

# Application of a Patient Safety Culture in Undata Palu Hospital

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# ABSTRACT

**Introduction**: The Word Health Organization suggests that developed countries focus more on knowledge of standardized mechanisms and organizational factors that cause unsafe care for patients, such as those related to miscommunication, eg coordination, human error and the need to improve patient safety culture. Patient safety culture is a major and fundamental factor because building a patient safety culture is a way to build an overall patient safety program. This study aims to determine the application patients safety culture at Undata Hospital, Palu, Central Sulawesi Province, Indonesia.

**Method:** Using a survey questionnaire, this study explores differences in the application of of patient safety cultures in patient, critical and emergency rooms. The research samples of 157 people obtained through the use of probability sampling techniques. Data were analyzed using Fisher's exact test. The statistic show that there are differences in the application of safety culture in patient, critical and emergency rooms. Because there are differences in the application of safety culture between rooms, the statistical analysis was continued with the Post Hoc Mann-Whitney test.

**Results:** The results showed that statistically there was no difference in the application of patient safety culture between inpatient and critical rooms because p = 0.643 (p> 0,05), a difference in the application of patient safety culture between in patient and emergency rooms because p = 0.011 (p <0,05), a difference in the application of patient safety culture between critical rooms and emergency rooms because p = 0.049 (p<0.05).

**Keywords:** *Patient Safety; Patient; Critical; Emergency* 

## Introduction

Patient safety or patient safety are elements and guidelines regarding all perspectives of quality health services. The Institute of Medicine (IOM) identifies six components of quality health care, namely patient safety, effectiveness, patient-oriented, timely, efficient and fair (Clarke & Donaldson, 2008). Patient safety is an indicator of the quality of nursing services (Hughes, 2008; Marquis & Huston, 2010). Efforts were made to improve the quality of hospital services through a systems approach, taking into account the quality management process of the structure, processes and outcomes. Structure becomes an indirect measurement of service quality, the process refers to interventions carried out in accordance with the structure, and outcomes are used as an approach to assess the impact of the process carried out or occurs on patients and organizations (Runciman et al., 2010; Triwibowo, 2013).

The Word Health Organization suggests that developed countries focus more on knowledge of standardized mechanisms and organizational factors that cause unsafe care for patients, such as those related to miscommunication, eg coordination, human error and the need to improve patient safety culture (Sammer et al., 2010). Patient safety culture is a major and fundamental factor because building a patient safety culture is a way to build an overall patient safety program. An open and fair culture will be able to build awareness of the value of safety(Croll et al., 2012)

Patient safety is a cultural change. Health service organizations must strive to produce a transparent patient safety culture, including establishing and maintaining a positive culture of patient safety (Cahyono, 2008). Positive cultural specifications regarding patient safety include responses to the need for patient safety, and the commitment and responsibilities of policy makers.Scott et al., (2003) stated in their research that a positive culture is needed to improve employee performance in realizing patient safety programs.

Patient safety in health care facilities is then an important issue due to the many findings of medical error cases that have occurred in various countries. In Australia, a medical error that resulted in a number of 18,000 patients died and more than 50,000 patients with disabilities, in the United States as many as 44,000 patients died each year and approximately one million patients with serious injuries were found (Clarke & Donaldson, 2008). Furthermore, a report from the Hospital Patient Safety

Committee (KKPRS) stated that there were 145 patient safety incidents consisting of 46% KTD, 48% KNC and 6% others, and these problems were spread across several provinces found DKI Jakarta to rank the highest, namely 37.9% followed by Central Java 15.9%, DI 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% ((KKPRS), 2012).

Medical record data of Undata Hospital Palu shows the number of nosocomial infections from January-September 2015 with the type of phlebitis incidence of 865 cases, urinary tract infection (UTI) as many as 45 cases, surgical wound infection (ILO) with 59 cases, pneumonia with 6 cases , sepsis in 12 cases, in addition to lifting decubitus in 9 cases. while the case number kasu s mistakes administering medication and actions, as well as patient falls nothing found in the medical record.

## Method

1. Design

This research is a type of analytic obeservational study, with a cross sectional design.

2. Sample

The sample in this study were the nurses who worked in inpatient, critical care and emergency rooms, namely 157 people. Sampling using probability sampling method with a proportionate stratified random sampling approach.

3. Data Collection Process

Primary data obtained by filling out questionnaires and interviews. Secondary data were obtained from Medical Records of Undata Hospital Palu.

4. Data analysis

Data analysis was performed using SPSS 21 for Windows and statistical tests using univariate test with frequency, bivariate kruskal-wallis test and post hoc analysis (Mann-Whitney).

## Result

### 1. Univariate Analysis

Characteristics	F	
	n	%
Age		
Youth	18	11,5
Adult	131	83,4
Elderly	8	5,1
Gender		
Male	30	19,1
Women	127	80,9
Marital status		
Single	34	21,7
Married	123	78,3
Education		
Non Professional	2	1,3
Professional	155	98,7
Years of service		
New (<5 years)	34	21,7
Old (≥5 years)	123	78,3
Training		
Ever Followed	45	28,7
Never Followed	112	71,3

Table 1. Distribution of Respondents by Characteristics of Age, Gender, Marital Status,Education, Working Period, Training Attended at Undata Hospital Palu

Source: Primary Data 2016

Table 1 shows that respondents are generally classified as mature age of 131 respondents (83.4%), female is 127 respondents (80.9%), marital status mostly married a number of 123 respondents (78.3%), education of some large Professional nurses amounted to 155 respondents (98.7%), most of them were classified as long as 123 respondents (78.3%) and most of them never attended training for 112 respondents (71.3%).

Table 2. Distribution of Respondents	Based on	Research	Variable In	Undata Hos	spital
	Palu				

Room	Ν	Variable	Р
	Application	* 0.032	
In patient	116	153 (115-196)	
Critical	25	155 (122-203)	
Emergency	16	137 (115-180)	

\* Test of *Kruskal-Wallis*. Post hoc Mann-Whitney test (Application of Patient Safety Culture ): Inpatient X Critical p = 0.463; Inpatient X *Emergency* p = 0.011; Critical X *Emergency* p = 0.049

Table 2 shows that the p = 0.032. Because p < 0.05, it can be concluded that there are differences in the application of patient safety culture between rooms. To find out which rooms have differences, a *post hoc* analysis (*Mann-Whitney*) was carried out .

With the *Mann-Whitney* test, the results showed that statistically there was no difference in the application of patient safety culture between inpatient and critical rooms because p = 0.643 (p> 0, 05). Clinically, there is no difference in the implementation of patient safety culture between inpatient and critical rooms because the difference in the application of patient safety culture is less than 15. Statistically there is a difference in the application of patient safety culture between inpatient and *emergency* rooms because p = 0.011 (p <0, 05). Clinically, there are differences in the application of patient safety culture between inpatient and *emergency* rooms because the difference in the application of patient safety culture is more than 15. Statistically there is a difference in the application of patient safety culture between critical rooms and *emergency* rooms because p = 0.049 (p<0.05). Clinically, there are differences in the application of patient safety culture between critical rooms and *emergency* rooms because the difference in the application of patient safety culture is more than 15.

## DISCUSSION

This study is no difference in the application of the safety culture in the inpatient unit, critical space and space *emergency*. S ecara statistical differences patient safety culture implementationis criticalspace *emergency* and inpatientward *emergency*. The results of theresearch on the univ ariat analysis showed that most nurses at Undata Hospital Palu were classified as professional education (DIII and S1 + Ners) of 98.7%, with the presentation classified as still lacking who had attended training, namely 28.7%.

The difference in the application of patient safety culture in each room is caused by differences in human resources (abilities and expertise) and motivation. The ability and expertise of a person can be assessed from the extent to which the resulting performance is, of course, inseparable from education and training factors. The higher the level of education and training undertaken by many to be the better behavior of the nurses in the implementation of patient safety culture .

Human resources (HR) is one of the pillars in an organization. Human resources as a production factor and a major element in creating patient safety. Therefore, health service agencies need to ensure the availability of competent and professional human resources. Education and training is one form of effort to improve the knowledge and skills of human resources in order to ensure safe and quality services (Cahyono, 2008).

Nurses' compliance in implementing patient safety programs is a reflection of the nurse's performance, while the application of patient safety culture itself is a description of the nurse's performance behavior. Nurse performance is influenced by three factors, namely individual factors, psychological factors and organizational factors . Education and training are part of the individual factors of organizational factors (Robbins & Judge, 2008)

Based on the results of research and supporting theories, it can be concluded that the differences in the safety culture of patients in inpatient, critical and *emergency* rooms are caused by differences in abilities and expertise.

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