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Analysis of the Implementation of Patient Safety Culture with the AHRQ Model at Mitra Medika Hospital Tanjung Mulia Medan

Naeni Juliani¹, Arifah Devi Fitriani², Deli Theo²

¹Student of Master of Public Health Study Program, Helvetia Institute of Health Medan, Indonesia ²Lecturer of the Faculty of Public Health, Helvetia Institute of Health Medan, Indonesia

*Corresponding Author: Naeni Juliani Email: julianinaeni86@gmail.com



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Abstract

Safety Culture is a collaborative environment where clinical staff treat one another with respect by involving or empowering patients and families so that each Professional provides patient-focused care. The purpose of this study was to determine the implementation of a patient safety culture with the AHRQ model in Mitra Medika Tanjung Mulia General Hospital Medan. This research uses a mix of methods, namely qualitative and quantitative. The population of this study were all staff on duty in each hospital unit associated with 450 patients at MItra Medika Hospital, so the sample was 75 people using simple random sampling technique. The main research informants were one officer each in each installation.Unit Mitra Medika Tanjung Mulia General Hospital Medan, namely 10 people, one key informant, and one triangulation informant. The results of the study show that the description of expectations and managerial actions of patient safety is 68%, organizational learning is 100%, cooperation in units is 76%, communication open by 80%, feedback about the error of 75%, the dimension of non-punitive response to errors is 55%, Staffing 51%, management support for patient safety efforts by 77%, cooperation between units of 61%, handsoff work and changing patients was 71%, the overall perception of hospital staff about patient safety was 63%, reporting frequency was 63%. With the research results, it is expected that Mitra Media Tanjung Mulia General Hospital Medan is expected to be able to initiate, maintain, and develop an ongoing patient safety program and implement the existing safety culture.

Introduction

Hospital patient safety is a system where the hospital makes patient care safer which includes risk assessment, identification and management of matters relating to patient risk, incident reporting and analysis, the ability to learn from incidents and their follow-up and implementation of solutions to minimize risks and prevent risks. the occurrence of an injury caused by an error as a result of carrying out an action or not taking the action that should have been taken.

Patient safety is part of hospital safety, which includes patient safety, medical equipment and hospital building safety (equipment and building safety), hospital environmental safety (environment safety), home business safety (Waterson, 2018). Illness (hospital business safety)

and personal safety in hospitals (personal safety). Patient safety is a top priority for health policy makers, including service providers and their managers (Behzadifar et al., 2019).

Data in November 1999 from the Institute of Medicine stated that in the United States at least 98000 people died in hospital due to medical errors that should have been prevented. In Indonesia, the patient safety movement began in 2005 when the Indonesian Hospital Association (PERSI) formed a hospital patient safety committee, which later changed to the Hospital Patient Safety Institute (IKPRS). The government regulates patient safety in hospitals in Article 43 of Law no. 44 of 2009. This law requires hospitals to provide safer patient care, including risk assessment, identification and risk management of patients, incident reporting and analysis, the ability to learn and follow up on incidents, and implement solutions to reduce and minimize incidences risk. This article requires hospitals to apply patient safety standards. One of the strategies used to reduce adverse events in a health service is by stimulating a culture of openness and stimulating a reflective attitude towards mistakes made and the occurrence of unexpected events (Purwani et al., 2020). An unexpected event in a health service is a condition that can occur in stressful situations felt by employees in a health service. If an error occurs, other employees will tend to blame the person who made the mistake, therefore open communication is needed in a team, discussing the cause of the error, and should not directly blame the person who made the mistake. It takes understanding between staff that as a human being is not free from mistakes, but the first response that must be given is to understand what happened and then analyze what factors make staff make mistakes related to patient safety.

The safety culture of an organization can be measured, one of the tools for measuring the safety culture of an organization that is often used is the measurement of the safety culture of the AHRQ (Agency for Healthcare Research). Measurement of safety culture is carried out regularly. Dimensions in patient safety culture are ((Purwani et al., 2020): open communication, feedback and communication about errors that occur, frequency of incident reporting, handoffs and transitions, organizational support for patient safety, nonpunitive response to error / non-judgmental response to mistakes made, organizational learning - continuous learning, overall perception of patient safety, staffing, supervisor/manager expectations and actions taken to improve patient safety, cross-unit collaboration, inter-unit/in-unit collaboration.

The Patient Safety Incident Report (IKP) in Indonesia in 2007 by province stated that there were 145 incidents reported, the cases occurred in the Jakarta area by 37.9%, Central Java 15.9%, in Yogyakarta 13.8%, East Java 11 .7%, South Sumatra 6.9%, West Java 2.8%, Bali 1.4%, South Sulawesi 0.69% and Aceh 0.68% (Hermiyanty, 2017).

Based on an initial survey conducted at General Hospital X, Standard Operating Procedures (SPO) for Reporting Patient Safety Incidents at Mitra Medika Tanjung Mulia General Hospital, Medan, came into effect on July 18, 2017. This SOP is a reference for all staff at Mitra Medika Tanjung Mulia General Hospital Medan to implement a patient safety incident reporting system and as a correction to the system in order to improve quality and patient safety. From the results of the researcher's in-depth interview with the Quality Improvement and Patient Safety Committee (PMKP) staff at Mitra Medika Tanjung Mulia Hospital, Medan, information was obtained that there were 7 incidents in 2020. The lack of incident data is due to the willingness of health workers to self-report patient safety incidents. low, generally health workers report incidents if they have caused injury to patients (Naome et al., 2020). Health workers are reluctant to report incidents for fear of being blamed in other words there is a blaming culture so health workers are reluctant to report IKP. As well as the lack of understanding of health workers on incidents. The lack of IKP reporting at the Mitra Medika Tanjung Mulia Hospital in Medan indicates an "under reporting". So from the initial survey, the patient safety incident rate in 2020 at Mitra Medika Tanjung Mulia Hospital in Medan was 0.32% and the reported safety culture report was 88%.

According to Aveling et al (2016) Patient safety is influenced by how the individual culture and systems run within the organization. So that a personal/individual approach and management system must be carried out within the institution. Patient safety culture will motivate staff to report any patient safety incidents that occur (Nieva & Sorra, 2003)

Methods

This study uses a mix method method with a quantitative paradigm with a cross sectional design, and a qualitative research using a phenomenological approach. This study also uses quantitative descriptive analysis with the aim of knowing the analysis of the implementation of patient safety culture with the AHRQ model at Mitra Medika Hospital Tanjung Mulia Medan. Qualitative research produces and processes descriptive data, such as interview transcripts, field notes, pictures, photos, video recordings and so on, while quantitative data processes data by showing the results of measuring variables used for research purposes.

The study population was all employees who directly deal with patients / who provide services directly with patients at Mitra Medika Tanjung Mulia General Hospital Medan as many as 450 people with a total sample of 75 people.

This research was conducted using primary data in the form of interviews and standard questionnaires from AHRQ to staff at Hospital X in November 2020.

In this study, the data collection technique that the author uses is a saturated sample (total sampling) where the respondents of this study are employees who directly deal with patients / who provide services directly with patients

Results and Discussion

Based on table 1, the majority of respondents are 36 years old, which is 63%. Most of the respondents are male, which is 53%. When viewed from the characteristics of marital status, most of the respondents are married, which is 54%. When viewed from the last education, most of the respondents have education with Diploma qualifications of 33%. Most of the respondents in this study were nurses who had a working period of 3 years, namely 42%. In addition, most of the respondents studied have other positions (Medical Record 1 person, Medical Electrical Engineering 1 person, Physiotherapy 1 person, Person in Charge of Shift 2 people) so the percentage for other positions is 54%.

Variable	Ν	Percentage (%)
Age Group		
\leq 36 years old	47	63
\geq 36 years old	28	37
Gender		
Man	40	53
Woman	35	47
Marital Status		
Unmarried	32	43
Marry	41	54
Janda/Duda	2	3
The last education		
SMA	12	16
D3	25	33
S 1	24	32

 Table 1. Distribution of respondent characteristics, technical competence, efficiency, patient safety and satisfaction

Based on table 2, the twelve dimensions of patient safety culture at Mitra Medika Medan General Hospital are categorized into 3 namely good, medium and bad culture. A patient safety culture is said to be good if the positive response is > 70%, it is said to be a moderate culture if the positive response is 50% - 70%, and it is said to be a bad culture if the positive response is < 50%. The following is a recapitulation of the 12 dimensions of safety culture that have been measured

No	Dimension	Percentage of Positive Response	Cultural Category
1	The expectations and actions of managers in promoting <i>patient</i> safety	68%	Medium Culture
2	Organizational learning- Continuous improvement	100%	Strong Culture
3	Cooperation in the unit	76%	Strong Culture
4	Open communication	80%	Strong Culture
5	Feedback and communication against errors	75%	Strong Culture
6	Non Punitive Response to Errors	55%	Medium Culture
7	Staffing	51%	Medium Culture
8	Management support for patient safety	77%	Strong Culture
9	Cooperation between units	61%	Medium Culture
10	Handsoffs and transitions	71%	Strong Culture
11	Nurses' perceptions of patient safety	63%	Medium Culture
12	Frequency of event reporting	63%	Medium Culture
	Percentage70%Of Culture		

Table 2. Overview of 12 Dimensions of Patient Safety Culture at Mitra Medika General Hospital Medan

Based on table 3 Dimensions of Overall Perception of patient safety In-depth interviews regarding the dimensions of overall perception of patient safety. What do you think is meant by patient safety?

Table 3. results of in-depth interviews regarding the dimensions of the overall perception of patient safety

Report	Dimensions of Overall Perception of Patient Safety		
Ι	Patient safety is about efforts to avoid incidents that are almost injured		
	or not done by paying attention to patient safety targets.		
II	The patient's safety is about the right way of giving drugs, proper		
	administration of drugs, the identity of the patient is well considered.		
III	Patient safety is a way for patients to feel comfortable in the hospital.		
IV	Patient safety is about efforts to avoid incidents that are almost injured		
	or not done by paying attention to patient safety targets.		
In	A system that makes patient care in hospitals safer		
WE	A system that makes patient care in hospitals safer		
VII	A system that makes patient care in hospitals safer		
VIII	A system that makes patient care in hospitals safer		
IX	A system that makes patient care in hospitals safer		
X	Patient safety is about efforts to avoid incidents that are almost injured		
	or not done by paying attention to patient safety targets.		

Conclusion of the interview: Patient safety, which is about efforts to avoid incidents, whether near injury or not, which is carried out by paying attention to patient safety goals.

Similar things were expressed by key informants and triangulation, as follows:

Safety Culture is a collaborative environment as clinical staff treat one another with respect by involving or empowering patients and families so that each Professional provides patient-focused care (Fisher et al., 2017). According to triangulation informants: Safety culture is a culture where all staff in a hospital support and respect each other regardless of position, essentially respecting each other, both specialists and other nurses.

Overview of 12 Dimensions of Patient Safety Culture at Mitra Medika Tanjung Mulia General Hospital Medan

Patient safety culture is a perception shared among organizational members aimed at protecting patients from mismanagement or injury due to interventions (Darmika & Darmawan, 2019). This perception includes a collection of norms, professional standards, policies, communications and responsibilities in patient safety. This culture then influences the beliefs and actions of individuals in providing services. The safety culture measured in this study also measured the staff's perception of the patient safety culture in each unit of Mitra Medika General Hospital. Perceptions measured in safety culture in each Mitra Medika general hospital Unit were generated with answers agree, strongly agree, disagree and strongly disagree which are then categorized into positive responses and negative responses. There are 12 dimensions that are measured in patient safety culture, along with an explanation of each dimension.

Dimensions of Managers' Expectations and Actions Promoting Patient Safety

Based on the results of the study, on the dimensions of expectations and actions of managers to promote patient safety there are 4 statements that are measured in this dimension. In this dimension the positive response obtained is 68% which can be categorized that the patient safety culture on this dimension can be said to be good or strong culture. Based on the results of the study, the implementation of a Patient Safety Culture towards the head of the room in each unit of Mitra Medika Tanjung Mulia Medan General Hospital has provided support for patient safety as evidenced by several points in the questionnaire that received a high positive response, including the manager giving praise when he saw the work being completed. In accordance with patient safety procedures, can hear and consider suggestions from subordinates to improve patient safety. These are part of effective leadership in creating a positive environment for patient safety.

Dimensions of Organizational Learning/Continuous Improvement

Based on the research results, the dimensions of organizational learning/continuous improvement regarding patient safety are measured from 3 statements. In this dimension, the positive response obtained is 100%, which can be interpreted as a safety culture on the organizational learning dimension in each Mitra Medika General Hospital Unit which is categorized as good or strongly entrenched. Based on the results of the study, each unit at Mitra Medika General Hospital has made mistakes that occur as triggers for a better direction and always evaluates the effectiveness of services as evidenced by high positive responses on the questionnaire. This illustrates that the Mitra Medika General Hospital unit is a form of organization that learns from mistakes. So it can be said that every staff at Mitra Medika General Hospital has made mistakes that occur as an effort to continuously improve their unit in order to ensure patient safety in the hospital. With these results, it is hoped that Mitra Medika General Hospital can maintain organizational learning that has been running and will be better if it continues to be improved.

Dimensions of Cooperation in Units

In the dimension of cooperation within the unit, a positive response of 76% is generated, which means that the safety culture in the dimension of cooperation within the unit in each Mitra Medika General Hospital Unit is categorized as good or strongly entrenched. Based on the

results of the study, the staff in each unit of Mitra Medika General Hospital in working support each other, work together as a team if there is a lot of work, and feel mutual respect for each other as evidenced by the high positive response results regarding this matter. Teamwork in hospital services can affect the quality and patient safety. Potential conflicts that may occur in team interactions can result in the implementation of teamwork in service. Working in teamwork is a value that must be built as a safety culture (Taylor et al., 2015). Conflicts that arise can reduce individual perceptions of teamwork, which can disrupt the service process and lead to the possibility of incidents. A study shows that individuals who lack perception of teamwork have a 3x greater potential for safety incidents to occur.

Dimensions of Open Communication

The open communication dimension in this study received a positive response of 80% which was categorized in a strong patient safety culture. Based on the results of the study, each staff in each Mitra Medika General Hospital Unit is free to express opinions, is free to ask questions about decisions or actions to be taken, and is not afraid to ask questions when they know something is wrong in patient care, which is indicated by the positive response value. high about it. This illustrates that the staff in each unit of Mitra Medika General Hospital communicate openly in serving patients.

Dimensions of Feedback and Communication of Errors

On the feedback and communication dimensions for errors, 75% of the positive responses were categorized into a fairly good patient safety culture or moderate culture. Based on the results of the study, the implementation of this dimension, managers have provided feedback on incident reports, received information about errors that occurred, and often discussed with fellow nurses/doctors to prevent adverse events as evidenced by the results of a positive response of 64% regarding this matter. This shows that feedback and communication on errors in the Unit at Mitra Medika General Hospital is going quite well. The existence of feedback from reported incidents is expected to provide corrective action to the existing patient safety system.

Dimensions of Non Punitive Response to Errors

The implementation of this dimension is seen in nurses and patients being treated fairly when an incident occurs. When an incident occurs, it should not focus on finding individual faults but rather on studying the system that resulted in the error. The culture of not blaming by nurses needs to be developed again in growing a culture of patient safety. The nurse will make an incident report if she is sure that the report will not be punished for the error that occurred. An open and fair environment will help to make reporting that can be a lesson in patient safety. Based on the results of the study, employees are worried that mistakes made will be recorded in their personal documents by the leadership and if they make mistakes in serving patients, nurses feel that these mistakes will threaten which is evidenced by the results of positive responses that tend to be low on this matter. This illustrates that there are still nurses who are worried that their mistakes will be recorded in personal documents by the leadership and are worried that they will be blamed or punished. fear of being blamed by the nurse who reports, not punishing when making a mistake, not blaming the incident reporter, making simple and easy patient safety incident reporting procedures to implement.

Staffing Dimension

The staffing dimension is measured to have a positive response of 51% which illustrates that the staffing dimension can be interpreted as being moderately cultured. Human resources in hospitals as individuals who directly implement services must meet the adequacy of both quantity and quality. Based on the results of the study, employees in each unit have a perception that the number of staff is insufficient to handle the workload in this unit because it only has a

positive response of 51%. which can illustrate that according to respondents, each unit of Mitra Medika General Hospital does not have sufficient number of employees to handle the workload in one unit.

Hospital Management Support for Patient Safety Efforts

Positive responses to the dimensions of hospital management support for patient safety are 77% which can be categorized as good or strong culture. Based on the results of the study, Mitra Medika General Hospital management support for patient safety efforts that received a positive response includes hospital management providing a supportive work climate for patient safety, hospital management policies indicate that patient safety is a priority and hospital management cares about patient safety. in case of KTD or KNC. Safety culture on the dimension of management support for patient safety efforts at Mitra Medika General Hospital Unit is categorized as a strong culture. This illustrates that Mitra Medika General Hospital has provided management support for patient safety efforts.

Cooperation Between Hospital Units

In the dimension of cooperation between units in Mitra Medika's General Hospital Unit, a positive response of 61% was generated which can be categorized as moderate culture. Cooperation between units in Mitra Medika General Hospital Unit is categorized in a moderate culture, so hospitals need to grow, improve, and develop cooperation between units at Mitra Medika General Hospital.

Handsoff and Transition

Based on the results of the study, the dimensions of handsoff and transition between service units have a positive response of 71% which illustrates that the dimensions of handsoff work and patient transition can be interpreted as good or culturally strong. Based on the results of the study, the implementation of the handsoff and transition dimensions was carried out properly by conveying patient information using SBAR or from medical record data in the patient's status. For this dimension, it is categorized in a strong culture so that Mitra Medika General Hospital needs to maintain the handsoff process and the transition between service units so that it can run optimally.

Overall Perception of Patient Safety

Based on the results of the study, the dimensions of the overall perception of patient safety have a positive response of 63% which illustrates that the dimensions of the overall perception of hospital staff about patient safety can be interpreted as quite good or moderately cultured. Staff perceptions of patient safety at Mitra Medika General Hospital Unit received a fairly good positive response and were categorized in a moderate safety culture, this illustrates that Mitra Medika General Hospital staff have a fairly positive perception of patient safety in hospitals. This of course must be a concern for the hospital management so that developments on this dimension can be carried out.

Frequency of Reporting Occurrence

Reporting is an important element of patient safety. Adequate information on reporting will be used as material by the organization in learning. Organizations learn from previous experience and have the ability to identify risk factors for incidents so that they can reduce or prevent incidents that occur (Stemn et al., 2018). report incidents when errors occur but are immediately recognized and corrected before affecting or impacting the patient, when errors occur, but do not have the potential to harm the patient, and when errors occur, which have the potential to harm the patient, even if the bad thing did not happen to the patient as proven from the results of a positive response of 60% which illustrates that the dimension of reporting frequency is as good as moderate or moderately cultured. This illustrates that incident reporting by employees

in each Mitra Medika General Hospital Unit still needs to be improved. Mitra Medika General Hospital is expected to increase the motivation for reporting incidents by eliminating the fear of being blamed by the nurse who reports, not punishing and not blaming the incident reporter, making patient safety incident reporting procedures simple and easy to implement.

Patient Safety Culture at Mitra Medika General Hospital Unit

Based on the results of the study, the overall picture of patient safety culture at the Mitra Medika General Hospital Unit in 2020 was 70% which was categorized in a moderate safety culture. The patient safety culture at Mitra Medika General Hospital Unit is said to be strong. The staff in each unit of Mitra Medika General Hospital can be said to have had a set of beliefs, norms, behaviors, roles, and social and technical practices in minimizing exposures that harm or injure patients. This shows the perception that nurses have in protecting patients from management errors and injuries due to interventions that are in good condition and need to be maintained. The patient safety culture that is said to be strong at Mitra Medika General Hospital Unit is expected to influence individual beliefs and actions in providing safe and quality services. In the 12 dimensions of patient safety culture, there are 6 dimensions of patient safety culture categorized as strong culture with positive responses >75% of them dimensions of managers' expectations and actions in promoting patient safety (88%), dimensions of organizational learning-continuous improvement (100%), dimensions of cooperation within units (90%), dimensions of open communication (80%), dimensions of management support for patient safety (93 %), handsoff and transition dimensions (80%). This shows that the staff in each unit at Mitra Medika General Hospital have a good perception of efforts to learn from mistakes which are included in continuous improvement (organizational learning), quite good in cooperation within units and between units, both in terms of open communication, and Mitra Medika General Hospital has promoted and supported patient safety well.

Implementation of Safety Culture at Mitra Medika Tanjung Mulia General Hospital Medan

All organizations have their own work culture, including hospitals. For example, when we enter a unit in a hospital, we can immediately assess whether the staff is friendly, ready to help, the service is fast, which is one example of the cultural dimension of patient safety that can be felt. Guldenmund (2010) says that safety culture as aspects of organizational culture that will influence attitudes and behavior related to increasing or decreasing risk. Based on this, to maintain the quality of patient safety culture at Mitra Medika Tanjung Mulia General Hospital, implement a safety culture by adopting the AHRQ model, which is carried out by conducting a safety culture survey once a year

Conclusion

The description of patient safety culture with the AHRQ model at Mitra Medika Tanjung Mulia General Hospital Medan in 2020 obtained 70% results in the medium culture category.

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