



Patient Safety: The Implementation of Patient Identification in the New Normal

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ABSTRACT

Identifying errors at the beginning of the service will have an impact on the errors at the next stage. Nurses have a central role in safe drug delivery. This study aimed to determine the implementation of patient identification. The research used descriptive analytic with a cross-sectional approach. A total of 134 nurses was selected to be the samples through purposive sampling at a hospital in Temanggung Regency. The data were collected using questionnaires and observation sheets. The data were analyzed using a frequency distribution. The results showed that the application of patient identification was categorized as low (<100%). Nurses need to improve the implementation of patient identification according to standards so that it will improve the quality of services that focus on patient safety.

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ABSTRAK

Kesalahan identifikasi diawal pelayanan akan berdampak pada kesalahan pelayanan tahap berikutnya. Perawat memiliki peran sentral dalam pemberian obat yang aman. Penelitian ini bertujuan mengetahui penerapan identifikasi pasien. Desain penelitian yang digunakan adalah deskriptif analitik dengan pendekatan cross sectional. Teknik pengambilan sampel menggunakan purposive sampling dengan jumlah sampel sebanyak 134 perawat di sebuah rumah sakit di Kabupaten Temanggung. Pengambilan data menggunakan kuesioner dan lembar observasi. Data dianalisis menggunakan distribusi frekuensi. Hasil penelitian menunjukkan bahwa penerapan identifikasi pasien dikategorikan rendah (<100%). Perawat perlu meningkatkan penerapan identifikasi pasien yang sesuai standar sehingga akan meningkatkan kualitas layanan yang berfokus pada keselamatan pasien.

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INTRODUCTION

Patient safety is defined as activities which minimize and eliminate the possibility of errors and injury to patients (Kosiek et al., 2021). Incidents of injury can also occur from various aspects such as medication errors, therapy failures,

communication failures, infections related to health services, and errors due to carrying out an action or not taking the action that should be taken (Permenkes RI, 2017). Misidentification at the beginning of service will have an impact on service errors at the next stage (Fatimah et al., 2018).

Research data stated that patient identification was still low. Recent studies found that patient identification is the step that carries the highest risk with regard to patient safety. The results of the study revealed that there were 16.1% of cases where patient identification was carried out incorrectly and 56% of patient identification errors were caused by poor labeling practices (Cornes et al., 2019). This is in agreement with Fatimah et al (2018) who mentioned that 71.9% of patients were identified and 28.1% were not identified. Patient identification before blood transfusion was 100%, before the treatment was 75.5%, before blood collection was 75%, and before drug administration was 64.1%.

Patient safety incidents in Indonesia continue to increase reaching to 1647 incidents in 2017, 1489 incidents in 2018, and a sharp increase of 7465 incidents in 2019. The presentation of the number of incidents in 2018 was KNC 33%, KTC 37%, KTD 30%, and in 2019 KNC 38%, KTC 31%, KTD 31%. Number of cases based on incident in 2019 was death 171 (2.3%), serious injury 80 (1.7%), minor injury 372 (5%), minor injury 1183 (16%), no injury 5659 (75%) (Daud, 2020). The cause of the incident was 46% related to incorrect identification, 36% due to ineffective communication resulting in medication errors, and 18% due to the incomplete procedures (Fatimah et al., 2018).

A number of factors affects patient safety management including facilities available in practice, communication and collaboration, and education about patient safety and general conditions (Kosiek et al., 2021). Non-standard patient identification may increase the risk of wrong treatment so that incidents related to patient safety will be quite high. Misidentification of patients can be fatal which can cause minor injury, severe injury, and even death. Various forms of patient identification errors include drug administration to the wrong patient, surgery on the wrong patient, anatomical pathology examination in the wrong patient, imaging examinations in the wrong patient, giving transfusions to the wrong patient, and taking specimens from the wrong patient (Swastikarini et al., 2019)

A preliminary survey was performed at the research site through interviews with the Infection Prevention and Control team. They stated that patient identification was not optimally implemented. They also mentioned that they had not been able to implement patient identification according to standards. One of the obstacles was the limited manpower so that the results obtained were not valid.

Therefore, it is very important to carry out a patient identification study. There are three main reasons why it is important to conduct this study. The first is that the assessment of patient identification has not been optimal. The second reason is the hospital's obligation to implement patient safety in hospital services. The third reason is that the quality improvement, especially in implementing patient identification must be an evidence-based activity. Finally, this study aimed to analyze the application of patient identification in a hospital in Temanggung Regency.

METHODS

The design used in this study was a descriptive analytic study with a cross-sectional approach. The study was carried out in one of the hospitals in Temanggung, a regency in the Central Java, from February to August 2022. The population was all nurses who provided services to patients. A total of 134 nurses were obtained by purposive sampling technique.

The data were collected using an observation sheet. The data obtained were analyzed using a frequency distribution. This research was approved by the Commission of Research Ethics No. 221/EC/KEPK-S2/01/2022.

RESULTS AND DISCUSSIONS

The following table shows the characteristics of respondents in a hospital in Temanggung.

Table 1
Respondents' Characteristics

Variables	Results
Age	
Mean	39.32
SD	7.41
Min-max	26-57
Years of service	
Mean	12.42
SD	8.76
Min-max	2-26
Education level, Σ (%)	
Nursing Diploma III	74.7
Bachelor of Nursing	25.3
Gender, Σ (%)	
Male	34.9
Female	65.1

The data in Table 1 show that the average age of the respondents is 39.32 years. The average years of service was found to be 12.42 years. The majority of the respondents (74.7%) were Nursing Diploma III graduates. Most of the respondents (65.1%) were women.

Table 2
The Results of Patient Identification by Nurses

Variables	Results	Standard
Stage 1, Σ (%)		100
Implemented	75.4	
Not implemented	24.6	
Stage 2, Σ (%)		100
Implemented	79.5	
Not implemented	21.5	
Stage 3, Σ (%)		100
Implemented	84.7	
Not implemented	15.3	

Based on Table 2, the assessment of patient identification was carried out in 3 stages and the results were below standard (<100%). This means that nurses did not carry out assessment according to standards. The observations found that nurses identified patients using 1 identity only, did not use open-ended questions, did not identify the patients according to standards prior to administration of drugs, incorrect prescriptions were attached to other patients, patients were not attached wristbands, incorrect injection labeling, did not identify the patients prior to follow-up examination. Some factors that influence patient identification are age, years of service, education level, and motivation. The previously mentioned factors affected good patient safety implementation (Nugroho & Sujianto, 2017; Swastikarini, 2018).

According to the researchers, the mean age of the respondents in this study was 39.32 years, so this may have

implications for enforcing patient safety standards. This is consistent with the findings of Setyani et al., (2017) found that nurses under the age of 35 may perform patient safety goals well. This statement is also corroborated by Handayani et al. in 2018 which affirmed that there was a relationship between age and the performance of nurses. Nurses under the age of 35 perform better than nurses over the age of 35 (Handayani et al., 2018). Those who are aged under 35 will have better activities because as they are getting older, the quality and productivity of work will decrease. This statement is corroborated by Robbins & Coulter which states that as age increases, physical quality will decrease and will result in decreased quality of work productivity. (Robbins & Coulter, 2015).

The researchers also analyzed that patient identification in a hospital room at Temanggung was influenced by nurse tenure. Respondents in this study had an average working period of 12.42 years. Miladiyah et al. stated that a person's performance will be good if the work period is under 10 years (Miladiyah et al., 2015). This is because years of service can provide a description related to one's work experience and quality and productivity of work, so it will affect performance. The head of the room needs to implement various innovations to improve the implementation of activities that are in accordance with standards at all levels of years of service, so that all nurses will be able to carry out their duties and work well according to standards, especially in the provision of care services related to patient identification.

Years of service give nurses good experience in providing optimal care services to patients, especially regarding patient safety and patient identification. This is consistent with a study by (Setyani et al., 2017) which found a correlation between years of service and achievement of patient safety goals. Experienced nurses typically implement better patient safety goals (Setyani et al., 2017).

The researchers argue that the results of patient identification in inpatient wards of hospitals in Temanggung are also due to the education level of nurses. This is supported by a study by Fadriyanti & Suryarinilsih (2018) who found a correlation between educational level and implementation of patient safety goals. Research shows that higher levels of nursing education lead to better quality of service when implementing patient safety and patient identification. A person with higher education level will have broader knowledge so that they can provide better services to patients according to patient needs. A good level of knowledge will be related to a person's level of education (Nur et al., 2019).

The results are parallel to Lombogia et al (2016) which stated that 74.2% of nurses in Manado identified the patients appropriately and 25.8% did not identified the patients appropriately. Another research by Fatimah et al (2018) found that 71.9% of the nurses identified the patients properly while 28.1% of them did not do it properly.

Patient identification is to match the patient's identity bracelet on the left/right wrist that contains the full name, date of birth, and medical record number with the identity of the person to be given, performed the action/procedure, taken blood/sample, given blood or blood products, and administered treatment (Permenkes RI, 2017).

Patient identification errors can occur in all aspects of diagnosis and treatment. If the patient is anesthetized, disoriented, completely unconscious, comatose, or if the patient changes beds, changes bedrooms, changes location within the hospital environment, or loses identity. Forgetfulness or sensory deficits that lead to other

experiences can lead to misidentification (Permenkes RI, 2017).

The identification process used by the hospital requires at least 2 (two) of 3 (three) forms of identification which include the patient's name, date of birth, medical record number, or other forms such as population identification number or barcode. Patient room numbers cannot be used for patient identification. These two forms of identification are used in all areas of hospital service, such as outpatients, inpatients, emergency departments, operating rooms, diagnostic service units, and others. Two forms of identification must be carried out in every situation related to intervention to the patient. For example, patient identification is useful before administration of radiation therapy, the administration of intravenous fluids, hemodialysis, the collection of blood or other samples for clinical evaluation, cardiac catheterization, radiological diagnostic procedures, and the identification of comatose patients (KARS, 2017). Therefore, nurses must be able to ensure that the nursing services provided must prioritize patient safety. In accordance with six patient safety goals, one of which is to identify correctly (Herlina et al., 2019).

From the results of the above incidents related to patient safety, hospitals must learn from incidents. Hospitals must continue to improve incident reporting and analysis (Permenkes RI, 2017). This is because several studies have found that incident reporting rates are very low. Research in South Korea found reporting of very low incidences ranging from 6.3% to 29.9%, regardless of whether the nurse recognized the incident as a medication error. These findings may have important implications for improving the safety of care in hospitals, and further management efforts are needed to improve incident reporting by nursing staff (Lee, 2017).

Medication errors are known as a real problem for all health systems worldwide and are the most common category of nursing errors. The results of this study are also corroborated by the research by Intas et al in 2021 which found 63.0% of nurses made errors in administering drugs, more often the time of administration (34.4%), dose (22.8%), and wrong dose (21.7%) (Intas et al, 2021).

Increasing the role of nurses in patient identification is very important. Nurses must continue to increase capacity in services so that they provide safe services to patients. Nurses play a central role in the safe administration of medications, including but not limited to recognizing the risks of potential medication errors. Nurses have a duty to evaluate patients and their treatments and use clinical knowledge and reasoning to administer medications safely. Nurses need to increase the use of safe drugs so that the incidence of errors can be reduced (Rohde & Domm, 2018).

LIMITATION OF THE STUDY

The limitation of this study is that the results of the study cannot be generalized so that it only describes the application of patient identification by nurses at the study site.

CONCLUSION AND SUGGESTION

To sum up, the application of patient identification is still low in a hospital in Temanggung. Hospital administrators should support improved use of proper patient

identification. For this reason, there is a great need to develop work programs related to patient identification so that problem-solving strategies can be implemented to improve its use among nurses. The results of this study can be used as a starting point for further research and development on patient identification by nurses, ultimately improving patient safety practices for nurses in the health sector.

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Conflict of Interest Statement

The author declares that there is no potential conflict of interest or financial conflict in the authorship and publication of this article.

REFERENCES

- Cornes, M., Ibarz, M., Ivanov, H., & Grankvist, K. (2019). Blood sampling guidelines with focus on patient safety and identification - a review. *Diagnosis (Berlin, Germany)*, *8*(1), 33–37. <https://doi.org/10.1515/DX-2018-0042>
- Daud, A. W. (2020). Sistem Pelaporan Insiden Keselamatan Pasien. Komite Nasional Keselamatan Pasien (KNKP). In *Perhimpunan Rumah Sakit Seluruh Indonesia* (Vol. 8, pp. 169–180). https://persi.or.id/wp-content/uploads/2020/08/materi_drarjaty_ereport_web060820.pdf
- Fadriyanti, Y., & Suryarini, Y. (2018). Hubungan Jam Kerja dan Karakteristik Perawat Pelaksana dengan Penerapan Sasaran Keselamatan Pasien pada Rumah Sakit di Kota Padang. *Menara Ilmu*, *12*(6).
- Fatimah, F. S., Sulistiarini, L., & Fatimah. (2018). Gambaran Pelaksanaan Identifikasi Pasien Sebelum Melakukan Tindakan Keperawatan di RSUD Wates. *Indonesian Journal of Hospital Administration*, *1*(1), 21–27. [https://doi.org/10.21927/IJHAA.2018.1\(1\).21-27](https://doi.org/10.21927/IJHAA.2018.1(1).21-27)
- Handayani, S., Fannya, P., & Nazofah, P. (2018). Faktor yang Berhubungan dengan Kinerja Tenaga Kesehatan di Rawat Inap RSUD Batusangkar. *Jurnal Endurance*, *3*(3), 440–448. <https://doi.org/10.22216/jen.v3i3.3005>
- Herlina, L., Studi, P., Keperawatan, I., Tinggi, S., & Cirebon, I. K. (2019). Hubungan Motivasi Dengan Kepatuhan Perawat Dalam Pelaksanaan Identifikasi Pasien Sebagai Bagian Dari Keselamatan Pasien Di Ruang Rawat Inap. *Jurnal Kesehatan*, *10*(1), 19–24. <https://doi.org/10.38165/JK.V10I1.4>
- Intas, G., Pagkalou, D., Platis, C., Chalari, E., Ganas, A., & Stergiannis, P. (2021). Medication Errors and Their Correlation with Nurse's Satisfaction. The Case of the Hospitals of Lasithi, Crete. *Advances in Experimental Medicine and Biology*, *1337*, 195–203. https://doi.org/10.1007/978-3-030-78771-4_22
- KARS. (2017). *Standar Nasional Akreditasi Rumah Sakit Edisi 1*.
- Kosiek, K., Staniec, I., Godycki-Cwirko, M., Depta, A., & Kowalczyk, A. (2021). Structural equation modeling for identification of patient safety antecedents in primary care. *BMC Family Practice*, *22*(1). <https://doi.org/10.1186/S12875-021-01533-6>
- Lee, E. (2017). Reporting of medication administration errors by nurses in South Korean hospitals. *International Journal for Quality in Health Care*, *29*(5), 728–734. <https://doi.org/10.1093/intqhc/mzx096>
- Lombogia, A., Rottie, J., Karundeng, M., Studi, P., Keperawatan, I., & Kedokteran, F. (2016). Hubungan Perilaku dengan Kemampuan Perawat dalam Melaksanakan Keselamatan Pasien (Patient Safety) di Ruang Akut Instalasi Gawat Darurat RSUP Prof. Dr. R. D. Kandou Manado. *JURNAL KEPERAWATAN*, *4*(2). <https://doi.org/10.35790/JKP.V4I2.12916>
- Miladiyah, N., Mustikasari, M., & Gayatri, D. (2015). Hubungan Motivasi dan Komitmen Organisasi dengan Kinerja Perawat dalam Pelaksanaan Dokumentasi Asuhan Keperawatan. *Jurnal Keperawatan Indonesia*, *18*(1), 9–16. <https://doi.org/10.7454/jki.v18i1.392>
- Nugroho, S. H. P., & Sujianto, U. (2017). Supervisi kepala ruang model proctor untuk meningkatkan pelaksanaan keselamatan pasien. *Jurnal Keperawatan Indonesia*, *20*(1), 56–64.
- Nur, R., Salmawati, L., Nutfa, S., Krisnasari, S., Rau, J., Radiah, & Patui, N. S. (2019). Knowledge, Attitudes of Nurses with Implementation of Patient Safety in Undata General Hospital of Central Sulawesi Province. *Indian Journal of Public Health Research & Development*, *10*(12), 1956–1960. <http://e-resources.perpusnas.go.id:2048/login?url=http://search.ebsc.ohost.com/login.aspx?direct=true&db=edsijc&AN=diva.ijphr.d.10.12.391&site=eds-live>
- Permenkes RI. (2017). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 11 Tahun 2017 tentang Keselamatan Pasien*.
- Robbins, S., & Coulter, M. (2015). *Management*. Pearson Education. <https://books.google.co.id/books?id=S8OgBwAAQBAJ>
- Rohde, E., & Domm, E. (2018). Nurses' clinical reasoning practices that support safe medication administration: An integrative review of the literature. *Journal of Clinical Nursing*, *27*(3–4), e402–e411. <https://doi.org/10.1111/jocn.14077>
- Setyani, M. D., Zuhrotunida, Z., & Syahrinal, S. (2017). Implementasi Sasaran Keselamatan Pasien Di Ruang Rawat Inap RSUD Kabupaten Tangerang. *Jurnal JKFT*, *1*(2), 59–69.
- Swastikarini, S. (2018). Hubungan Umur, Tingkat Pendidikan Dan Lama Kerja Perawat Pelaksana Dengan Pelaksanaan Ketepatan Identifikasi Pasien Di Ruang Rawat Inap. *Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal*, *8*(2), 75–81. <https://doi.org/10.32583/PSKM.8.2.2018.75-81>
- Swastikarini, S., Yuliasari, Y., & Susanti, M. (2019). Analisis Faktor Faktor Yang Berhubungan Dengan Pelaksanaan Ketepatan Identifikasi Pasien Oleh Perawat Pelaksana. *Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal*, *9*(2), 125–134. <https://doi.org/10.32583/PSKM.9.2.2019.125-134>