Original Research

The Correlation of Nurse's Work Environment with Missed Nursing Care in Hospital

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ABSTRACT

Introduction: Missed nursing care is caring aspect needed for patients who have intentionally or not been eliminated or significantly postponed. One of the factors that can affect missed nursing care is the work environment of the nurse. This study aims to examine the correlation of nurse’s work environment with missed nursing care in a regional general hospital in Indonesia.

Method: This research study is used correlational analysis and a cross sectional design approach which was carried out on 56 nurses as respondents using two instruments: Misscare survey and Practice environment scale (PES-NWI) questionnaire. Descriptive and inferential statistics tests were applied. The level of significance was set at p value = <0.05.

Results: Nurse work environment data including staffing and resources; quality of basic nursing care; nurse-doctor relationship; nurse participation in hospital affairs; nurse manager abilities, leadership, and nurse support. The statistical test showed study using Spearman Rank test showed that there was a significant relationship between the work environment of nurses and missed nursing care (p <0.05).

Conclusions: Professional nursing environments determine the quality of care and patient outcomes. Assessing the quality of environments is essential to improve and obtain better health outcomes. Simplifying and shortening the way to evaluate environments reliably is also essential to help nurses better understand the strengths and weaknesses of their work. Identifying elements of nursing environments would allow the construction of better health services as a whole.

1. INTRODUCTION

Hospital is one form of health facilities, either organized by the government or the general public that functions to carry out basic health service efforts or referral health and supporting health. The success of the hospital in carrying out its functions is marked by the quality of excellent hospital service. The quality of hospital services is influenced by several factors, among which the most dominant is human resources (Depkes RI, 2012). Improving the quality of hospital services is influenced by Human Resources, namely health workers, and those who are most often in contact with patients are nurses. The nurse is the officer who has the longest contact with the patient, which is for 24 hours (Saputra, 2018). So that nurses as health workers who dominate in hospitals have an important role in providing proper nursing care without missing anything to their patients.

Missed nursing care is defined as aspects of care required for patients that are intentionally or not eliminated or significantly delayed (Kalisch et al, 2009). Missed Nursing Care has become a phenomenon in hospitals in several countries in the world. Scott et al., (2019) states as many as 55-98% miss one or more activities in nursing care. J.E., (2017) It states 74% of nurses in Sweden have missed nursing care at the end of their shift. Cho et al., (2016)
M. The Korea also revealed that 30.3% of test influence on the description above, researchers are interested in nurse's work environment which has not been widely conducted, so it is necessary to conduct research related to the relationship with the nurse's work environment factors in the unit (Hessels et al., 2018). A systematic review of 54 studies identified insufficient or poorly allocated care environments and nurse resources as major factors affecting missed care (Jones et al., 2015). Other research according to Hessels et al., (2015) Inadequate staffing and inadequate resources are the strongest factors in a nurse's work environment associated with missed nursing care (Missed Nursing Care).

Research on Missed Nursing Care in Indonesia has not been widely conducted, so it is necessary to conduct research related to the relationship with the nurse's work environment which has not been widely known. Based on the data and facts in the background description above, researchers are interested in conducting research entitled “The Correlation of Nurse’s Work Environment with Missed Nursing Care in Hospital”.

2. MATERIALS AND METHODS

2.1 Design
This type of research is quantitative research using correlational analysis research design and cross sectional design approach. This study was conducted in the Medical Surgical Inpatient Room at the Regional General Hospital from 26th until 28th December, 2020.

2.2 Population, Sample, and Sampling
The sample used in this study amounted to 56 nurses as respondents with the inclusion criteria of implementing nurses in the medical surgical inpatient room, nurses who graduated from diplomas and bachelors of nursing, nurses who were not on leave, illness, study assignments, and training.

2.3 Variable
The research instrument used is divided into two parts, namely the first missed nursing care questionnaire which consists of four elements of missed nursing care including assessment, individual needs intervention, basic needs intervention, and planning. While the second instrument is a nurse work environment questionnaire consisting of five aspects of the work environment, including staffing and resources, quality of basic nursing care, nurse and doctor relationships, nurse participation in hospital affairs, and nurse manager ability and leadership and nurse support (Schubert et al., 2011).

Several studies related to the work environment explain that factors such as resource levels, communication between staff, teamwork, and head nurse leadership have the greatest influence on the occurrence of missed nursing care even though clinically and academic careers of each nurse have a certain degree (Jones et al., 2015). In a study involving 186 nurses in Korea also revealed that 30.3% of nursing care can be missed because it is influenced by work environment factors in the unit (Kim et al., 2018). A systematic review of 54 studies identified insufficient or poorly allocated care environments and nurse resources as major factors affecting missed care (Jones et al., 2015). Other research according to Hessels et al., (2015) Inadequate staffing and inadequate resources are the strongest factors in a nurse's work environment associated with missed nursing care (Missed Nursing Care).

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2.4 Instruments
The instrument to measure missed nursing care is taken from the Misscare Survey questionnaire according to Kalisch & Williams, (2009) which contains 24 statement items. In each item the statement is given a rating using a Likert scale of 1-5, where the values 5 = always, 4 = often, 3 = sometimes, 2 = rarely, 1 = never. While the instrument to measure the nurse's work environment using the PES-NWI questionnaire according to Lake (2002) which contains 31 statement items based on 5 domains that include staffing and resource subscales, quality of basic nursing care, nurse and physician relationships, nurse participation in hospital affairs, and nurse manager abilities and leadership. Each item is rated using a Likert scale of 1-4, where 4 = strongly agree, 3 = agree, 2 = disagree, 1 = strongly disagree.

2.5 Procedure
The results of the missed nursing care instrument test were declared valid and reliable with an r value showing > 0.05 and a α value = 0.68. While the nurse’s work environment instrument shows a value of α = 0.63 which is also declared valid and reliable. 5. The preparation stage of data collection includes selecting research samples in each room, explaining the purpose and purpose of the study, providing an

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explanation of informed consent to nurses. Contract the time and place of research to respondents. Researchers explain the procedures for filling out questionnaires, then distribute questionnaires to respondents selected based on the number and criteria of samples that have been determined. Respondents fill out questionnaires accompanied by researchers, if respondents experience difficulties in filling, then the researcher will explain again about how to fill out and help or guide in filling out the questionnaire. The researcher takes back the questionnaire that has been filled out by the respondent, then the researcher provides an opportunity if there are questions, suggestions, or criticisms from the respondents. At the end of the closing session of the study, researchers gave souvenirs to respondents as a sign of gratitude for participating in research activities.

2.6 Data Analysis
Data analysis used to determine the relationship between nurses' work environment and missed nursing care is using the Spearman Rank correlation test.

2.7 Ethical Clearance
This research has been conducted ethical feasibility test and received approval from Brawijaya University.

3. RESULTS
Nurse work environment data including staffing and resources; quality of basic nursing care; nurse-doctor relationship; nurse participation in hospital affairs; nurse manager abilities, leadership, and nurse support are presented in Table 1. While missed nursing care data which include assessment, individual needs interventions, basic needs interventions, and planning are presented in Table 2. The correlation of the relationship between nurse work environment variables and missed nursing care is presented in Table 3.

Based on table 1, it shows that the nurse’s work environment can be said to be good lies in the aspect of the quality of basic nursing care, which is as many as 42 respondents (75%), for the nurse’s work environment is quite good lies in the aspect of staffing and resources, which is as many as 18 respondents (32%), and the nurse's work environment is not good lies in the aspect of nurse participation in hospital affairs which is shown by 11 respondents (20%).

Based on table 2 shows that low missed nursing care is shown in the assessment element of 48 respondents (86%), and high missed nursing care is shown in the individual need intervention element of 20 respondents (36%).

Based on table 3 shows that a good nurse work environment can reduce missed nursing care or a low missed nursing care rate of 35 respondents (89.7%), and a poor nurse work environment can increase missed nursing care or a high missed nursing care rate of 5 respondents (100%).

The results of the Spearman Rank correlation test using the SPSS 25.0 for windows computer program with a meaning level of 95% (α = 0.05) obtained results with a significance value (p-value) of 0.000 which means the value of p < 0.001 shows that there is a meaningful correlation. Meanwhile, the correlation coefficient value of 0.564 shows a positive correlation with moderate correlation strength. It can be concluded that the research hypothesis (H0) is rejected or there is a significant relationship between the nurse’s work environment and missed nursing care.

4. DISCUSSION
4.1 Nurse Work Environment
Based on the results of the study, it was found that the nurse's work environment showed as many as 39 respondents (70%) who were categorized as a good work environment. In this case, it is seen from one aspect of the work environment, namely the quality of basic nursing care which shows as many as 42 respondents (75%) in the good category. The quality of nursing care provided by nurses to patients is very important as a benchmark for the level of quality in a health service. According to Lake et al., (2020), the quality of basic nursing care can be said to be good if it meets the criteria in the subscale consisting of nurses providing standardized nursing care, nursing care is based on a nursing model, nursing care plans are well documented, primary nurses are responsible from patients entering to leaving the hospital, and the use of standardized nursing diagnoses in the room. So that in this study the nurse's work environment has a good category in the aspect of the quality of basic nursing care.

In the category of good work environment, there were 12 respondents (21%). This is in terms of staffing and resources which shows as many as 18 respondents (32%). In this case, it can be seen from the adequacy of the number of nurses who have not been proportional to the number of patients. In line with Aiken et al., (2011) which states that staffing staff is one of the characteristics that can encourage a better work environment. Therefore, if the adequacy of labor is adequate, the level of quality of the work environment is also getting better. So that in this study, it was found that aspects of the work environment in terms of human resources have not been fulfilled or are still in the category of quite good.

Based on the category of poor work environment, 5 respondents (9%) obtained results. One aspect of the work environment with a poor category is the aspect of nurse participation in hospital affairs which shows as many as 11 respondents (20%) from a total of 56 respondents. In this aspect, nurses should participate in the development of hospital programs, but what was found in this study was that nurses had not developed...
continuing education programs. In this case, most of the nurses who work in the medical surgical inpatient room are majority of nurses who graduated from the nursing diploma. According to Menard (2014) stated that nurses need to participate in hospital policy making and be given the opportunity to develop clinical competencies aimed at modifying the work environment. In this study, the aspect of nurse participation in hospital affairs became an aspect of the work environment that had a poor category.

The results of research from each aspect of the work environment, it was found that the personnel and resource aspects showed results as many as 38 respondents (68%). In this case, it is very related to missed nursing care, because if the number of nursing staff is adequate and proportional to the number of patients, nurses in providing care will not be left behind or missed. In accordance with research according to Flynn L, Hessels A.J., Cimiotti J.P, Cadmus E, (2017) which states that inadequate staff and resources are the strongest factors of nursing practice environment associated with missed nursing care.

2) Foundations for Quality
In the second element of the nurse's work environment, namely the quality of basic nursing care, it showed as many as 42 respondents (75%). In providing nursing care, of course, it must be based on a standardized model, because the quality of care is the basis or benchmark of a service that can affect patient outcomes. In accordance with research according to Jones et al., (2015), it is stated that the high and low rate of missed nursing care can be seen from the quality of nurses in providing nursing care.

1) Staffing and Resources
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3) Nurse-Doctor Relations
The results of the study on the elements of the nurse-doctor relationship obtained the results of 41 respondents (73%). In this aspect, communication and cooperation between health professionals are needed in order to establish good relationships and collaborations with the aim of improving the service quality, so that no nursing care can be missed. According to Smith et al., (2018) also said it is likely that nursing care will be missed when communication
between health workers is disrupted, so it will have an impact on the capacity to provide care and increase the occurrence of missed nursing care.

4) Hospital Affairs
Nurse participation in hospital affairs is the fourth aspect in the nurse's work environment that can affect missed nursing care. In this aspect, the results showed that as many as 34 respondents (61%), this can be related to missed nursing care when reviewed based on the development of continuing education programs. Nurses need to be given the opportunity to develop clinical competencies in order to improve the quality of nurses’ human resources, so that the chances of missed nursing care can be minimized. In line with the opinion expressed by Nancy (2012) that the number of nurses who can skip nursing care is greatly influenced by the nurse’s own human resources.

5) Nurse Manager Leadership
In the results of the study on aspects of manager ability, leadership, and nurse support, 41 respondents (71%) were obtained. This aspect of the work environment can affect missed nursing care. This relates to how far a room head is in responding to the nurse's mistakes or omissions in providing care. In research conducted by Nantsupawat et al., (2011), explained that the task of a manager is to provide support to nurses, and consider mistakes as opportunities to learn. If the nurse misses a care, it is the duty of a manager to remind and not give criticism. Therefore, in this aspect the manager's leadership ability and support for nurses can affect missed nursing care.

4.2 Missed Nursing Care
Based on the results of the study obtained that missed nursing care showed as many as 42 respondents (75%) had low or almost never missed nursing care. In this case, judging from the results of the missed nursing care element research which showed the highest value lies in the assessment element, as many as 52 respondents (93%) most did not miss nursing care. Some of the actions contained in the assessment elements include vital signs examination, patient assessment carried out every shift, focused reassessment according to the patient's condition, assessment and treatment of intravenous areas or central lines according to hospital policy, and assessing drug effectiveness. According to Palese et al., (2015) stated that nurses rarely miss vital signs monitoring actions in providing nursing care because vital sign examination is a mandatory and common assessment carried out by every nurse in carrying out nursing care. This case study the assessment element in missed nursing care has mostly been done by nurses.

Another finding in this study was that 16 respondents (29%) missed nursing care contained in the missed nursing care element, namely individual needs intervention. In other words, the subscale in this element is categorized as the highest compared to the other three elements. In this case, it is in line with Flynn L, Hessels AJ, Cimiotti JP, Cadmus E, (2017) research which states that nurses skip more action on aspects of individual needs interventions such as feeding and preparing food for patients, bathing patients, skin care, oral care, and helping with toileting needs. This is because the action has been assisted by the patient's family. So it can be said that nurses in the internal surgery medical inpatient room I and II still miss a lot of nursing care related to the actions contained in the intervention element of individual needs.

4.3 Correlation Nurse Work Environment with Missed Nursing Care
The results of the study found that the work environment had good results and missed nursing care obtained low results. This is evidenced by both variables having p-values of 0.000 < 0.05 so that it can be interpreted that H0 is rejected and H1 is accepted.

The results of cross-tabulation show that most respondents who have a good work environment will also have a lower missed nursing care rate of 35 respondents (89.7%), and those who have a poor work environment with a high missed nursing care rate of 5 respondents (100.0%). Based on these results, it can be explained that nurses who work in the medical surgical inpatient room have a good work environment; but there are 5 respondents with a high rate of missed nursing care or still often miss nursing care. Missed nursing care is subjective, so different results are obtained from individual which is influenced by the characteristics of respondents.

Based on the results of the study that respondents who have a good work environment will not miss nursing care or low missed nursing care rates. In this case, in accordance with the opinion expressed by Blackman et al., (2015) that one of the factors that can affect missed nursing care is the work environment factor, where the condition of the work environment can also be a benchmark for the extent of a nurse's satisfaction with the work she undertakes. The better work environment, the less likely you can miss nursing care.

The results of research that show an unfavorable work environment with a high missed nursing care rate can also be influenced by several factors that cause missed nursing care. In this case, it is in accordance with the statement according to Park et al., (2018) which states that if one aspect of the nurse's work environment has not been fulfilled, it can increase the chances of missed nursing care. In this study, it can be seen from the aspect of nurse participation in hospital affairs which is still low as a factor that contributes to missed nursing care.
The results of the Spearman Rank correlation test with a meaning level of 95% (α = 0.05) were obtained with a significance value (p-value) of 0.000 with a correlation coefficient value of 0.564, so it was stated that the research hypothesis was accepted and there was a significant relationship between the nurse's work environment and missed nursing care. Based on the results of the study, it can be concluded that the better the nurse's work environment, the lower or minimized missed nursing care (low missed nursing care). This is because one aspect of the work environment, namely the quality aspect of basic nursing care, has shown good results with low missed nursing care results. Similarly, the aspect of the work environment, nurse participation in hospital affairs still shows poor results with high missed nursing care results.

The results of this study are in line with research conducted by Hessels et al., (2015) involving more than seven thousand nurses as respondents in seventy hospitals with different service settings proving that there is a positive relationship between the nurse's work environment and missed nursing care, if the work environment is good or supportive then the possibility of missed nursing care patients will be reduced so as to improve patient outcomes. In accordance with the theory of the Missed Nursing Care Model according to Kalisch et al., (2009) which explains that one of the factors that contribute to missed care is the nurse's work environment which can facilitate or hinder nursing practice.

5. CONCLUSION

Based on the results of research and discussion, it can be concluded that the nurse's work environment in the medical surgical inpatient room is mostly good. Missed nursing care in medical surgical inpatient rooms is mostly low. And there is a relationship between the nurse's work environment and missed nursing care. It can be concluded that the nurse's work environment in the medical surgical inpatient room is mostly good. Missed nursing care in medical surgical inpatient rooms is mostly low. Therefore, research should shift toward identifying interventions that improve the environment in which nurses practice and determining if changing the environment results in improved care quality.

6. REFERENCES


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