

Relationship Of The Nurse's Work Environment With Patient Safety At Sejati Medan Partner General Hospital

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ABSTRACT

Objective: Assurance of patient safety to realize the quality of health services is the responsibility of all health workers, especially nurses. Improving patient safety can reduce the risk of nosocomial infections and prevent the negative effects of nursing actions. The application of patient safety is still low due to several aspects, namely communication errors (57.7%), safety and service quality (57.4%), open communication (54.4%), management support (53.8%), and the work environment (28.4%). An unfavorable work environment for the professional practice of nursing harms the quality of nursing care and patient safety. Methods: Analyzed the relationship between the nurse's work environment and patient safety at Mitra Sejati General Hospital, Medan. Methods: This research is a correlational analytic descriptive study with a cross-sectional approach. The study population was all nurses in the inpatient room at Mitra Sejati General Hospital, Medan, totaling 200 nurses. The sampling technique used was total sampling, by setting inclusion criteria. The study was carried out from March to July 2022. Data analysis was carried out univariate and bivariate using the chi-square test. Results: most of the respondents stated that patient safety was well implemented (56%) and the work environment was good (64.5%). There is a significant relationship between the nurse's work environment and patient safety, p -value = 0.005. Conclusion: A good working environment for nurses ensures the optimal implementation of patient safety. Therefore, the hospital management contributes to supporting a conducive working environment for nurses by involving nurses in decision-making related to the development of nursing services, improving the ability of nurses, fulfilling nurse resources according to the required expertise.

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1. Introduction

Assurance of patient safety in order to realize the quality of health services is the responsibility of all health workers, especially nurses. According to Araujo et al. (2022), the role of nurses contributes to maintaining patient safety in the scope of professional nursing services. Alanazi, Sim, & Lapkin (2022), nurses who can maintain patient safety during the provision of nursing care, reported fewer incidents of patient falls, medication errors, pressure injuries and infections. Kakemam et al. (2021), increasing patient safety can reduce the risk of nosocomial infections and prevent the negative effects of a nursing action. So the achievement of good patient safety results in quality nursing services.

The implementation of patient safety that is still lacking can be caused by several elements. Alfadhalah et al. (2021), describe the causes of the low application of patient safety, namely

communication errors (57.7%), patient perceptions of safety and service quality (57.4%), open communication (54.4%), management support (53,8%) and work environment (28,4%). According to Jarrar et al. (2021), nurses who work in shifts for 12 hours assess the work environment is less good and patient safety is lower. Cristina, Rodrigues, & Cimiotti (2018), an unfavorable work environment for professional nursing practice has a negative impact on the quality and safety of care provided to patients. This shows that the nurse's work environment is a focus that must be considered to realize patient safety.

The nurse's work environment has the opportunity to create patient safety. The Malinowska-Lipień et al. (2021), identified that there is a strong relationship between the work environment and patient safety. The nurse's work environment includes aspects of adequacy of resources, cooperation between nurses and doctors, support from management and professional independence. According to Anunciada, Benito, Gaspar, & Lucas (2022), a conducive working environment for nurses supports the improvement of the quality of nursing care, patient safety and the professional development of nurses. In addition, a nurse's work environment that provides comfort for nurses in providing nursing care prevents medication errors, pressure injuries and nasocomial infections (Al-ghraiyyah, Sim, & Lago, 2021). The nurse's work environment is very important in maintaining patient safety. Therefore, the nurse's work environment must be assessed consistently.

Assessment of the work environment of nurses can use instruments that are appropriate to the scope of the hospital. Fernando & Amaral (2012), have carried out the validity of the Practice Environment Scale of the Nursing Work Index (PES-NWI) as a reliable and appropriate measuring tool in assessing the work environment of nurses. The study (Lucas, Jesus, Almeida, & Araújo, 2021) identified 5 (five) PES-NWI factors that are valid and can be used in clinical nursing practice consisting of nurse participation in hospitals, improving the quality of nursing services, nurse manager-leadership abilities and nurse support, availability of resources and nurse-doctor relationship. According to Elmi et al. (2017), the assessment of the work environment through PES-NWI has appropriate validity and reliability in making improvements or setting quality nursing services. Thus, the working environment of nurses must be identified in all health facilities.

A preliminary study conducted on March 8, 2022 regarding the working environment of nurses at Mitra Sejati General Hospital Medan through interviews with the head of the nursing field, it was found that there was no special assessment of the nurse's work environment and there were still gaps in the relationship between nurses and doctors. However, the head nurse is involved in making decisions about the nursing service development plan. According to 1 nurse on duty in the VIP room and 2 class III nurses said they were tired in carrying out nursing care when the patient was full of all rooms and unable to coordinate with nurses in other rooms. While the description of reporting patient safety goals has not been carried out optimally in reducing the risk of infection related to health services and reducing the risk of falling patients.

The work environment is not conducive to supporting nurses in providing nursing care, this has an impact on the implementation of reporting on patient safety goals. Therefore, this study aims to analyze the relationship between the nurse's work environment and patient safety at Mitra Sejati General Hospital Medan.

2. Method

This research is a descriptive analytic correlational study with a cross sectional approach, which means that this type of research emphasizes the measurement of the dependent and independent variables at the same time and there is no follow-up. The population in this study were all nurses in the inpatient room at Mitra Sejati General Hospital, Medan, amounting to 200 nurses. The sampling technique used is total sampling, where all respondents are used as research samples according to the inclusion criteria set by the researcher in the form of willingness to become respondents and cooperative respondents during the implementation of data collection. The research has been carried out for 4 (four) months starting from March to July 2022.

This study has several instruments used to collect data on the characteristics of respondents, work environment and patient safety described as follows: The first instrument, the characteristics of respondents include age, gender, education and years of service. The second instrument aims to measure the work environment using the Practice Environment Scale of the NWI (PES-NWI) developed by Swiger et al. (2017) which consists of nurse participation, improving the quality of nursing services, the ability of nurse managers/leaders and nurse support, the availability of

manpower and resources, and the relationship between nurses and doctors. While the third instrument, the nurse's work safety assessment uses the Patient Safety Assessment which was adopted from Ogata et al. (2018) consists of 4 domains including error and patient safety (error and patient safety), health service system safety (safety of the healthcare system), personal character towards safety (personal influence over safety) and personal attitude towards patient safety (personal attitude). to patient safety).

The validity and reliability test of the work environment and patient safety research instrument was carried out on 30 nurses at Bunda Thamrin General Hospital Medan. So the researchers used all question items from each variable when conducting research in the Inpatient Room at Mitra Sejati General Hospital Medan. Meanwhile, the results of the reliability test showed that the value of the work environment and patient safety variables was negligible > 0.60 , which means that both variables are reliable.

Peneliti melakukan analisa data secara kuantitatif yang terdiri dari analisis univariat dan bivariat. Analisis univariat dilakukan pada setiap variabel penelitian yang meliputi 1) karakteristik responden, 2) lingkungan kerja, dan 3) keselamatan pasien, dengan perhitungan berupa distribusi tabel frekuensi dari semua variabel, persentase, dan pembahasan gambaran variabel yang diamati. Adapun analisis bivariat untuk melihat ada tidaknya hubungan antara variabel independen (lingkungan kerja) dengan variabel dependen (keselamatan pasien) dengan menggunakan uji chi square (χ^2), dimana variabel dependen dan variabel independen adalah katagorik.

3. Results And Discussions

Based on research conducted on 200 nurses at Mitra Sejati General Hospital in Medan, the following research results were obtained:

TABLE 1.
FREQUENCY DISTRIBUTION OF RESPONDENTS CHARACTERISTICS

Nurse Characteristics	Category	f	%
Age	a. Early adulthood	89	44,5
	b. Middle adult	111	55,5
Gender	a. Man	77	38,5
	b. Woman	123	61,5
Education	a. Vocational	162	81
	b. Professional	38	19
Years of service	a. New	35	17,5
	b. Long	165	82,5

Based on Table 1, it is known that most of the nurses are middle-aged adults, most of the nurses are female, most of the nurses are with vocational education level and most of the nurses are with long tenure.

TABLE 2.
FREQUENCY DISTRIBUTION OF NURSE WORK ENVIRONMENT AND PATIENT SAFETY

Variabel	Category	f	%
Nurse work environment Good	Good	129	64,5
	Not enough	71	35,5
Patient Safety	Good	112	56
	Not enough	88	44

Based on Table 2, it is known that most of the respondents stated that the nurse's work environment was good and the implementation of patient safety was also good.

TABLE 3.

RELATIONSHIP BETWEEN NURSES' WORK ENVIRONMENT AND PATIENT SAFETY

Nurse Work Environment	Patient Safety				Total		P-value	OR (95% CI)
	Good		Not enough					
	f	%	f	%	f	%		
Good	87	67,4	42	32,6	129	100	0,005	2,709
Not enough	25	35,2	46	64,8	71	100		(1,402-5,235)

Based on Table 3, it is known that there is a significant relationship between the nurse's work environment and patient safety at Mitra Sejati General Hospital, Medan.

Discussion

The results of the study in table 4 show that there is a significant relationship between the work environment of nurses and patient safety at Mitra Sejati General Hospital Medan. According to Brešan et al. (2021), the assessment of the nurse's work environment correlates with patient safety and the quality of nursing care. This is in line with the results of research by Moisoglou, Lamia, Yfantis, & Galanis, (2020) identifying that there is a relationship between the nurse's work environment and patient safety at Lamia Hospital, Greece. Where respondents rated the nurse-doctor relationship as the most favorable characteristic of the work environment, in addition to that the nurse manager's ability, leadership and nurse support were among the best. The most frequently reported patient safety indicators by nurses were infections due to catheter insertion (51.6%) and pressure sores (40.3%). A positive nurse work environment is a solution for hospitals to improve patient safety and quality nursing services (Schlak, Aiken, Chittams, Poghosyan, & McHugh, 2021). According to Brubakk et al. (2021), a work environment that supports nurses' commitment to nursing services according to patient needs is proven to be significant for patient safety.

According to the researcher's analysis, there is a relationship between the work environment and patient safety. This is due to the large number of nurses at Mitra Sejati RSU with a long working period and experience in professional nursing practice, so that nurses can work together to create a conducive work environment in providing nursing care and be able to maintain optimal patient safety. Therefore, support from the managerial side is needed to improve the conditions of the work environment in order to provide safety guarantees for patients.

4. Conclusion

The results showed that most of the respondents stated that patient safety was well implemented (56%) and the work environment was good (64.5%). There is a significant relationship between the nurse's work environment and patient safety, p-value = 0.005. Based on the results of these studies, it is suggested to the hospital management to contribute to supporting a conducive working environment for nurses by involving nurses in decision-making related to the development of nursing services, improving the ability of nurses, and fulfilling nurse resources according to the required expertise.

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