Implementation of Patient Safety in Hospitals: A Qualitative Study

Mirna Jayustin Tanjung¹; Ermi Girsang¹*; Linda Chiuman¹; Chrismis Novalinda Ginting¹; Putranto Manalu²

¹ Faculty of Medicine, Universitas Prima Indonesia
² Faculty of Public Health, Universitas Prima Indonesia

ARTICLE INFO

Article history:
Received 11 June 2021
Accepted 21 October 2021
Published 10 December 2021

Keyword:
Patient safety
Hospital

ABSTRACT

The implementation of patient safety programs is an important thing to do to minimize medical errors, increase health costs and improve the quality of health services. This study qualitatively analyzes the implementation of the patient safety program performed by referring to the 6 target indicators of patient safety. The approach used is a case study design involving 10 informants to be interviewed and observation and document tracing. The results showed that in the implementation of the patient safety program, there were several obstacles, namely ineffective communication due to the instruction provider not reconfirming the instructions given to the implementing nurse. The officers also forgot the position of the drugs to be wary of, and some officers were still found to be negligent in washing their hands. In terms of preventing the risk of falls, collaboration and communication between staff and the patient's family has not been effective. The most basic thing to be immediately addressed is the adequacy of human resources so that a lower workload can optimize the performance of officers in implementing a patient safety culture. Additionally, increasing understanding can be done by providing continuous education and training to health workers.

This open access article is under the CC-BY-SA license.

Kata kunci:
Keselamatan pasien
Rumah sakit

*corresponding author

Faculty of Medicine, Universitas Prima Indonesia
Jl. Fabrik Tenun No. 103, Kelurahan Sei Putih Tengah, Kota Medan
Email: ermigirsang@unprimdn.ac.id
DOI: 10.30604/jika.v6i4.808

ABSTRAK

Penerapan program keselamatan pasien menjadi hal yang penting dilaksanakan guna meminimalisir kesalahan tindakan medis, pembengkakan biaya kesehatan dan peningkatan kualitas layanan kesehatan. Studi ini bertujuan menganalisis secara kualitatif mengenai pelaksanaan program keselamatan pasien yang telah dijalankan dengan mengacu pada 6 indikator sasaran keselamatan pasien. Pendekatan yang digunakan adalah rancangan studi kasus yang melibatkan 10 orang informan untuk diwawancarai serta observasi dan penelusuran dokumen. Hasil penelitian menunjukkan bahwa dalam pelaksanaan program keselamatan pasien terdapat beberapa kendala yakni komunikasi yang kurang efektif, akibat pemberi instruksi tidak melakukan konfirmasi ulang terkait instuksi yang diberikan kepada perawat pelaksana. Petugas juga lupa penempatan posisi obat-obat yang diwaspadai, dan masih dijumpai beberapa petugas lalai dalam mencuci tangan. Dalam hal pengelolaan risiko jatuh, kolaborasi dan komunikasi antara petugas dan keluarga pasien belum efektif. Hal paling mendasar untuk segera dibenahi adalah kecukupan SDM sehingga beban kerja yang lebih rendah mampu mengoptimalkan kinerja petugas dalam menerapkan budaya keselamatan pasien. Selain itu peningkatan pemahaman dapat dilakukan dengan memberikan edukasi dan pelatihan berkelanjutan pada petugas kesehatan.

This open access article is under the CC-BY-SA license.
INTRODUCTION

Medical errors due to medical treatment and activities are an important problem in the discussion of health services. The impact of medical errors is worrying, ranging from the increasing number of deaths to increasing health costs (Samp et al., 2014; Hogan et al., 2015). This problem is certainly a challenge for hospital management to be able to reduce cases of medical errors. The implementation of patient safety programs can increase awareness of patient safety culture (Pronovost et al., 2008). Good leadership and communication between health workers is an important focus that must be highlighted (Basson et al., 2018).

In Indonesia, the significant growth of hospitals recently has made it important to implement a patient safety culture. With the aim of minimizing risk and preventing injury during treatment, health authorities issued regulations requiring hospitals to establish systems that make patient care safer (Kementerian Kesehatan, 2017). Medical errors in Indonesia in the period 2006-2011, based on the report of the Hospital Patient Safety Committee there were as many as 877 cases. In 2019, the report summarizes near misses (KNC) as much as 38%, noninjury events (KTC) as much as 31%, unexpected deaths (KTD) as much as 31% (Komisi Nasional Keselamatan Pasien, 2020).

Implementing a patient safety culture encourages healthcare providers to always collect data, report, and review medical errors. Elements such as teamwork, open communication, nonpunitive feedback and responses to mistakes, and perceptions of patient safety culture are things that can be emphasized in patient safety system (El-Jardali et al., 2011; Basson et al., 2018). Studies show that excessive workload impacts work fatigue, work stress, and psychological burden on health workers. This encourages the error rate in giving medical treatment to be higher (Fagerström et al., 2018). Management and leadership support can have a positive effect on changing staff attitudes and behavior in implementing a patient safety culture (van Noord et al., 2010).

Patient safety programs implemented by various healthcare providers need to be investigated to be able to provide data for future policy making. In assessing the achievements of patient safety programs implemented in Indonesia, the regulation emphasizes 6 indicators of patient safety goals that include 1) the accuracy of patient identification, 2) improvement of effective communication, 3) improvement of drug safety that needs to be watched out for, 4) certainty of exact location, right procedure, the right patient for surgery, 5) reducing the risk of infection related to health services, and 6) reducing the risk of the patient falling. The 2012 version of the Hospital Accreditation Assessment refers to these six indicators (Setyani et al., 2017).

The initial survey on secondary data at the Royal Prima Medan Hospital showed that there were 4 of 6 indicators that did not meet the standards, namely indicators of effective communication, increased drug safety, reduced the infection and reduced infection falls. The four indicators in 2020 have not reached the target (100%). This study was conducted with the aim of analyzing the implementation of the patient safety program performed by referring to the 6 target indicators of patient safety. At the end of the analysis, we provide several recommendations for improving program implementation using the PDSA method.

METHOD

Research Design

This research is qualitative research using a case study approach. The qualitative method was chosen to explore in-depth information on subjects related to the phenomenon under study, namely, the application of patient safety programs. The case study approach was chosen to explore the real experiences of research informants through detailed data collection involving various sources of information such as observations, interviews and documents (Creswell, 2014). The research occurred from July to August 2020 and was located at the Royal Prima Medan Hospital.

Participant Recruitment

The population involved in the study were all medical and nonmedical personnel. Determination of research informants using purposive sampling technique. We determined 9 people who became research informants with inclusion criteria, namely, being involved either directly or indirectly in the implementation of quality improvement policies and patient safety. 6 informants are hospital employees and 3 are triangulated informants.

Data Collection

In collecting data, we conducted in-depth interviews with informants consisting of the Chair of the Hospital Quality and Patient Safety Committee (R01), the Person in Charge of the Hospital Infection Prevention and Control (PPI) Team (R02), and the Person in Charge of Hospital Patient Safety. (KPRS) (R03), 3 nurses (R04, R05, and R06). Then, we triangulated informants (patients: T01, T02, and T03) to ensure the validity of our findings.

Our in-depth interview guideline contains specific questions regarding the implementation of a patient safety program for key informants. The questions given are open questions. The main informants R01, R02, and R03 were asked questions about program planning, program implementation, and the obstacles faced (24 questions). While the main informants R04, R05, and R06 were asked questions regarding technical steps for implementing patient safety programs at home such as patient identification, communication with doctors, drug safety to watch out for, the accuracy of patient handling procedures, the reduction of infection risk, and reduction of patient risk fall (23 questions). Questions for triangulated informants were about their experiences during hospitalization and were confirmatory whether the nurse implemented the patient safety program well (12 questions).

During the data collection process, we first explained the objectives of the study, then the informants filled out an informed consent. After the informants agreed, we conducted interviews and recorded with the help of an electronic recorder. The recorded data are used to analyze the data and present the research results.

To add to the richness of data from the field, we also made observations by directly observing the daily lives of informants in performing their duties. This is intended to determine the suitability between the provisions set and their implementation. Additionally, we also collect data from secondary sources such as organizational structure documents for inpatient installations, document descriptions of main tasks and functions, surveys of patient safety culture that have been performed, surveys on the achievement of
patient safety implementation, and patient safety incident rate documents.

Data Analysis

After conducting in-depth interviews, we reviewed the interview transcripts to identify themes. We used open coding to decipher, examine, compare and categorize data from interview transcripts. We also take notes to elaborate ideas for easy construction of themes. The next step is to present the analyzed data in the form of a narrative that contains specific meanings or things.

In this study, we also processed the results using the PDSA method (Plan-Do-Study-Action) to produce recommendations for hospital management. The PDSA method was chosen for reasons of ease of use and this analysis is commonly used so that it is easy to implement by hospital staff. sick.

RESULT AND DISCUSSION

This study analyzes the implementation of the patient safety program at the Royal Prima Medan Hospital. After the analysis, the findings of the study are presented based on 6 target indicators, namely patient identification accuracy, increased effective communication, increased safety of drugs that need to be watched out for, certainty of the right location, right procedure, right patient for surgery, reduced risk of infection related to health services, and reduced patient risk fall.

Patient identification accuracy

Patient identification accuracy is a process of giving a sign or differentiator which in this case includes a medical record number and patient identity which aims to be able to distinguish between one patient and another patient for the accuracy of providing services, treatment and actions or procedures to patients correctly. The informant stated that this initial process was always carried out as part of the SOP. have also received training to improve their competence in identifying patients.

"...if here, yes, it is obligatory first to confirm the patient's name, date of birth and RM..." (R04, 26 years old)

"...if we want to take action on a patient, we will definitely identify the patient first." (R06, 28 years)

Informants also stated that they had received training to improve their competence in identifying patients.

"... if that's what we really have training for, so we are trained on how to identify patients." (R03, 36 years)

Improved effective communication

Effective communication between service providers that is carried out in a timely, accurate, complete, clear, and understandable manner by the recipient, aims to reduce errors and produce improvements for patient safety. The informants stated that they always recorded and double-checked all the results of the initial examination. However, interview excerpts also show that there are still communication barriers between doctors and nurses.

"...if we have double-checked, we will re-read it according to the instructions to make sure we didn't hear wrong." (R04, 26 years old)

Increased drug safety that needs to be watched

The need to increase drug safety is carried out because a number of drugs that have a high risk can cause great harm to patients if not used properly. In this section, all employees have understood and implemented the SOP in its implementation.

"...we have arranged according to the labels of the medicines, it's only possible in the field, because there are lots of medicines, so sometimes we forget where they are." (R01, 37 years)

"... we have the SOP so that there are no errors in giving drugs to patients." (R02, 35 years)

"...for example, electrolytes and concentrates have a special place, so they are stored in a special place." (R06, 28 years)

Certainty of the right location, right procedure, right patient operation

Surgery is one of the important medical actions in health services. Surgery is a medical procedure that saves lives, prevent disability and complications. The results of interviews with informants show that they always ensure that before a medical procedure is performed, they seek consent from the patient and the patient's family.

"... signs of approval for surgery are important, both from the patient and the patient's family and of course we also have to identify the patient first." (R03, 36 years)

"...if the patient wants to be operated on, there is a checklist form, we always record the start and end hours of the operation." (R04, 26 years old)

We also confirmed with patients and families regarding statements from informants. They stated that doctors and nurses asked for the consent of the patient and the patient's family if a medical action was to be carried out.

"The nurse asked us that, you want surgery because the pain is getting worse." (T02, 56 years old)

“We were asked to sign an agreement that we would allow your father to be operated on, we were told what caused it." (T03, 45 years old)

Reduction of infection risk

Reducing the risk of infection in hospitals is important considering the level of risk of infection is high. The results of the interview indicate that SOPs are also a reference for health workers in implementing infection risk reduction. However, sometimes nurses are still negligent if the number of patients is quite large and requires early treatment.

"... We have received the new hygiene guidelines and we always receive the training regularly..." (R02, 35 years old)

"...before doing that action, we wash our hands first, after doing the action we also wash our hands. The SOP already exists, so we just follow it." (R04, 26 years old)

"...but still we are sometimes negligent too. Usually when the patient is busy, it keeps colliding with the doctor's visiting hours and there are patients who need to be treated, right, we have to move quickly, especially since our human resources are limited..." (R05, 30 years old)
Reduction of the patient's risk of falling

Reducing the patient's risk of falling is an attempt to reduce the patient's risk of injury due to falls. In practice, the informant stated that limited human resources were an obstacle. Directions and guidance from officers in the family also help minimize the risk of falling in patients.

"...patients at risk of falling are obligated to have an accompanying family...it's just that sometimes there are family members who don't know where so the patient is not monitored..." (R03, 36 years old)

"...we always carry out initial and repeated assessments, especially if the patient is at high risk, so we assess more often." (R05, 30 years)

"...we also monitor the patients...it's just that we can't maximize it because our human resources are really limited..." (R06, 28 years old)

DISCUSSION

A patient safety program is a real effort of a system that functions to make patient care safer to implement. The program consists of risk assessment, patient risk identification and management, incident reporting and analysis, the ability to learn from incidents and their follow-up, and implementation of solutions to minimize risks and prevent injuries caused by errors resulting from taking action or not taking appropriate action. should be taken (Kementerian Kesehatan, 2017). Injury to patients during the delivery of healthcare is one of the top 10 causes of disability and death in the world. Nurses' adherence to patient safety principles is influenced by, among others, standardization of care processes, nurse collaboration, patient participation, knowledge and attitudes of healthcare providers, appropriate electronic equipment and systems, education and regular feedback (Valmoradi et al., 2020). This study analyze qualitatively the implementation of patient safety programs in hospitals. The program target indicators analyzed include the accuracy of patient identification; improvement of effective communication; increased drug safety that needs to be watched out for; certainty of the right location, right procedure, right patient operation; and reduced risk of infection.

From the results of the analysis performed, it can be seen that patient identification is always performed either before administering therapy or when taking blood samples and other specimens, and identification is done by confirming the patient's name, date of birth, and RM number. The results of the document review that we conducted also showed that patient files were complete, ranging from general identification to disease records and medical history. Studies in Tanzania show that good and accurate medical record data contribute to the availability of useful data in evidence-based policy making at regional and national scales. In the case of surgery and obstetrics, for example, the quality of the patient's medical record data available from primary health care will also greatly help improve the quality of care at referral health facilities or secondary health services (Lodge et al., 2020). The things that need to be considered in patient identification are that the patient is identified using two patient identities; the patient is identified before the administration of drugs, blood, or blood products; patients are identified before taking blood and other specimens for clinical trials; Patients are identified before giving treatment and actions/procedures (Lestari & Aini, 2015). The use of patient identification bracelets can also reduce the risk of errors in patient identification during procedures, diagnostic and therapeutic procedures (Neri et al., 2018).

The indicators of inter-professional communication have been performed well between two directions, but there is one obstacle where when the instructor is in a busy condition, he does not have time to re-confirm. This is in accordance with the document review conducted by the researcher in which verbal and telephone orders or examination results are written in full by the recipient of the order, and then read back by the recipient of the order so that there are no errors. The results of a literature review show that effective communication between professions is essential to produce safe and high-quality patient care (Weller et al., 2014). Communication that is prone to errors occurs mwhen orders are given verbally or over the phone. The application of the Situation Background Assessment Recommendation (SBAR) method in the context of making decisions in clinical situations faced by patients can help the accuracy and accuracy of information (Panesar et al., 2014).

Based on the results of observations and interviews that have been performed, it appears that the management for drug safety that needs to be watched out for is in good condition. The use of stickers for drug markers that need to be watched out for has also been implemented. However, the officers forget to place the drugs, so it takes time to find the drugs they need. Additionally, late reporting is also a problem. The implementation of policies on the identification process, location determination, labeling, and storage of concentrated electrolytes needs to be performed properly. Minister of Health Regulation No. 72 of 2016 mandates several components that need to be considered in their storage, namely drugs and chemicals (labeled clearly with names, first date of opening the package, expiration date and special warnings), high concentration electrolytes are not stored in the unit. treatment except for essential clinical needs and must be clearly labeled and stored in a tightly delimited area to prevent inadvertent management, and medical consumables carried by patients must be stored in a special and safe manner. can be identified. Additionally, the drug storage area is not used for storage of other items that cause contamination (Kementerian Kesehatan, 2016). Anugrahini & Hariyati (2019) stated that providing patient safety training to officers can reduce medication errors. Improved incident reporting compliance can be an early response to future patient safety incidents and prevent the same incident from happening again.

From the results of the document review, we conclude that the hospital management in implementing infection prevention measures by washing hands has adopted or adapted the latest guidelines in the form of the hand hygiene guidelines issued by WHO. The results of the interview showed that the obstacles faced by the officers were when the patient was crowded and the limited human resources caused the officers' negligence in washing their hands. Studies in Syria indicate that male workers are less to wash their hands properly. Another finding was that the availability of hand washing facilities in hospitals contributed 60.4% to handwashing noncompliance. Non-adherence is also high in the ICU (Jonker & Othman, 2018). Failure to wash hands can be reduced by increasing knowledge and improving attitudes by officers (Shobowale et al., 2016). The last indicator examined in this study was the reduction in the patient's risk of falling. Efforts to minimize the risk of injury due to patient fall are performed by
assessing when the patient is admitted and when experiencing a change in clinical status, to identify and predict the patient’s risk of falling. By knowing the risk of falling, health workers can take action in the form of prevention and appropriate handling of patients at risk of falling. The results of the interview show that the initial assessment and re-assessment and monitoring have been performed. The most common action taken by nurses to reduce the risk of injury due to patient is to prepare the patient’s bed with a bed site rail and remind the patient’s family to take care. However, there are obstacles to the lack of human resources and the patient’s family who are less alert when accompanying patients who are at risk of falling. Nurses should also provide an explanation regarding the risk of falling for both the patient and the patient’s family. Several studies show that the active and collaborative role of the family has a significant impact in preventing the risk of falling during the treatment process. Patient motivation to engage in individualized interventions can effectively reduce fall-related injuries (Opsahl et al., 2017; Vonnes & Wolf, 2017).

Several target indicators that we examine in this study indicate that the adequacy of human resources is an important matter to be addressed immediately. The results of the interview show that excessive workload reduces the performance and awareness of officers in implementing patient safety programs. We use the PDSA (Plan-Do-Study-Action) method to devise recommendations for hospital management to improve service quality and patient safety. Here are some of our recommendations:

1. Effective communication: Time management is needed and directions from hospital management to doctors who give action instructions not to immediately hang up the phone before re-checking the instructions given.
2. Increased drug safety that needs to be watched out for. There needs to be an improvement in the system in terms of organizing drugs and minimizing the amount of time needed to take a drug such as by expanding the drug storage area so that drugs can be seen clearly and reporting guideline.
3. Reducing the risk of infection: The need for additional human resources in the inpatient room, which is mainly filled by patients who are at high risk of falling according to the initial assessment performed.
4. Reduction of patient’s risk of falling. The need for additional human resources and education to the patient’s family to be able to monitor patients, especially at night.

CONCLUSION AND SUGGESTION

In this study, we found several obstacles faced by officers in implementing several indicators of patient safety programs. Effective communication is hampered by the fact that the giver of instructions does not reconfirm the instructions given to the implementing nurse. The officers also forgot the position of the drugs to be wary of, and some officers were still found to be negligent in washing their hands. In terms of preventing the risk of falls, collaboration and communication between staff and the patient’s family has not been effective. The most basic thing to be immediately addressed is the adequacy of human resources so that a lower workload can optimize the performance of officers in implementing a patient safety culture.

Additionally, increasing understanding can be done by providing continuous education and training to officers.

Acknowledgements

We would like to express our gratitude to the Royal Prima Medan Hospital for giving permission to conduct our research. Besides, thank you also to the respondents who took their time to be interviewed.

Ethical Consideration

This research has received ethical approval from the Health Research Ethics Committee of Universitas Prima Indonesia with No: 034/KEPK/UNPRI/IX/2020.

Funding Statement

The authors did not receive support from any organization for the submitted work and No funding was received to assist with the preparation of this manuscript.

Conflict of Interest statement

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

REFERENCES


Implementation of Patient Safety in Hospitals: A Qualitative Study


