

Revitalization Management of Patient Safety Culture With Malcolm Baldrige's Approach

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Abstract

Patient safety is a serious public health problem, various studies report an increased rate of accidents in patients as a result of poor patient safety management. The impact of service and noncompliance poor caused various issues, from pain mild, disability, and even death. Another impact is the increase in service costs that must be handled by hospital management due to negligence or lack of compliance in service. This happens because of various things, such as unclear service systems, or lack of compliance with standard of procedures or lack of understanding of medical personnel on patient safety culture procedures, as well as inadequate leadership patterns. The purpose of this study was to determine the culture of patient safety that occurred in hospital services, to conduct an analysis based on the Malcolm Baldrige approach, to be able to make suggestions for improving patient safety service systems, in an effort to reduce the number of patient accidents at hospital. This research uses the *explanatory mixed method*. Quantitative data collection was carried out using a survey adapted from the *Agency for Healthcare Research and Quality* (AHRQ). The results of quantitative data triangulation was then performed with the Malcolm Baldrige approach. In general, a picture of patient safety culture was with a positive perception result of 58.37%. The results obtained from this study of the 12 dimensions of positive perception measured, there are three dimensions that fall into the category of lacking the dimensions of staffing 44.33%, the handover dimension and the transition dimension 43.90% and the dimension of non punitive response to errors 33.07 %. The research implication is that in order to create effective and efficient patient safety management it is necessary to revitalize management comprehensively through increasing the level of compliance of medical personnel, increasing the competency of medical personnel, and improving leadership patterns. Implement *Training Need Analysis* (TNA), evaluate workload and migrate to the use of *electronic medical records*.

Keywords: *Patient safety culture, compliance level, Training Need Analysis (TNA), Electronic medical record*

PRELIMINARY

Patient safety is currently a global and national issue for hospitals and is a component related to the quality of health services, and is a basic principle of patient care and a critical component in quality management.

In 2000 the IOM (*Institute of Medicine*) in the United States published the report " *To Err Is a Human - Building a Safer Health System* which states that in the United States each year there are 44,000 - 98,000 people who die as a result of drug errors that might be preventable. The possibility of this error

occurs due to system failures, processes and some conditions that cause this error can occur.

Institute of Medicine (IOM) to Err is Human: Building a Safer Health System states that hospitals in Utah and Colorado found unexpected events (KTD) of 2.9% and 6.6% of them died. Whereas in New York it was found that the unexpected event (KTD) 3.7% and 13.6% of them died. (L. Kohn, 1999) . Then WHO published the 2004 Unexpected Event (KTD) rate in hospitals from developed countries amounted to 3.2% to 16.6% in hospitalized patients and some of them died.

The New South Wales in the Third Report on Incident Management in the NSW Public Health System 2005-2006 shows data on the incidence rate at Australia's New South Wales General Hospital in the last three years. In 2003-2004 there were 452 incidents, 2004-2005 there were 429 incidents and 2005-2006 there were 499 incidents. The highest number of incidents occurred in 2005-2006 and is increasing every year. In 2006, studies were also carried out by *The World Health Organization (WHO)*, *Eastern Mediterranean and African Region (EMRO and AFRO)* and *WHO Patient Safety* in 8 developing countries. The result is that patient safety incidents occur in 2.5% to 18.4% of 15,548 medical records in 26 hospitals and 34% are related to therapeutic errors in relatively uncomplicated clinical situations. In addition, WHO also reported studies at 58 hospitals in Argentina, Colombia, Costa Rica, Mexico and Peru by IBEAS (*The Latin American Study of Adverse Events*) and involved 11,379 inpatients. The result is 10% of admissions have experienced patient safety incidents due to health services.

Patient safety incidents were also found in Indonesia in 2011 which were reported to 145 Hospital Patient Safety Committees (KKP-RS). Jakarta is the province that ranks highest at 37.9%, Central Java at 15.9%, DI Yogyakarta at 13.8%, East Java at 11.7%, South Sumatra at 6.9%, West Java at 2.8%, Bali at 1.4%, East Kalimantan at 0.69 % and Aceh is 0.68%. Other data regarding patient safety incidents in Indonesia show that near misses are more reported than unexpected events. Reporting near-injury events was 47.6% while the expected number of events was 46.2%. In Indonesia, although publications on malpractice appear quite frequently in the mass media, official data on patient safety incidents is still rare. The first study of patient safety in Indonesia was conducted in 15 hospitals with 4500 medical records. The results showed the patient safety incident rates ranged from 8.0 to 98.2% for misdiagnoses and 4.1% to 91.6% for medication errors. (Rosita Jayanti, 2017)

Every health care facility must handle patient safety incidents aimed at improving the quality of health care and patient safety. The handling of incidents in health care facilities is carried out through the establishment of a patient safety team determined by the leader of

the health service facility as the executor of incident handling activities. In handling incident, the patient safety team carries out activities in the form of reporting, verification, investigation and analysis of the cause of the incident without blaming, punishing and humiliating someone. The patient safety team can be developed into a patient safety committee according to the needs and capabilities of the health service facility.

THEORY STUDY

Patient Safety

Patient safety is a system that makes patient care safer, including risk assessment, identification and management of patient risk, reporting and analysis of incidents, ability to learn from incidents and follow-up, as well as implementing solutions to minimize risks and prevent injuries caused by errors as a result of carrying out an action or not taking the action that should have been taken. The goal of patient safety is to improve the quality of health service facilities through the application of risk management in all aspects of services provided by health care facilities

Safety Culture

Patient safety culture consists of three components (Cooper (2000)), namely:

- 1) Psychological aspects, namely as a safety climate of an organization, related to the values, attitudes and perceptions of individuals and groups. This aspect is how people feel about patient safety culture
- 2) Behavioral aspects are actions and patient safety behaviors. This aspect is about what people do to create patient safety.
- 3) Situational aspects are policies, procedures, regulations, organizational structures and management systems. This aspect is about what organizations have.

Safety Culture Measurement

There are a variety of measurement tools to measure the culture of patient safety with different organizational characteristics and cultural dimensions. Patient safety culture in health develops a patient safety culture measurement tool. Researchers used a measuring tool developed by the Agency for

Healthcare Research and Quality (AHRQ) in measuring patient safety culture.

The assessment dimension according to the *Agency for Healthcare Research and Quality* (AHRQ) measures staff perceptions about safety culture within the scope of work, as well as perceptions about the overall culture of patients in hospitals. There are 12 dimensions of patient safety culture with each dimension measured using three to four questions, namely:

- 1) Dimension of Perception of Patient Safety .
- 2) Inside Reporting Frequency Dimensions n.
- 3) Dimensions of Expectations.
- 4) Dimensions of Organizational Learning
- 5) Dimensions of Cooperation Within the Unit
- 6) Dimensions of Communication Openness
- 7) Feedback Dimensions and Communication Against Mistakes .
- 8) Dimensions of Non-punitive Responses to Errors .
- 9) *Staffing* Dimensions
- 10) Management Support Dimensions
- 11) Dimensions of Cooperation Between Units
- 12) Handover and Transition Dimensions

Malcolm Baldrige

Baldrige models is sometimes referred to as the "*Baldrige burger*," the model shows the relationship antara a triad of leadership (leadership, planning and focus on the customer) with triads results (staff, processes and outcomes) and how to measure impact on both. This diagram shows that these criteria can match one another. This is a systemic view of the criteria and how they penetrate throughout the organization

RESEARCH METHOD

This research uses the *explanatory mixed method* as the research design. The *explanatory mixed method* is a design that combines methods with two phases. This method aims for qualitative data that can help explain the results of quantitative data that has been obtained. Quantitative research was conducted with *cross sectional* analytic descriptive to see staff perceptions about patient safety culture in hospitals. While the qualitative method was carried out with data *triangulation* , namely in *depth interviews* , observations and document

review. *In depth interviews* were conducted with informants using questions compiled based on *Malcolm Baldrige's* criteria .

The study was conducted at Hospital in Jakarta for d ith a total population of 731 respondents.

RESULTS AND DISCUSSION

Based on the guidelines *Agency for Healthcare Research and Quality* (AHRQ) stated that the cultural dimensions with a positive perception of the strength for each hospital to implementing n culture of patient safety. In this study, the assessment measure is based on AHRQ measurement standards with **criteria Indexes > 75%** was good, **criteria Indexes 50% - 70%** was **Medium** and if the positive perception indexes 50% was **Less** (Westat et al., 2010) . those criteria indexes then proceed to the 7's criteria approach of Malcolm Baldrige.

Leadership . Dimensi leadership by Malcolm Baldrige is a process whereby a person or a team to play on other people's influence or the other team by way of inspiring, motivational and direct the activities to achieve the goals and objectives set . Malcolm Baldrige said that leadership assesses how senior leaders act in accordance with organizational instructions and can sustain the sustainability of the organization and also assesses how the governance system and how the organization meets aspects of legal ethics and social responsibility, this is why the leadership dimension is the most important thing in a organization. If the leadership dimension is associated with an assessment at the *Agency for Healthcare Research and Quality* (AHRQ) it is related to the management support component and expectations of management in the implementation of a patient safety culture. The results of data processing showed the value of management support is at 68.77% ter into the category of **being** . While the results of a positive perception of the dimension of hope for the management in the implementation of patient safety culture is at 64.30%, so that in the category of **medium** . From these findings it can be concluded that in general the patient safety culture has not been carried out effectively and efficiently.

Strategic plan . P Planning for the Malcolm Baldrige is positioned according to the organization's efforts in developing strategic objectives and action plans, as well as the strategic objectives and work plans that have been established, which is then elaborated and can be changed at any time what if circumstances require. In Malcolm Baldrige, strategic planning can be assessed from strategic development and strategic implementation. Development is an organization's effort in developing strategies to respond to challenges that can enhance the strategic advantages of it. Whereas implementation is how the organization translates strategic objectives into work plans, which are then spelled out in terms of performance indicators and work projections. The dimensions of strategic planning assessed by the *Agency for Healthcare Research and Quality* (AHRQ) can be seen in the dimensions of overall perception of patient safety. The results of the measurement of positive perceptions from the overall perceptions dimension obtained results that the patient safety index of 53.68% is included in the *medium* category. The findings in this study are that leaders and stakeholders have basically committed to implementing a patient safety culture program but have not been able to implement it well to the implementing staff.

Focus on customers . F Okus to customers according to the Malcolm Baldrige an organizational effort tying patients to achieve success in the market share long term, arrives can be done through building a culture that focuses on patient safety. F Okus to customers assess how the organization understands the needs, desires and expectations of customers and build loyalty. The dimension of customer focus in the *Agency for Healthcare Research and Quality* (AHRQ) can be seen in the dimensions of organizational learning and continuous improvement. The results of data processing on the positive perception of the dimensions of organizational learning and continuous improvement obtained an index of 74.90%, this index is included in the *medium* scale category. The findings of the study are the existence of learning from each patient safety incident that occurs but the

need for customer engagement measurements related to patient safety culture.

Measurement, Analysis and Management of knowledge . In the dimensions of measurement, analysis and knowledge management according to Malcolm Baldrige is how organizations in selecting, organizing, and using information data in performance measurement, analysis and review of performance and how the organization guarantees data availability and data quality, information needed by staff. In Malcolm Baldrige measurement, analysis and knowledge management can be assessed from the measurement, analysis and improvement of organizational performance, information management, information technology and knowledge management. Measurement analysis and improvement of organizational performance are indicators to measure, analyze and improve organizational performance. Whereas information management, information technology and knowledge management assess indicators that emphasize how an organization manages information, information technology and knowledge management through the provision of information and ease of access. The dimensions of measurement, analysis and knowledge management assessed from the *Agency for Healthcare Research and Quality* (AHRQ) can be seen in the dimension of frequency of incident reporting. The result of positive perception on the reported incident frequency dimension is 57.53% so it falls into the medium category. In the research, it was found that 44.40% of staff had not reported in the last 12 months. The finding of this research is that the frequency of providing patient safety incident reports is still low because this staff still feels a culture of "*blamming culture*".

Focus on the team . D imensi focus on the team according to the Malcolm Baldrige an effort *baga i* where an organization in assessing the capabilities and needs of employees in building a workforce that is conducive to achieve high performance through engagement, management, and development of employees in the use of the ability to align the vision, mission and values and the organization's action plan. In Malcolm

Baldrige the focus of the team can be assessed from the workforce environment and workforce engagement. The workforce environment is an organizational effort in building an effective workforce environment. While the workforce engagement is an organizational effort to actively involve, provide compensation, and reward for achieving high performance. The dimension of team focus assessed by the *Agency for Healthcare Research and Quality* (AHRQ) can be seen in the dimensions of communication openness 63.47% fall into the medium category, the dimension of feedback and communication about patient safety incidents 62.17% fall into the medium category and the response dimension non punitive to errors 33.07% fall into the less category. The findings of the study are that the staff still feels that if there is an error, the problem is reported but it is more to the individual. And the staff feels that if something goes wrong it will be recorded in the HR department.

Focus on the process . In the dimension of process focus, according to Malcolm Baldrige, it is how organizations design their work systems, design, manage, improve their main processes to implement work systems, to provide value to patients, to achieve success and achieve organizational sustainability. Work system design is an organizational effort to design its work, determine its main processes in providing value to patients, prepare themselves in the face of potentially emergency situations. While the work process is an organizational effort in designing, implementing, managing and improving its main work processes in providing value to patients in achieving good service. The dimension of process focus assessed by the *Agency for Healthcare Research and Quality* (AHRQ) can be seen in the dimension of staffing 44.33% so that it falls into the category of inadequate, the dimension of cooperation in units of 80.00% is included in the good category, dimension of cooperation between units 54.35 % included in the medium category and the dimension of handover and transition 43.90% included in the category of less. The findings of this study are that staff feel they are working more than they should and feel that many forms must be completed

and completed to meet the needs of the hospital accreditation research element.

Research Findings: The results can be described based on the right of the *Hospital Survey On Patient Safety Culture* (HSOPSC) is as follows; The average index of positive perception was 58.37% included in the medium category. Persepsi positive into force on the dimensions of cooperation in a unit that is 80.00% were in the category of **good** . But the dimensions that are still included in the category of weakness are the staffing dimension with an index of 44.33%, the handover dimension and the transition with an index of 43.90% as well as the non punitive response dimension to errors of 33.07% these three dimensions fall into the *less* category .

Discussion

Leadership . The patient safety culture program exists but is not yet effective and efficient.

Strategic Plan . The Patient Safety Culture Program is included in the strategic plan but is not yet known by the staff.

Customer Focus . Patient complaints can be identified through customer satisfaction, but customer engagement has not been measured.

Measurement, Analysis and Knowledge Management . The frequency of reports of patient safety incidents is still low.

Focus on the team. The staff feels that if there are errors then what is reported is not a problem. Staff felt mistakes were noted in the HR section.

Focus on Process . The staff felt that many medical record file forms had to be filled out and completed in accordance with hospital accreditation standards. The staff feels they are working longer than they should.

Results . There are 3 dimensions that still have less perception, namely the staffing dimension, the handover dimension and the transition and the non punitive response dimension to errors

Based on the calculation of overall respondents' positive perceptions of patient safety culture showed a value of 58.37%. This value is included in the medium category. This means that the patient safety culture has not been well perceived by all staff even though the patient safety culture program is included in the hospital's strategic planning.

Leadership is perceived by respondents as being in the medium category with a value of 68.77% management support and expectation of management in the implementation of a patient safety culture of 64.30%. This means that in general the leadership has provided support to all staff working to support the patient safety culture.

Customer focus is perceived by respondents as being in the medium category with the value of organizational learning and continuous improvement 74.90%. This means that in general respondents do not have a good perception in learning and change to improve patient safety.

Measurement, analysis and knowledge management perceived by respondents fall into the medium category with a value of 57.53%. This means that not all staff if something goes wrong can identify, correct and report properly.

Focus on the team and focus on the process perceived by respondents as inadequate with a staffing value of 44.33%, handover and transition of 43.90% and a non punitive response to errors of 33.07%. This means that overall respondents have not a good perception related to the workload done. Overall respondents felt that they had a high workload. In addition, overall respondents felt that there was a " *blaming culture* " in the hospital. So when there is a patient safety incident that occurs, the respondent feels that what was reported is not the incident but the staff and feels that the mistake will be recorded in SDM.

Overall, the perception of patient safety culture in the health care industry is still in the moderate category, so there is a need for more active commitment from the leadership in the hospital in order to provide the same understanding to all staff with the aim that all staff have a good patient safety culture in providing services to patients. And the existence of a system that supports the activities of all staff in working to provide services to patients more safely.

Recommendation

Melakukan revision keselamatan associated with cultural programs and monitoring and evaluation with a detailed analysis and sharp.

The leader together with all staff need to declare efforts to support patient safety with

a strong commitment. Selanjutnya leadership of health services should be reviewing the regulations related to patient safety culture that already exists then be disseminated with the aim that all staff can work by applying the patient safety culture with the aim of prioritizing patient safety.

Management needs to recommend to improve the application of " *no blaming culture* " and instill the values of safety culture to be applied to all staff through continuing education related to patient safety culture.

Management needs to conduct a review of *Training Need Analysis* (TNA) for all staff related to patient safety culture. When conducting patient safety culture training *pre-test* and *post-test tests* are conducted to measure the achievement of knowledge before and after the training. Dith the necessity to meet the accreditation standards in filling hospital medical record file is still manual will be more effective and efficient if Industrial health services migrate to the digital era, namely *the electronic medical record*. B Eban work is perceived by staff, researchers recommended the implementation of in-depth analysis of the workload.

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