

# EFFECT OF PERCEPTION OF PATIENT SAFETY CULTURE DIMENSIONS ON THE WILLINGNESS TO REPORT PATIENT SAFETY INCIDENT

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**Abstract:** The purpose of this study was to determine the effect of the perception of patient safety culture dimensions on the willingness to report patient safety incident. This study used a quantitative correlation design with cross-sectional approach. Data analysis used multiple linear regressions. The result showed that perception of patient safety culture dimensions simultaneously affects the willingness to report patient safety incident in Hospital X Malang. The culture of communication openness partially has a positive and significant effect on the willingness to report patient safety incident. Teamwork, staff composition, feedback and learning from previous errors, non-punitive response to error, management support, cooperation between teams, handover and patient transfer process does not affect the willingness of patients to report patient safety incident.

**Keywords:** patient safety culture, patient safety incidents, willingness to report patient safety incident.



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In a hospital, there are thousands of different drugs, tests, and procedures, as well as diverse professions and human resource background that provide patient care for 24 hours continuously (Wardhani et al., 2013). The manifestation of good organizational culture can be gained from the images of how employees understand their work, understand each other, and understand the basic relationships and values of the organization. Employees are expected to not only work in accordance with the standards, but employees are

expected to provide more value to the hospital as expected (Soegandhi, 2013).

Hospital is a health-care institution that has a high risk because it is related to patient safety. Patient safety is something way more important than just the service efficiency. Various risks due to medical action can occur as part of patient care in the hospital. Patient safety is one of the major issues in health care. The hospital can overcome this if the organization carries out patient safety system properly (Singer et al., 2003).

The American Institute of Medicine has required health services to arrange patient safety program comprehensively, which is conducted by trained health-care personnel to improve patient safety culture in both the patients and the health-care workers. They will jointly establish the system as the basis for patient safety. Problems that occur will disrupt the health care system. Effective facil-

ity management is also needed in order to create a system to work safely and smoothly as possible.

In healthcare, understanding of safety becomes a universal concept in all types of health organizations (JCI, 2006). A hospital is required to provide health services efficiently without putting the principle of patient safety aside. Effective management is necessary to ensure a safe environment for patients, employees, patient's families and visitors. To achieve this goal, the role of leadership is crucial for reducing and controlling hazards as well as risks, preventing accidents and injuries, and also maintaining safety throughout the hospital environment (JCI, 2006). Patient safety refers to the absence of danger threatening patients during the health-care process (WHO 2013b). According to Bawelle (2013), patient safety is free from accidental injury or avoids patients being injured due to medical treatment and treatment error (Bawelle et al., 2013).

Hospital X Malang has 202 employees; it has 88 nurses and midwives by the end of 2015. The high level of outpatient visits, Bed Occupancy Rate (BOR), the addition of beds, and the number of service activities in Hospital X consequently lead to high risk of patient safety incidents. The number of patient safety incident report patient safety incident at Hospital X is very low, even the IKP report patient safety incident in the last 3 months of 2015 is 0. A study states that KTD (Adverse Event) is around 10% of admission and the risk of KTD increases in developing countries. In Hospital X, which has high utility rate, the incident rate is not even reported; this is very small compared to literature (10%). The patient safety report or problem recognition is the heart of service quality as a basis for continuous quality improvement. The analysis of patient safety incident is essential for the learning process, improvement, and revision of the existing policies, SPO, and guidelines.

This study aims to determine the effect of perception of patient safety culture dimensions on the willingness to report patient safety incident patient safety incidents. It also aims to know the influence of teamwork cooperation on the willingness to report patient safety incident, to know the influence of team composition on report patient safety incident, to know the influence of feedback about error

on the willingness to report patient safety incident, to know the influence of non-punitive response on error on report patient safety incident, to know the influence of the management support on the willingness to report patient safety incident, to know the influence of communication openness on the willingness to report patient safety incident, to know the effect of teamwork on the willingness to report patient safety incident, and to know the effect of handover and patient transfer process on the willingness to report patient safety incident. The results of this study are expected to be taken into consideration in preparing hospital strategy in the preparation of quality improvement program and patient safety in Hospital X Malang. It is also expected to increase the willingness of nurses and midwives to report patient safety incident in order to improve patient safety culture in Hospital X Malang.

## **METHOD**

This research used correlational quantitative research design with cross-sectional approach. This research was conducted at Hospital X Malang; data collection was done by distributing questionnaires to all nurses and midwives at Hospital X Malang in June 2016. The total sampling method was used in this study. The respondents collected in this study were 77 people. The research variables used are teamwork, team composition, the perception of feedback and learning from errors, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process. The instrument used in this study is the questionnaire, which had been tested for its validity and reliability. This study used multiple linear regression analysis.

## **RESEARCH RESULT**

The results of this research show that most of the nurses and midwives in Hospital X Malang are women, aged d" 25 years old, unmarried, have work period d" 2 years, and work in inpatient installation (however, there is one person working in CSSD), permanent employees, and whose last education is D III (Table 1)

**Table 1 Characteristics of Respondents**

Characteristics of Respondents	Frequency	Percentage (%)
Age		
- ≤ 22 years old	19	24.7%
- 23 – 27 years old	46	59.7%
- 28 – 32 years old	7	9.1%
- > 32 years old	5	6.4%
Sex		
- Male	14	18.1%
- Female	63	81.9%
Work Period		
- ≤ 20 months	53	68.8%
- 21 – 40 months	15	19.5%
- 41 – 60 months	7	9.1%
- > 60 months	2	2.6%
Work Unit		
- CSSD	1	1.3%
- HCU	3	3.9%
- IGD	3	3.9%
- IKO	7	9.1%
- IRJA	20	26.0%
- IRNA	30	39.0%
- Maternity	13	16.9%
Position		
- Functional	57	74.0%
- Structural	20	26.0%
Employment Status		
- Contract	41	53.2%
- Permanent	36	46.8%
Last Education		
- D3	70	90.9%
- S1/D4	7	9.1%
Work period in the last unit		
- < 10 months	36	46.8%
- 11 – 25 months	37	48.1%
- > 25 months	4	5.2%
Work hour per week		
- ≤ 45 hours	7	9.1%
- 46 – 55 hours	59	76.6%
- > 55 hours	11	14.3%
Position in the hospital		
- Doctor Assistant	6	7.8%
- CSSD	1	1.3%
- Head of room	2	2.6%
- Management	2	2.6%
- Executor Nurse	66	85.7%

Characteristics of Respondents	Frequency	Percentage (%)
Contact with patient		
- Yes	76	98.7%
- No	1	1.3%

Source: Processed Primary Data, 2016

### Result of descriptive analysis of variable patient safety culture dimension

Variable teamwork has an average of 4.27 (high). Variable staff composition is 3.83 (high); however, there is one question item that is included in medium category (3.66). Variable feedback and learning from errors of 3.92 is included in a high category, but there is one question item that is included in medium category (3.66). Variable non-punitive response to an error of 3.08 is included in the medium category.

Variable supervisor's or manager' assessment of 3.35 is included in the medium category. Variable communication openness of 3.34 is included in the medium category. Variable cooperation between units in hospitals is 3.77, which is included in a high category, but there are two items that are in medium category (3.62 and 3.57). Variable perception of handover and patient transfer process is 3.56, included in the medium category. The average of variable willingness to report patient safety incident is 2.51, which is in the medium category. Although these research variables are in medium to high criteria, it should be noted that there are other things that need to be noticed by hospital management such as variable non-punitive response to error, assessment of the supervisor or manager, communication openness, and the perception of handover and patient transfer process.

Some points to consider from the non-punitive response to error include: the aspect that the respondents worry that the error will be recorded in the health-care personnel file has the lowest average value (2.79); there are 42.2% of respondents who revealed that they are anxious if their error is recorded in the health-care personnel file. Besides, 51.9% of respondents feel that if there is an error found, they will be accused. Some things to con-

sider in the assessment of supervisor or manager; there are two items which are moderate according to the respondents, namely appreciation given by superiors and when there is a pressure in the work, the superior want them to work faster even though if they have to go through shortcuts (3.58 and 2.74).

The results of data analysis using multiple linear regressions are presented in Table 2.

Data processing using multiple linear regression analysis in obtained the results listed in Table 2. Based on Table 2, regression model of X1, X2, X3, X4, X5, X6, X7 and X8 to Y obtained as follows:  $Y = 5.132 - 0.345X1 - 0.104X2 - 0.086X3 - 0.205X4 + 0.175X5 - 0.824X6 - 1.193X7 + 0.559X8$ .

**Table 2 Results of Multiple Linear Regression Analysis of the Effect of Patient Safety Culture Dimension on Willingness to Report patient safety incident**

Variable	Coefficient	Standardized Coefficient	TStatistic	Prob
Constant	5.132		4.782	0.000
Teamwork	-0.345	-0.059	-0.423	0.674
Team Composition	-0.104	-0.034	-0.219	0.827
Feedback about Previous Error	-0.086	-0.026	-0.150	0.881
Non-Punitive Response to Error	-0.205	-0.103	-0.638	0.526
Management Support	0.175	0.056	0.369	0.713
Communication openness	-0.824	-0.319	-2.460	0.016
Cooperation between Teams	-1.193	-0.269	-1.481	0.143
Handover and Patient Transfer Process	0.559	0.184	1.005	0.318
<i>F statistic</i> = 2.238		Prob = 0.035		
R-squared = 0.208		Adj. R-squared = 0.115		

The equation above shows the following things:

1. The constant of 5.132 indicates that if variable teamwork, team structure, feedback about the previous error, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process are constant, thus the willingness to report patient safety incident is 5.132.
2. The coefficient of teamwork of -0.345 indicates that teamwork negatively affects the willingness to report patient safety incident. This means that the better the teamwork, the lesser the willingness to report patient safety incident. However, the decline is not significant.
3. The coefficient of team composition of -0.104 indicates that team composition negatively affects the willingness to report patient safety incident. This means that the better the team composition, the lesser the willingness to report patient safety incident. However, the decline is not significant.
4. The coefficient of feedback about the previous error of -0.086 indicates that feedback about the previous error negatively affects the willingness to report patient safety incident. This means that the better the feedback about the previous error, the lesser willingness to report patient safety incident. However, the decline is not significant.
5. The coefficient of non-punitive response to an error of -0.205 indicates that non-punitive response to error negatively affects the willingness to report patient safety incident. This means that the stronger the culture of non-punitive response to error, the lesser the willingness to report patient safety incident. However, the decline is not significant.
6. The coefficient of management support of 0.175 indicates that the support given by the superior

has a positive effect on the willingness to report patient safety incident. This means that the more the support is given by superiors, the more the willingness to report patient safety incident. However, the increase is not significant.

7. The coefficient of communication openness of -0.824 indicates that communication openness negatively affects the willingness to report patient safety incident. This means that the higher the level of communication openness, the lesser the willingness to report patient safety incident.
8. The coefficient of cooperation between teams of -1.193 indicates that cooperation between teams negatively affects the willingness to report patient safety incident. This means that the better the cooperation between teams, the lesser the willingness to report patient safety incident. However, the decline is not significant.

The coefficient of handover and patient transfer process of 0.559 indicates that the handover and patient transfer process have a positive effect on the willingness to report patient safety incident. This means that the better the handover and patient transfer process, the more the willingness to report patient safety incident. However, the increase is not significant.

### Determination Coefficient

The amount of contribution of teamwork, team structure, feedback about the previous mistakes, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process to the willingness to report patient safety incident can be known through determination coefficient (adj R<sup>2</sup>) of 0.115. This means that the diversity of the willingness to report patient safety incident can be explained by teamwork, team structure, feedback about error, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process of 11.5%; in other words, the contribution of teamwork, team composition, feedback about error, lack of lack of, management support, communication openness, cooperation between teams,

and handover and patient transfer process to the willingness to report patient safety incident of 11.5%, while the remaining (88.5%) is contributed by other variables which are not discussed in this research.

### Simultaneous Hypothesis Testing

Simultaneous hypothesis testing is used to determine whether there is the influence of teamwork, team structure, feedback about an error, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process on the willingness to report patient safety incident. The test criterion states that if the value of  $F_{count} \geq F_{table}$  or probability  $\leq$  level of significance ( $\alpha$ ) then there is a simultaneous significant influence of teamwork, team structure, feedback about error, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process on the willingness to report patient safety incident. Simultaneous hypothesis test yields  $F_{count}$  of 2,238, with a probability of 0,035. The test results show that probability  $<$  level of significance ( $\alpha = 5\%$ ). This means that there is a simultaneous significant influence of teamwork, team structure, feedback about the error, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process on the willingness to report patient safety incident.

### Partial Hypothesis Testing

Partial hypothesis testing is used to determine whether there is the influence of teamwork, team structure, feedback about an error, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process on the willingness to report patient safety incident. The test criterion states that if the value of  $t_{count} \geq t_{table}$  or probability  $<$  level of significance ( $\alpha$ ), then there is a significant individual influence of teamwork on the willingness to report patient safety incident, team structure on the willingness to report patient safety incident, feedback about error on the willingness to

report patient safety incident, non-punitive response to error on the willingness to report patient safety incident, management support on the willingness to report patient safety incident, cooperation between teams on the willingness to report patient safety incident, and handover and patient transfer process on the willingness to report patient safety incident.

**a. Partial Hypothesis Testing of the Effect of Teamwork on the Willingness to Report patient safety incident**

Partial hypothesis testing of the effect of the teamwork yields  $t_{\text{count}}$  value of -0.423, with a probability of 0.674. The test results show that probability > level of significance ( $\alpha = 5\%$ ). This means that there is no significant influence of teamwork on the willingness to report patient safety incident.

**b. Hypothesis Testing of the Effect of Team Composition on the Willingness to Report patient safety incident**

Partial hypothesis testing of the effect of the team composition yields  $t_{\text{count}}$  value of -0.219, with a probability of 0.827. The test results show that probability > level of significance ( $\alpha = 5\%$ ). This means that there is no significant influence of team composition on the willingness to report patient safety incident.

**c. Partial Hypothesis Testing of the Effect of Feedback about Error on Willingness to Report patient safety incident**

Partial hypothesis testing of the effect of feedback about the error yields  $t_{\text{count}}$  value of -0.150, with a probability of 0.881. The test results show that probability > level of significance ( $\alpha = 5\%$ ). This means that there is no significant influence of feedback about an error on the willingness to report patient safety incident.

**d. Partial Hypothesis Testing of the Effect of Non-Punitive Response to Error on the Willingness to Report patient safety incident**

Partial hypothesis testing of the effect of non-punitive response to an error yields  $t_{\text{count}}$  value of -

0.638, with the probability of 0.526. The test results show that probability > level of significance ( $\alpha = 5\%$ ). This means that there is no significant influence of non-punitive response to an error on the willingness to report patient safety incident.

**e. Partial Hypothesis Testing of the Effect of ManagementSupport on the Willingness to Report patient safety incident**

Partial hypothesis testing of the effect of the management support yields  $t_{\text{count}}$  value of 0.369, with a probability of 0.713. The test results show that probability > level of significance ( $\alpha = 5\%$ ). This means that there is no significant influence of management support on the willingness to report patient safety incident.

**f. Partial Hypothesis Testing of the Effect of Communication openness on the Willingness to Report patient safety incident**

Partial hypothesis testing of the effect of the communication openness yields  $t_{\text{count}}$  value of -2.460, with a probability of 0.016. The test results show that probability < level of significance ( $\alpha = 5\%$ ). This means that there is a partial significant influence of communication openness on the willingness to report patient safety incident.

**g. Partial Hypothesis Testing of the Effect of Cooperation between Teams on the Willingness to Report patient safety incident**

Partial hypothesis testing of the effect of cooperation between the teams yields  $t_{\text{count}}$  value of -1.481, with a probability of 0.143. The test results show that probability > level of significance ( $\alpha = 5\%$ ). This means that there is no partial significant influence of cooperation between teams on the willingness to report patient safety incident.

**h. Partial Hypothesis Testing of the Effect of Handover and Patient Transfer Process on the Willingness to Report patient safety incident**

Partial hypothesis testing of the effect of handover and patient transfer process yields  $t_{\text{count}}$  value of 1.005, with a probability of 0.318. The test

results show that probability > level of significance ( $\alpha = 5\%$ ). This means that there is no partial significant influence of handover and patient transfer process on the willingness to report patient safety incident.

#### i. Partial Hypothesis Testing of the Effect of Constant on the Willingness to Report patient safety incident

Partial hypothesis testing of the effect of the constant yields  $t_{\text{count}}$  value of 4.782, with a probability of 0.000. The test results show that probability < level of significance ( $\alpha = 5\%$ ). This means that there is a partial significant influence of constant on the willingness to report patient safety incident.

#### Dominant Effect

The dominant effect of independent variables on the willingness to report patient safety incident can be seen through the standardized coefficient; the most dominant effect has the largest coefficient. From the estimation results presented in the table above, it can be seen that the variable that has the largest standardization coefficient is communication openness (0.319). Therefore, communication openness has the most dominant influence on the willingness to report patient safety incident.

### DISCUSSION

#### Characteristics of Respondents

Most of the nurses and midwives working at Hospital X are female, young, inexperienced, and unmarried. According to Robbins and Judge (2015), age is closely related to maturity. Work period describes one's experience and seniority in the work environment; there is a positive relationship between seniority and work productivity (Robbins and Judge, 2015). The lack of nurses and midwives at Hospital X Malang with a work period of more than four years shows that the number of nurses and midwives in the hospital who have experience and professional skill are very limited. There are nurses and midwives who work not in accordance with their educational background, such as in pharmacy installation because there is not enough pharmaceutical staff in this unit. According to Suryono and Pitoyo

(2013), deciding to work at a place that does not match the level of education is a way out to avoid jobless. Therefore, there should be a harmony between employers and educational institution; it is essential to create better employment condition. According to Law No. 36 of 2014 regarding health-care personnel, according to the standard, the education background of nurses and midwives should be at least D3; it is reflected from the characteristics of respondents' education. Education is a picture of individual ability and skill. According to Lee et al. (2013), diploma or lower level of education is a significant predictor of turnover.

In Hospital X, most of nurses and midwives are D3 graduates because D3 graduates still dominate nursing graduates in Indonesia, so they are easily found in employee recruitment. Having lower education background compared to undergraduate and newly graduated from school indicate that they are inexperienced, unable to think rationally, and have not been able to control their emotion. In addition, nurses and midwives graduate are looking for jobs to have a new experience and avoid being jobless.

#### The Effect of Perception of Patient Safety Culture Dimension on the Willingness to Report patient safety incident Patient Safety Incident

Based on the analysis results, it is known that teamwork, team structure, feedback about an error, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process simultaneously have a significant influence on the willingness to report patient safety incident. Teamwork, team structure, feedback about an error, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process are the dimensions of patient safety culture perceptions that focus more on staff attitudes or perceptions of safety culture in the organization they work for. In this study, the significant simultaneous influence of teamwork, team structure, feedback about error, non-punitive response to error, management support, communication openness, coopera-

tion between teams, and handover and patient transfer process on the willingness to report patient safety incident supports the opinion of Snijders (2008), suggesting that patient safety culture has a positive effect on incident report patient safety incident. The results of this study indicate that safety culture in the implementation of a good patient safety management system will encourage nurses to report patient safety incident patient safety incidents, so that it can be an input for the management to review the system or policies and procedures that are not appropriate in order to improve services and prioritize patient safety. Building patient safety culture in the hospital is the duty and responsibility of all staff working in the hospital, especially health-care personnel who deal directly with patients as well as nurses. Therefore, nurses' perception of the patient safety culture that will affect their willingness plays an important role. This supports the research conducted by Hamdani (2007), finding that nurse is the health-care personnel who is closely related to patient safety. It places the role of the nurse as an important component in building a patient safety culture.

### **The Effect of Teamwork on Nurse's Willingness to Report Patient Safety Incident**

Teamwork can be interpreted as support of one health-care personnel to others in a team. When someone has a lot of tasks which must be finished immediately, all health-care personnel will work together, so the tasks will be finished quickly. Every health-care personnel in this unit will respect to each other. If there is someone very busy, the others will help him/ her (Westat et al., 2004). Based on the analysis result, it is known that teamwork has no significant effect on the willingness to report patient safety incident. It indicates that supporting each other, working as a team in order to complete a task quickly, respect each other, and helping each other have no significant effect on the willingness to report patient safety incident. It can be said that the willingness to report patient safety incident is not affected by teamwork.

In treating patients, a nurse certainly cannot handle all by his/ herself, so required teamwork is

required in the care unit in order to provide the best service for patients. Good teamwork can make nurses work together better, particularly in treating patients, to minimize the number of incident and conflict; therefore, nurses have no willingness to report patient safety incident. Good teamwork leads to the good relationship between nurses so that someone will be reluctant to report patient safety incident. This is what makes the teamwork not significantly influence nurses to report patient safety incident the incident.

### **The Effect of Staff Composition on Nurse's Willingness to Report patient safety incident**

Foreign staff and the habit of the staff in this unit to working in the state of emergency will encourage nurses to report patient safety incident. Based on the analysis, it is found that team composition has no significant effect on the willingness to report patient safety incident. The result indicates that nurses are too busy doing other things rather than taking care of patients; employing contract employees rather than employing the best nurses to serve patients and habit of doing a task when the deadline is close do not significantly influences nurses to report patient safety incident the incident. This is because the nurses are too busy to report patient safety incident the incident. This is due to many nurses do other things, so they cannot take care of patients properly. It is in line with the research conducted by Wijaya et al (2013) finding that the patient safety team at the hospital also had other tasks besides their main tasks. In addition, the research which was conducted by Gunawan et al (2015) also found that high workload of human resources is one of the factors that lead to a small number of report patient safety incident of the patient safety incident. Therefore, it can be concluded that team composition does not affect the willingness to report patient safety incident.

### **The Effect of Feedback about Error on the Willingness to Report Patient Safety Incident**

According to Gisburg in Gunawan (2015), feedback about the error is related to health-care personnel's perceptions of risks to be received if



they report patient safety incident patient safety incidents. Based on the analysis result, it can be known that feedback about error has no significant effect on the willingness to report patient safety incident. It indicates that feedback given about what changes will be made based on the given report patient safety incident, notifying if there is an error occurring in the unit, and also ways to prevent errors from happening again does not affect the willingness to report patient safety incident. It can be concluded that nurse's willingness to report patient safety incident patient safety incident is not affected by the feedback given to nurse regarding patient safety incident.

No effect of feedback on nurse's willingness to report patient safety incident can be attributed to a lack of feedback given on the report patient safety incident. Feedback is given to make the health-care personnel know what he/ she did wrong. Health-care personnel and nurses are also given the opportunity to discuss how to prevent the mistakes from happening again.

The lack of feedback on a given report patient safety incident can cause nurse ignore and not report patient safety incident the incident. As stated by Hwang et al (2012), the lack of feedback on a report patient safety incident is one of the inhibiting factors in report patient safety incident. Furthermore, Carroll (2009) argues that constraint in reporting patient safety incident, among others, is caused by a lack of trust; the nurse is skeptical that it will not make any changes; therefore, nurse rather forgets the incident due to fear of being punished or revenge of the one being reported. Thus, feedback has no significant effect on the willingness to report patient safety incident.

### **The Effect of Non-Punitive Response to Error on Willingness to Report patient safety Incident**

Because of non-punitive response to error, if there is a mistake, the hospital does not discuss the problems that occur but rather talk to the health-care personnel involved. Given that culture, health-care personnel is worried that any mistakes they make will be recorded in their health-care personnel files as a bad record (Snijders et al., 2009).

Based on the results of the analysis, it is found that culture non-punitive response to error has no significant effect on the willingness to report patient safety incident. The analysis result shows what the nurses feel when there is any report patient safety incident of the incident involving them; they feel that the one being discussed is not the problem, but the person. They worry that it mistake will be recorded in the health-care personnel file, thus they rather not to report patient safety incident patient safety incident. It can be said that nurse's willingness to report patient safety incident patient safety incident is not influenced by factors related to the culture of non-punitive response to the error. According to Beginta (2012), non-punitive response to error is a weak component in almost all hospitals. It is also influenced by the educational process that emphasizes perfection of performance, so that mistake is considered the violation. On the other hand, mistakes are unavoidable in patient care. By not blaming nurse for the incident that occurs, we can encourage nurse to report patient safety incident each incident as a process of improving patient care service. The results of this research show that culture of non-punitive response to error has no significant effect on the willingness to report patient safety incident, in line with the research which was conducted by Anggraeni et al (2016), finding that a non-punitive response to error has no significant effect on the report of patient safety incident.

### **The Effect of Management Support in Patient Safety Improvement on the Willingness to Report patient safety Incident**

In this case, management support is the nurse's perception of the role of the direct supervisor, namely head of the room, head of the unit, and service manager of the hospital in maintaining patient safety. Based on the analysis results, it is known that the support of superiors has no significant influence on the willingness to report patient safety incident. This shows that superior's appreciation when nurses work in order to patient safety procedure, superior's attention to the suggestion/ input given by staff in improving patient safety, and no pressure from superiors to work faster even though they have to go

through a shortcut does not encourage nurses to report patient safety incident patient safety incident. It can be said that the nurse's willingness to report patient safety incident is not due to management support. Although superiors have authority in organizing and controlling maintenance activities and have greater responsibility for patient safety, it does not affect the nurse's willingness to report patient safety incident. This may be because nurse cares more about the patient's interest, especially in relation to patient safety, rather than management support.

The absence of significant influence of management support on report patient safety incident of accident indicates that the hospital leadership needs to be improved in order to be able to support and contribute positively to the implementation of patient safety culture. In line with the research which was conducted by Wijaya et al (2013), the existing leadership in the work unit of the hospital still needs to be improved again, so that the supervision can work well, in accordance with the responsibility of the department/ unit they lead.

#### **The Effect of Communication openness on the Willingness to Report Patient Safety Incident**

Communication not only occurs between health-care personnel and patients; there is also communication within health-care personnel (among nurses, between nurse and doctors, among doctors, etc), between health-care personnel and health-care personnel etc. Based on the analysis results, it can be stated that communication openness has a significant influence on the willingness to report patient safety incident. This indicates that freedom of speech for staff if they see something that could adversely affect the patient's treatment, the freedom of staff to ask about decisions or actions to be performed in accordance with their authority, and the fear of asking when they see something that seems untrue may affect their willingness to report patient safety incident. The significant influence of communication openness on the willingness to report patient safety incident indicates that communication openness to report patient safety incident all mistakes that occur without fear of being punished

or the impact that may result from the report patient safety incident will affect a nurse's willingness to report patient safety incident all incidents. As stated by Beginta (2012), interaction within a team affects the behavior of its members in communication and open in reporting patient safety incident that occurs. A belief in a team that every team member aims to achieve common good and find the best solution for each problem becomes a factor that affects nurse to report patient safety incident an error in a team.

This research found that communication openness has a positive and significant effect on the willingness to report patient safety incident in favor of research conducted by Anggraeni et al (2016), finding that communication openness has a significant effect on report patient safety incident of the incident. A culture of communication openness in an organization will encourage the feeling of being supported by professionals if something is wrong, that will lead to confidence to act appropriately.

#### **The Effect of Cooperation between Teams in Hospital on the Willingness to Report Patient Safety incident Accident**

The team formed in the hospital basically has the same goal, namely providing services to patients. Based on the analysis results, it is known that cooperation between teams has no significant effect on the willingness to report patient safety incident. The answers of most respondents indicate that there is good cooperation between units and all units in the hospital work well together to provide the best care for patients. This condition indicates similar goals of most respondents, namely to provide the best service for patients; it reflects that hospital organization is divided into several work teams; they help each other in order to give the best service to patients. However, some respondents also noted that hospital units do not coordinate well with each other, and the staff often felt uncomfortable working with staff from other units; it indicates that the cooperation between teams in the hospital is not good. It can be stated that even if the staff of each team are willing to help each other and work together, the cooperation between teams is still not good; there is

still a lack of comfort to work with other teams. This condition indicates the need for improvement in the cooperation between teams to provide good service to patients. Lestari in Anggraeni et al (2016) stated that the lowest percentage of teamwork in groups of nurses is 50%, while good service is provided by respondents with the high percentage of teamwork of 77.4% (16). This indicates that level of teamwork provides different results for the service, including nurse's willingness to report patient safety incident. Therefore, cooperation between teams has no significant effect on nurse's willingness to report patient safety incident.

### **The Effect of Handover and Patient Transfer Process in Hospital on the Willingness to Report Patient Safety Incident**

Based on the respondent's answer, most respondents stated that if many things are "ignored" in transferring patients from one unit to another unit, patient's important information often "disappears" in the handover. There are often problems occurring in the exchange of information between units in the hospital; handover is a problem for patients in this hospital. This condition indicates that the transfer of patients and patient's information from one unit to another unit is still not good. In fact, communication among units is important, which will determine the success of service, as Risenberg (2010) points out that communicating various information about the development of patients between health-care personnel in the hospital is a fundamental component in hospital services. Good communication among units can show that the cooperation between units is good as well. Mistakes that occur in handover and patient transfer process from one unit to another can be caused by a lack of coordination among health-care personnel; therefore, handover and patient transfer process do not affect nurse's willingness to report patient safety incident.

### **Implication Research Result**

The result of this research that has been conducted to nurses and midwives in Hospital X Malang has shown that perception of patient safety culture dimension simultaneously has a positive effect on

the willingness to report patient safety incident. However, the effect of each independent variable in this study is not significant on the willingness to report patient safety incident except the variable communication openness.

The effort of Hospital X Malang to build a patient safety report system can be started by improving the factors contributing to the willingness to report patient safety incident identified in this study. Communication openness has a significant positive effect on the willingness to report patient safety incident. In communication, communication openness is important in building patient safety (Palumpun et al., 2015). Superior who has the ability to communicate well and effectively will be able to coordinate and control the staff in achieving patient safety.

### **Limitations of the Study**

This research was conducted in a certain environment with certain characteristics of the population, in Hospital X Malang, which must be different with other hospital or other organization. Furthermore, the sample size used is small, causing this research to have a low level of generalization.

### **CONCLUSION**

The first conclusion is that teamwork, team structure, feedback about an error, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process influence the willingness to report patient safety incident simultaneously and significantly. This means that the better the perception of the patient safety culture, the higher the willingness to report patient safety incident. However, partially, that teamwork, team structure, feedback about an error, non-punitive response to error, management support, communication openness, cooperation between teams, and handover and patient transfer process do not significantly influence the willingness to report patient safety incident.

Second, the results of this study show that communication openness is one of the variables that partially affect the willingness to report patient safety incident. This means that in hospital, com-

munication openness will increase the willingness of health-care personnel to report patient safety incident.

The third conclusion is that communication openness has the most dominant influence on nurse's and midwives' willingness to report patient safety incident in the hospital. This can be an input for hospitals to develop communication openness to improve IKP report patient safety incident. The contribution of perception of cultural dimension simultaneously can be a reference to improve report patient safety incident in Hospital X Malang. With a good report of the patient safety incident, it is expected that patient safety culture in Hospital X Malang will also be improved.

### **SUGGESTION**

The results of this study are expected to be used as a reference for Hospital X Malang to further improve patient safety culture, especially communication openness, in order to improve the report of patient safety incident in the hospital. With the increase in the number of IKP report patient safety incident in the hospital, it is expected that patient safety, as well as the quality of the hospital, will be better.

In the hospital, communication openness in communication can be improved by improving effective communication between health-care personnel. Communication is a tool to establish the relationship between one individual and another individual. With good communication, misunderstandings and other obstacles in a relationship can be reduced

Further research can be developed by examining other factors that are not investigated in this study, such as organizational factors and individual factors that can hamper IKP report patient safety incident in hospitals. In addition, the qualitative method is suggested for future researchers, as it can better reveal the cultural conditions in hospitals.

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