



Implementation Analysis of Prevention and Infection Control in Datu Beru Takengon Hospital

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Abstract

The incidence of HAIs is also associated with high rates of morbidity and mortality in hospitals. 37,000 deaths were recorded in Europe and 99,000 deaths in the United States due to HAIs, 18.5% in Latin America, 23.6% in Asia and 29.3% in Africa. Infection at Datu Beru Hospital Takengon. The type of research is descriptive qualitative. This research was conducted at Datu Beru Takengon Hospital, Jalan Qurrata Aini Kebayakan, Nunang Antara, Bebesen, Central Aceh Regency, Aceh. There were 12 informants in this study. The results showed that from interviews with key informants and supporting informants, the implementation had been running according to existing standards, although there were still some shortcomings. The conclusion of the study was that there were shortcomings from the 11 components of standard precautions: health workers did not use PPE according to the area and indications, hand washing compliance was not up to standard, some still wore jewelry, did not carry out 5 moments, facilities and infrastructure for hand washing were not adequate, room flow was not up to standard. PPI because there are some rooms that are still old buildings, waste sorting and transportation are correct, but the disposal of infectious waste still uses a third party because Datu Beru General Hospital does not yet have an independent incinerator, sorting and management of linen and laundry are good but the distribution and transportation of linen is still using the same and open trolley, Health checks and immunizations for hospital staff have not been carried out regularly.

Introduction

Infectious diseases related to health services or Health care Associated Infections (HAIs) are one of the health problems in various countries in the world (APEC, 2013). In the Asian Pacific Economic Committee (APEC) or Global Health Security Agenda (GHSA) forum, HAIs became the agenda discussed, this situation shows that HAIs have a direct impact on the country's economy (Sapardi et al., 2018). The incidence of HAIs is also associated with high morbidity and mortality in hospitals. 37,000 deaths were recorded in Europe and 99,000 deaths in the United States due to HAIs, 18.5% in Latin America, 23.6% in Asia and 29.3% in Africa.

The incidence of HAIs in Indonesia reaches 15.74%, much worse than developed countries which range from 4.8 to 15.5% (Afandi, 2016). HAIs are one of the benchmarks for assessing the quality of hospital services. Assessment of HAIs is carried out in several diseases such as Ventilator Associated Pneumonia (VAP), Blood Stream Infections (IAD), Urinary Tract

Infections (UTI) and Surgery Area Infections (IDO), the risk of HAIs is one of them caused by disruption or interruption of anatomical barriers such as urinary catheters. cause UTI, surgical procedures can cause SSI, intubation and use of a ventilator can cause VAP, venous and arterial cannulae can cause IAD, phlebitis.

Based on the phenomenon that the risk of infection in hospitals is still high, it is necessary to make efforts to minimize the risk of infection in hospitals by establishing Infection Prevention and Control (PPI). PPI needs to be implemented in every hospital and other health facilities to protect individuals who are active in hospitals from the risk of infection.

Infection Prevention and Control (PPI) is the basis for measures to reduce the risk of transmission of microorganisms from known or unknown sources of infection. Sources of infection that can cause transmission include blood and body fluids, feces (excluding sweat), open wounds or mucous membranes and equipment or items in the care environment that cause contamination.

The basic PPI Hospital program in Indonesia was developed based on the Guidelines for Infection Prevention and Control in Hospitals and Other Health Care Facilities (WHO, 2016) covering prevention of infection transmission through the application of standard precautions and isolation precautions, control of antibiotic resistance through the wise use of antibiotics and disinfectants, infection surveillance hospital that focuses on epidemiological studies and risk analysis, equipment management and environmental hygiene, protection and prophylaxis of staff and staff education. The preparation of competent human resources in the IPC field is facilitated through various trainings and workshops tiered from basic to advanced levels on an ongoing basis.

According to Permenkes No. 27 of 2017, the Implementation of Infection Prevention and Control in Health Service Facilities aims to protect patients, health workers, visitors who receive health services and the community in their environment by breaking the cycle of transmission of infectious diseases through standard precautions and based on transmission. For patients who require isolation, isolation precautions will be applied, consisting of standard precautions and transmission-based precautions.

Standard precautions, namely primary precautions, are designed to be applied routinely in the care of all patients in hospitals and other health care facilities, whether diagnosed, suspected of being infected or colonized. In 2007, CDC and HICPAC recommended 11 (eleven) main components that must be implemented and adhered to in standard precautions, namely hand hygiene, Personal Protective Equipment (PPE), decontamination of patient care equipment, environmental health, waste management, linen management, health protection. staff, patient placement, respiratory hygiene/cough and sneeze etiquette, safe injection practices and safe lumbar puncture practices. While transmission precautions are in addition to standard precautions that are carried out before the patient is diagnosed and after the diagnosis of the type of infection through contact, through droplets, through the air (Airborne), through common vehicles (food, water, drugs, tools, equipment), and through vectors (flies, mosquitoes, mice). An infection can be transmitted in more than one way, and those associated with HAIs are contact, droplet and airborne transmission.

The concept and principle adopted from standard precautions is that all blood and body fluids must be managed as sources that can transmit infections, such as HIV, Hepatitis B (HBV), Hepatitis C and various other blood-borne diseases and treat all patients the same without distinction. disease with the assumption of risk or dangerous infection.

Standard precautions were created to consistently reduce the incidence of infection, as well as prevent transmission from patient to patient, visitor to patient, or patient to health care workers. Nurses as providers of nursing care are equipped with elements of knowledge and attitudes obtained when attending nursing education. Both of these elements will affect the behavior of nurses in providing nursing care which is reflected in the implementation of nursing actions.

The Minister of Health in Permenkes No. 27 of 2017 which ordered that the human resources of health care facilities increase their knowledge and skills in preventing and controlling infection. The strategy used is to increase the ability of health workers with the Standard Precautions method which is applied to all people (patients, officers or visitors) who receive health care facilities regardless of whether they are infected or not and vigilance based on transmission which is intended for inpatients who show symptoms, are infected. with pathogenic bacteria.

Research that supports and relates to standard precautions, infection prevention and control, namely the study of Amoran & Onwube (2013) states that the implementation of standard precautions among health workers in Africa is related to the knowledge of health workers and the availability of personal protective equipment. Punia et al. (2016) shows that the implementation of standard precautions in South India is influenced by perceptions and determinants of health worker compliance. Another study by Satiti, et al (2017) stated that the five components of standard alertness that could be assessed at RAA Soewondo Pati Hospital were associated with suboptimal nursing managerial functions.

Health workers are at the forefront of dealing directly with patients to handle confirmed or suspected cases such as COVID-19 where the virus is transmitted through splashes of saliva that come out of the mouth or nose when an infected person talks, coughs, or sneezes, so they are at high risk. to be exposed and infected. One health worker is transmitted through several modes of transmission, depending on the type of pathogen.

Health workers, especially nurses, have an important role in preventing and controlling HAIs. Evaluation of the level of knowledge of nurses in the prevention of HAIs in the inpatient ward is an important step that needs to be taken in following up on the philosophy and objectives of the PPI to prevent and minimize infection in patients.

According to Nursalam, the quality of health services in hospitals can be reflected in patient satisfaction with the health services they have received. Patient satisfaction on service quality is a comprehensive assessment of the superiority of a service or service. Satisfaction is a person's feeling of pleasure that comes from a comparison between the pleasure of an activity and a service received with his expectations. Kotler (2005) states that satisfaction is a person's feelings of pleasure or disappointment that arise after comparing his perceptions or impressions of the performance or results of a product and his expectations.

Patients will feel satisfied if the performance of the health services they get is in line with their expectations. Therefore, patient satisfaction is a level of patient feelings that arise due to the results of comparing the performance of the health services they receive with what they expect.

Datu Beru General Hospital Takengon Central Aceh is one of the regional general hospitals in Central Aceh which is a type B hospital and as a teaching hospital that provides health services to the community which of course must be supported by qualified health personnel, including knowledge and skills. behavior of health workers in medical waste management. Datu Beru General Hospital Takengon Central Aceh currently has 378 beds with a total of 801 human resources, namely 27 general practitioners, 26 specialists, 576 nurses and 172 non-medical people, while the 2021 BOR is 83%.

A preliminary study conducted by researchers at RSU Datu Beru Takengon Central Aceh in May 2021 obtained data that the PPI program had been established and the IPCLN (Infection Prevention and Control Link Nurse) had created a program. At Datu Beru Takengon General Hospital, Central Aceh, standard precautions are applied that must be carried out by all officers in providing services to patients. Studies of compliance with standard precautions have not been carried out in its entirety. The initial survey conducted by researchers regarding standard precautions for 10 nurses found 6 nurses washing their hands and using PPE (handscon) when taking action, 4 nurses not washing their hands and not using PPE (handscon) when taking action

Methods

This study uses a descriptive qualitative method, which examines objects that reveal the phenomena that exist contextually through the collection of data obtained, by looking at the elements as a unit of interrelated study objects and then describing them. The phenomenon can be in the form of forms, activities, characteristics, changes and differences between one phenomenon and another.

Results and Discussion

Matrix of Interview Results with Main Informants and Supporting Informants for the Implementation of the PPI Standard Precautions Program at RSUD Datu Beru Takengon

Based on the results of interviews obtained by researchers with key informants and supporting informants regarding the implementation of standard precautions in RSUD Datu Beru Takengon based on 11 main components of standard precautions, it is known as follows:

"So far and until now it has gone well and has been realized well, and there have been no complaints from the hospital about the implementation and prevention of infection, sir" (Results of the 2022 interview)

Based on the results of the interview above, the researcher concluded that the main informants and informants supporting the implementation had met the existing standards, although there were some shortcomings, but they could run well, and in accordance with the implementation of the PPI from RSUD Datu Beru Takengon based on the 11 main components of standard precautions.

According to the researcher, with the implementation of the 11 main components of standard precautions, the hospital implements preventive measures if the implementation of the PPI does not go well, but in this case the implementation is in accordance with what is expected.

Matrix of interview results with the Main Informant and Informant Supporting the Obstacles Faced byi and the Strategies Carried out by the PPI Team at Datu Beru Takengon Regional Hospital

Based on the results of interviews obtained by researchers with the main informants and supporting informants regarding the constraints of standard vigilance at the Datu Beru Takengon Regional Hospital based on 11 main components of standard vigilance, it is known as follows:

"If the obstacles so far are usually empty items, like handscoond then masks suddenly rise and become scarce, we have experienced that before, so we were overwhelmed to find masks that were all rare, but thank God that currently all supplies are safe, and the medical personnel are also septy times when it comes to this problem, because they know that health is expensive" (Interview Results, 2022).

“The usual obstacle is that a murder victim who has not yet been identified has been in the refrigerator for a long time, sir, so we also have to work a little extreme because we have to be vigilant and on guard, that's all, sir. So the work is more difficult, if there are no other problems so far” (Interview Results, 2022).

Based on the results of the interviews above, the researcher concludes that the main informants and supporting informants in the implementation there are several obstacles but all of these things have been resolved properly because in this case it is fulfilled because the Regional General Hospital (RSUD) Datu Beru Takengon is based on 11 main components of standard precautions, where each Obstacles that occur will immediately be addressed properly, as a result of the safe interview, there are some patients who do not want to use masks and do not wash their hands, so they will not be given services and are not allowed to enter the hospital area.

According to the Constraint researcher, In planning, there are still standard component performance indicators that have not yet been determined for preventive measures. In the organization there is no division of individual tasks for all members of the PPI committee and there are still obstacles. There are obstacles or obstacles in its implementation, such as non-compliant human behavior and lack of infrastructure, so medical personnel are given to be able to overcome problems ranging from the smallest to the biggest in order to keep implementing the 11 main components of standard precautions.

Matrix of interview results with the Main Informant and Informant Supporting Hopes of the PPI Team at Datu Beru Takengon Regional Hospital

Based on the results of interviews obtained by researchers with the main informants and supporting informants regarding the Expectations of the standard vigilance team at The Datu Beru Takengon Regional Hospital based on 11 main components of standard vigilance. known as follows:

“Stay alert and continue to improve infection prevention and control because at this time we are not safe, take care of ourselves and remember that there are families waiting for us to come home healthy and safe, that's all, sir.” (Interview results, 2022).

“It is increasingly being improved and still maintaining the implementation and prevention of infection so that people who come for treatment here feel safe and comfortable” (Interview Results, 2022).

Based on the results of the interview above, the researcher concludes that the main informants and supporting informants of Harapan Tim have fulfilled the 11 main components of standard precautions. However, the informant hopes that this will continue to improve health status and also maintain what has been done well, so that it can become a role model for every private hospital in Takengon.

According to the researcher, with the hope that the Team has run according to the 11 main components of standard precautions, and the informants are also very enthusiastic in implementing the PPI, because apart from taking care of the medical staff, it can also maintain the welfare of patients which will increase because they take care of each other from things that can harm others. other.

According to the researcher, based on the 11 main components of standard precautions, it has been implemented in accordance with hospital policies, and the informants are also very enthusiastic in implementing the PPI, because in addition to taking care of the medical staff, they can also maintain the welfare of patients which will increase because they take care of each other. themselves from things that can harm others. By implementing the 11 main

components of vigilance, hospital patient safety is a system where hospitals make patient care safer which includes risk assessment, identification and management of matters relating to patient risk, reporting and analysis of incidents, minimizing risks and preventing injuries caused by an error as a result of carrying out an Action. Although there are some shortcomings, this does not prevent the implementation of the 11 components of vigilance considering that this is a pandemic period that provides support and encouragement to keep yourself from infection.

PPI Program Implementation

Implementation of Infection Prevention and Control in Health Service Facilities aims to protect patients, health workers, visitors who receive health services and the community in their environment by breaking the cycle of transmission of infectious diseases through standard precautions based on transmission. For patients who require isolation, isolation precautions will be applied consisting of standard precautions and transmission-based precautions.

The implementation of Universal Precautions is an important step to maintain health facilities (hospitals, health centers, etc.) as a place of healing, not a source of infection. In connection with the above, a series of continuous programs is needed in the context of infection prevention and control (PPI). To minimize the risk of infection in hospitals and other health care facilities, infection prevention and control (PPI) needs to be implemented. Hospitals/clinics as providers of health services not only provide curative and rehabilitative services but also provide preventive and promotive services. Education and training as well as wise use of antimicrobials.

In addition, monitoring is carried out through Infection Control Risk Assessment (ICRA), audits and other monitoring on a regular basis. In the implementation of PPI, hospitals, health centers, clinics, independent practices are required to implement all PPI programs while for other health service facilities, the implementation of PPI is adjusted to the services provided at the health service facilities.

Based on the results of the interviews above, the researcher concluded that the main informants and informants supporting the implementation had complied with the existing standards, although there were some shortcomings, but they could run well, and in accordance with the implementation of RSUD Datu Beru Takengon based on the 11 main components of standard precautions.

According to the researcher, with the implementation of the 11 main components of standard precautions, the hospital will carry out preventive measures if the implementation does not go well and in accordance with what is expected, but in this case the implementation is as expected.

According to the CDC and HICPAC (2007) recommend 11 (eleven) main components that must be implemented and adhered to in standard precautions, namely hand hygiene, Personal Protective Equipment (PPE), decontamination of patient care equipment, environmental health, waste management, linen management, health protection of workers, patient placement, respiratory hygiene/cough and sneeze etiquette, safe injection practices and safe lumbar puncture practices.

According to Hajirah W 2018 with the title "analyzing the implementation of infection prevention and control policies in the delivery room in terms of George Edwards theory" the implementation of the PPI policy has received less attention from the management; leadership support is still lacking; the health office as a technical sector has not carried out good

supervision; and PPI SOP managerial policies have not been implemented optimally according to standards.

Obstacles Faced and Strategies Implemented by the PPI Team

According to the Decree of the Minister of Health of the Republic of Indonesia concerning Guidelines for Performance Assessment of Health Human Resources in Puskesmas, professional health workers include strategic health workers and non-professional health workers as well as health support/support personnel who are involved and work and devote themselves such as in health efforts and management.

The health effort referred to is any activity and/or a series of activities carried out in an integrated, integrated and sustainable manner to maintain and improve the degree of public health in the form of disease prevention, health improvement, disease treatment, and health restoration by the Government and/or the community.

Based on the results of the interviews above, the researcher concludes that the main informants and supporting informants in the implementation have several obstacles, but all of these things have been resolved properly because in this case they are fulfilled because RSUD Datu Beru Takengon is based on 11 main components of standard precautions, where any obstacles that occur will be immediately resolved. well, as the results of the interview, there are some patients who do not want to use masks and do not wash their hands, then they will not be given services and are not allowed to enter the hospital area.

According to the Constraint researcher, In planning, there are still standard component performance indicators that have not yet been determined for preventive measures. In the organization there is no division of individual tasks for all members of the PPI committee and there are still obstacles. There are obstacles or obstacles in its implementation, such as non-compliant human behavior and lack of infrastructure, so medical personnel are given to be able to overcome problems ranging from the smallest to the biggest in order to keep implementing the 11 main components of standard precautions.

Satiti AB 2017, with the title "Analyzing the application of Standard Precautions in the Prevention and Control of HAIs (Healthcare Associated Infections) at RAA Soewondo Pati Hospital". In planning, there are still component standard performance indicators that have not yet determined preventive measures. In the organization there is no division of individual tasks for all members of the PPI committee and there are still obstacles. There are obstacles or obstacles in its implementation, such as human behavior that is less compliant and lacks infrastructure. Scheduled monitoring and evaluation of standard precautions is only carried out when audits are quarterly of the year and some components of standard precautions have not been audited.

Based on the observations of the researcher, there are obstacles in implementing the PPI in planning, there are still component standard performance indicators that have not yet determined preventive measures. In the organization there is no division of individual tasks for all members of the PPI committee and they still have control. However, this can also be caused because the patient's family also does not understand how the procedures are in the hospital so that the implementation of the PPI is constrained, starting from using the wrong mask and there are still patients who do not wear masks properly and correctly, even though the officer has given an explanation before entering the hospital area must wash hands and wear but this can still be overcome immediately.

Expectations of the PPI Team

Hope is something that can improve performance and can be evaluated by making more frequent observations in each treatment room and conducting training for all health workers and the PPI team hopes that the activities they carry out get support from all health workers.

All of these experiences have an effect on increasing the knowledge of the PPI team about infection so that it contributes to the implementation of infection prevention. As found by Puspasari (2015) that the higher the knowledge of nurses, the practice in preventing nosocomial infections will be better. However, the results of research by Iiyasu et al. (2016) found weaknesses. monitoring is done by visiting and observing one by one inpatient in the room where he is on duty. The monitoring process is carried out periodically to ensure that the implementation of infection prevention and control runs properly so as to reduce the incidence of infection.

Based on the results of the interview above, the researcher concludes that the main informants and supporting informants of Harapan Tim have fulfilled the 11 main components of standard precautions. However, the informant hopes that this will continue to improve health status and also maintain what has been done well, so that it can become a role model for every private hospital in Takengon.

Rismayanti(2019)'s research with the title "Seeing an overview of the implementation of infection prevention and control programs at General Hospital X." it is known that the PPI program procedure flow and implementation activities related to the PPI program have not run optimally and have not been in accordance with applicable regulations, namely Permenkes no 27 of 2017 at RSU X City Y.

In accordance with what was obtained by Mustariningrum et al. (2015) that training has a positive effect on IPCLN performance, every 1% increase in the training variable, the IPCLN performance variable will increase by 36.2%. This means that the more often IPCLN receives training in accordance with its duties as the implementer of the PPI program, the more its performance will increase.

Based on the observations/observations of the researcher, Harapan observed that Overall, all informants had understood the concept of implementing the PPI. The results of this study also show the informants' expectations for the hospital to continue to provide support to the PPI team by funding further training and providing the necessary facilities and infrastructure. The PPI program training should be held on an ongoing basis at the Datu Beru Takengon Hospital.

Observation Sheet 11 Standard Precautions for Infection Control with Main Informants and Supporting Informants Hope the PPI Team at Datu Beru Hospital Takengon

Implementation of standard infection prevention procedures will accelerate the wound healing process in postoperative patients, by performing quality postoperative wound care actions always pay attention to established universal precautions methods such as washing hands, tools used must be sterile before use on patients. Surgical wound infection occurs due to impaired wound healing, possibly infected if the wound has signs of inflammation or secretes serous discharge.

Infection Prevention and Control (PPI) is an effort to prevent and minimize the occurrence of infections in patients, staff, visitors, and the community around health care facilities. One of the efforts to prevent and stop the incidence of infection in health care facilities is to break or eliminate the chain of infection transmission which consists of 6 components (infectious agent, reservoir, portal of exit, transmission method, portal of entry, and suspect host).

Based on the research results, the hospital has provided education/training to officers. The performance of officers has not been maximized because of the behavior of each individual. In terms of funds, there is no specific budget for the implementation of infection prevention and control. Then, in terms of facilities and infrastructure, it has not fulfilled the sink, while in terms of policies, SOPs and guidebooks are available regarding the implementation of infection prevention and control. Furthermore, on duty nurses who use PPE in the form of gloves as much as 100%, use masks, although there are some patients or patients' families who do not wear masks, but after entering the hospital area it is mandatory to use and there are officers who will monitor it.

The results of this study are in line with the research of Ratna et al (2012) which states that medical professionals do not wash their hands first, and immediately wear gloves. This is one of the causes of phlebitis infection. Therefore, it is hoped that all officers can carry out bundles phlebitis as prevention and control of phlebitis incidence. This incident was caused by the low rate of compliance of officers with hand hygiene, unsterilized infusion, the concentration of fluid was too concentrated, the type of catheter used did not match the size of the blood vessels, and the age of the patient.

The results of the study indicate that the availability of manpower is sufficient and is in accordance with the required characteristics. The hospital has provided education/training to officers, but the performance of the officers has not been maximized due to the behavior of each individual. do 5 moments of hand washing. The moments that are mostly done are after contact with the patient's blood and body fluids and after contact with the patient, whereas before contact with the patient and before giving aseptic actions the nurse rarely washes her hands. the availability of PPE already exists, but sometimes there is a delay in distributing it to the room, using masks during work hours, so that if they cough/sneeze they don't transmit the virus to others. For officers who have not used masks, have covered their mouths and noses using their upper arms when coughing and sneezing, a nurse in the inpatient room has used one syringe and one syringe per person, then the waste is disposed of into the safety box, but the problem is when the safety box runs out has complied with the 11 main components of standard precautions. However, the informant hopes that this will continue to improve health status and also maintain what has been done well, so that it can become a role model for every private hospital in Takengon.

Conclusion

The management is in accordance with the implementation of the standard precautions PPI program based on the 11 main components of standard precautions for the implementation of the Infection Prevention and Control Program in Improving the Quality of Health Services at Datu Beru Takengon Hospital. There are still obstacles in the implementation of the PPI, there are standard performance indicators for components that have not yet determined preventive measures. In the organization there is no division of individual tasks for all members of the PPI committee and there are still people who do not want to wear masks, and use masks incorrectly. There are obstacles or obstacles in its implementation, such as the behavior of patients who are less compliant and lack of infrastructure but medical personnel are able to overcome problems ranging from the smallest to the largest to continue to carry out the 11 main components of standard precautions for the implementation of the Infection Prevention and Control Program in Improving the Quality of Health Services at Datu Hospital. Beru Takengon. The treatment was in accordance with the expectations of the PPI Team in carrying out infection prevention and control in improving the quality of health services at the Datu Beru Takengon Hospital. Judging from the results of interviews with informants who recommend maintaining and in order to continue to improve the effectiveness of the implementation of the Infection

Prevention and Control Program in Improving the Quality of Health Services at Datu Beru Takengon Hospital.

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