population was families of post ASP at Sakinah Hospital were divided into the intervention group (33) and control (33) patient, so that the number of respondents can be met. The independent variable was CADP. The dependent variable was FR to care post ASP. Data were collected using a modified FR questionnaire and analysed using Kolmogorov Smirnov, Wilcoxon sign rank, Mann Whitney.

Results: The first phase of the study produced a CADP module for families of stroke patients, the second phase based on the Wilcoxon sign rank test showed that there was an effect after the intervention and Mann Whitney test showed the difference significant mean between intervention and control during EH (0.000; 0.000), during treatment (0.000;0.000), before LH (0.000;0.000).

Conclusion: The CADP module and intervention increased FR to care ASP patients during EH, treatment and LH so they can be used as guides and media in providing DP education in hospitals for patients' families.

Cite this as: Kurniati, N., Nursalam, N., & Kartini, Y. (2022). The Effect Of Discharge Planning Combines Audiovisual With The Family Centered Nursing Preparedness Caring For Acute Post Stroke Patients. Interest : Jurnal Ilmu Kesehatan, 154-165. https://doi.org/10.37341/interest.v0i0.345

INTRODUCTION

Discharge planning is an effort to provide education to patients and their families from the time they enter the hospital until they leave the hospital to prepare their
families to provide follow-up care at home (Koyama et al, 2018). The low level of family readiness in terms of knowledge and skills on how to care for patients at home is due to the implementation of discharge planning being limited to the routine implementation of new patient admissions when entering the hospital or only providing information on re-control that is carried out before leaving the hospital, resulting in failure in the program, home care planning (Fitriyah et al., 2020).

Family readiness in caring for sick families has been widely studied in the world and in Indonesia. Several research results on family readiness to care for stroke patients show the percentage of ready 28.6%, not ready 71.4%, after being given a standard discharge planning intervention from a family readiness hospital, it shows 33.3% ready and 66.7% not ready (Muhsinin et al, 2019). The results of other studies showed that family readiness in the treatment group increased after being given discharge planning with a family centered nursing approach, from a ready percentage value of 28.6% to 78.6% (Damawiyah, 2015).

The incidence of stroke in the world is estimated at 200 per 100,000 population in a year (American Stroke Association, 2018) while the incidence of stroke in Indonesia in 2018 is estimated to be 500,000 people with stroke prevalence increasing from 7% to 10.9% (Ain, 2021; Riskesdas, 2018). Low muscle strength which results in dependence on daily activities in post ischemic stroke patients by 85% and 55%-75% continues to be functional limitations (Ashari, 2021; Yang et al., 2018).

Sakinah Mojokerto Islamic Hospital is a hospital that treats a lot of stroke patients. Medical data of Sakinah Mojokerto Islamic Hospital shows the number of stroke sufferers in the last 2 years has increased. In 2019, there were 287 people, where on average there were 24 cases per month, while in 2020 it was 361 people, where on average there were 30 cases per month.

The results of research conducted by Deyhoul et al. (2018); Mohammadi et al. (2019) regarding the family-oriented discharge planning program, it was found that the factors that influence the family's readiness to care for the patient, namely the family often feels not quite ready to meet the physical, cognitive, and emotional needs of the patient, this is because the patient's family only gets little information. Needed to care for the patient at home. Nurses do not provide information about matters relating to the daily needs of patients and how families can overcome problems that arise.

Other factors such as stress on the family or caregivers who are a burden on the family are also the reason for not optimal care for stroke patients (Camak, 2015; Hi Ukum, 2021). The role of the family is very important in the stages of health care, starting from the stages of health improvement, prevention, treatment, to rehabilitation, but long-term patient care such as care for stroke patients causes psychological disorders in the family/caregiver and lack of readiness to perform treatment (Mohammadi et al., 2019).

A preliminary study by conducting interviews with 5 families of stroke patients who were treated at the Sakinah Mojokerto Islamic Hospital said they did not know how to properly care for their sick family, especially when they were at home later. When asked about the definition of stroke and what causes it, the family also could not answer correctly. They said they wanted nurses to provide clear information about stroke and how to treat it.

The family said they hoped the sick family would recover soon and be able to carry out their activities as before (Intan, 2021; Mushalpah, 2021). The results of
interviews with 5 nurses who work at Sakinah Mojokerto Islamic Hospital found that discharge planning or discharge planning is only done when the patient is going home in the form of instructions for the patient to go home.

One of the efforts that can be made to optimize the implementation of discharge planning is by providing discharge planning education in addition to patients and families (Purwanti et al., 2018; Zakiyatul Fuadah et al., 2021). The selection of more effective media also needs to be chosen appropriately, if the media and techniques are chosen correctly there will be an increase in understanding of the information conveyed (Fertman & Allensworth, 2016), one of which is through audiovisual media that combines 2 senses working simultaneously, namely senses of hearing and sight (Arso Wibowo & Adianti, 2021; Gejir et al., 2017; Ilmiati, 2021; Ji et al., 2015; Setiawan & Suwardianto, 2021).

The combination of audiovisual discharge planning intervention with a family centered nursing theory approach is based on the perspective that the family is the basic unit for individual care from family members and from a wider unit (Nursalam, 2016). The application of family nursing care with a family centered nursing approach, one of which uses the Friedman Model where the assessment with this model sees the family as a subsystem of society (Friedman, 2010).

Discharge planning intervention was given when entering the hospital, during treatment and when leaving the hospital with a combination of audiovisual media. The process of providing this intervention is expected to improve perceptions, learning processes, decisions and actions of families and ultimately improve family readiness in caring for patients both when entering the hospital, during treatment and when going home.

Efforts to improve family readiness in caring for stroke patients by providing discharge planning education have been widely carried out and researched in various countries including Indonesia (Darnanik, 2018; Ulfah, 2016), but the provision of audiovisual combination discharge planning education is given in a complete and gradual manner, namely at admission. Hospital, during treatment and discharge from the hospital has never been studied in Indonesia so it has not been proven whether this intervention is effective or not.

Based on the above background, the researcher will examine the effect of audiovisual-based discharge planning with a family centered nursing approach on the readiness of families to care for stroke patients.

MATERIALS AND METHOD

Research Design That is qualitative research with an exploratory descriptive approach (mixed methods), expert consultation and module preparation, the second stage is quantitative with a quasi-experimental design to intervene. This research is a mixed methods research that is exploratory in nature, namely research conducted starting from qualitative followed by quantitative.

The participants in this study were 5 families of patients who suffered from post-acute stroke, lived in the same house with the patient, and aged 20-50 years in the Wali Songo room of RSI Sakinah Mojokerto and were able to communicate in Indonesian that the researcher could understand. The first stage used qualitative research with exploratory descriptive approach to 5 participants at RSI Sakinah. The second stage was quantitative research with a quasi-experimental research design.
The population was families of post ASP at Sakinah Hospital were divided into the intervention group (33) and control (33) patient, using consecutive sampling, which is a sampling technique by selecting a sample among the population in accordance with what the researcher wants, so that the sample can represent the characteristics of the population that have been known previously.

The instrument used in this first phase of research is the researcher himself. This is because everything that needs to be developed during research so that humans as human instruments function to determine the focus of research, select participants as data sources, collect data, assess data quality, interpret data and draw conclusions from their findings.

Data analysis is defined as the process of describing and compiling interview transcripts and other materials that have been collected. Data analysis in qualitative research uses qualitative analysis techniques. This technique uses an inductive thinking process, meaning that the hypothesis testing starts from the data collected and then concluded. Usually this technique is used to analyze data obtained from observations, interviews, and group discussions.

The writing of the results of data collection was carried out immediately after the interview process. Data processing at the analysis stage through the way of organizing the data is done to help facilitate researchers in conducting data analysis. This research has gone through an ethical test by the research ethics commission of the Chakra Brahmanda Lentera Institute with Number 034/28/VI/EC/KEPK/Lamb.Candle/2021 dated 28 June 2021.

RESULTS
The following is a table of Characteristics of Phase I Participants:

<table>
<thead>
<tr>
<th>N</th>
<th>Gender</th>
<th>Age</th>
<th>Relationship with patient</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Male</td>
<td>40</td>
<td>Child</td>
<td>Senior High School</td>
</tr>
<tr>
<td>P2</td>
<td>Female</td>
<td>37</td>
<td>Child</td>
<td>Senior High School</td>
</tr>
<tr>
<td>P3</td>
<td>Female</td>
<td>28</td>
<td>Child</td>
<td>Senior High School</td>
</tr>
<tr>
<td>P4</td>
<td>Male</td>
<td>50</td>
<td>Husband</td>
<td>Bachelor</td>
</tr>
<tr>
<td>P5</td>
<td>Female</td>
<td>39</td>
<td>Child</td>
<td>Senior High School</td>
</tr>
</tbody>
</table>

In the field study, sample selection was carried out through purposive sampling method and then semi-structured interviews were conducted with 5 participants. Table 5.1 shows that the majority of participants are women, have high school education and the age range of participants is between 28-50 years. The interview guide uses draft questions with the aim of this semi-structured interview to find out the family's understanding of discharge planning for stroke patients and the readiness of families to care for post-acute stroke patients.
Table 2. Themes Identified From Semi-Structured Interviews

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub Theme</th>
<th>Category</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family role</td>
<td>Family readiness</td>
<td>patient care</td>
<td>Meet the physical needs of patients during MRS and after KRS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Deliver all food and medicine given from the hospital without asking</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stressed and can't wait to go home</td>
</tr>
<tr>
<td>Intervention</td>
<td>Discharge planning</td>
<td></td>
<td>Room rules when MRS is not explained</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Drug explanation only when approaching KRS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Control sheet given before KRS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>How to change clothes and help defecate when a medical device is installed is not explained</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weakness</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Explanation of the procedure for taking drugs after KRS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hear the explanation live</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Can directly ask if something is not understood</td>
</tr>
</tbody>
</table>

The implementation of discharge planning only focuses on when the patient is going to KRS, the explanation focuses on treatment and patient control. The patient's family does not know if the discharge planning stage begins when the MRS, during treatment and before KRS, their assumption is that discharge planning is a preparation for the patient to be discharged from the hospital to be carried out after arriving at home.

Fulfilment of patient care provided by the family focuses on meeting the physical needs of patients such as eating, defecating, and others. During treatment at the family hospital, the patient's nutrition is fulfilled by relying on the food provided from the hospital in the amount, type and time without asking for details on the amount and type of food that is good and allowed for stroke patients. The treatment of post-acute post-stroke patients, mostly causes the effect of patient dependence, especially for physical activities, causing families to often experience stress and impatient in accompanying in the hospital or helping to provide care and meet patient needs.

Table 3. Results of Expert Consultation on Discharge Planning Intervention Module Combination Audiovisual with Family Centred Nursing Approach on Family Readiness to Care for Post-Acute Stroke Patients

<table>
<thead>
<tr>
<th>Theme</th>
<th>Expert Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family role</td>
<td>Family roles related to family readiness to care for post-acute stroke patients are grouped according to discharge planning education, namely during MRS, during treatment and before KRS.</td>
</tr>
<tr>
<td>Intervention</td>
<td>Concepts and sessions for implementing discharge planning</td>
</tr>
</tbody>
</table>
Theme interventions combined with audiovisual media were carried out in several sessions, namely: session-1 during the MRS with introduction, regulations and management materials. Session-2 during treatment with materials on medication, environment, treatment, health, outpatient referral, diet. Session -3 before KRS with control material, medicine, activity and nutrition. Each session is given 2-3 times accompanied by a documentation format for the implementation of the intervention.

Table 4. Readiness of Families Caring for Post-Acute Stroke Patients Before being Out of Hospital (KRS) in the Intervention Group and Control Group at RSI. Sakinah Mojokerto, June-July 2021

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Pre-Test (Mean ± SD)</th>
<th>Min-Maks</th>
<th>Post-Test (Mean ± SD)</th>
<th>Min-Maks</th>
<th>Delt a (Δ)</th>
<th>p Value (wilcoxon sign rank test)</th>
<th>p Value Mann Whitney</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before KRS</td>
<td>Intervention</td>
<td>33.64±1.57</td>
<td>30-37</td>
<td>36.52±1.46</td>
<td>32-38</td>
<td>2.88</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Control</td>
<td>21.94±1.34</td>
<td>18-24</td>
<td>22.97±1.33</td>
<td>21-27</td>
<td>1.03</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

In Table the difference in the mean (delta) value of pre-test and post-test of family readiness to care for post-acute stroke patients before discharge from the hospital in the intervention group is 1.88. The results of the Wilcoxon sign rank test showed that there was a significant difference between the readiness of families to care for post-acute stroke patients before being discharged from the hospital before and after discharge planning with a combined audiovisual combination with a value of 0.000 (p < 0.05).

In the control group, the difference in the mean (delta) of pre-test and post-test of family readiness to care for post-acute stroke patients before being discharged from the hospital was 2.03. The results of the Wilcoxon sign rank test showed that there was a significant difference between the readiness of families to care for post-acute stroke patients before leaving the hospital before and after being given hospital standard discharge planning with a value of 0.000 (p < 0.05). The results of the Mann-Whitney test showed that there was a significant average difference in the value of family readiness to care for post-acute stroke patients before being discharged from the hospital between the intervention and control groups, namely p = 0.000.

DISCUSSION

The results showed that there was a significant effect on family readiness to care for post-acute stroke patients during hospitalization in the intervention group based on the post-test results after being given a combination of audiovisual discharge planning, while the control group did not show a significant effect with a negative delta value, meaning the mean value. The post-test mean is lower than the pre-test.

This shows that the combined audiovisual discharge planning is able to improve the family's readiness to care for stroke patients during hospitalization, while the
standard discharge planning from the hospital does not affect the family's readiness to care for post-acute stroke patients during hospitalization. Several factors that can hinder the implementation of discharge planning in hospitals are the lack of discharge program planning and lack of coordination of health workers with different disciplines, lack of communication between nurses in hospitals and nurses in community services and no staff continuity (Soebagiyo et al., 2020).

Other research results regarding barriers to discharge planning that are commonly identified are communication problems between the caring team and the patient or his family, particularly regarding the date and purpose of discharge planning. Ensuring efficient and accurate communication between the clinical team and the patient or family has the potential to improve the patient and family experience and can reduce LOS (New et al., 2016).

The results of this study are in line with research on video-based discharge planning instructions for pediatric gastroenteritis in the emergency department, the results show that when families receive video discharge instructions, the level of knowledge and skills of families caring for patients in hospitals increases compared to caregivers who only receive verbal instructions (Jové-Blanco et al., 2021; Suwardianto & Astuti, 2020; Suwardianto & Setiawan, 2021). These results are consistent with those obtained by Redzuan et al. (2013) where the addition of video instructions about the response to diseases experienced by patients such as fever and headaches increased family knowledge after returning home.

The results of Mendyk et al. (2018) showed that standard hospital discharge planning was able to increase family readiness in caring for patients but other studies showed that standard discharge planning was less able to improve family readiness compared to discharge planning interventions provided through different media such as audiovisual or video or through video meetings (Hedqvist et al., 2020). The significant effect on the intervention group that received the combined audiovisual discharge planning intervention was because the audiovisual media provided contained the implementation of discharge planning during hospitalization, accompanied by examples that the family must know and do when the patient is undergoing treatment at the hospital and given several times, namely 2-3 times which makes it easier for the patient's family to remember and understand what to do to patients who are undergoing treatment.

There is no significant effect on family readiness to care for post-acute stroke patients in the control group after discharge planning Hospital standards can be caused because nurses are accustomed to providing discharge planning focusing on patients, especially when care or treatment is being given to patients. The provision of audiovisual combination discharge planning has a significant effect on family readiness to care for post-acute stroke patients before leaving the hospital in the intervention group and also shows a significant effect in the control group after giving standard discharge planning from the hospital, this shows that the audiovisual combination discharge planning as well as standard discharge planning from the hospital alone affect the family's readiness to care for post-acute stroke patients before leaving the hospital.

However, the difference in the value of the delta or the difference in the average value of the intervention group after giving the intervention with before giving the intervention showed a higher value than the control group, meaning that the increase in the average value obtained by the intervention group after giving the audiovisual
combination discharge planning was higher than the control group. The results of this study are in line with research on the effect of early supported discharge on the results of stroke patient reports showing that patients who receive early supported discharge education after having a stroke are more satisfied with rehabilitation after discharge and families experience less stress in caring for patients (Bråndal et al., 2019).

Subsequent research on feasibility studies and trials of reality interventions to support the discharge planning process of patients virtually shows that virtual reality interventions are feasible to provide readiness for patients and families in the planning process before KRS by facilitating discussion and providing education on practical issues relevant to the hospital. Disease and problems that often arise when treatment is carried out at home, this study also proves that audio and visual or video media can make it easier for patients and families to receive information provided in the discharge planning process (Threapleton et al., 2018).

Another study on the implementation of educative daily discharge planning has a positive impact on how patients and families rate their level of self-confidence after discharge from the hospital. This shows that providing discharge planning education consistently with gradual and continuous materials has an impact on the acceptance response and understanding of patients and families becomes easier (Hedqvist et al., 2020). The results of a review of several articles in a systematic review about the influence of impedance factors and the improvement in the implementation of discharge planning in hospitals stated that there were several factors that influenced the implementation of discharge planning in hospitals, one of which was the role of the family in carrying out discharge planning.

The role of the family cannot be denied as a very helpful support system, especially when the patient is at home. Patients will feel motivated to comply with treatment to speed up recovery (Soebagiyo et al., 2020). Increased family readiness to care for post-acute stroke patients in the intervention and control groups can occur because of the audiovisual combination discharge planning intervention given to the intervention group containing complete education regarding preparations that families must know before KRS, namely controls, drugs, activities and patient nutrition at home.

This intervention is given gradually in 3 doses before KRS with audiovisual media that is interesting and easy to understand by the family and can be played back if forgotten. The standard discharge planning intervention from the hospital that was given to the control group was also able to increase the family's readiness to care for the patient because usually the focus of standard discharge planning was given at MRS and before KRS, nurses were accustomed to giving patient control sheets to go home and most nurses explained about the activities that were allowed and prohibited activities and the nutritional needs of the patient after being at home.

CONCLUSION

Discharge planning combined with audiovisual is one of the media that can make it easier for families and patients to re-learn discharge planning materials so as to increase understanding and strengthen memory about the material that has been given as well as a guide in undergoing hospital treatment starting from admission to hospital until before discharge from hospital. Discharge planning combined with audiovisual is one of the media that can make it easier for families and patients to re-learn discharge planning materials so as to increase understanding and strengthen memory about the
material that has been given as well as a guide in undergoing hospital treatment starting from admission to hospital until before discharge from hospital.

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