

Analysis of Patient Safety Management in the In-Patient Room at Deli Hospital, Medan, North Sumatera

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ABSTRACT

Background: Patient safety management means to reduce unnecessary risks and adverse events to the minimum possible level while providing health care. The application of patient safety management had not been maximal in some hospitals. It can cause health problems for patients and health workers. This study aimed to analyze the patient safety management in the in-patient room at Deli Hospital, Medan, North Sumatera.

Subjects and Method: This was a qualitative study conducted in February to July 2018. The three informants were consisted of the head of quality improvement and patient safety, the patient safety team, and the nursing committee at Deli Hospital, Medan, North Sumatera. The data were collected by in-depth interview and observation. The data were analyzed using data reduction, data presentation, and conclusion.

Results: The role of hospital organization in implementing management patient safety in the in-patient care had not been maximized. The efforts of increasing the commitment of health workers, working environment condition, facility, implementation of standard operating

procedure (SOP), and implementing Situation, Background, Assessment, and Recommendation (SBAR), and implementing sanction, had not been maximize. Communication was not effective. The ability of health workers to perform patient safety had not been maximal as seen from the understanding of a poor safety system. Adverse event report was still of manual type. Number of fall accidents in 2018 was 2 cases.

Conclusion: Patient safety management in the in-patient care has not been maximized. Patient safety management can be improved by implementing SOP, SBAR, and its sanctions.

Keywords: management of patient safety, quality of service.

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BACKGROUND

Patient safety has become a serious concern for health policymakers and world health care providers. The number of cases of adverse events in the world was around 1 person of 10 inpatients that experienced it and at least 50% could be prevented in 2017. Based on the frequency of adverse event prevention, from 26 low and middle-

income countries, the level of adverse event was around 8%, where 83% could be prevented and 30% caused death. Every year, 42.7 out of 421 million inpatients in the world had side effects during hospitalization (World Health Organization, 2017).

Based on an analysis of 151 reports conducted by the Hospital Patient Health Committee (KKP-RS) from September

2006 to December 2007, there were 114 complete reports. Besides, there were 103 reports in the period of January to April 2010 (first quarter). The report was incomplete, thus making it difficult to determine the number of cases. It occurred because the hospital has not fully implemented the report of the adverse events (Ministry of Health, 2011).

Patient safety activities at home are inseparable from management as activities to achieve the vision and mission of the hospital. According to Vincent (2012), the model for assessing patient safety could be carried out by paying attention to the important aspects, namely: a) health workers, b) patients or hospital leaders, c) supporting facilities, and d) techniques or methods carried out continuously. Furthermore, Vincent identified that there were six elements could affect safety, namely organizational factors, work environment, team, individual, patient characteristics, and external environment.

The hospital management has a Quality Improvement and Patient Safety (QPS) team that plays an important role in managing patient safety to achieve the target of not finding cases of adverse events with a zero-defect rate. QPS activities in managing adverse events, commitment, and coordination among all fields/divisions such as health workers, doctors, pharmacy, sanitation, including heads of units/fields was by implementing effective or two-way communication (Commission on Accreditation of Hospitals, 2017).

Factors affecting patient safety management practices were workload and patient safety management construction systems. These results indicated the need to develop strategies to improve the perception of the importance of construction and construction practices among all hospital staff (Kim and Choi, 2013).

Deli Hospital in Medan had data of adverse events for the category of patients falling by 3 people in 2014 and increased to 4 people in 2015. The postoperative death rate in 2014 was 0.04 percent and increased to 0.89 percent in 2015. In 2016, the Surgical Site Infection (SSI) rate tended to improve with a decreased SSI rate by 1 percent compared to the benchmark by 0.8 percent.

Based on the results of the interviews with the QPS team members, regarding the implementation of patient safety management, the professional staff for patient safety had not yet existed. In addition, there were no specific funds for the patient safety budget. The culture of patient health had not had an effective communication strategy in minimizing the adverse events between lines.

The coordination between QPS and other teams such as the Infection Prevention and Control (IPC) team and health workers has not been well coordinated due to the improvement in communication skills between the staff through training that has not been evenly distributed. Disruption of the work environment was facilities that did not support. Based on the external factors, the report of the adverse event incident by health workers was passive. It was not in line with the real condition because they were afraid of getting sanction or getting a stern warning(fired). The performance of hospital patient safety management was not optimal due to organizational, work environment, work team, individual, and external environmental factors.

This study aimed to analyze patient safety management in the in-patient room at Deli Hospital, Medan.

SUBJECTS AND METHOD

1. Study Design

This was a qualitative study with a phenomenological approach conducted at Deli Hospital, Medan, from February to July 2018.

2. Population and Sample

There were 3 informants: 1 Chairman of QPS, 1 member of the Patient Safety Team, and 1 member of the Nursing Committee.

3. Data Collection

The data were collected by in-depth interview and observation.

4. Data Analysis

The steps for interactive data analysis method were data reduction, data presentation, conclusion, and verification.

rience between 6-8 years, the chairman of Quality Improvement and Patient Safety (QPS), Health Facilities Management (MFK) Staff, member of Nursing Committees, had the educational background of Bachelor Strata One (S1) and lived in Medan. To make it easier to analyze the results of the study, each informant was coded into Informant M, Informant A, and Informant R.

The results of in-depth interviews from input consisted of human resources, facilities and infrastructure as well as patient safety management processes consisted of organizations, work environments, teams, individuals, and external environment to prevent and minimize adverse events in Deli Hospital, Medan.

RESULTS

The characteristics of the informants were women aged 31-33 years, had work expe-

Table 1. Matrix of Themes and Sub-Themes of the Study

| Theme/Sub-Theme |
|--|
| 1. The role of the organization in establishing patient safety management The expert mentor who increased patient safety commitment was unavailable The nurses' commitment to risk management has not strong yet |
| 2. The hospital working environment conditions in supporting patient safety The facilities have not support yet The implementation of the SOP of patient safety in the room has not been effective |
| 3. The ability of individuals in conducting patient safety on the QPS team in the inpatient room SBAR communication was less effective The performance evaluation has not comprehensive yet |
| 4. The ability of health workers to perform patient safety in the inpatient room The understanding of the patient safety system has not good The awareness at the bottom line was still low |
| 5. The support on the external environment in the form of the adverse event report The patient safety policy has been implemented The reports in the form of specific forms The implementation of socialization Giving warning |

DISCUSSION

1. Input

The availability of the number of health workers in the QPS team was sufficient to support the patient safety program in the hospital. Therefore, they only need to manage and implement as well as provide quality health services. The number of QPS

members was 6 people, consisting of a chairperson, secretariat, service quality sub-section, risk management sub-section, patient welfare sub-section and QPS documentation (reporting) also worked with other departments to provide patient safety services. Each section has duties and responsibilities regarding quality control and

patient safety in accordance with the provisions of the hospital director.

The QPS team and other units worked together and communicated to create a conducive hospital condition. This showed that the number of health workers in the QPS team in managing patient safety to improve the quality of health care in hospitals is in line with expectations.

The hospital director had tried to improve the knowledge and skills of health workers in the inpatient room to improve the quality of health services through patient safety training to support patient safety programs. Patient safety management training that was conducted to increase the commitment of all lines in the hospital to create a culture of patient safety has not been maximized (unbalanced).

The completeness of facilities for cleaning hands in each inpatient room has not been fulfilled. In addition, there was no sign given from the cleaning service officer to the area after cleaning the floor (mopping), so that the risk of falling could occur if the patient or visitor passed through the area. In addition, the patient's bed in the inpatient room still had no divider.

According to a study conducted by Dewi (2017), the bed side rails on the bed were not paired or not elevated, so that the high bed could cause patient to fall. The children's room which consists of 4 patient rooms and 13 beds has not been equipped with a patient bell. The procurement of this patient bell is in the process. However, the case did not cause serious injury or death.

The health facilities in the inpatient rooms at the hospital were not optimal. It was certainly related to the number of funds needed to complete patient safety facilities. The availability of personal protective equipment for health workers also still needs to be improved in the future.

Therefore, health workers could implement patient safety programs by following the Standard Operating Procedure (SOP) guidelines.

2. Process

The five themes examined in the implementation of patient safety management were as follows:

Theme 1. The role of the organization in implementing patient safety management

The aspects of the organization studied on patient safety programs, medical audits/monitoring, and commitment.

Deli Hospital Medan has issued various policies, guidelines, and standard operating procedures regarding patient safety. This is reflected in the observation result by looking at the files as a reference for health workers in organizing health services. Deli Serdang Hospital has been accredited so that the assessment of patient safety indicators in the form of documents is available.

The Director conducted medical audits or monitoring on patient safety every month. It proceed with evaluating the findings through quarterly meetings to realize the hospital's vision. The form of medical audits or patient safety monitoring was in the form of patient safety monitoring and evaluation in hospital. According to the United Nations Development Program (2002), monitoring aimed to carry out measurements or assessments of process performance to achieve the expected outputs. Good monitoring was carried out through monitoring activities and sustainably.

The hospital's commitment has been realized in the form of written policies (regulations, organizational structure, job description, SOP) that are clear and easy to understand. It has also known by all Hospital staff due to socialization. However, it was found that the health workers had a

commitment that was not optimal due to the considerable workload and different understandings in the inpatient room. In addition, the sanctions in increasing that commitment had not implemented.

The implementation in the hospital was still incomplete due to different understanding among nurses although the nurse has received training in patient safety culture. Therefore, it affected the low commitment in improving the quality of service (Weaver et al., 2013; Kaufman and McCaughan, 2013; Tan et al., 2019).

Theme 2. The conditions of the hospital work environment in supporting patient safety

The environmental aspects studied about the availability of facilities, the efforts to improve, and the implementation of SOP.

The inpatient room at Deli Hospital Medan was very clean. The yard and waiting room condition were equipped with television broadcasts to make patients not bored getting health care. The patient registration room also had quite a large number of seats. It was also equipped with various health magazines and newspapers.

The availability of other supporting facilities needed to be added such as the availability of personal protective equipment (gloves) or signs by following the risks and potential hazards, a sink to avoid infectious diseases, and a standard bed to prevent patients from falling, as well as patient bells to speed up the service process in each inpatient rooms to avoid the adverse event experienced by the health workers and patients. Some of the conditions above have shown low attention to patient safety in the hospital.

According to Geller (2000), achieving the total safety culture of an organization must be supported by environmental factors such as facilities and infrastructure,

machinery, mechanics, SOP, and cleanliness.

Any facilities that could be repaired such as beds were immediately repaired or could be replaced with alternative beds. For additional facilities, meeting with the team was required. Therefore, the team knew what efforts need to be conducted to meet the lack of facilities. According to Vincent (2012), a model for assessing patient safety could be done by paying attention to one important aspect such as adequate supporting facilities.

The efforts of the QPS team in procedures in equipping facilities to support patient safety towards the quality of service have been maximized because of the demand for facilities in coordination with the Management of Health Facilities of the hospital. The damaged health facilities in the inpatient room were fixed and replaced with the new one immediately if they could not be used anymore. However, if there were facilities that needed to be replaced, they must seek approval from the director to provide funds. Funds were the most essential factor in meeting the availability of health facilities in hospitals.

According to Dewi (2017), the availability of available facilities is in line with health service standards. It worked well to carry out patient safety programs effectively. Hospital medical devices greatly affected the quality of health services to create safe and comfortable conditions as well as patient satisfaction. Therefore, sufficient funds were needed to provide these medical devices.

All health service activities have a Standard Operating Procedure (SOP). However, the implementation of SOP in the inpatient room was not optimal, especially in reducing the risk of infection related to health services; and reducing the risk of patients falling in the inpatient room.

Therefore, cooperation with nursing needed to be carried out.

This is in line with a study conducted by Suparna (2015) that the implementation of patient safety of the risk of falling, based on the SOP, the writing aspect in the documentation was carried out 100%, the aspect of the reviewing of falling risk was 50%, and the implementation of the aspect of warming up a signs risk of falling was 25%. Based on the three aspects, the implementation of the patient safety of the risk of falling, according to SOP, was not implemented 100% at Panti Rini Hospital, Kalasan, Sleman.

Theme 3. The individual ability to conduct patient safety

The aspects of individual abilities studied about communication, common perception, team relationships, and performance improvement. The pattern of communication among health workers in the QPS team has been going well. In addition, health workers could make online contact (telephone) if needed or provide information about patient safety.

However, the nurses, in the implementation of Situassion aspects of SBAR communication, have not mentioned the entire data of the patient's identity name, medical diagnosis, patient complaints, and did not mention the age and date of entry of the patient. The incompleteness in the implementation of Situassion in SBAR communication could occur due to the low motivation of nurses on the importance of other health workers knowing the age and date of patient entry. In addition, the communication between the doctor and the patient to obtain health information about complaints of illness was still represented by the nurse on duty. It was not directly obtained from the doctor.

According to Smith et al, (2017) the factors contributed to the occurrence of

adverse event in hospitals that stated that communication about treatment and surgery was the main factor affecting patient safety culture.

The similarity in perception towards the goal of the QPS team to improve the quality of health service and patient safety was the same. It is in accordance with the results of the QPS team meeting, that they were always committed to succeeding the program with all their efforts and optimize the resources available in the hospital.

The relationship between the QPS team in conducting health services and other units has been going well. Other things could be seen from the cooperation in holding meetings supported by the timely submission of reports as a material issue that the solution would be sought. According to Manser (2009), patterns in communication, coordination, and leadership could support the effectiveness of work teams in health services.

The performance of the QPS team in patient safety services was always evaluated through meetings with other units. It was undeniable that the success of the QPS team in managing patient safety in hospitals related to improving the quality of services has not been 100% good. It occurred due to the need for support from various sectors such as funds, quality of health workers, and supporting facilities especially health workers in the bottom line such as nurses in the inpatient room. Health development was also a factor that patient safety management always changes every time. Therefore, hospital management needed to follow these developments (Kim et al., 2013).

Theme 4. The ability of health workers to do patient safety in the inpatient room

The aspects of the ability studied regarding the understanding of the system or method

of patient safety, efforts to minimize patient safety, and efforts to build awareness of the value of patient safety.

Nurses' understanding in the in-patient room about the patient safety program has not been maximized. Therefore, it could cause adverse events. Based on the findings of reports, the number of patients falling in 2018 was 2 people. According to Vincent (2012), the individual factors affecting patient safety were knowledge, skills, attitudes and behavior, physical and mental conditions.

The most basic effort in minimizing patient safety was by providing education to every health worker in all lines. To support the understanding of health workers, each health worker was given a pocket book on patient safety programs that could be brought or read in free time. According to Beginta (2012), the competency of staff in hospitals could be carried out by efforts to meet the competency standards by each staff in accordance with the standards set in each profession (Manser, 2009; Tan et al., 2019).

Efforts to build awareness of the value of patient safety, especially for health workers, was by implementing briefing before working. Briefing frequency was usually conducted in the morning and afternoon (evening) according to each shift. Material presented was about cases or events that occurred overnight, so that it was expected not to be repeated. In this briefing activity, the health workers did not need to know the patient safety program by memorizing and repeating the readings in each of their Pocket Books. Vincent (2012) stated that the individual factors affecting patient safety were knowledge, skills, attitudes and behavior, physical and mental conditions.

Theme 5. The support of the external environment in the form of the adverse event report

The aspects of the external environment studied about the reporting and learning system for health workers. The flow mechanism of patient safety reporting by filling the accident incident list by the head of the unit (room) was delivered to the QPS team. If there were no incidents, the reports were still made every month as an evaluation material in taking hospital policy. Reporting was manual and often delivered late. The patient safety report was also not followed up by nurses by providing information about patient safety to patients or families (Kaufman and McCaughan, 2013).

According to Beginta (2012), one of the organizational external factors was reporting. Strong adequate information would be used by the organization in learning.

The efforts to provide learning to health workers at Deli Hospital Medan in implementing patient safety through education and socialization internally and externally have not been evenly distributed. Based on the author's observations, the head of the room warned the health workers who neglected in implementing patient safety programs. This is in line with a study conducted by Astuty (2013) that it has conducted at Muhammadiyah Hospital Surakarta to the chief coordinator and delivered back to the health workers. However, it has not yet optimal.

The role of the management or hospital QPS committee was very important in patient safety management, considering the patient safety incident at the hospital was expected to be at zero defect (incidence rate of 0%). The implementation required good coordination and communication between heads of division/division of medical, nursing, medical support, administration,

and others including head of unit/ department/service installation (Indonesian Ministry of Health, 2011).

The patient safety program is a never-ending process. Therefore, it requires a culture including high motivation from all hospital lines to be willing to carry out the program continuously and sustainably.

Based on the results of this study, the facts found could be used as a material for discussion and consideration in the patient safety management in hospitals by increasing the role of the organization, making conducive conditions for the work environment, increasing the ability of health workers of Infection Prevention and Control (IPC) team specifically and the complete form of adverse events

AUTHOR CONTRIBUTION

Tona Bontor Melkisedek Sinaga, Zulfendri, and Juanita collected the data, analyzed the data, and drafted the manuscript.

CONFLICT OF INTEREST

The researchers stated that no party felt disadvantaged in the preparation of this journal. Every opinion that has been written or published by other researchers, except in writing, was written as a reference in the document and the references.

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