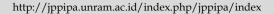


# Jurnal Penelitian Pendidikan IPA

Journal of Research in Science Education





# The Relationship of Patient Safety Culture to Compliance with the Implementation of Standard Precautions by Nurses in the Inpatition of Royal Prima Hospital Medan

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Received: September 27, 2023 Revised: November 18, 2023 Accepted: December 25, 2023 Published: December 31, 2023

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DOI: 10.29303/jppipa.v9iSpecialIssue.5488

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**Abstract:** Patient safety is a system that makes patient care safer, including risk assessment, identification and management of patient risks, incident reporting and analysis, the ability to learn from incidents and follow up, as well as implementing solutions to minimize risks and prevent injuries caused by errors. The consequences of carrying out an action or not taking an action that should be taken. This type of research is quantitative research with an analytical descriptive design. The level of compliance with the application of universal precautions shows that the majority of respondents are compliant in implementing universal precautions with a total of 73 respondents (58.4%) and for respondents whose level of Compliance with the Implementation of Universal Precautions is not 52 people (41.6%).

**Keywords:** Compliance with the implementation of precautions; Patient safety culture

# Introduction

Hospitals are an example of a non-profit oriented organization. Hospitals have the main task of providing treatment, care to patients and health services to the community (Naima et al., 2018). In providing health services, hospitals earn income from the services and facilities provided (Nandra, 2017). Patient safety is a system that makes patient care safer, including risk assessment, identification and management of patient risks, incident reporting and analysis, the ability to learn from incidents and follow up, as well as implementing solutions to minimize risks and prevent injuries caused by errors, as a result of carrying out an action or not taking action that should be taken (Kementerian Kesehatan Republik Indonesia, 2017). Patient safety is avoiding preventable dangers and reducing unnecessary risks to a minimum during the health care process (World Health Organization, 2017). One of the dimensions of quality is measured through patient safety (Arini et al., 2018).

Patient safety is a system that makes patient care safer, including risk assessment, identification and management of patient risks, incident reporting and analysis, the ability to learn from incidents and follow up, as well as implementing solutions to minimize risks and prevent injuries (Arini et al., 2018). The role of nurses in patient safety is illustrated and many things are related to patient safety needs. One of them is safety culture (Harsul et al., 2018).

The process of implementing an optimal Patient Safety System in a hospital means that this can prevent injury to patients caused by errors resulting from carrying out an action (Febriyaty et al., 2019). From the side of the health service provider, which in this case is Health Human Resources, this patient safety system plays a very important role in preventing patient safety incidents, including Unexpected Events (KTD), Near Injury Events (KNC), Non-Injury Events (KTC), and Potential Injury Events (KPC) (Sorra et al., 2014).

Patient safety has become a world issue since the Institute of Medicine (IOM) in the United States

published a report that the death rate due to adverse events (KTD) is increasing in patients in inpatient wards, ranging from around 44,000-98,000 every year (Simamora, 2019) . In following up on this discovery in 2004, WHO launched the World Alliance for Patient Safety, a joint program with various countries to improve patient safety in hospitals (Febriyaty et al., 2019).

Wardhani (2017) revealed that the number of patient safety incidents is still quite high, a study conducted by the World Health Organization (WHO) stated that in developed countries the number of unexpected events is 3.2% – 16.6% with a mortality rate of 8.5%. whereas in developing countries the prevalence reaches 2.5% - 18.4% with 30% deaths and 34% therapeutic errors in clinical situations.

Patient safety incidents also occur in Indonesia. Data on patient safety incidents in Indonesia is very minimal due to the lack of culture to report patient safety incidents. However, we still see a lot in the mass media that malpractice occurs in hospitals, so this indicates that there are still many patient safety incidents that occur in Indonesia. According to the 2019 National Patient Safety Commission (KNKPRS) report, the number of Near-Injury Events (KNC) was 2534 cases, Non-Injury Events (KTD) were 2554 cases and Unexpected Events (KTD) were 2567 cases, while 243 cases resulted in death. Many patient safety incidents occurred in the productive age group, namely 15-30 years with 1125 cases and the 30-65 year age group with 3821 cases (Kementerian Kesehatan Republik Indonesia, 2019). From this data we can see that the number of patient safety incidents in Indonesia is still high and of course this has a big impact on patient safety.

To improve the quality of patient safety services at the unit level, efforts must be made to change the patient safety culture (Manorek et al., 2018). The first step to improving quality services is safety, while the key to quality and safe services is building a culture of patient safety. So quality development in hospitals has led to safety-oriented quality improvement efforts (Desveaux et al., 2017). Nurses are health workers who have a higher risk of patient safety hazards than other health workers (Yulianto et al., 2018). Nurses work in a complex health service environment, provide fast service and use high technology (Kusumawati et al., 2019).

Nasocomial infections are infections acquired during hospital treatment (Simamora, 2019). Nosocomial infections are infections that are acquired in hospital for at least 72 hours, and the patient does not show symptoms of infection when admitted to the hospital (Sapnita, 2021). Infection is an effect that is most commonly experienced in hospitals, affecting 5 to 10% of all inpatients in developed countries and in low-income

countries it is a huge burden (Abbas et al., 2021). The impacts resulting from nosocomial infections are quite diverse, including the risk of exposure to infections which are not only experienced by the patient himself, but can also be experienced by health workers in health services, families and visitors (Ema, 2021). Nosocomial infections can have an impact on patients and the patient's family, resulting in loss of source of income, danger, disability, death, increased length of treatment, increased hospital costs and can result in lowering the image of the hospital (Ema, 2021). The main point of eliminating this and other infections is the behavior of health workers who do not wash their hands properly (Poernomo et al., 2016).

This research took the object at RSU Royal Prima Medan, standard precautions were implemented at Royal Prima Hospital Medan with the aim of controlling infection consistently and preventing transmission for health workers and patients. By implementing a positive patient safety culture, it is hoped that compliance with universal/standard precautions will improve.

Based on the results of a pre-survey conducted by researchers at RSU Royal Prima Medan, based on the patient safety report at RSU Royal Prima Medan in 2018, data on the incidence of potential injury (KPC) was 588 cases, the incidence of near injury (KNC) was 30 cases, the incidence of no injury (KTC) was as many as 6 cases, nosocomial infection, namely phlebitis, was 26.02% or 71 cases (RSU Royal Prima, 2018). Based on the patient safety report at RSU Royal Prima Medan in 2019, data on the incidence of potential injury (KPC) was 633 cases, the incidence of near injury (KNC) was 39 cases, the incidence of no injury (KTC) was 1 case, the nosocomial infection, namely phlebitis, was 36.93 % or 270 cases (RSU Royal Prima, 2019).

Then, based on the results of the pre-survey that had been carried out, it was seen that in several rooms many nurses did not use personal protective equipment when carrying out care procedures for patients and nurses used disposable medical equipment repeatedly. Next, the researchers conducted a pre-survey of 10 nurses at RSU Royal Prima Medan and found 8 people. the nurse had not carried out the hand washing procedure according to the moment, and 2 nurses had not carried out the hand washing procedure according to the correct steps.

Individual characteristic factors of health workers include skills, knowledge and work experience (Idris, 2017). Lack of compliance with the implementation of universal/standard precautions can be caused by several factors, including weak parts of the patient safety culture dimension, such as communication problems between staff, problems with the patient handover process, lack of supervision or problems in terms of staff management.

Based on the background data above, researchers are interested in conducting research on the relationship between patient safety culture and compliance with standard precautions by nurses at the Royal Prima Hospital in Medan.

#### Method

This type of research is quantitative research with an analytical descriptive design. Descriptive research is a method that functions to describe or provide an overview of the object under study through data or samples that have been collected as they are without carrying out analysis and making conclusions that apply to the general public (Sugiyono, 2019).

In this study, researchers used a perception study method through questionnaires to nurses to determine the patient safety culture and implementation of standard precautions at the Royal Prima Medan Hospital. Questionnaires were distributed to nurses in the inpatient room at Royal Prima Hospital, Medan. The final results of the questionnaire were analyzed based on quantitative analysis with a Likert measurement scale. From this activity, the results are presented in matrix and table form.

### **Result and Discussion**

The Relationship between a Culture of Openness and Compliance with the Implementation of Universal Precautions by Nurses in Inpatients at Royal Prima Hospital, Medan

The results of the research on the relationship between Culture of Openness and Compliance with the Implementation of Universal Precautions by Nurses in Inpatients at the Royal Prima Hospital in Medan, namely the P value for the Culture of Openness variable P = 0.000 < 0.05, which means that the Culture of Openness variable has a significant relationship with Compliance with the Application of Universal Precautions By a Nurse at the Royal Prima Hospital Medan Inpatient. The results of this research are in line with research conducted by Aditya (2018) which stated that there was a significant relationship between a culture of openness and compliance in implementing universal/standard precautions by nurses midwives in inpatient settings.

This culture of openness illustrates that all hospital staff feel comfortable discussing incidents that occur or topics regarding patient safety with teammates or their managers. Staff feel confident that the main focus is openness as a learning medium and not to find fault or punish. Open communication can also be realized during patient handovers, staff briefings or

morning reports. Openness means that nurses feel comfortable discussing incidents and issues regarding patient safety with teammates or managers. The focus of openness is a learning medium and not to find nurses' mistakes, because openness is one component of patient safety culture. These results show that a high culture of openness is associated with better compliance in implementing universal/standard precautions by nurses

Open communication plays a very important role in reducing patient safety incidents and an attitude of open communication can improve the quality of human resources to have the courage to report every patient or officer safety incident so that it can be used as a source of information in the learning process to improve the quality of hospital services.

The Relationship between a Culture of Justice and Compliance with the Implementation of Universal Precautions by Nurses in Inpatients at the Royal Prima Hospital in Medan

The results of the research on the relationship between Compliance Culture and Compliance with the Implementation of Universal Precautions by Nurses in Inpatients at the Royal Prima Hospital in Medan, namely the P value for the Compliance Culture variable P=0.000<0.05, which means that the Justice Culture variable has a significant relationship with Compliance with the Implementation of Universal Precautions By a Nurse at the Royal Prima Hospital Medan Inpatient. The results of this research are in line with research conducted by Nurmalia et al. (2019) whose results show that there is a relationship between a culture of justice and compliance with the implementation of universal precautions by nurses.

These results show that the level of justice culture is related to compliance in implementing universal/standard precautions by nurses and midwives. This culture of justice is closely related to staffing, namely the availability of sufficient staff to handle the workload and the appropriate number of working hours.

A culture of justice is a culture that brings an atmosphere of "trust" so that members are willing and have the motivation to provide data and information and involve patients and their families fairly in every decision making. Nurses and patients are treated fairly when incidents occur and are not focused on finding individual errors but rather studying the systems that lead to errors. An open and fair environment will help staff make honest reports about incidents that occur and use incidents as lessons in an effort to improve patient safety.

A culture of justice focuses on a non-punitive response to wrongdoing and seeing an event from both

sides. Apart from looking at nurse accountability, we also pay attention to errors in the system.

The Relationship between Reporting Culture and Compliance with the Implementation of Universal Precautions by Nurses in Inpatients at Royal Prima Hospital, Medan

The results of the research on the relationship between Reporting Culture and Compliance with the Implementation of Universal Precautions by Nurses in Inpatients at the Royal Prima Hospital in Medan, namely the P value for the Reporting Culture variable P = 0.000 < 0.05, which means that the Reporting Culture variable has a significant relationship with Compliance with the Implementation of Universal Precautions By a Nurse at the Royal Prima Hospital Medan Inpatient. Reporting is an important element of patient safety. Adequate information will be used as a learning process to improve patient safety. The level of reporting culture related compliance in implementing is universal/standard precautions nurses by midwives.

A reporting culture is a culture where staff are ready to report incidents or near misses, so that the types of errors can be assessed and errors commonly made by staff can be identified and action can be taken as learning material for the organization. Organizations learn from previous experiences and have the ability to identify risk factors for incidents to occur so that they can reduce or prevent future incidents. Reporting is an important element of patient safety. Adequate information will be used as a learning process to improve patient safety, adequate reporting will provide benefits including: staff involvement in risk management and staff awareness will increase, the organization will respond to complaints from patients more quickly and effectively, preventing excessive hospital expenditure. excess because patient complaints are reduced, incidents can be prevented and court costs.

Relationship between Learning Culture and Implementation Compliance Universal Precautions By Nurses In Inpatients at Royal Hospital Prima Medan

The results of the research on the relationship between Learning Culture and Compliance with the Implementation of Universal Precautions by Nurses in Inpatients at the Royal Prima Hospital in Medan, namely the P value for the Learning Culture variable P = 0.000 < 0.05, which means that the Learning Culture variable has a significant relationship with Compliance with the Implementation of Universal Precautions by Inpatient Nurse at Royal Prima Hospital, Medan. The results of this research are in line with research conducted by Nurmalia et al. (2019), the results of which show that there is a relationship between learning culture and compliance with the implementation of

universal precautions by nurses. Every line of the organization, both the sharp end (which is in direct contact with service) and the blunt end (management), uses incidents that occur as a learning process. The organization is committed to studying incidents that have occurred,

A learning culture is formed when individuals learn from mistakes and are able to improve their abilities as part of the system. Learning begins when leaders become role models for nurses not only in poor cultures but also in good cultures. Incidents related to patient safety are a learning process to become better. Nurses are part of a patient safety culture and are able to learn from reports of patient safety incidents, both undesirable events and near-injury incidents. Learning is carried out to extract value from errors that occur so that they can prevent repeated errors. Effective learning to prevent unsafe processes and prevent errors.

The relationship between Information Culture and Implementation Compliance Universal Precautions By Nurses In Inpatients at Royal Hospital Prima Medan

The results of the research on the relationship between Information Culture and Compliance with the Implementation of Universal Precautions by Nurses in Inpatients at the Royal Prima Hospital in Medan, namely the P value for the Information Culture variable P = 0.000 < 0.05, which means that the Information Culture variable has a significant relationship with Compliance with the Implementation of Universal Precautions By a Nurse at the Royal Prima Hospital Medan Inpatient. A good information culture is when an organization is able to learn from past experiences so that it has the ability to identify and avoid incidents that will occur because it has been clearly informed about incidents that have already occurred, for example from incident reporting and investigations. The results of this research are in line with research conducted by Aditya (2018) which stated that there was a significant relationship between information culture compliance in implementing universal/standard precautions by nurses and midwives in inpatient settings. Organizations are able to learn from past experiences so that they have the ability to identify and avoid incidents that will occur because they have learned and are clearly informed from incidents that have already occurred, for example from incident reporting and investigations.

A good information culture is when an organization is able to learn from past experiences so that it has the ability to identify and avoid incidents that will occur because it has been clearly informed about incidents that have already occurred, for example from incident reporting and investigations. To build patient safety there must be an environment or culture that

allows staff to share information about patient safety problems and then take action to improve. Open communication can be applied when communicating to other unit nurses about the risk of incidents involving nurses and patients during handover and transition.

## Conclusion

From the results of the research that has been carried out, the conclusions in this study are as follows: a) The level of compliance with the implementation of universal precautions shows that the majority of respondents are compliant in implementing universal precautions with a total of 73 respondents (58.4%) and for respondents whose level of Compliance with the Implementation of Universal Precautions is not 52 people (41.6%). b) A culture of openness is related to compliance in implementing standard precautions by nurses at the Royal Prima Hospital in Medan because the p value is 0.000 < 0.05. c) A culture of justice is related to compliance in implementing standard precautions by nurses at the Royal Prima Medan Hospital because the p value is 0.000 < 0.05. d) Reporting culture is related to compliance in implementing standard precautions by nurses at Royal Prima Medan Hospital because the p value is 0.000 < 0.05. e) Learning culture is related to compliance in implementing standard precautions by nurses at Royal Prima Medan Hospital because the p value is 0.000 < 0.05. f) Information culture is related to compliance in implementing standard precautions by nurses at the Royal Prima Medan Hospital because the p value is 0.000 < 0.05. g) A culture of openness, a culture of justice, a culture of reporting, a culture of learning and a culture of information are jointly related to compliance in implementing standard precautions by nurses at Royal Prima Medan Hospital because the p value is 0.000 < 0.05.

# Acknowledgments

Thank you to all parties who have helped in this research so that this article can be published.

#### **Author Contributions**

All authors contributed to writing this article.

# **Funding**

No external funding.

# **Conflicts of Interest**

No conflict interest.

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