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Analysis of Patient Safety Culture at Semen Padang Hospital Indonesia

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ABSTRACT

Background: Hospitals have a role and function to provide integrated health services for patients as consumers of health services. When providing services to patients, hospitals must pay attention to quality and safety. This study aimed to find out the patient safety culture that has been built at Semen Padang Hospital in 2022. **Methods:** This study uses an approach mixed methods research with a design sequential explanatory, namely research that uses a combination of quantitative and qualitative methods simultaneously (quantitative-qualitative). The subjects of this study were employees of Semen Padang Hospital, with as many as 81 respondents for quantitative data and 11 respondents for qualitative data. Measurement of patient safety culture using the MaPSaF instrument (Manchester patient safety framework) in the form of filling out the MaPSCAT questionnaire (Manchester patient safety culture assessment tool). This questionnaire consists of 10 dimensions with a total of 24 questions and is equipped with in-depth interview data. **Results:** Data collection was carried out using the MaPSCAT instrument on 10 dimensions of patient safety culture, 6 dominant dimensions were at the proactive level, namely the dimension of overall commitment to continuous improvement (1st dimension), the dimension of system error and individual responsibility (3rd dimension), the dimension of incident evaluation and best practices (5th dimension), effective learning and change (6th dimension), communication about patient safety issues (7th dimension) and staff education and training dimension (9th dimension). **Conclusion:** The safety culture at Semen Padang Hospital is generally at a proactive level. This indicates that the hospital places priority on improving patient safety and is carried out on an ongoing basis. A system that is integrated and comprehensive has a wide scale, involved stakeholders, and an evidence-based approach.

1. Introduction

Patient safety is one of the most important aspects of the delivery of health services in hospitals. Every patient has the right to care that is safe, of good quality, and free from unnecessary risks while undergoing the treatment process at health facilities. Along with the development of medical technology and knowledge, health services are increasingly complex, thus increasing the challenges in maintaining patient safety. Every year, hospitals around the world face the challenge of identifying and mitigating the risks of medical errors and other health-related incidents. Therefore, it is important for hospitals to have a strong and continuous patient safety analysis program. One of the key aspects of maintaining patient safety is a positive and open safety culture among medical personnel and health staff. All members of the maintenance team should feel comfortable reporting any mistakes or safety incidents they experience without fear of retribution. This approach allows the hospital to learn from mistakes and take appropriate

preventive measures to prevent similar incidents in the future.[1-3]

In addition, hospitals need to involve patients and families in the treatment process. Clear and comprehensive information must be provided to patients so that they can become active partners in decisions about their care. Involving the patient in the treatment process also helps in identifying potential risks and increasing patient awareness of warning signs to watch for. The use of advanced medical technology can also contribute to patient safety. Hospitals should adopt an integrated information system to manage medical records, medications, and treatment procedures. The system can assist in reducing administrative errors and improving care coordination between various departments.[4]

Semen Padang Hospital is one of the leading health service facilities in the region and is committed to providing the best service for patients from various backgrounds and medical needs. The main goal of a patient safety analysis program is to identify, prevent, and reduce potential risks and incidents that may occur during patient care. Overall, implementing a holistic patient safety analysis, including data collection, incident reporting, training of medical personnel, and involving patients, is an important step taken by hospitals to ensure that every patient receives the best and safest care. By prioritizing patient safety, hospitals can create a safer, more reliable, and more effective care environment for the people they serve.[5,6] This study aimed to analyze the patient safety culture at Semen Padang Hospital Indonesia.

2. Methods

This study uses an approach mixed methods research, namely quantitative methods with a descriptive approach and qualitative methods with a case study approach with a design sequential explanatory namely research that combines quantitative and qualitative methods sequentially (quantitative-qualitative). Research using quantitative methods in this study by using a questionnaire filled out by respondents, namely employees of Semen Padang Hospital, to describe the culture of patient safety at Semen Padang Hospital. After that, it is followed by qualitative methods, namely collecting and analyzing data obtained from in-depth interviews with the management of Semen Padang Hospital. The time of the research starts from October 2022 to November 2022. A total of 81 research subjects were included in this study.

This study made observations related to sociodemographic data and cultural aspects of patient safety. To assess aspects of patient safety culture, the MaPSaF (Manchester patient safety framework) instrument is used in the form of the MaPSCAT (Manchester patient safety culture assessment tool). MaPSaF (Manchester patient safety framework) is a framework used to identify, analyze, and improve patient safety in healthcare organizations. Meanwhile, the MaPSCAT (Manchester patient safety culture assessment tool) is a tool developed based on the MaPSaF framework for evaluating patient safety culture in an organization. The tool includes a number of components used to measure patient safety culture, such as management support for safety, communication between teams, response to errors, patient participation, and learning from safety incidents.

In this study, univariate analysis was conducted to see the frequency distribution or proportion of patient safety culture by looking at the answers in the respondents' questionnaires. For quantitative data, classification of data is made and gives a code or value of the answers to each question in the questionnaire. The questionnaire consists of 10 dimensions, where each dimension has several aspects of questions with different numbers. Respondents filled out the answers to the questions in accordance with the conditions in the field or hospital, not an answer that described the situation expected by the respondent.

Qualitative data processing is done by making data transcripts, namely transferring or copying information from recorded spoken speech and various information contained in field notes into written form.

Each written information is given a data source so that it can be traced if the information is deemed incomplete. Reducing data means summarizing, choosing the main things, focusing on the important things, and looking for themes and patterns. Thus the reduced data will provide a clear picture and make it easier for researchers to carry out further data collection and look for additional data if needed. The longer the researcher is in the field, the more and more complex the amount of data will be. Therefore data reduction needs to be done so that the data does not overlap, and so as not to complicate further analysis. The initial conclusions put forward are still temporary and will change if strong evidence is not found to support the next data collection stage. But if the conclusions put forward at the initial stage are supported by valid and consistent evidence when the researcher returns to the field to collect data, then the conclusions put forward are credible conclusions.

3. Results

Based on Table 1, it is known that based on age, the majority of respondents were aged 31-40 years, and the gender of the majority of respondents was female. Based on the characteristics of the respondents, the majority have worked for 6-10 years. Based on the level of education, the majority of respondents had diplomas and bachelor degrees. The majority of respondents came from the medical service work unit. The majority of respondents have received education about patient safety.

Table 1. Characteristics of respondents.

Characteristics	Frequency	Percentage
Age (year)		
20-30	31	38,3
31-40	40	49,4
41-50	9	11,1
> 51	1	1,2
Gender		
Female	66	81,5
Male	15	18,5
Working period		
15 years	34	42,0
6 - 10 years	35	43,2
11 - 15 years	5	6,2
> 16 years	7	8,6
Level of education		
Senior high school equivalent	3	3,7
Diploma Equivalent	38	46,9
Bachelor degree equivalent	38	46,9
Master degree equivalent	2	2,5
Work unit		
Division of medical services	35	43,2
Division of medical support	17	21,0
Division of pharmacy	6	7,4
Division of casemix	3	3,7
Division of financial	3	3,7
Division of general and asset	3	3,7
Division of corporate communication	2	2,5
Division of human capital	2	2,5
Division of maintenance	2	2,5
Division of Internal audit and quality assurance	1	1,2
Nursing department	1	1,2
Division of procurement	1	1,2
Case manager	1	1,2
Nursing committee	1	1,2
Medical committee	1	1,2
Quality committee	1	1,2
Infection prevention and control nurses	1	1,2
Socialization of patient safety		
Already	67	82,7
Not yet	14	17,3

The ten dimensions of patient safety culture in this study are overall commitment to continuous improvement (dimensional 1), priority given to patient safety (dimensional 2), system errors and individual responsibility (dimensional 3), incident recording and best practices (4th dimension), Incident evaluation and best practices (dimensional 5), Effective learning and change (dimensional 6), Communication about patient safety issues (dimensional 7), Staffing management and safety issues (dimensional 8), Staff education and training (dimensional 9), and Teamwork (dimensional 10) .

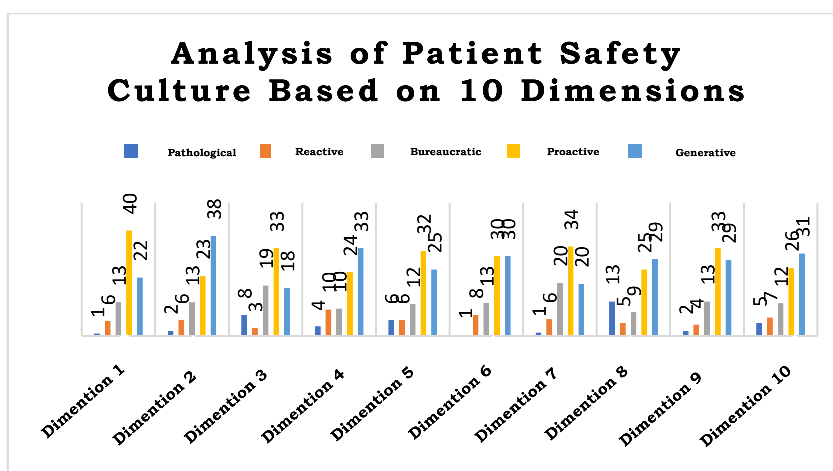

Figure 1. Results of the cultural dimension of patient safety at Semen Padang Hospital.

Based on data collection conducted using the MaPSCAT instrument on the 10 Dimensions of Patient Safety Culture, it was found that 6 dimensions of patient safety culture were dominant at the proactive level, namely the dimensions of overall commitment to continuous improvement (dimensional 1), the dimensions of system error and individual responsibility (dimensional 3). , incident evaluation dimensions and best practices (dimensional 5), learning and effective change dimensions (dimensional 6), communication dimensions about patient safety issues (dimensional 7), and staff education and training dimensions (dimensional 9). Proactive and generative levels are aspects of a good commitment to patient safety culture.

4. Discussion

Patient safety culture is an important foundation in the delivery of safe and quality health services. In a positive patient safety culture, awareness of the importance of patient safety is part of the values and identity of every member of the care team. Every health staff understands that patient safety is non-negotiable and is a top priority in every aspect of health services. A positive patient safety culture encourages openness and transparency in reporting medical errors or near misses. Health staff feel comfortable reporting incidents because they know that the goal is to improve safety and quality of care, not to punish or blame. A good patient safety culture also promotes effective communication among members of the care team and with patients and families. Clear and open communication helps to avoid misunderstandings and ensures that important information related to patient care is conveyed correctly. In a strong patient safety culture, safety incidents are seen as opportunities to learn and improve the system. The treatment team performs an in-depth analysis of the root causes of incidents, and corrective and preventive actions are then implemented to prevent similar incidents in the future.

Table 2. Qualitative analysis of respondent interviews.

Thematic	Deep interview	Observation	Document review	Triangulation analysis
Overall commitment to continuous improvement	There is a cultural survey conducted annually from 2021 There is already a standard operating procedure (SOP) related to patient safety culture	There is already a safety culture survey report that will be conducted in 2021. Follow-up plans from the results of the 2021 patient safety culture survey are made into a quality work program for 2022 The socialization of the quality work program was carried out in January 2022.	There are already results of a cultural survey conducted from April to June 2021 There is already evidence of socialization regarding the results of the 2021 cultural survey, which was carried out on January 14th, 2022, and January 17th, 2022	From the three data sources, it was found that there had been a commitment to continuous improvement carried out by the Semen Padang Hospital in the form of a cultural survey from 2021. There had been an SPO that regulated it and had been socialized
Priority is given to patient safety	The hospital has prioritized patient safety by conducting outreach about patient safety Conduct socialization regarding risk management Each unit must make a list of unit risk management and socialize it to all staff.	All units have made risk identification and submitted to the quality committee, but not all the risks described by the unit in the risk identification. Every month all units make patient safety incident reports and report them to the quality committee The quality committee will make monthly reports and will be reported to the main director	Guidelines for implementing integrated risk management evidence of socialization of risk management to all department heads, section heads, Head of room, and quality PICs of each unit on 24-30 December 2021 proof of request for risk identification to each unit on January 19th, 2022	The quality committee has socialized patient safety and risk management to all units. All units have made a risk management list, but not all the risks described by the unit in the risk identification.
System error and individual responsibility	Most of the staff are still afraid to report patient safety incidents because they still perceive it as a mistake.	There are several units that diligently report patient safety incidents In some units, reporting is done if there is information obtained by superiors or complaints from the patient's family	The minutes of the meeting progress The Quality Committee Work Program on February 10th, 2022, has determined follow-up steps for KTC patient safety incidents (Uninjured Incident), KTD (unexpected event), and Sentinel	Most staff are still afraid to report safety incidents because there are still sanctions given if an incident occurs.
Incident recording and best practices	Patient safety incident reporting flow at Semen Padang Hospital already exists When it happens incident, the incident finder will make a patient safety incident (IKP) report on a standardized form and will report to the supervisor or team leader for the shift the unit supervisor will do grading against the IKP and report to the quality committee. not all patient safety incidents have been reported by the staff concerned	The incident reporting flow has been running according to the flow set by the quality committee From January to October 2022, the number of reported IKPs totaled 14 incidents with details of 2 KTC, 11 KNC, and 2 KTD	Standard operating procedures (SOP) regarding the flow of reporting patient safety incidents.	The IKP reporting flow has been regulated and understood by each unit.
Incident evaluation and best practices	When there is IKP reporting, it will be done grading to determine the severity of the incident There is no policy regarding specific sanctions related to	Most unit leaders already know the follow-up steps if there is an IKP report	already contained in the patient safety incident reporting system guidelines according to the results grading that	Follow-up on patient safety incident reports has been understood and carried out by each unit leader Rewards have been

	IKP Sanctions are handed over to each unit and refer to the Joint Work Agreement (PKB) that applies at Semen Padang Hospital		event SOP flow of patient safety incident reporting	included in the quality committee work program for 2022, but their implementation has not been carried out
Effective learning and change	if a patient safety incident occurs, the follow-up program that is carried out is to re-socialize all staff in the unit	All units fill out a patient safety incident recap form and submit it to the quality committee every month Internal meeting of the unit when IKP occurs	Recap of patient safety incidents for every shift change starting from January 2022. Minutes of meetings and absences of IKP socialization	If an incident occurs in a unit, education will be carried out to all staff in that unit so that the incident does not happen again. But this activity has not been included in the SOP
Communication on patient safety issues	All staff have received patient safety information because education has been carried out by the quality committee re-education by the SPV unit on a regular basis. Information regarding patient safety incidents has so far been obtained from the reports of the staff concerned, from other units, from patients and their families	Most of the staff have received education or information about patient safety incidents Not all SPV units carry out routine re-education regarding patient safety culture.	Education on quality improvement and patient safety has been carried out, which includes indicators of quality and patient safety on September 27th - October 1st, 2021, for all employees There are no routine re-education documents yet. Information sources for reporting patient safety incidents can be found on the Semen Padang Hospital internal incident report form	All staff have received education about patient safety from the quality committee once at the end of 2021. However, there is no evidence or documentation in the form of an SOP regarding re-education. Information about the IKP can be seen in the internal incident report form
Staffing management and safety issues	Re-socialize Ensure patient safety culture is in place	Not all supervisors always socialize regarding patient safety. If there is a report of a patient safety incident, superiors will follow up and grade the incident according to applicable regulations	has been stated in one of the missions of Semen Padang Hospital, which reads, "We provide the best experience for customers (customer experience) with quality and safety in mind	Not all superiors have re-socialized and gone into the field to monitor the course of patient safety culture.
Staff education and training	There is no regular training on this patient safety culture socialization from the quality committee with a period of once a year	Training on patient safety incidents was carried out in 2021 resocialization is planned for December 2022 The PMPK and FMEA pieces training have been attended by the quality committee	The outreach program for quality improvement and patient safety is contained in the 2022 quality committee work program with an agenda for house training quality committee and PIC in July 2022.	Training for the quality committee team has been carried out. Socialization to officers has also been carried out
Teamwork	The structure of the quality committee consists of the chairman of the quality committee and three sub-sections under it, namely patient safety, quality, and risk management the role of the current quality team is not optimal because the quality team is still only accommodating reports from all units. The role of confirming to the field has not been carried out optimally	The quality committee is assisted by the unit supervisor as an extension of the quality committee in the unit There is only 1 full-time member of the quality committee	The structure of the quality committee is contained in the Decree of the Main Director of Semen Padang Hospital No: 024/SK/DIR/SPH/03.2022 on March 16th, 2022	The quality committee should go to the field more frequently to ensure that a patient safety culture is in place in all units

A patient safety culture creates an environment where safety practices are valued and encouraged. Safety protocols and guidelines are strictly followed to reduce the risk of medical errors and improve the quality of care. A patient safety culture also emphasizes the patient's active participation in the care process. Patients and families are encouraged to ask questions, provide important information about health conditions, and participate in decisions about their care.[7,8]

A strong patient safety culture focused on error prevention practices plays a key role in preventing incidents that could harm patients. In a good patient safety culture, healthcare staff actively seek and identify potential risks in the care environment. This includes identifying factors that can lead to medical errors, such as incomplete information, using the wrong medication, or procedural errors. A positive patient safety culture encourages effective communication among members of the care team. Through open communication, health staff can share information and their experiences regarding the prevention of medical errors, as well as better understand the risk factors to watch out for. A strong patient safety culture emphasizes the importance of following established safety protocols and guidelines. Healthcare staff are empowered to adhere to standard safety practices, including the use of personal protective equipment, verification of patient identity, and double-checking of medications prior to administration. An effective patient safety culture also recognizes the importance of training and improving the competence of healthcare staff in dealing with the risk of medical errors. Regular training on safety practices and the latest innovations can help healthcare staff be better prepared for challenging situations. An open patient safety culture encourages the care team to learn from safety incidents that occur. An in-depth analysis of the root causes of medical errors can lead to the identification of opportunities for improvement and changes to procedures to prevent similar incidents in the future. A strong patient safety culture involves patients as active partners in care. Patients are encouraged to report their health conditions, ask questions, and provide input about the care they receive. This active participation can assist in detecting potential risks and improving treatment practices.[9-11]

An open and transparent patient safety culture is very important in improving the quality of service and patient safety in hospitals and other health facilities. An open safety culture encourages healthcare staff to report safety incidents, including medical errors or near misses. In a transparent environment, staff feel comfortable reporting these incidents without fear that precautions will be taken against them. When a safety incident is reported, the hospital can learn about what happened and identify the cause. This allows the hospital to conduct a root cause analysis to identify system problems or weaknesses in procedures and the work environment that can be improved. By knowing the cause of the incident, the hospital can take appropriate corrective and remedial action. This can include developing or revising procedures, additional training for staff, or changes in systems and infrastructure. By understanding the root causes of incidents, the hospital can take steps to prevent them from recurring in the future. These precautions help create a safer, higher-quality care environment for patients. An open and transparent safety culture creates an environment where the care team focuses on patient safety as a top priority. This influences the behavior and actions of health staff so that they are more careful and careful in providing care. When patients know that a hospital has a safety culture that is open and proactive in dealing with safety incidents, they feel more confident and secure in receiving care at the facility.[12-14]

Involving patients and families in the care process is an important aspect of a positive patient safety culture. When patients and families are involved in the care process, they have a better understanding of the patient's medical condition, treatment plans, and actions that need to be taken. This increases patient

awareness of their treatment so that they can take an active part in managing their own health. Patients and families often have unique insights into the patient's medical history and symptoms that may not be visible to the treatment team. Involving them in the treatment process can assist in identifying potential risks or warning signs that need attention so that preventive action can be taken earlier. Involving patients and families in the care process also improves communication between patients, families, and the care team. Open and effective communication allows patients and families to ask questions, express concerns, and share information relevant to patient care. In a patient safety culture that involves the patient and family, decisions about care are made together with the patient's preferences and relevant medical information involved. This allows for treatment that is more individualized and tailored to the needs and values of the patient. Involving patients and families in the care process increases patient satisfaction because they feel heard and valued as part of the care team. Patients tend to be more satisfied with care when they feel their role is recognized and empowered in decision-making about their health. The involvement of the patient and family in the monitoring of care can also help prevent safety incidents. By understanding the warning signs and potential risks, patients and families can help reduce the risk of medical errors or complications that may occur.[15,16]

A good patient safety culture has a significant positive impact on increasing patient confidence in the health services provided. A transparent and open patient safety culture reflects the organization's commitment to putting patient safety above all else. Patients feel more confident because they know that the hospital or healthcare facility recognizes and learns from mistakes and will take steps to prevent them from recurring. A good patient safety culture indicates that a hospital or healthcare organization has clear priorities for service quality and patient safety. Patients tend to feel safer and more satisfied because they know that healthcare staff are committed to providing high-quality care. A patient safety culture that involves patients as partners in the care process provides opportunities for patients to participate in decision-making about their care. Patients feel heard and valued as individuals, thereby increasing their confidence in the treatment process. A good patient safety culture promotes the adoption of standard safety practices and strict protocols. Patients feel more confident about the care they receive because they know that tested safety procedures have been strictly followed. A good patient safety culture also emphasizes the importance of effective communication between healthcare staff and patients. Clear and open communication helps reduce patient anxiety and allows them to understand more about their health condition and the care provided. High confidence in service safety and overall quality of care contributes to increased patient satisfaction. Patients feel more satisfied with the care they receive when they feel safe, heard, and involved in the care process.[17]

An effective patient safety culture has a positive impact on reducing the incidence of medical errors and complications that can lead to extended treatment periods or additional medications. A good patient safety culture encourages medical error prevention practices. By identifying and treating potential risks early, incidents of medical errors can be prevented, which in turn, reduces the costs that may arise from additional treatments to treat complications. An open and transparent patient safety culture encourages the reporting of safety incidents. When an incident is reported, the hospital can conduct an in-depth analysis to identify the root cause and take corrective action. This way, necessary changes can be implemented to prevent similar incidents in the future, reducing the additional costs that may occur. A patient safety culture that focuses on standard safety practices helps avoid preventable complications during treatment. By reducing the risk of complications, patients have a greater chance of having a successful treatment and avoiding the additional costs of extended or additional treatments. By prioritizing patient safety, hospitals can improve the efficiency of the treatment process. Safer practices

and better quality of care can reduce hospitalization time and avoid the excessive costs that may result from inefficient or problematic care. A strong patient safety culture can also reduce the risk of lawsuits that can create additional costs for the hospital or healthcare system. By focusing on patient safety and providing high-quality care, the risk of potential lawsuits can be reduced.[18-20]

5. Conclusion

The safety culture at Semen Padang Hospital is generally at a proactive level. This indicates that the hospital places priority on improving patient safety and is carried out on an ongoing basis. A system that is integrated and comprehensive has a wide scale, already involves stakeholders, and an evidence-based approach.

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