

THE INFLUENCE OF LEADERSHIP AND WORK ENVIRONMENT ON PATIENT SAFETY CULTURE

(CASE STUDY IN THE INPATIENT CARE FACILITY OF SITI AISYAH REGIONAL HOSPITAL, LUBUKLINGGAU CITY)

Nurisa Elistia¹, Dadang Kusnadi², Albert Hendarta³

¹*Master of Management Study Program, Hospital Management Concentration, Bandung Islamic University, Indonesia*

²*Master of Management Study Program, Hospital Management Concentration, Bandung Islamic University, Indonesia*

³*Master of Management Study Program, Hospital Management Concentration, Bandung Islamic University, Indonesia*

ABSTRACT

Patient safety is a global issue with many reports of patient lawsuits for medical errors. Patient safety culture is able to improve the quality of services received by patients. An important concept of patient safety is the existence of leadership in the hospital that can optimize the patient safety movement by forming cooperation between all policy makers and officers in the hospital. This study is a cross-sectional study with a quantitative descriptive approach. The sample used is the total sample that meets the inclusion criteria with a total of 50 respondents consisting of nurses and midwives at the Hospital. The researcher determines the sampling by determining special characteristics that are in accordance with the objectives of the study, so the sample size in the study that meets the criteria is 50 people. Validity test using the product moment correlation technique and reliability test using the cronbach alpha formula, and the data obtained will be used to test the hypothesis using multiple linear regression. The purpose of this study is to analyze the influence of leadership style and work environment on patient safety culture in the Hospital. The results of the study indicate that there is a partial or simultaneous influence of the work environment and leadership style on the Hospital Patient Safety Culture with a hypothesis result of 0.000.

Keyword : *Leadership Style, Work Environment and Patient Safety Culture*

1. Introduction

Patient safety is the most important global issue today where there are now many reports of patient lawsuits for medical errors that occur in patients. Patient Safety is a system that makes patient care safer, including risk assessment, identification and management of patient risk, reporting and analysis of incidents, the ability to learn from incidents and their follow-up, and implementation of solutions to minimize risks and prevent injuries caused by errors due to carrying out an action or not taking action that should have been taken. Patient Safety Incidents, hereinafter referred to as Incidents, are any unintentional events and conditions that result in or have the potential to result in preventable injury to patients.

Safety culture was initially determined by the Advisory Committee on Safety in Nuclear Installations of Thailand as "a product of individual and group values, attitudes, perceptions, competencies, and behavioral patterns that determine commitment and style and skills, health and safety management of the organization. Organizations with a positive safety culture are characterized by communication founded on mutual trust, with shared perceptions about the importance of security, and with confidence in the success of preventive measures..

Patient safety culture in healthcare organizations is becoming increasingly important. For improve the quality of services received by patients. Patient safety is a high priority in health organization. Reviewing patient safety culture regularly enables hospital managers to understand patient safety health care and cues for hospital and patients about management's commitment to safety. Evidence suggests that hospital staff more likely to complete tasks reciprocally and have high work morale if health care managers are committed to creating a better patient safety culture.

Hospitals are health service facilities that are needed when someone is sick and needs help with the aim of saving the patient's condition. With the passage of time and the development of science and technology, hospitals are not only places to save patients. Various services can be accessed by patients who need help. Patients who need comprehensive and intensive assistance for 24 hours can access inpatient services. Inpatient care has an important role in care services for observation, diagnosis, treatment or other health care efforts. Patient safety in hospitals involves the participation of all health workers, especially nurses. Nurses as one of the health workers who have a fairly dominant number in hospitals, namely 50 to 60% of the number of existing health workers. Nursing care services provided to patients are integrated services from other health services and have a fairly important role in realizing patient health and safety.

According to the incident from the IOM (Institute of Medicine) in America in 1999 openly stated that at least 44,000 even 98,000 patients died in hospitals in one year due to medical errors that could have been prevented. This situation caused lawsuits experienced by hospitals to increase. This quantity exceeds deaths from traffic accidents, breast cancer and AIDS. The report presented research in several hospitals in Utah and Colorado as well as New York about Adverse Events (AEs). In Utah and Colorado, AEs were found to be 2.6%, 6.6% of which caused death, while in New York the AE figure was 3.7% with a mortality rate reaching 13.6%. The death rate due to KTD in hospitalized patients in America, which amounts to 33.6 million per year, ranges from 44,000 to 98,000 per year. From the WHO (World Health Organization) publication in 2004, which collected hospital research figures in various countries: America, England, Denmark, and Australia, KTD was found to range from 3.2 to 16.6%.

The above report has moved the world health system to change the paradigm of health services towards patient safety. This movement also has an impact on health services in Indonesia through the establishment of the KKPRS (Hospital Patient Safety Committee) in 2005. In 2007, the KKPRS reported 145 Patient Safety Incidents (IKP) consisting of 46% Unexpected Events (KTD), 48% Near Misses (KNC), and 6% others. Based on the province, DKI Jakarta was found to be in the highest position, 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%. Based on the National Map Report on Patient Safety Culture (PERSI Congress September 2007), errors in administering medication were ranked first (24.8%) of the top 10 reported incidents.

Nurses are health workers who have a very important role in the patient's treatment process. Nurses have a primary role in improving and maintaining client health by encouraging clients to be more proactive if they need services during treatment. Nurses try to help clients build a correct and clear understanding of the treatment they are undergoing, provide education to patients and their families for every service provided and participate in decision-making about the services provided together with other health workers.

The occurrence of a patient safety incident in a hospital will have a detrimental impact on the hospital, staff, and patients in particular as recipients of services. Other impacts that arise are reducing the level of public trust in health services. Low quality or quality of care provided, because patient safety is part of quality.

Patient safety is a cultural change influenced by Learning Culture. Individual conditions cannot be changed but various changes in individual working conditions can be attempted to improve their performance in patient safety. Working conditions that lead to a culture of safety will optimize the role and performance of individuals in supporting patient safety programs.

Patient safety standards as stated in the Indonesian Minister of Health Regulation No. 11 of 2017 include the role of leadership in improving patient safety. Research in various hospitals reports that supportive leadership has a positive impact on safety motivation which then increases safety levels.

And the results of the study by Setiowati, D. 2013 "The Relationship between Effective Head Nurse Leadership and Patient Safety Culture by Nurses at RSUPN Dr. Cipto Mangunkusumo Jakarta, University of Indonesia" showed that leadership has a positive influence on patient safety culture. From the results of the study by Beginta, R. 2012. "The Influence of Patient Safety Culture, Leadership, Work Team, on the Perception of Reporting Service Errors by Nurses in the Inpatient Unit of the Bekasi Regency General Hospital in 2011, Jakarta: University of Indonesia." which states that Leadership together with patient safety culture and Leadership influences perception.

From various research results that the author found, it showed positive results that there is an influence on the categories of characteristics, leadership and work environment on patient safety culture.

Interviews with the Patient Safety Committee of Siti Aisyah Hospital, Lubuklinggau City (KKP-RS) in January 2021 found that nursing staff at the Hospital had not yet made reporting a top priority in supporting the implementation of the seven steps towards patient safety that had been made a policy.

The lack of a common perception regarding filling out the incident reporting format, the selection of incidents that were not very appropriate, and the fear of being blamed if reporting an incident were identified as obstacles found by the KKP-RS Team in relation to the involvement of nurses in implementing patient safety programs.

Nurses often need to be motivated to report incidents they find and the reporting process which is often only verbal also makes it difficult to monitor incidents in the Hospital. In this case the role of leadership is very much needed.

The suboptimal values of awareness in building a patient safety culture related to the role of nurses through increasing competence in supporting the implementation of patient safety programs that must be continuously reminded is also a condition that is felt to be fixed. This is related to the problem of training needed.

Siti Aisyah Hospital, Lubuklinggau City was inaugurated in 2012. Since the implementation of patient safety culture was declared in the Hospital in 2015, it was recorded that until December 2018 the number of Patient Safety Incidents was 171 cases. Of that number, around 34.5% of cases were related to medication error and 65.5% other cases such as patient falls, mistaken identity, wrong laboratory results, and others. Based on these Patient Safety Incidents, those classified as Adverse Events (KTD) were around 18%, Non-Injury Events (KTC) were around 9.4%, and Near Injury Events (KNC) were around 56%. Of all patient safety incidents that occurred in the Hospital, around 60% occurred in the treatment room.

An important concept of thinking about patient safety is the existence of Leadership in hospitals, which can optimize patient safety movements by forming cooperation between all policy makers and officers in the hospital. In hospitals, there are still problems in the implementation of less than optimal leadership, namely leaders at the level of those in charge of shifts to not motivating and giving examples to nurses, especially in implementing a patient safety culture. This is in accordance with the results of research by Singer et al (2005), where the first thing that must be considered in implementing a patient safety culture is the leader's commitment to safety. Commitment can be started by creating goals, missions and hospital strategies that are implemented in accordance with improving quality and patient safety (Nabilla & Samian, 2014). Leadership produces a culture of safety, a leader must always make continuous efforts to prevent injury to patients and hospital staff (Krausse & Hidley, 2009). The board of directors, managers, and clinical service coordinators must work together seriously, be visible and have a high commitment to create a consistent, high-quality service system.

The leadership that is currently widely used is transformational leadership. Transformational leadership is leadership that anticipates future trends, teaches new possibilities and builds organizations into communities of people who feel challenged. Basically, transformational leadership is oriented towards the future, meaning it concerns "change". This type of leadership helps a group move to see the fundamental differences between the existing reality and what should be done.

Health workers who stated the errors were general practitioners, room heads, care team leaders, implementing nurses, and midwives. Meanwhile, the possible causes of errors according to them were not understanding the information,

high work volume, lack of knowledge, lack of sleep/rest, lack of caution, misinformation, other activities, lack of facilities, and some forgot the cause.

Latent errors related to patient safety incidents include the external environment, management, social or organizational environment, physical environment, interactions between humans and systems. Safety culture is part of latent errors related to management or leadership factors. The key to preventing injuries in nursing care is risk identification. This is highly dependent on a culture of trust, honesty, integrity, and openness to communication in the nursing care system. In the case of the Hospital, the Leadership did not provide enough encouragement and guaranteed the implementation of an integrated patient safety program and Leadership that did not motivate nurses because the praise given by the employer when the work was completed in accordance with the established procedures would provide its own motivation for nurses.

Based on the Patient Safety Incident Reporting Guidelines (2008) In filling in the direct cause or root cause of the problem, contributory factors can be used (can choose more than 1), namely: External Factors / outside the Hospital, Organizational and Management Factors, Work Environment Factors, Team Factors, Officer / Staff Factors, Task Factors, Patient Factors, Communication Factors, Near Miss Incident Control Strategy. The patient safety program is a program that aims to further improve the service process, because most KTD can be errors in the service process that can actually be prevented through a comprehensive service plan involving patients based on their rights (Ministry of Health of the Republic of Indonesia, 2006). The problems found at Siti Aisyah Hospital, Lubuklinggau City were that suboptimal coordination resulted in the absence of a common perception regarding filling in the incident reporting format, the selection of incidents that were not very appropriate, and the fear of being blamed if reporting an identified incident.

The results of the study according to Johansen et al (2020) entitled "Exploration of the Meaning of Healthy Work Environment for Nurses" show that the psychological work environment greatly influences nurses' motivation in providing nursing care. Nurses stated that they need to feel appreciated and receive meaningful recognition.

Based on the data and background above, it shows that health services that prioritize patient safety require optimal nursing roles. The implementation of patient safety is something that is very complex and can be influenced by many factors. This is related to the nature of the services and care provided by nurses which have their own characteristics. Direct contact between nurses and patients and ongoing interactions and interdependence with other professional health workers within the framework of partnership and coordination require nurses to play their important role as advocates for patients to ensure the safety of care received by patients. Various factors that may contribute to the implementation of patient safety programs need to be anticipated so that the role of nurses can be more optimal in implementing patient safety programs.

The vision of Siti Aisyah Regional Hospital in Lubuklinggau City is "The realization of Siti Aisyah Regional General Hospital as a Professional Leading Hospital that prioritizes patient satisfaction and safety.". The mission of the Siti Aisyah Regional Hospital in Lubuklinggau City includes: **Improving the quality of hospital services that are oriented towards quality and patient safety**”with the basis of the vision and mission, the implementation of patient safety programs in nursing services is one of the important aspects in the quality of nursing services that affect the overall quality of health services in hospitals. The results of the study showed that although the patient safety program has been implemented, the number of KTD and KNC still exists. The tendency for KTD and KNC to occur is a phenomenon that needs to be anticipated so that existing conditions can guarantee that patients are always in a safe service context. Patient safety management in hospital services is useful for reducing the level of disability or error in providing services to patients, therefore patient safety is a top priority to be implemented in hospitals.

In hospital services as stated in Law Number 47 of 2021, hospitals are obliged to provide safe, quality, anti-discrimination, and effective health services by prioritizing patient interests in accordance with hospital service standards, therefore hospitals are required to implement patient safety standards. Meanwhile, in the inpatient unit of Siti Aisyah Hospital, Lubuklinggau City, there have been patient safety incidents that reached 60% of the total incidents, even though nurses are the spearhead in implementing patient safety in hospitals. This shows that in providing nursing care services to patients in the inpatient room, patient safety aspects have not been prioritized optimally. Based on the description above, the things that influence patient safety culture are individual characteristics, leadership and Leadership, but so far the management of Siti Aisyah Hospital, Lubuklinggau City has not been able

to properly prevent the occurrence of these incidents. By knowing the causes of Patient Safety Culture by nurses in the inpatient unit, it will be easier to prevent the occurrence of Patient Safety Culture.

Based on the description and conditions that have been outlined previously, the researcher feels the need to conduct an analysis regarding **""The Influence of Leadership and Work Environment on Safety Culture (Case Study at Siti Aisyah Regional Hospital, Lubuklinggau City)""**.

1.1 Identification of problems

In accordance with the research background, the problems in this research can be identified as follows:

1. How is the Leadership in the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City?
2. How is the working environment at the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City?
3. How is the patient safety culture in the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City?
4. Is there an influence of leadership on patient safety culture in the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City?
5. Is there an influence of the work environment on safety culture in the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City?
6. Is there an influence of leadership and work environment on patient safety culture simultaneously in the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City?

1.2 Research purposes

The aim of this research is to:

1. Leadership Analysis at the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City, South Sumatra in 2021
2. Analysis of the Work Environment at the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City, South Sumatra in 2021
3. Knowing the culture of patient safety in the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City, South Sumatra in 2021
4. Analysis of the Influence of Leadership on Patient Safety Culture in the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City.
5. Analysis of the influence of the work environment on patient safety culture in the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City.

6. Analysis of the Influence of Leadership and Work Environment on Patient Safety Culture Simultaneously in the Inpatient Installation of Siti Aisyah Regional Hospital, Lubuklinggau City.

1.3 Research Scope

This research was conducted at the Siti Aisyah Regional Public Hospital, Lubuklinggau City in Lubuklinggau City, specifically regarding the inpatient installation nurses.

2. Literature Review

2.1 Hospital

Hospitals are health service institutions for the community with their own characteristics influenced by the development of health science, technological advances, and the socio-economic life of the community that must continue to be able to improve services that are of higher quality and affordable to the community in order to achieve the highest level of health. In order to improve the quality and reach of Hospital services and regulate the rights and obligations of the community in obtaining health services, comprehensive regulations are needed regarding the organization of Hospitals.

According to the Republic of Indonesia Law Number 47 of 2021 concerning hospitals, hospitals have the task of providing comprehensive individual health services. Comprehensive health services are health services that include promotive, preventive, curative, and rehabilitative.

2.2 Leadership

Robbins and Judge (2015) stated that leadership is the ability to influence a group towards achieving a vision or set of goals. Kreitner and Kinicki (2010) define leadership as the process by which an individual influences others to achieve common goals. McShane and Glinow(2010)states that leadership is about influencing, motivating, and enabling others to contribute towards the effectiveness and success of the organization of which they are members. Leadership is the process of influencing and supporting others to work enthusiastically towards the achievement of goals.(Newstrom, 2011).

Transformational Leadership is a leadership perspective that explains how leaders transform teams or organizations by creating, communicating and modeling a vision for the organization or work unit and inspiring workers to strive to achieve that vision.

Bass(2018)view transformational leadership as different from charismatic leadership in several aspects. Charisma is the most important part of transformational leadership, but charisma alone is not sufficient for transformation. Followers may identify with a famous and charismatic person and imitate the person's behavior and appearance, but they are rarely motivated to transform their own interests for the benefit of a strong reason and identification with the leader. Transformational leaders try to empower and elevate followers, while charismatic leaders tend to keep followers more dependent and instill personal loyalty rather than commitment to ideals.

2.3 Work Environment

The work environment is the physical environment where employees work that affects their performance, safety and quality of work life. A conducive work environment provides a sense of security and allows employees to work optimally. The work environment can affect employee emotions, if employees enjoy the work environment where they work, then the employee will feel at home in their workplace to carry out activities so that work time is used effectively and optimally, employee work performance is also high. The work environment includes work relationships formed between fellow employees and work relationships between subordinates and superiors as well as the physical environment where employees work. (Heizer, 2015)

According to Newstrom (2016) Work condition relates to the scheduling of work-the length of work days and the time of day (or night) during which people work. Which means that working conditions relate to the scheduling of work, the length of work in a day and the time of day or night during which people work. Therefore, working conditions consisting of factors such as physical conditions, psychological conditions, and temporary conditions of the work environment, must be considered so that workers can feel comfortable.

2.4 Culture

Hawkins (2012) said that culture is a complex that includes knowledge, beliefs, art, morals, customs and other abilities and habits that humans have as part of society.

2.5 Patient Safety Culture

Patient Safety is a system that makes patient care safer, including risk assessment, identification and management of 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 injuries caused by errors due to carrying out an action or not taking action that should have been taken. Patient Safety Incidents, hereinafter referred to as Incidents, are any unintentional events and conditions that result in or have the potential to result in preventable injury to patients.(Regulation of the Minister of Health of the Republic of Indonesia No. 11, 2017)

According to the Agency of Healthcare Research and Quality (AHRQ) 2016 "The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measures.

3. Research Methods

3.1 Design

This study uses a survey method, which is a study that takes samples from a population using a questionnaire as the main data collection tool to study the symptoms or phenomena observed. This study uses a causality design based on the cross-sectional time dimension, which is the measurement of independent and dependent variables carried out at the same time. The unit of analysis is the individual, the data analysis method uses regression.

This study was conducted to explain the influence of three variables, namely independent variables including work environment (X1), transformational leadership style (X2) with the dependent variable, namely Patient Safety Culture (Y). The type of data used is quantitative data. The type of research used is Quantitative Causality.

The relationship between research variables is described in the following constellation:

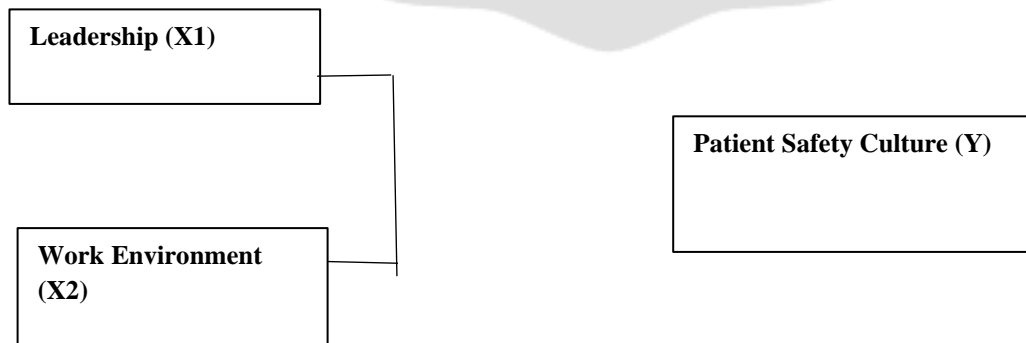


Figure I Research Constellation Framework

3.2 Sample

Health workers who will be targeted as research samples use a 5% error rate. To calculate the determination of the number of samples from a certain population that is developed, sampling uses the Slovin formula. The calculation of sampling using the Slovin formula is as follows:

$$n = \frac{N}{N \cdot (d^2) + 1}$$

Where:

n = sample size

N = Population

d = real level or error limit

In determining the number of samples to be selected, the author uses an error rate of 5%, because in every study it is impossible for the results to be 100% perfect, the greater the error rate, the smaller the sample size. The population used is 70 people, with the calculation above then:

$$\begin{aligned} n &= \frac{70}{70 \cdot (0.0025) + 1} \\ &= \frac{70}{1.175} \\ &= 50,142 \text{ or } 50 \text{ people} \end{aligned}$$

The sample criteria in this study are:

- a. Inclusion Criteria: Respondents who have a profession as a nurse working in the inpatient installation of Siti Aisyah Regional Hospital, have more than 1 year of work experience.
- b. Exclusion Criteria: Respondents who work in the inpatient installation of Siti Aisyah Hospital, Lubuklinggau City, are nurses but hold structural positions, nurses who are on leave and have a work period of less than 1 year.

The population size is 70 people, so the sample size in the study that meets the criteria is 50 nurses who meet the sample criteria.

3.3 Research Instruments

Primary data collection uses questionnaires filled out by each respondent and carried out by research assistants to assist in distributing questionnaires and data completeness.

Demographic data questionnaire is used to see the characteristics of respondents. This instrument consists of age, gender, marital status, length of service and education.

Regarding the measurement scale in compiling the questionnaire, the researcher used a modified Likert scale with an interval scale of 1 to 4, 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree.

in this study it is reliable or consistent in measuring each variable, so it can be used as a research instrument.

4. DISCUSSION

4.1 Results

The characteristics of this study show that of the 50 respondents studied based on gender, it was found that male gender was a larger proportion than female employees. Most employees were in the 20-35 year age group (64%). Of the 50 respondents studied based on education, the majority were S1 educated, at 56%. Furthermore, respondents studied based on length of service, at 78% of respondents have worked for 1-5 years and 22% have worked for >5 years.

In this study, reliability testing was conducted using Cronbach Alpha. Reliability is a tool to measure a questionnaire which is an indicator of a variable. A questionnaire is said to be reliable if the respondent's answers to the statements are consistent or stable over time. Testing with the criteria if r count < 0.60 means unreliable and if r count > 0.60 means reliable.

TABLE 1 Reliability Test Results

Variables	N of Items	Cronbach's Alpha	Cut off	Decision
Leadership (X1)	10	0.799	0.60	Reliable
Work Environment (X2)	10	0.861	0.60	Reliable
Patient Safety Culture (Y1)	15	0.862	0.60	Reliable

Based on the calculation results above, the Cronbach's Alpha value of each variable was above 0.60, so it can be concluded that all questionnaires in this study are reliable or consistent in measuring each variable.

A. Hypothesis Testing

The method used to analyze in this study is the multiple linear regression method between independent variables and dependent variables.

The F test is known as a simultaneous test and is conducted to determine the effect of all independent variables simultaneously on the dependent variable. This test is conducted through observation of the significance value used in this study of 5% or 0.05, where variable X is said to have a simultaneous effect on variable Y if the significance value is < 0.05 . The results of the F test can be seen in the following table:

TABLE 2 F Test Results (Anovaa)

Model	Sum Of Squares	Df	Mean Square	F	Sig.
REGRESSION	2216.323	3	738.77	36.46	.000b
RESIDUAL	4376.454	216	20,261		
TOTAL	6592.777	219			

(Source: Data processed using SPSS)

a. Dependent Variable: Patient Safety Culture

b. Predictors: (Constant), Leadership, Work Environment,

TABLE 3 t-Test Results

Model	Unstandardized Coefficients		Std. Coef	t	Sig.	Information
	B	Std. Error	Beta			
(Constant)						
Leadership Style (X1)	.724	.079	.526	9.141	.000	Hypothesis 1 Accepted
Work Environment (X2)	.275	.048	.362	5,738	.000	Hypothesis 2 Accepted

From the results of data processing in the t-test, the results obtained show that:

- 1) Testing the influence of the Leadership variable (X1) on the Patient Safety Culture variable (Y).
 H1: Leadership influences the Patient Safety Culture of employees in **R Hospital**. With a probability of 0.05 and from the results of Multiple Regression, the calculated t is 9.141. Based on the results of data processing, the probability value of t-count is 0.000 < 0.05, so Ho is rejected or Ha is accepted, so it can be concluded that the Leadership variable (X1) has a significant effect on Patient Safety Culture (Y).
- 2) Testing the influence of the Work Environment variable (X2) on the Patient Safety Culture variable (Y).
 H2: Work environment influences patient safety culture in **Hospital**. With a probability of 0.05 and from the results of Multiple Regression, the calculated t is 5.378. Based on the results of data processing, the probability value of t-count is 0.000 < 0.05, so Ho is rejected or Ha is accepted, so it can be concluded that the Work Environment variable (X2) has a significant effect on Patient Safety Culture (Y).

And the results of the R2 test can be seen in the following table:

TABLE 4 R test results₂

R	R Square
.923a	.841

(Source: Data processed using SPSS)

- a. Predictors: (Constant), Leadership, Work Environment
- b. Dependent Variable: Patient Safety Culture

The R2 value presented in the table above shows a value of 0.841 or 84.1%. Based on the table it can be seen that **Patient Safety Culture influenced by Leadership and Work Environment, by 84.1%** while the rest is influenced by other factors outside the variables tested in this study.

4.2 Discussion

4.2.1 H1. Leadership towards Patient Safety Culture

Based on the research results it was found that H_0 was rejected and H_a was accepted, which means that there is an influence between leadership style and patient safety culture.

The success of an organization in achieving its goals is highly dependent on the quality of the leadership in the organization. The quality of leadership in an organization is also reflected in the leader's ability to: understand the factors that are the strengths of the organization, recognize the weaknesses of the organization, take advantage of existing opportunities, eliminate various threats, be proactive and anticipatory towards change, encourage subordinates to work with optimum efficiency, effectiveness and productivity, and create a conducive working climate. Here is the definition of leadership style:

Rivai (2010) stated that Leadership Style is a set of characteristics used by leaders to influence subordinates so that organizational goals are achieved or it can also be said that leadership style is a pattern of behavior and strategies that are preferred and often applied by a leader. Leadership style that shows, directly or indirectly, about a leader's belief in the abilities of his subordinates. This means that leadership style is behavior and strategy, as a result of a combination of philosophy, skills, traits, attitudes, which are often applied by a leader when he tries to influence the performance of his subordinates.

From the research results of Setiowati, D. 2010 with the title "The Relationship between Effective Leadership of Head Nurses and Patient Safety Culture by Implementing Nurses at Dr. Cipto Mangunkusumo National Hospital, Jakarta, University of Indonesia" shows that leadership has a positive influence on patient safety culture.

The results of the study are in line with the Theory and previous research results. A strong safety culture requires leadership that includes components such as being able to set and communicate a clear safety vision, respecting and empowering staff to achieve the vision. Other components include being actively involved in efforts to improve patient safety, being a role model for subordinates, focusing on system problems rather than individual errors, and continuing to improve the system.

To achieve the goal optimally, managers, leaders including room heads must synergize with employees at various levels, therefore the most appropriate leadership model is the transformational leadership model, where leaders and their subordinates strive to achieve a higher level of morality and motivation. This is different from the transactional leadership model to motivate subordinates to carry out their responsibilities, transactional leaders rely heavily on the system of giving rewards and punishments to their subordinates.

The implementation of patient safety culture mainly focuses on human resource management procedures and performance behavior in patient safety related to supervision, individual discipline and effective leadership. This shows that to build a strong safety culture, it is necessary to be supported by strong leadership, motivation and individual discipline in patient safety performance and human resource management systems. Leaders have the authority to implement the applicable system in the organization, therefore leadership style, communication techniques and managerial skills are things that really need to be considered in creating a conducive work atmosphere as an effort to create a patient safety culture.

4.2.2 H2: Work Environment on Patient Safety Culture

Based on the test results it was found that H_0 was rejected and H_a was accepted, which means that there is an influence between the work environment and patient safety culture.

Of the 50 respondents who answered agree, 60% of the total respondents, this shows that respondents stated that the work environment is one of the things closest to a person in carrying out their work. The work environment around employees needs to be considered in order to have a good impact on a person's performance. A sense of comfort and security will be created because of an adequate work environment. From the physical work environment factor, the cleaning service at the Hospital, the cleaning service is not carrying out its duties properly, and the security officers are still not optimal in their duties.

The results of the study according to Johansen et al (2020) entitled "Exploration of the Meaning of Healthy Work Environment for Nurses" show that the psychological work environment greatly influences the motivation of nurses in carrying out Nursing Care. Nurses stated that they need to feel appreciated and receive meaningful recognition. The work environment can be interpreted as all the tools faced, the surrounding environment where a person works, their work methods, as an influence on their work both as individuals and as a group. The work environment is the environment where employees do their daily work. From the several definitions above, it can be concluded that the work environment is everything around workers/employees that can affect employee job satisfaction in carrying out their work so that maximum work results will be obtained, where in the work environment there are work facilities that support employees in completing tasks assigned to employees in order to improve employee work in a company.

4.2.3 H3. Leadership, Work Environment towards Patient Safety Culture

Based on the research results, it is known that the Sig. value is 0.000 and the calculated F value is 36.462 because the sig. value is $0.000 < 0.05$ and the calculated F value is $>$ from the F table ($36.462 > 2.70$), then it can be concluded that the hypothesis (H1) is accepted in other words, leadership and work environment simultaneously influence Patient Safety Culture in Hospitals.

Knowledge is a factor that is in the first row that has a direct impact on service quality. Individual knowledge includes the qualities that the individual brings to the job such as skill level, experience, intelligence, detection ability, education, and training, and even attitudes such as alertness, fatigue, and motivation. Leadership that shows, directly or indirectly, about a leader's belief in the abilities of his subordinates. This means that leadership is behavior and strategy, as a result of a combination of philosophy, skills, traits, attitudes, which are often applied by a leader when he tries to influence the performance of his subordinates. Many studies suggest that the existence of a team makes goals achieved more effectively than traditional hierarchical structures because decision making is faster and more efficient. Dramatic changes can be seen with support for input and feedback to employees.

The results of Setiowati's research, D. 2016 showed that leadership has a positive influence on patient safety culture. From the results of Beginta's research, R. 2012 stated that teamwork together with patient safety culture and leadership style affect perception. In the knowledge category according to the results of Ratna Irma Hidayati's research, 2015 which showed the results of internal factors of nurses and midwives that had a significant influence on the implementation of patient safety culture were knowledge and attitude.

It can be concluded that the hypothesis built in this study has similarities and strengthens previous research., almost every medical action has potential risks, no doctor or other health worker wants their patient to be harmed. Therefore, patient safety is important and is continuously socialized in the health facility environment.

Patient safety is an important issue in a healthcare facility, and in hospitals patient safety is also an important point that is assessed in the accreditation process.

5. CONCLUSION

Based on the results of the study and its discussion, the researcher can draw several conclusions as follows: The average value for the variable is 43.85 and is included in the High category. This means that respondents have a Good Occupational Safety Culture. The highest index is in the indicator, namely in our unit, errors that occur are used to make positive changes with an index value of 46.4. This shows that the Patient Safety Culture in the Hospital is oriented towards solutions to positive problem solving so that nurses can improve their performance optimally.

The average value for the Work Environment variable is 43.5 and is included in the High category. This means that according to respondents, the work environment in the hospital is quite Good. The highest index is found in the indicator, namely Attention from superiors in the work environment is very motivating and employees are enthusiastic about working with an index value of 46.8. This shows that the non-physical work environment greatly influences the motivation of nurses in implementing a patient safety culture.

The average value for the Leadership variable is 43.78 and is included in the High category. This means that the Leadership in the hospital is good enough so that employee work motivation towards the Hospital Patient Safety Culture is good enough. The highest index is in the indicator The leader advises me/staff to find new ways to do the task with an index value of 44.4. This shows that the leadership in the Hospital shows transformational leadership, namely by motivating hospital nurses in solving problems by finding other ways from nurse initiatives in related units.

Leadership style has a significant effect on patient safety culture. This means that the better the leadership spirit of the leader in motivating nurses, the target of patient safety quality indicators can be achieved. The work environment has a significant effect on patient safety culture. This shows that the better the work environment felt by nurses in carrying out their duties and the minimal conflict between nurses, the patient safety culture can be maintained.

Hospitals are expected to provide feedback from each reported incident because reporting can only be beneficial if it is responded to constructively and produces feedback from the analysis of findings. The existence of feedback from reported incidents is expected to provide data to provide corrective action to the patient safety system that has been implemented. Some ways to provide feedback include: focusing on learning about incidents with root causes, training on reporting, internal reporting competitions, creating easy tools for recording incident reports, cultivating reporting as an effort to improve quality rather than looking for individual mistakes.

Hospital management makes patient safety a culture in all hospital environments. It begins with the habit of reporting culture and learning culture from every incident that occurs. Reporting culture -p; and learning culture are the initial foundations in building a patient safety culture. Reports are the beginning of the learning process to prevent the same incident from happening again. So that all events or incidents can be documented properly, so that analysis and corrective or preventive actions can be carried out. The breath of patient safety is a culture of learning, learning from incidents that occurred in the past to then prepare steps so that similar incidents do not happen again, either in the same unit or in other units in one hospital or in other hospitals. This learning process is not a simple thing, starting from the incident reporting process, continued with incident analysis, until the root of the problem is found as the basis for redesigning a system so that safer patient care is achieved in the hospital. If we pay attention, the process above is a cycle, the initial movement of which begins with the reporting system, the reporting system is the heartbeat of patient safety.

Hospital Management is expected to commit to implementing a reporting culture and learning culture for the sake of improving patient quality and safety. With a good reporting culture, hospital management can learn from events or incidents that have occurred and are able to reduce or prevent incidents that will occur.

6. REFERENCES

- [1] Agency for Healthcare Research and Quality, 2016, Hospital Survey on Patient Survey Culture. (On line)
- [2] Arikunto S, 2010, Research procedures: a practical approach, Jakarta: Rineka Cipta
- [3] Prof. Dr. Charles JP Siregar, M.Sc 2003, Hospital Pharmacy Theory & Application, Jakarta: EGC
- [4] Ministry of Health, 2004, Decree of the Minister of Health of the Republic of Indonesia Number 1027/MENKES/IX/2004 concerning Pharmaceutical Service Standards in Pharmacies, Jakarta.
- [5] Emzir, 2010, Qualitative Research Methodology for Data Analysis, Jakarta: Raja Grafindo Persada.
- [6] Ery Rustiyanto, 2012, Integrated Hospital Management Information System, Yogyakarta; Gosyen Publishing.
- [7] Gita I Made, 2004, Evaluation of Outpatient Prescription Services Related to Workforce Productivity at the Pharmacy Installation of East Jakarta Islamic Hospital. Thesis, Yogyakarta: Gadjah Mada University.
- [8] Dr. dr. H.Boy S. Sabarguna, MARS, 2009, Student Handbook for Hospital Management Jakarta: Sagung Seto.
- [9] JCI, 2011, Hospital Accreditation Standards, Switzerland : ISO.
- [10] Kenneth C. Laudon & Jane P. Laudon, 2007, Managing Digital Firm, New Jersey : Pearson Education, Inc.

- [11] Prof. Dr. Muhardi, 2011, Operations Management: A Quantitative Approach to Decision Making, Bandung: Refika Aditama.
- [12] M. Fais Sastranegara, 2014, Organization and Management of Health Services: Theory and Application in Health Center and Hospital Services, Jakarta: Salemba Medika.
- [13] MINISTER OF HEALTH REGULATION OF THE REPUBLIC OF INDONESIA NO. 30 OF 2014 concerning Pharmaceutical Service Standards in Community Health Centers, Jakarta.
- [14] Rizky, Soetam, Basic Concepts of Software Engineering, 2011, Jakarta: Prestasi Pustaka.
- [15] Stephen P. Robbins & Timothy A. Judge, 2015, Organizational Behavior, Pearson Education, Inc.
- [16] Prof. Dr. Sugiyono, 2018, Educational Research Methodology Quantitative, Qualitative and R&D Approaches, Bandung: Alfabeta.
- [17] Sukmandinata, 2006, Qualitative Research Methods. Bandung: Graha Aksara.
- [18] Prof. Dr. Tjutju Yuniarsih, Dr. Suwatno, Msi, 2016, Human Resource Management, Bandung: Alfabeta.
- [19] Tri Murwanto, Wahyul Amien Syafei, R.Rizal Isnanto, 2013, Design and Construction of a Web-Based Pharmacy Information System (Case Study at Mutiara Pharmacy, Banyumanik Semarang): Semarang.

