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## FACTOR WHICH INFLUENCE ROLE NURSE IN IMPROVED PATIENT SAFETY

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#### **ABSTRACT**

Patient safety is the most important factor to consider in the hospital setting. Nurses have the most interactions with patients, thus they will undoubtedly play a role in enhancing patient safety. Various elements will develop during the course of providing services, influencing the improvement of patient safety. These variables can serve as focal points for enhancing and addressing safety culture in management. This study seeks to determine the elements that impact nurses in their endeavors to enhance patient safety. The research was conducted using the PICO method, which involves describing the population as nurses, using patient safety as the intervention (no comparisons), and identifying factors that influence nurses to improve patient safety. Articles or journals were used as the inclusion criteria. National and international publications covering a five-year period (2017-2021) can be downloaded in full text in Indonesian and English, exploring aspects connected to nurses' roles in enhancing patient safety. This literature review found that nurses' knowledge of patient safety incidents, their attitude, their length of service (greater than three years), the encouragement they receive from the room leader and hospital administration, the frequency and quality of their supervision, and the training they receive all contribute to better patient safety. After reviewing the relevant literature, we can say that nurses' abilities to improve patient safety are affected by their knowledge, attitude, length of service, motivation, supervision, and training. Keywords: Patient safety, The role of the nurse

#### **INTRODUCTION**

Injury incidents are one of the benchmarks for the effectiveness of patient safety so that health services are safe and effective. One of the main causes of death in every patient the yearconstitutes unsafe health services, unsafe care has an impact on around 13.4 million adverse events occurring in hospitals in low and medium capacity countries(World Health

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Organization, 2019). Patient safety is an absolute right that patients must have and it is the hospital's obligation to fulfill it. Patient safety is an important component of determining the quality of health services so it is a top priority that must be implemented.

Patient safety incident data outlined by the Agency for Healthcare Research and Quality (AHRQ) in 2017 was 1,031,649, in 2018 there were 1,139,124 and in 2019 there were 1,758,234 cases, while in Indonesia patient safety incident cases also increase every year, in 2017 there were 1645 cases, in 2018 there were 1489 cases and in 2019 there were 7465 patient safety cases that occurred in several provinces of Indonesia (Kronick, 2016). In the national patient safety reporting and learning system, the prevalence of patient safety incidents is found in almost all provinces in Indonesia, Jakarta has a prevalence of 24% of patient safety injury incidents, Bali has 38% and all provinces in Sulawesi have 24% of patient safety cases. As for a number of factor Which influential to action nurse in carry out their role to implement patient safety, namely age, gender, marriage, number of dependents, length of work and nurse motivation(Pambudi, 2018). Awareness of nurses' knowledge and attitudes regarding patient safety will provide an increase in patient safety and improve the quality of health care. It is very important for nurses to participate in providing services to improve and create patient safety(Kim & Jeong, 2019). In health services, especially patient care, the highest level of interaction between patients is with nurses so that the risk of making mistakes in actions or providing services to patients is very likely to occur so that nurses are a profession that has a big responsibility in ensuring patient safety. Nurses must be able to realize the important role they have to play in order to achieve patient safety. Nurses are the first providers of care services and spend more time caring for patients compared to other health workers(Balamurugan & Flower, 2015).

Based on data on the number of patient safety incidents, it was found that it is still necessary to reduce the number of incidents and even prevent them at the outset so that incidents which should be scientifically preventable related to patient safety do not occur. The purpose of writing this literature review is to first identify what factors can influence the role of nurses in efforts to improve patient safety.

#### **METHOD**

This research was prepared using Literature Review, this study is a type of research carried out by increasing reading in the form of journals, books and various kinds of publications that are related to the research topic so that it can produce an article with many references from previous researchers. Framework used by Population (Nurses) Intervention:

Patient Safety, without Comparison, Outcome (Factors that influence nurses in improving patient safety)

The keywords used for searches in this article are the results of publications obtained on Google Scholar, PubMed and Science Direct. Searches on Google Scholar use the sentence "Factors that influence nurses in improving patient safety" while on Pubmed and Science Direct the keywords used are "factors that influence AND the role of nurses AND in improving patient safety".

Articles or journals published in Indonesian or English and covering topics pertaining to nurses' roles in enhancing patient safety and having a publication date during the last five years (2017–2021) are eligible for inclusion.

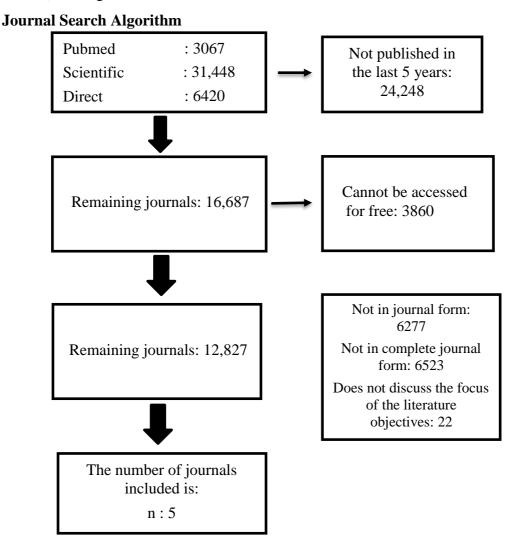


Figure 1. Journal Search Algorithm

#### **RESULTS**

All articles in the literature review research were published from 2017-2021 with publications in the form of national and international articles that met the inclusion criteria, only 7 articles of which 5 were from Indonesia, 2 from Africa. The search media obtained

3067 articles from Pubmed, 31,448 from Scient Direct and 6420 from Google Scholar. 24,248 articles that were not published in the last 5 years, 3860 that could not be accessed for free, 6277 that were not journals, and articles that were not in form. There are 6523 complete journals and 22 which do not discuss research variables.

Table 1 Research on Nurses' Contribution to Patient Safety Initiatives from 2017 to 2021: A Synthesis of the Literature

	Synthesis of the Literature										
No	Author, Year	Research Title	Research purposes	Participant s	Research design	Instrument s nt Research	Research result				
1	(Pamb udi, 2018)	Factors that influence nurses in implementatio n 6SKP (Patient Safety Goals) on JCI (Joint Commission International) accreditation in the inpatient room House Sick House Waluya Malang	For Sources to know the factors that influence nurses in implementin g the 6 SKP	186 nurse in the inpatient room at Panti Waluyo Hospital, Malang	Cross- sectional	Question naire and Checklist	Factor which influential ie amount dependents, long time. Work nurse knowledge, nurse motivation, supervision, and organizational influence				
2	(Dua Lembang, 2021)	Relationship between knowledge and attitude, and Nurses' work motivation by implementing patient safety at Santa Hospital AnnaKendari 2017	to better understand the nurses' perspectives, beliefs, and drive in relation to patient safety initiatives at Santa Anna Hospital Kendari in 2017.	45 nurses in House sick Santa Anna Kendari	Cross Sectional	Total Sampling	There is a correlation attitude with patient implementation safety Mean while knowledge and Motivation Norelated to the implementation of patient safety.				
3	(Handayan i & Kusumapr adja, 2018)	The influence of nurses' work motivation on the implementatio n of patient safety programs in inpatient unit of hospital x south tangerang	The study aims to assess how nurses' individual traits, expertise, and motivation affect their execution of safety programs for patients.	respondents in units In patient at Hospital X in South Tangerang.	Correlative	Questionna re	There is a correlation age and Motivation Work nurses have a positive influence and significant to the success of patient safety programs.				

4	(Salih et al., 2021)	Patient safety attitude and associated factors among	This research aims to assess	350 nurse at home University	Cross Sectional	Usefulthe form staff informati	Factor related main islevel education, experience,
		nurses at	attitude	Hospital		on	
		Mansoure University	nurse Egypt	Mansoura, Egypt		And questionnair e	and attend training course
		Hospitals: A Cross Sectionals Study	to safety patient And factor- factors that wheezing			attitude safety	Which related with safety patient, Which own high influence, age and status marriage influential small while Type sex and work units No own that relationship significant
5	(Biresaw et al., 2020)	Knowledge	evaluate	386	cross-	questionnair e	Research result
		and attitude of nurses towards patient safety and its associated factors	knowledge , attitude and factor related to safety patient on nurse Which Work in hospital special University Gondar.	nurse	sectional		show that respondents have levels knowledge Low around safety Patient but Own attitude Which Good. in support safety patient. Necessity Training And giving information about safety patient

Based on Table 1, Following the completion of the inclusion criteria, we discovered five journals that were suitable for inclusion. After that, we were able to conduct additional research to determine the elements that are associated with the role of nurses in enhancing patient safety. In addition to demographic characteristics like gender, age, and the number of dependents, it was discovered that other elements that play a role in improving patient safety include knowledge, attitude, motivation, supervision, and training. There are many other aspects that play a role in enhancing patient safety.

### **DISCUSSION**

In 2005, Indonesia started a patient safety movement. The Indonesian Hospital Association (PERSI) formed a Hospital Patient Safety Committee (KKPRS) at that time and regulations regarding patient safety began to be formed which have been updated to date, namely Minister of Health Regulation No. 11/2017 which discusses patient safety in hospitals. Problems that often occur in givingHealth services are related to patient safety(Insani & Sundari, 2018). A hospital is a place where all parties who work in it have an obligation to provide the best service to patients to improve patient safety. Based on a literature review conducted, demographic factors are factors that play a role in improving patient safety, such as age, gender, number of dependents.

(Tulus & Maksum, 2018) stated that monitoring and evaluation in supervision activities carried out periodically by the Hospital Patient Safety Team (KPPRS) can be a solution to increase compliance in building and strengthening a patient safety culture. From several previous studies, it was found that several factors influence the role of nurses in improving patient safety in inpatient rooms apart from demographic factors, namely knowledge, length of work, motivation, training and supervision. Knowledge is a person's cognitive abilities that can be developed with education and training. Cognitive knowledge obtained in the educational process is able to influence a person's behavior so that the higher a person's education will influence his behavior in carrying out work. Knowledge about the differences in all types of patient safety incidents is very necessary for nurses to be able to prevent and overcome unwanted events related to patient safety.

Pambudi, 2018, In the Panti Waluyo Hospital inpatient room, it was discovered that there was a significant relationship between the nurses' knowledge and their behavior in the implementation of the six Patient Safety Standards (SKP). The cause of this relationship was a lack of training and evaluation related to the implementation of the six SKP, which included correct patient identification, increasing effective communication, increasing awareness of drug safety, paying attention to surgical procedures correctly, reducing the risk of infection due to treatment, and preventing injury. Thus, it is important for health workers to have adequate knowledge and participate in regular training to increase their understanding and skills in implementing SKP so that they can improve patient safety in inpatient rooms. According to (Myera, 2020), the implementation of patient safety is very dependent on the level of knowledge possessed by health workers. Years of experience, training, age of participants and information received about patient safety during education are significant predictors of increased knowledge about patient safety (Biresaw et al., 2020).

Baihaqi & Etlidawati, 2020 found a correlation between the level of knowledge of nurses

and the implementation of patient safety. Research conducted by Aprilia Roswati, 2019 showed a correlation between knowledge regarding preventing injuries due to wrong actions and the implementation of patient safety at Pusri Palembang Hospital. These results confirm that nurses' understanding of patient safety plays an important role in patient care practices and patient safety in hospitals. The formation of attitudes can be impacted by a variety of variables, including personal experience, the culture that an individual adopts, the perspectives of other individuals who are regarded as being significant, the thoughts expressed by the mass media, educational or religious institutions, and emotional factors that are present within the individual. Research by (Dua Lembang, 2021) This finding reinforces the significance of adequate knowledge and attitudes in patient care practices and patient safety in hospitals. It was discovered that there is a correlation between the attitudes of nurses and the implementation of patient safety. It is intended that both the quality of care provided in hospitals and the safety of patients can be improved by the enhancement of nurses' attitudes and knowledge, particularly with regard to patient safety.

Research by (Pambudi, 2018) shows a correlation between length of work and behavior in implementing Patient Safety Standards (SKP), a fairly long work period, namely more than 5 years, implementing 6 SKPs well, so efforts need to be made to increase the awareness and knowledge of new nurses so they can apply SKPs well and minimize the risk of errors in patient care practices.

Research by(Safrudin & Milkhatun, 2019), A correlation was discovered between nurses with over 5 years of experience and the successful implementation of the first patient safety target, accurate patient identification. Nurses with ample patient care experience are proficient in efficiently implementing patient safety targets improved.

Research by (Salih et al., 2021) finds that nurses with less than five years of experience are less likely to be knowledgeable about how to apply patient safety measures. This is in accordance with research by (Nurhanifah et al., 2021) that there is a relationship between length of work of more than 5 years and nurses optimizing patient safety. Then research by (Danielsson et al., 2019) found that nurses with little or less than 3 years of experience would have less knowledge.

Another factor is that based on research conducted by (Pambudi, 2018), The implementation of patient safety systems is influenced by both intrinsic and extrinsic factors. There are two types of motivation that impact behavior when it comes to implementing patient safety systems. One type is intrinsic motivation, which includes goals like self-improvement and increased success. The other type is extrinsic motivation, which includes things like knowing that there could be legal repercussions if you don't comply with

Patient Safety Standards. Research by (Handayani & Kusumapradja, 2018) shows that there is an influence between nurses' motivation, in the form of awareness of responsibility at work, and the implementation of patient safety in the inpatient room. Motivation can be interpreted as a process that gives influence and encouragement to someone to complete the task or work that has been given. (Farida & Astuti, 2018) that motivation in the form of awareness of responsibility, support from superiors and those from hospital management is related to the implementation of patient safety which focuses on preventing the risk of infection. (Nugroho & Widiyanto, 2020), motivation in the form of positive reinforcement given by the room leader to the nursing team can improve the implementation of patient safety.

Training carried out in the form of simulation can improve a nurse's communication skills and skills in overcoming patient safety problems because simulation is a process that shows the same situation as an actual incident. The more training a nurse follows regarding patient safety, the more knowledge about patient safety will be able to increase. Research by(Salih et al., 2021), it is stated that there is a correlation between training on patient safety before work and the implementation of patient safety in the inpatient room at Mansoura University Hospital. This opinion is supported by (Biresaw et al., 2020) that nurses who receive a lot of training regarding patient safety tend to have a good attitude in implementing patient safety compared to nurses who do not receive training. Research (Kim & Jeong, 2019) shows that the effects of patient safety training regarding patient safety competencies have the effect of increasing competence in this case attitudes, skills and knowledge about patient safety. Another opinion regarding the relationship between training and patient safety is (Nurumal et al., 2020) stating that there is a relationship between PPGD and BTCLS training to increase nurses' knowledge and skills regarding patient safety. Training regarding the impact of patient safety professional development initiatives will influence patient safety because from this training nurses will gain knowledge from the material presented in the training. Comprehensive Unit Based Safety Program (CSUP) training can provide nurses with knowledge about how to identify safety problems in implementing nursing care practices so that patient safety incidents do not occur.

Training regarding patient safety competencies is very important for nurses in carrying out their duties. This training can improve nurses' attitudes, knowledge and skills in implementing patient safety. With a good attitude, nurses can provide better health services to patients so that patient safety can be maintained. Apart from that, adequate knowledge and skills regarding patient safety are also very important to prevent errors and risks to patients. Therefore, training and developing patient safety competencies must be a priority in

developing nurse professionalism.

#### **CONCLUSION**

This literature review established that, in addition to demographic factors, knowledge factors (such as an understanding of patient safety incidents), attitudes, length of service (greater than three years), intrinsic motivation (a nurse's self-confidence and belief in his abilities) and extrinsic motivation (the support and appreciation of the head of the room and hospital management) are known to impact nurses' roles. Nurses can enhance their skills in implementing patient safety measures through regular simulation training and supervision by the leader or head of the room. In order to better prepare nurses to handle real-life scenarios, simulation training allows them to practice their skills and knowledge in environments that mimic the original incident.

#### **REFERENCES**

- Aprilia Roswati. (2019). Hubungan Pengetahuan Dan Sikap Perawat Dengan Pelaksanaan Keselamatan Pasien (Patient Safety) Di Rumah Sakit Pusri Palembang Tahun 2019. *Masker Medika*, 7(2), 323–331.
- Baihaqi, L. F., & Etlidawati, E. (2020). Hubungan Pengetahuan Perawat dengan Pelaksanaan Keselamatan Pasien (Patient Safety) di Ruang Rawat Inap Rsud Kardinah Tegal. *JKM Edisi Khusus September* 2020, *September*, 318–325.
- Balamurugan, E., & Flower, J. L. (2015). A Study on Patient Safety Culture among Nurses in a Tertiary Care Hospital of Puducherry. *International Journal of Nursing Education*, 7(1), 174. https://doi.org/10.5958/0974-9357.2015.00036.7
- Biresaw, H., Asfaw, N., & Zewdu, F. (2020). Knowledge and attitude of nurses towards patient safety and its associated factors. *International Journal of Africa Nursing Sciences*, *13*(September 2019), 100229. https://doi.org/10.1016/j.ijans.2020.100229
- Danielsson, M., Nilsen, P., Rutberg, H., & Årestedt, K. (2019). A National Study of Patient Safety Culture in Hospitals in Sweden. *Journal of Patient Safety*, 15(4), 328–333. https://doi.org/10.1097/PTS.00000000000000369
- Dua Lembang, F. T. (2021). Relationship of Knowledge and Work Motivation of Nurses With Attitudes To Support the Application of Patient Safety Inpatient Room of Wonosari Yogyakarta General Hospital. *Jurnal Keperawatan Respati Yogyakarta*, 8(1), 11. https://doi.org/10.35842/jkry.v8i1.579
- Farida, F., & Astuti, W. (2018). Nurse's Knowledge, Motivation and Implementation of Patient safety Program in RSUI Orpeha Tulungagung. *The 2nd Joint International Conference*, 342–348. http://proceeding.tenjic.org/jic2
- Handayani, Y. V, & Kusumapradja, R. (2018). Pengaruh Motivasi Kerja Perawat Terhadap Penerapan Program Keselamatan Pasien Di Unit Rawat Inap Rumah Sakit X Tangerang Selatan. *Hospitalia*, 1(1), 67–80.
- Insani, T. H. N., & Sundari, S. (2018). Analisis Pelaksanaan Keselamatan Pasien oleh Perawat. *JHeS* (*Journal of Health Studies*), 2(1), 84–95. https://doi.org/10.31101/jhes.436
- Kim, N. Y., & Jeong, S. Y. (2019). Patient safety management activities of clinical nurse: A modified theory of planned behavior. *Journal of Korean Academy of Nursing Administration*, 25(5), 384–392. https://doi.org/10.11111/jkana.2019.25.5.384
- Kronick, R. (2016). AHRQ's Role in Improving Quality, Safety, and Health System Performance. *Public Health Reports*, 131(2), 229–232. https://doi.org/10.1177/003335491613100205
- Myera, S. A. (2020). *Patient safety and hospital accreditation : a model for ensuring success.* : Springer Publishing Company.

- Nugroho, S. H. P., & Widiyanto, P. (2020). The Implementation of Patient Safety by Nurses Based on Work Design. *JMMR* (*Jurnal Medicoeticolegal Dan Manajemen Rumah Sakit*), 9(3), 248–256. https://doi.org/10.18196/jmmr.93136
- Nurhanifah, N., Kamil, H., Syahrul, S., Marlina, M., & Marianthi, D. (2021). The Relationship between Nurse's Characteristics and Motivation with the Implementation of International Patient Safety Goal. *Media Karya Kesehatan*, 4(2), 252–267. https://doi.org/10.24198/mkk.v4i2.34665
- Nurumal, M. S., Sabran, N. M., Hamid, S. H. A., & Che Hasan, M. K. (2020). Nurses' Awareness on Patient Safety Culture in A Newly Established University Hospital. *Jurnal Keperawatan Indonesia*, 23(2), 119–127. https://doi.org/10.7454/jki.v23i2.1088
- Pambudi, Y. S. A. Y. D. (2018). Faktor-faktor yang mempengaruhi perawat dalam penerapan 6 SKP (Sasaran Keselamatan Pasien) pada akreditasi JCI (Joint Commision International) di ruang rawat inap rumah sakit panti Waluya Malang. *Nursing News*, 3(1), 729–747.
- Safrudin, M. B., & Milkhatun, M. (2019). the Relation Between Nurses Age and Compliance in the Implementation of Prevention of Falling Patients in the General Hospital of the Samarinda Government. *Jurnal Ilmu Kesehatan*, 7(1), 33–38. https://doi.org/10.30650/jik.v7i1.243
- Salih, S. A., Abdelkader Reshia, F. A., Bashir, W. A. H., Omar, A. M., & Ahmed Elwasefy, S. (2021). Patient safety attitude and associated factors among nurses at Mansoura University Hospital: A cross sectional study. *International Journal of Africa Nursing Sciences*, 14(September 2020), 100287. https://doi.org/10.1016/j.ijans.2021.100287
- Tulus, H., & Maksum, H. (2018). Redesain Sistem Identitas Pasien sebagai Implementasi Patient Safety di Rumah Sakit Redesigning Patient Identity System as Patient Safety Implementation at Hospital. *Jurnal Kedokteran Brawijaya*, 28(2), 221–227.
- World Health Organization. (2019). SEVENTY-SECOND WORLD HEALTH ASSEMBLY: Global action on patient safety (Issue May 2019).

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