

The Importance Of Identifying Patients Correctly In Hospital (Based On *Donabedian* Model)

Widani Darma Isasih¹, Ernawaty^{1*}

¹Department of Health Policy and Administration, Faculty of Public Health Universitas Airlangga, Surabaya, Indonesia

***Corresponding Author: Ernawaty**

Department of Health Policy and Administration, Faculty of Public Health, Universitas Airlangga, Surabaya, Indonesia

Campus C, Jl. Dr. Ir. H. Soekarno, Mulyorejo, Mulyorejo, Surabaya, East Java postal code : 60115

Email: ernawaty@fkm.unair.ac.id

Abstract. An error due to the mistake in identifying the patient can happen at almost all stages of diagnosis and treatment. The possible result is the incident in patient safety which can cause damage to the patient along with the hospital. This research was focused on the implementation of correct identification to the patient at the regional public hospital of North Lombok regency using *Donabedian* model for the analysis with qualitative type research. The research subjects were six officers. Additionally, the data collection was through an in-depth interview, direct observation, and document analysis. The finding showed that some patients were not given (using) the patient ID wristbands (wristlet) and the Standard Operating Procedure (SOP) for identifying the patients had not been distributed to the officer yet. The infrastructures and the facilities were not sufficient in terms of both quality and quantity. In addition, the executing officer did not perform the identification maximally and correctly. Thus, the implementation of identifying the patient based on the *Donabedian* model (structure/input, process, and outcome) has not been performed at the maximum extent.

Keywords: patient identification, patient identity, patient safety.

1. Introduction

The *donabedian* system theory [1], which can also be used as an indicator of the quality of health services, consists of the structure or input in a health care organization. That structure is used as an indirect measurement of service quality. The Structure/input can be assessed based on financial resources, human resources, equipment, facilities, and information systems. A process is an activity carried out by the health personnel and their interactions with patients. This interaction is a process which can be assessed based on a preventive care, diagnosis, therapeutic care, rehabilitation, patient information, and instructions. An outcome is the direct result of the process, activities, or service of a program. The outcome can be assessed based on the health status, results from provided care and prevention, healthy patients, patient satisfaction, and good use of resources.

Hospitals have an important role for the community. They offer and provide services with various components that are very complex, and if it is not managed properly can potentially lead to an error in providing services to patients; thus, it is threatening the patient safety [2]. Based on the results of the preliminary study, there are several reasons of North Lombok District Hospital being selected for this study: some patients were not paired with identity bracelets, Standard Operating Procedure identified patients had not been distributed to officers; patient identity bracelets were often erroneous; there were no special markers; some officers did not use at least two patient identification which means to identify them. All of these problems can trigger incidents related to a misidentification of patients which cause harm to the patients as well as the hospitals. Therefore, the researchers focused on the research in implementing correctly identifying patients in a public hospital in the North Lombok regency.

2. Material and methods

2.1 Research design, population, sample and variables

The research method used a qualitative method, types of descriptive research, and use a case study approach [3]. The location of the study was conducted at North Lombok Regional General Hospital in 2017. Techniques in determining research subjects using snowball sampling method. The research subjects consisted of six people: the chairperson of the hospital patient safety committee, head of pharmacy, nurse in the outpatient unit, nurse in the inpatient unit, nurse in the emergency unit, and the laboratory staff. The variables are objects which have different size for each other [3]. The variable of this study is input, process, and output of identifying patients correctly in the hospital.

2.2. Instruments

This research instruments was an interview guide and observation sheet.

2.3 Research procedures and analysis

The data collection methods used in this research were in-depth interviews, direct observation, and document review. Data analysis with Mile and Humbermen models consisting of reduction data, display data, and conclusion drawing/verification [4].

3. Results

Table 1. Analysis of patient identification according to the *donabedian* model In North Lombok Regional General Hospital In 2017

| Elements | Research Elements | Information |
|----------|---|---------------------|
| Input | Standard Operating Procedure Patient identification | Available |
| | Incident form of patient identification | Not available |
| | Officer consistency | Not implemented yet |
| | Training in how to identify patients correctly | Not implemented yet |
| | Monitoring and evaluation identifying patients | Not implemented yet |
| | Patient Identity Bracelet | Not implemented yet |
| | Allergy Sticker | Available |
| | Risk of falling stickers | Available |
| | Label Stickers | Not available |
| Process | | Available |
| | Patients are identified using two patient identities | Not implemented yet |
| | Patients are identified before administration of drugs, blood or blood products | Not implemented yet |
| | The patient is identified before taking blood and other specimens | Not implemented yet |
| | Patients are identified before treatment or action | Not implemented yet |
| | Describes the identification function and function of patient identification bracelets for patients | Not implemented yet |
| | Write the patient's name on the patient's identity bracelet without any abbreviations | Not implemented yet |
| | Do not cross the wrong patient's name when writing on the identification bracelet | Done |
| Output | It has not been maximally implemented and the incidence of misidentification of patients | Done |

was discovered.

Based on Table 1 it can be seen that the policies/guidelines related to the identification have not been provided in the form of patient incident forms. However, they have been prepared in the form of standard operating procedure, but the manager has not submitted patient identification process to the executive officers because they are still in the revision stage. Thereby, it has not been maximally implemented and the incidence of patients misidentification was discovered.

4. Discussion

In accordance with the Decree of the Minister of Health of the Republic of Indonesia Number 11/2017 regarding the Patient Safety, all health facilities are required to be able to provide services while still prioritizing the patient safety by ensuring a sense of security and protecting the impact of the services provided by the hospital staff to the patients [5]. Hospital service security is viewed from the aspect of identifying patients correctly. The indicator used by *donabedian* model analysis consists of input, process, and output.

4.1 Input Element

Based on the results of the research obtained, the input indicator is still not optimally implemented because the incident form and the Standard Operating Procedure have not been received by the officer concerned about correctly identifying the patient. Therefore, the officers do not have a standard reference, and there are no special standards used by the officers in carrying out the process of identifying patients correctly. If there is an incident identifying the patient then the officer and the hospital will not be able to detect or determine the cause and the reason for the incident. This is because the officer is only guided by the work procedure habits that have been conducted. Based on the data collected [6], the Mean for 2014 was 99% with 1% gap due to staff not aware on the standard practices. For 2015 the Mean was 97.6%, decreased by 1.4% as compared to year 2014 due to the increase number of new staff and incomplete practicing of the two identifiers

The main factor to prevent errors in identifying patients is the availability and compliance with the Standard Operating Procedure, and reporting if there is patient misidentification. Reporting the patient identification needs to be used as a basis for improving Standard Operating Procedure and learning so that there will be no misidentifications [7]. Officers who know the most ways of working according to the rules are the officers who have received the Standard Operating Procedure that have fully accommodated and applied the principles [8]. An internalized Standard Operating Procedure will support the officer's work [9].

In addition to policy factors, human resource factors also take part in the failure to properly identify patients in the North Lombok district hospital. The human resource factor observed in this study relates to the consistency of the research subject in correctly identifying patients. According to the rules, identifying patients should be done using at least two patient identities and performed at all stages of the health service but in reality there are only officers who identify with only one patient identity [5].

In addition, monitoring and evaluation are also needed to improve the implementation of identifying patients correctly. Monitoring aims to identify errors early so they are easily corrected in time and not cause adverse impact on a large scale/fatal scale while the evaluation aims to assess how the process has been going on overall and if there are problems then find a solution. This evaluation also highlighted the officers' work to increase involvement in health services and care [10].

Similarly, in identifying patients, if monitoring and evaluation is not carried out optimally by the responsible person, the level of awareness of the importance of the identification of patients is also hampered, because if there is a problem in the patient identification process, it can cause an impact on service quality that is not optimal and raise many new issues that need to be addressed as soon as possible. Evaluation can be used as a way to assess the success or failure of a program [11]. In order to improve the compliance, the Management will continue to conduct awareness for all staff, to perform regular audit and to share the Root Cause Analysis of any incidences. The important of correct

identification will be displayed in screen server, notice board, book mark and pocket book. Patients are educated to participate in the process [6].

Another factor that caused this to happen was lack of training for the relevant officers about identifying the items correctly. Training can improve officers' skills and understanding in identifying patients correctly. The training is stated as part of education that involves the learning process to acquire and improve skills outside the education system, skills that can be applied in a relatively short time. The amount of training that health workers follow can have a powerful influence in determining whether or not someone is good at implementing patient identification correctly [11]. Training is conducted to encourage active participation and provide opportunities for participants to learn to support the implementation of the programs to identify patients correctly [12]. The officers' level of knowledge about identifying patients correctly is closely related to the actions taken in identifying patients correctly [13]. His knowledge and criteria tend to influence what he feels, thereby introducing certain distortions of perception [14].

The facilities and the infrastructure also play an important role in the implementation of identifying patients correctly. If the facilities and infrastructure are inadequate, both in terms of quality and quantity, the program cannot be implemented optimally. The incompatibility between the standards and the quality of the facilities and infrastructure provided in the implementation of identifying patients correctly will trigger the emergence of complaints from both officers and patients as recipients of services. Lack of facilities and infrastructure will have an impact on the quality of service in these health facilities [15].

4.2 Process Element

Officers identify inpatients and emergency departments by using two patient identities, the patient's identity printed on the identity bracelet, which is then verified by matching the patient's identity listed on the medical record file [5]. Officers should explain the importance of identifying and using identity bracelets for patients so that the services provided are right on target.

The patient identification system starts when the patient registers; the patient's identity includes: the name, age and medical record number of the patient. Then the patient's identity is printed on a sticker which is then affixed to the patient's identity bracelet and medical records. During hospitalization the patients must wear patient bracelets, blue for male and pink for women [16].

But other elements of assessment about the accuracy of patient identification have not been carried out by all the officers involved. The officer only calls the name of the patient in question and then provides services without conducting identity verification by asking him or his family about the patient's identity again. Every nurse or health worker should verify every action before administering drugs, blood transfusions, taking samples for laboratory tests and other actions [16].

Errors in patient identification can occur at this stage. As in the case of a patient with the same name or with a similar name, it is possible for the patient to experience an error in hearing the name when called by the officer or even the officer can mistakenly call the patient's name or read the patient's name incorrectly. If this happens, the service product and type of service is given to the wrong patient or the patient should not receive the service product and type of service provided. The impact that might have on this event is the occurrence of patient safety incidents such as Unwanted Events (UE), Near Injury Events (NIE), and so forth. The failure to correctly identify patients continues to result in medication errors, transfusion errors, testing errors, wrong person procedures, and the discharge of infants to the wrong families [6]. Ensuring accurate patient identification is central to preventing medical errors [17]. Patient identification errors during the medication administration process can be fatal [18].

If the patient is identified inappropriately when the specimen is obtained for laboratory testing or when blood and blood products are infused, misidentification can result in delayed diagnosis, additional

laboratory testing, mistaken treatment of the wrong patient and even death from the reaction of acute hemolytic transfusion [17].

4.3 Output Element

Based on the explanation of input indicators and the process of identifying patients correctly, it will be related to the output achievement. As a result there are inputs such as Standard Operating Procedure that are not distributed, human resources that are still not maximal in the implementation of correctly identifying patients, facilities and infrastructure that are not sufficient in terms of quality and quantity. Then, regarding the influence of the process of identifying patients and it not being implemented in accordance with the Regulation of the Minister of Health of the Republic of Indonesia Number 11/2017 concerning Patient Safety [5]. Based on these two indicators, it can be said that the implementation of identifying patients correctly in a public hospital in North Lombok district has not been carried out maximally. This is due to the lack of commitment from officers to identify patients correctly. Although basically it is very difficult to change an individual's mindset about something, but if trained and reminded continuously, it will gradually have an impact in the form of a change in mindset or even a change in the individual's behavior.

As a result of research conducted the conclusion was that in practice, nurses do not always verify when they are going to take nursing actions. This is especially true when carrying out routine nursing actions which they think will not pose a risk to the patient, because they are busy or unable to avoid the patient's boredom if asked to confirm his identity too often [19].

The research shows that hospital has implemented patient identification but there were five nurses did not identify the patient correctly [20]. They did not identify the patients with two patient identities. It because of habit and the role model within environment has not formed properly

5. Limitation of the study

There are many factors that are likely to influence the input indicators and the process of identifying patients correctly related to the output achievement. This study was covered only to hospital factors which consisted of Standard Operating Procedure Patient identification, Incident form of patient identification, Officer consistency, Training in how to identify patients correctly, Monitoring and evaluation identifying patients, Patient Identity Bracelet, Allergy Sticker, Risk of falling stickers, Label Stickers, Patients are identified using two patient identities, Patients are identified before administration of drugs, blood or blood products, The patient is identified before taking blood and other specimens, Patients are identified before treatment or action, Describes the identification function and function of patient identification bracelets for patients, Write the patient's name on the patient's identity bracelet without any abbreviations and Do not cross the wrong patient's name when writing on the identification bracelet.

6. Conclusion

The implementation of identifying patients based on the input had not been carried out because the Standard Operating Procedure were not distributed. Afterward, human resources are still not maximal in the implementation of correctly identifying patients. The facilities and infrastructure are not sufficient in terms of quality and quantity. The implementation of identifying patients based on the process had not been carried out because the process of identifying patients has not been implemented in accordance with the regulation of the Health Minister Republic of Indonesia number 11/2017 regarding patient safety. The implementation of identifying patients based on output had not been implemented because it was supported by the results of input and processes that have not met the qualifications, so the output had not reached its optimal value. This was also supported by the findings of an error incident when identifying patients.

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References

- [1] Donabedian, A., 1978. The Quality Of Medical Care Methods For Assessing And Monitoring The Quality Of Care For Research And For Quality Assurance Programs. Science, Vol. 200. Medical Care Organization At The School Of Public Health, University Of Michigan.
- [2] Satibi., 2015. *Manajemen Obat di Rumah Sakit*. Yogyakarta. Gajah Mada Universitas Press. pp. 123-124
- [3] Moleong, L. J., 2015. *Metodologi Penelitian Kualitatif* Edisi Revisi. Bandung: PT Remaja Rosdakarya. pp. 6-327.
- [4] Satori, D., Komariah, A., 2014. *Metodologi Penelitian Kualitatif*. Bandung: Alfabeta. pp.36-220.
- [5] Kementerian Kesehatan Republik Indonesia. Peraturan Menteri Kesehatan Nomor 11 Tahun 2017 Tentang Keselamatan Pasien.
- [6] Aziz, A. R. A., Safina, N., 2016. Monitoring Compliance To The Sixth International Patient Safety Goals :Malaysia Perspective *International Journal Of Latest Engineering Research And Applications (Ijlera)* 01(08), Pp 14-25.
- [7] Tulus, H., Maksum, H., 2015. Redesain Sisitem Identifikasi Pasien Sebagai Implementasi *Patient Safety* di Rumah Sakit, *Jurnal Kedokteran Brawijaya*, 28(2). pp.221-221.
- [8] Wahyuni, R. M., 2015. Perilaku Perawat Menerapkan Prinsip Enam Benar Pemberian Obat Mencegah Kejadian Tidak Diharapkan, *Jurnal Of Ners Community*, 6(1). pp. 82-91
- [9] Howanitz, P. J., 2005. Errors in laboratory medicine: practical lessons to improve patient safety. *Archives of Pathology and Laboratory Medicine*, 129(10), pp.1252-1261.
- [10] Gentry, S. V., Powers, E. F. J., Azim, N., Maidrag, M., 2018. Effectiveness of a voluntary family befriending service: a mixed methods evaluation using the Donabedian model. *Public health*, 160, pp.87-93.
- [11] Suparna., 2015. Evaluasi Penerapan *Patient Safety* Risiko Jatuh Unit Gawat Darurat di Rumah Sakit Panti Rini Kalasan Sleman. *Skripsi*. Sekolah Tinggi Ilmu Kesehatan 'Aisyiyah, Yogyakarta. pp.6-13.
- [12] Budiono, S., Alamsyah, A., Wahyu, T., 2014. Pelaksanaan Program Manajemen Pasien Dengan Risiko Jatuh di Rumah Sakit. *Jurnal Kedokteran Brawijaya*, 28(1). pp. 78-83
- [13] Kilateng, E., Ake, J., Makausi, E., 2015. Hubungan Pengetahuan Perawat Tentang *Patient Safety* dengan Tindakan Pencegahan Risiko Pasien Jatuh di Ruang Internal RSUD Waria Malanda Maramis Airmadidi, *E-journal Sariputra*, 2(2), pp.96-103
- [14] Donabedian, A., 2005. Evaluating the Quality of Medical Care. Reprinted from The Milbank Memorial Fund Quarterly, 44(3), pp. 166–203
- [15] Arifin, A., Darmawansyah, D., Ilma S.Sanna, A. T., 2011. Analisis Mutu Pelayanan Kesehatan Ditunjang Dari Aspek Input Rumah Sakit Di Instalasi Rawat Inap RSUD Hajji Makasar. *Jurnal MKMI*, 7(1). pp.141-149.
- [16] Lombogia, A., Rottie, J., Karundeng, M., 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. *E-journal Keperawatan (E-KP)*, 4(2). pp.1-8
- [17] Morrison, A. P., Tanasijevic, M. J., Goonan, E. M., Lobo, M. M., Bates, M. M., Lipsitz, S. R., & Melanson, S. E., 2010. Reduction In Specimen Labelling Errors After Implementation Of A Positive Patient Identification System In Phlebotomy. *American Journal Of Clinical Pathology*, 133(6), Pp 870-877.
- [18] Marquard, J. L., Henneman, P. L., He, Z., Jo, J., Fisher, D. L., & Henneman , E. A., 2011. Nurses' Behaviors And Visual Scanning Patterns May Reduce Patient Identification Errors. *Journal Of Experimental Psychology: Applied*, 17(3), Pp 247

- [19] Anggeraeni, D., Hakim, L., Widjiati, C., 2014. Evaluasi Pelaksanaan Sistem Identifikasi Pasien di Instalasi Rawat Inap Rumah Sakit. *Jurnal Kedokteran Brawijaya*, 28(01), pp.97-102
- [20] Insani, T. H. N., Sundari, S., 2017. Analysis Of Patient Safety Implementation By Nurses In Queen Latifa Hospital Of Yogyakarta, Indonesia. *International Journal Of Scientific And Research Publications*. 7(8). Pp 614.