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Evaluating the implementation of risk management at hospital

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Abstract Risk Management has an important role in identifying risks to reduce patient safety incidents. However, patient safety incidents are still very high. In 2016, there were 36 cases found at one of the hospitals in Surabaya. It means that it has not met zero-incident as the Hospital targets. The purpose of this study was to analyze the implementation of risk management at one of the hospitals in Surabaya. This study was a quantitative research with a cross-sectional research design which collected data at one time. The sampling technique was done withtotal sampling. The study results showed that 18 working units (81.8%) at the Hospital had implemented the risk identification process very well. Afterward, as many as 17 working units (77.3%) carried out an excellent risk analysis at the Hospital. They have classified types of risks found, and 15 working units (68.2%) at the Hospital have notably performed it. In addition, the risk control process as a follow-up of risk priority among 19 working units (86.4%) has been well-executed. However,risk management should be supported by awareness of all human resources at the Hospital. Thus, a strategy that can be carried out is strengthening collaboration among health workers, so they are integrated to adopt patient safety in accordance with their profession. The implementation of risk management was carried out very well in most of the hospital's working units. Still, the hospital needs more effort to raise awareness of the importance of patient safety.

Keywords: Hospital, Patient Safety, Risk Management

1. Introduction

Patient safety is one of the important aspects of formulating safer health treatment which can improve healthcare services. Hospital, as a complex health facility, relates to various risks of patient safety. The risks potentially cause patient safety incidents that can harm patients.

Based on Permenkes RI No 11 of 2017, Patient safety incidents areunintended events or potential events that may cause harm to patients. These events include unintended events, near-miss events, no-harm events, harmful events, and sentinel events.A study showed that there were about 44 thousand up to 98 thousand mortalities because of iatrogenic events, in which nearly 7000 deaths are related to medication errors (Ramos and Calidgid, 2018). Like the research,patient safety incidents in Indonesia are also high. Based on the data released by the Committee of Hospital Patient Safety, East Java Province had the highest percentage of incident reporting of 27% in the period of 2010-2011 (Hasrul, Irwan and Sjattar, 2018). The preliminary study showed that there were 781 patient safety incidents in 2016 at one of the

hospitals in Surabaya. Most of the incidents were near-miss events that have notmeet the standard of zero-incident (Rahmah, 2017).

Risk management is important as risk prevention and control to minimize the impacts of the incidents. Minimal impacts may occur ifrisk management is systematically carried out, and it involves a management approach. Therefore, this study aimed to analyze the implementation of risk management at the Hospital in Surabaya.

2. Methods

This study was a quantitative study using a cross-sectional design. The population involved were all coordinators in medical units at one of the hospitals in Surabaya. There were 22 coordinators in the medical units selected as samples using a total sampling technique based on the sample frame. The data were then obtained through questionnaires disseminated to the respondents. The variables in this study were stages of risk management, including the identification of risks, risk analysis, risk classification, and risk control. The data analysis was explained descriptively usingstatistics software.

3. Results and Discussion

This study evaluates the implementation of risk management at the Hospital which is done through several stages, such as risk identification, analysis, classification, and control. The evaluation is based on the implementation and method used as follows:

3.1 *Identification of Risks*

Based on [Table 1], generally, the identification process of risks in the hospital's medical units is well-implemented.Each of the working units has identified risks in implementing risk management.

Table 1. The implementation of Identification of Risks at the Hospital.

The implementation of Identification of Risks	Total	
	n	Percentage
Good	4	18.2%
Excellent	18	81.8%
Total	22	100%

This stage is done to identify risks that are the potential to cause patient safety incidents. The identification of risks is made with several methods, such as internal audit, SWOT analysis, and survey. These findings are relevant to a study in China, whichfound that the identification process can be implemented using audit checks, brainstorming, Focus Group Discussion, incident reporting, and reviews of current and previous data (Guo, 2015). Despite the methods, it also can be done using a risk identification form provided by the Committee of Quality Control and Patient Safety in all working units of the Hospital. The risk identification form which has been filled out should be returned to the Committee of Quality Control and Patient Safety to be recapped. However, not all working units, in fact, did not return the forms on time.

Identification of risks is a basic aspect of risk management in which a hospital should be able to identify all potential risks in all working units (Vincent, 2010). The identification process is an early vigilance towards the potential risks that impact patient safety. It also benefits an organization in 1) reducing the possible patient safety incidents; 2) improving all employees' knowledge of potential risks; 3) becoming a basic determinant for prevention strategies; 4) documenting information on potential risks (Rahmah, 2017).Moreover, it

depicts all potential risks in the working units comprehensively. Sufficient identification of all risks can improve vigilance, so prevention and control can be done earlier.

3.2 *Risk Analysis*

[Table 2] illustrates that the risk analysis at the Hospital is good. It means all working units have implemented the risk analysis. The results of risk identification arethen analyzed based on the possibility of patient safety incidents and their impacts. The risk analysis can identify the possibility of risks that causes patient safety incidents and their effects (Rahmah, 2017). Although all working units have carried out this stage, they have not all conducted root cause analysis of each potential risk. The observation showed thatsome working units that never evaluate the impacts resulted from the potential risks.

Table 2 Implementation of Risk Analysis at the Hospital.

Risk Analysis Implementation	Total	
	n	Percentage
Good	5	22.7%
Excellent	17	77.3%
Total	22	100%

The risk analysis at the Hospital was conducted quantitatively. Quantitative techniques are doneusing a risk matrix which depicts the risk span from the lowest to the highest. Furthermore, the seriousness of risks is only categorized based on harms, deaths, and impacts resulted from the risks (Ramli, 2010). However, this technique is still not perfect because it does not give clear differences, whether the risks are low, middle, or high. Such a quantitative technique is done by measuring the probability of incident occurrence and the impacts seen from the scores. In other words,quantitative measurement can give more accurate information about all potential risks (Noora, 2015).

3.3 *Risk Classification*

It can be seen from [Table 3] that the risk classification at the Hospital is good, meaning that all working units have done this stage. The risk analysis is the measurement of risks, which is then formulated through risk matrix based on the probability and seriousness of the risks with scales 1 to 4.

Table 3.Implementation of Risk Classification at the Hospital.

Implementation of Risk Classification	Total	
	n	Percentage
Good	7	31.8%
Excellent	15	68.2%
Total	22	100%

A study on the probability and seriousness of all aspects should be conducted. According to the matrix, the risk rates include tremendous risk, high risk, middle risk, and low risk. These ratings are based on the criteria and indicators that have been determined (Ramli, 2010). Risk classification results can be a foundation for forming risk priorities so that risk management can be more effective. Even though all working units have classified risks, not all of them consider the risk analysis for classifying the risks.

The risk classification deploys the Matrix Grading based on the results of risk analysis which have been done before. The findings are useful for creating risk priorities to improve the effectiveness of decision-making related torisk control (Rahmah, 2017). The matrix grading of risks multiplies the probability with the level of seriousness. It is a tool assistant for identifying the level of risks at a hospital, and the high-risk level has the greatest possibility to be controlled so that patient safety incidents can be prevented (Abrianto, 2011).

3.4 *Risk Control*

Generally, the hospital's risk control was very well implemented, as seen in [Table 4].

Table 4.Implementation of Risk Control at the Hospital.

Implementation of Risk Control	Total	
	n	Percentage
Good	3	13.6%
Excellent	19	86.4%
Total	22	100%

It was found that all working units at the Hospital have excellently applied risk control. Decision-making related to risk management is done by considering the results of risk analysis and classification. The Committee of Quality Control and Patient Safety at the Hospital work together on the risk control. Formulation of recommendation used in the risk control is based on the risk management criteria, as stated in the Guideline of Hospital Risk Management (Rahmah, 2017). In this case, the recommendations given are operationally oriented to control the risks.

The results of risk classification become the basis for determining the risk control steps in which will be taken. This stage is significant for the risk management process. The identified risks which potential impacts are found should be managed well and effectively. The risk control is done by reducing, avoiding, transferring, and retaining risks. At this stage, the results of risk identification and analysis are considered for the decision-making process for the risk management applied at a hospital (Noora, 2015).

The selection of risk control strategies is seen from many aspects, such as finance, human, management, and others, so that it can result in a correct and effective decision for the risk control. These management stages are impossible to eliminate all risks at the Hospital. However, at least, the stages can control risks and avoid patient safety incidents at a hospital (Widyanti, 2015).

In general, the hospital's risk management has been carried out even though the hospital should follow up to improve employees' compliance in implementing risk management.Another study mentioned thatrisk management at an Iranian Hospital was moderate. It can be caused by many factors, such as culture blaming, poor feedback to staff, high employee turnover, and lack of infrastructure and facilities (Farokhzadian, DehghanNayeri, and Borhani, 2015). However,risk management will be good if it is supported by awareness of all human resources at the Hospital. Thus, a strategy that can be carried out is strengthening the collaboration among all health workers, so it creates integration and priority of patient safety in accordance with their profession (Rahimi, Shafeghat, and Kharazmi, 2013).

4. **Limitation of the study**

Above all, this study still has some limitations, such as the limited samples which only involve the coordinators in the working units, so the evaluation is merely based on the leaders' perspectives. Besides, this study is still presented descriptively. As a result, it does not delve into the issue but only observes one situation.

5. **Conclusion**

The implementation of risk management at the Hospital was carried out very well by most of the working units, but there were some activities that need to be improved. However, the Hospital still needs more effort to raise awareness of patient safety.

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