# Patient Safety Culture in Makassar City General Hospital

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**Abstract.** This study is based on patient safety incidents at Makassar City Hospital as much as 39 cases since 2017. This research aims to determine the description of Patient Safety Culture at Makassar City Hospital. The type of research used in this study is quantitative research with cross-sectional approach. The population is medical and nursing service officers. Sampling method in this study is proportional random sampling with a large sample of 100 from 334. The data collection tool is a patient safety culture questionnaire based on the Hospital Survey on Patient Safety Culture questionnaire. The results showed that most dimensions of patient safety culture in Hospital of Makassar City were positive with the highest dimension found in dimension of the management support for the patient safety of 95% and teamwork within units of 94.1%, while the lowest dimension was in dimension of staffing of 19%, nonpunitive response to error of 38% and frequency of events reported of 40%. The advice to the hospital is to arrange a recording and reporting system and improve the monitoring function of each patient safety incident, to health workers eliminate the culture of mutual blame and cornering, improve and familiarize the culture of incident reporting.

Keywords: Culture; patient safety; hospital

## **1** Introduction

One of the important component of health care quality is patient safety. There is a bigger recognition of patient safety culture when health care organization continually improving [1].

The hospital needs to improve the quality of its services and image to restore public confidence, including through patient safety programs where WHO started it in 2004. Patients not only need quality services but also a condition that ensures that they need safe services and do not endanger themselves. Not only that, the hospital is obliged to apply patient safety standards to reduce the number of Unexpected Events through incident reporting, analyzing, and determining problem-solving [2].

The importance of patient safety as stipulated in the Regulation of the Minister of Health of the Republic of Indonesia No. 11 of 2017 concerning patient safety and Regulation of the Minister of Health of the Republic of Indonesia No. 1691 of 2011 concerning hospital patient safety. Also, to improve patient safety in hospitals, patient safety is also used as one of the indicators in determining hospital accreditation mentioned in the Hospital Accreditation Standards by the 2011 Ministry of Health and Joint Commission International (JCI).

Hospital patient safety is a system in which a hospital makes patient care safer which includes risk assessment, identification, and management of patient-related risks, reporting

and incident analysis, learning ability from incidents and follow-up and implementation of solutions to minimize risk and prevent injury caused by errors resulting from carrying out an action or not taking action that should be taken.

In the application of patient safety, according to the National Patient Safety Agency, one of the points that must be applied is to build a patient safety culture. Patient safety culture is the foundation for implementing patient safety. In pursuing patient safety, of course, it requires continuity and cultivation of values and beliefs [4].

The application of patient safety culture will bring benefits to patients and health care providers. The application of a patient safety culture will detect errors that will occur or if an error has occurred. The patient's safety culture will increase awareness to prevent errors and report if there are errors. Patient safety culture can also reduce financial expenses caused by patient safety events. The importance of applying a patient safety culture also affects aspects of service quality related to potential events that have an impact on patient safety [5].

Patient safety culture according to the Health Care and Research Quality Association (AHRQ) can be measured in terms of hospital staff perspectives consisting of 12 dimensions, including: manager's expectations and actions promoting patient safety, organizational learning - continuous improvement, cooperation in units in hospitals, open communication, feedback and communication about errors, non-punitive responses to errors, staffing, management support for patient safety efforts, cooperation between units in the hospital, hands-off and patient transition, overall perception of hospital staff regarding patient safety, and reporting frequency of events [6].

Based on preliminary data obtained, there were several Patient Safety Incidents (IKP) since the last year in Makassar City Hospital. For 2017 there were 31 cases in which there were 14 Non-Injury Events (KTC), 7 Unexpected Events (KTD), 3 Potential Injury Events (KPC), and 7 Events of Near Injury (KNC). Whereas for 2018, data obtained from January to February, there have been 8 cases in which there were 2 KTC, 5 Events of Near Injury (KNC), and 1 Unexpected Event (KTD). This shows that the incident that occurred in Makassar City Hospital exceeded the standards set by the Minister of Health Regulation No. 129 of 2008, which is zero occurrences. Therefore, as a first step to be able to improve patient safety efforts, it is necessary for the Makassar City General Hospital to first find out how the patient's safety culture is in the Hospital.

### 2 Methods

This type of research is a quantitative study with a cross-sectional approach. This research was carried out at the Regional General Hospital of Makassar City from May to July 2018. The population in this study were all health workers in the field of medical and nursing services. The total population is 334 people. The sample in this study is a portion of all health workers in the field of medical and nursing services. The sampling method in this study is Proportional Random Sampling as many as 100 samples. Data collection was carried out using a patient safety culture questionnaire based on the Hospital Survey on Patient Safety Culture questionnaire, which was published by the Agency for Healthcare Research and Quality (AHRQ) in 2004. Data analysis was carried out through the SPSS program, and in this study, data presentation used a distribution table frequency accompanied by interpretation narrative for research results.

# **3 Results**

The results showed that based on the age group of respondents, the most in the range of the age group 26-35 years were 63 people (63%) and at least in the range of the age group  $\geq$  46 years as many as 4 people (4%). Based on gender, the majority of respondents were women as many as 87 people (87%). The most recent education of respondents was D3 / equivalent as many as 67 people (67%) and the least was S2 as many as 7 people (7%). As for ethnic respondents, the majority are Bugis ethnic groups as many as 47 people (47%). The majority of respondents with employment status as civil servants are 45 people (45%), and there are 17 people (17%) who are employed as volunteers. The term of work of respondents is mostly for 1 - 5 years, as many as 50 people (50%).

Characteristics	Frequency (n)	Percent (%)
Age (year)		
< 25	12	12.0
26 - 35	63	63.0
36 - 45	21	21.0
$\geq 46$	4	4.0
Length of Work		
(year)		
< 1	1	1.0
1-5	50	50.0
6-10	38	38.0
11-15	7	7.0
>15	4	4.0

Table 1.Distribution of Respondents by Age and Length of Work

Table 1 shows that based on the age group of the respondents, the most in the range of the age group 26-35 years were 63 people (63%) and at least in the range of age groups 46 years as many as 4 people (4%). It denotes that most of the respondents. It is also shown that most respondents have a length of work 1-5 years (50%).

Table 1.Distribution of Patient Safety Culture Dimension

	Category				Total	
Patient Safety Culture Dimension	Positive		Negative		Total	
	n	%	n	%	n	%
Communication Opennes	84	84.0	16	16.0	100	100
Feedback and Communication about errors	71	71.0	29	29.0	100	100
Frequency of Events Reported	40	40.0	60	60.0	100	100
Handoffs & Transition	74	74.0	26	26.0	100	100
Management Support of Patient Safety	95	95.0	5	5.0	100	100
Nonpunitive Response to Error	38	38.0	62	62.0	100	100
Organizational Learning and Continous Improvement	73	73.0	27	27.0	100	100
Overall Perception of Patient Safety	74	74.0	26	26.0	100	100
Staffing	19	19.0	81	81.0	100	100
Supervisor/ManagerExpectation and Actions Promoting Safety	59	59.0	41	41.0	100	100

Teamwork Accross Units	77	77.0	23	23.0	100	100
Teamwork Within Unit	91	91.0	9	9.0	100	100

The table shows that there are nine dimensions that has a higher percentation in a positive category. They are Communication Openness (84%), Feedback and communication about errors (71%), Handsoff & Transition (74%), Management support of patient safety (95%), Organizational learning & Continous improvement (73%), Overall perception of patient safety (74%), Supervisor/managers expectation and actions promoting safety (59%), Teamwork across units (77%), and Teamwork within unit (91%).

Three other dimensions categorized as negative responses. They are Frequency of Events Reported, Nonpunitive Response to Error, and Staffing.

#### **4** Discussion

Communication openness indicates the extent of openness between members and leaders in communicating freely and not feeling depressed. Based on the results of the study, it was found that the dimension of openness of communication in Kota Makassar Hospital had a positive response percentage of 84%. This result is in line with research which found that the dimensions of communication openness were positive, with a percentage of 78,7% [7].

Feedback and communication about errors indicate the extent to which feedback is received by officers and conduct discussions to find solutions related to any errors that occur. Based on the results of the study, it was found that the average overall positive response on this dimension in Makassar City Hospital was 71%. This result is in line with the research conducted by Ultaria, which found that the percentage of positive response dimensions of feedback and communication about errors was 88.9% [8].

The frequency of events reporting is the level of frequency of officers in reporting incidents of errors that occur in the hospital. The results showed that the average overall positive response of this dimension in Makassar City Hospital was 40%. The results of this study are in line with the research conducted by Ultaria which suggests that this dimension has a percentage of 48.2% [8]

Hands off & Transition indicate the extent to which the work shifts and the transfer of patients. Based on the results of the study, the average overall positive response on this dimension in Makassar City Hospital was 74%. This result is in line with the research conducted by Amirullah, who stated that this dimension had a positive response of 74.5% [7].

Management support for patient safety shows the extent to which management provides support for the creation of a patient safety culture. Based on the results of the study, the average overall positive response on this dimension in Makassar City Hospital was 95%. This result is in line with the research conducted by Nivalinda, which suggests that the positive response of this dimension is 93.3% [9].

Nonpunitive responses to errors indicate the extent to which the acknowledgment of the error is not responded to by punishment but identifies the problem that occurred and the cause. Based on the results of the study, the average overall positive response on this dimension in Makassar City Hospital was 38%. This result is in line with the research conducted by Alquwez, which suggests that the average percentage of this dimension is 16.6% [10].

Organizational learning and continuous improvement show the extent to which hospital staff is willing and willing to learn continuously for the improvement of patient safety. Based

on the results of the study, the average overall positive response on this dimension in Makassar City Hospital was 73%. The results of this study are in line with the research conducted by Alquwez, which suggested that the average positive response of this dimension was 83.3% [10].

The overall perception of patient safety shows how far the knowledge and understanding of the officers about patient safety apply in the hospital. Based on the results of the study, the average overall positive response on this dimension in Makassar City Hospital was 74%. This result is in line with Ultaria's study which found that the percentage of positive responses to this dimension was 74.7% [8]

Staffing shows the extent to which the availability of officers is by the needs of the hospital, and its management is carried out effectively. Based on the results of the study, the frequency of positive response on this dimension in Makassar City Hospital was 19%. This result is in line with Alquwez's study, which found that the percentage of positive responses to this dimension was 21.1% [10].

The supervisors/managers expectations of patient safety promotion actions indicate the extent to which supervisors/managers promote and support patient safety. Based on the results of the study, the average overall positive response on this dimension in Makassar City Hospital was 59%. These results are in line with the research of Alquwez who found that the percentage of positive responses to this dimension was 54.3% [10]

Teamwork within the unit shows the extent of compactness in the unit to support, respect, help, and work together in teams. Based on the results of the study, the average overall positive response of this dimension in Makassar City Hospital was 77%. This result is in line with Irwandy's study, which found that the percentage of positive response to this dimension was 96.1% [11].

Teamwork across units shows the extent to which the inter-unit officers are compacted to coordinate and cooperate well in providing hospital services. Based on the results of the study, the average overall positive response on this dimension in Makassar City Hospital was 91%. This result is in line with the Irrawaddy's study, which found that the percentage of positive response to this dimension was 93.7% [11].

#### **5** Conclusions

There are nine dimensions with a positive response that is higher than the negative response that is manager's expectations and actions to promote patient safety, dimensions of organizational learning and continuous improvement, dimensions of collaboration in units, dimensions of openness of communication, dimensions of feedback and communication about errors, dimensions of management support for safety patients, dimensions of collaboration between units, dimensions of shift turnover and patient movement, and overall dimensions of perception about patient safety. Whereas for higher negative response, there are three dimensions: the response dimension does not blame the error, the staffing dimension, and the frequency dimension of the incident reporting.

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