

Exploration of Themes from the Application of Standard Operational Procedures Control Infection Nosocomial at X General Hospital

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Abstract: Nosocomial infections are the most common complications in hospitals. One of the important methods to prevent the risk of nosocomial infections in hospitals by controlling nosocomial standard. This study aims to explore of themes from the application of standard operational procedure (SOP) of nosocomial control infection at X general hospital Medan. The research design used is descriptive phenomenology. Participants in this study were 10 nurses selected by purposive sampling technique. The data collected were in-depth interviews completed with field notes and then made in verbatim and analyzed using Colaizzi's approach. The results of the study found five themes: seek nurse prevention by strictly implementing SOP, safe guarding nursing actions, ensuring satisfaction in nursing service, creating cooperation and effective communication as the key to make patient safe and positive support from related hospital management infection prevention and control. The results show that the nurse adheres to SOP of nosocomial control infection to prevent the risk of nosocomial infections. This study can be used by hospitals, especially to prevent and control infection teams increase support for nurses by conducting regular training about prevent and control infection, so that increases understanding nurses about infection risk identification that can occur every nurses workplace.

1 INTRODUCTION

Health risks and clinical risks are recognized as major challenges in health care, in addition health risks and clinical risks have created concerns and challenges for the entire health process (Farokhzadian et al, 2015). The potential risks adversely affecting developing countries in developing countries are far greater than the risk of developing countries, as clinical risks can never be completely eliminated (WHO, 2014).

Healthcare providers contribute to clinical incidents that pose a threat to patient safety, especially those who are the most healthcare professionals in the hospital and constantly interact with patients with various procedures and nursing actions that are likely to cause errors and threaten patient safety. In addition, fatigue in the nurse is a contributing factor to errors (Mattox, 2012). Characteristics of nurses can affect their daily work and potentially errors in patient safety (White, 2012).

Nosocomial infection or also known as infection in the hospital which is the most frequent complications in health services. Infection is the most commonly acquired effect of a hospital affecting about 5 to 10% of inpatients in developed countries (Kadi & Salati, 2012). According to Weston that nosocomial infections also affect patients and families that will result in loss of income, harm, disability or death, increased length of care, additional expenses for hospitals and may reduce hospital image (Weston, 2013).

Standard operating procedure (SOP) is a standardized step / instruction to complete a certain routine work process, which provides the right and best steps based on mutual consensus to carry out various activities and service functions, the standard operating procedure also helps to reducing errors in sub-standard services by providing measures that have been tested and approved in carrying out various service activities (KARS, 2012). National Patient Safety Goals Hospital based on Joint Commission International explains that the achievement of patient safety is lowering the risk of

nosocomial infection, one of the important methods to prevent the risk of nosocomial infections in hospitals by applying highly valuable SOP nosocomial control infections in an effort to prevent potential infectious diseases not expected (JCI, 2015).

The WHO survey results show that in 55 hospitals in Europe, the Middle East, Southeast Asia and the Western Pacific, an average of 8.7% of hospital patients have nosocomial infections and more than 1.4 million people worldwide suffer from those complications obtained from hospital (WHO, 2015). The National Health and Medical Research Council says there are approximately 200,000 nosocomial infections in Australia obtained from acute care health facilities in each year (NHMRC, 2010).

In Indonesia, based on research conducted at 11 hospitals in DKI Jakarta in 2004 that there were 9.8 percent of inpatients getting infected during treatment, in RSUD Semarang in 2009 was phlebitis 131 incident, infection of operation area 38 incident, Urinary tract infection as many as 23 events, sepsis 22 events, pneumonia 7 events and decubitus 6 events (Aisyah & Styabakti, 2013).

Infection prevention and control is the responsibility of nurses in carrying out nursing practice in accordance with standard operational procedures that will result in patient safety. The existence of standard operational procedures can be used as a reference for nurses in performing tasks, can improve the quality of services and avoid malpractice demands for that research will study in depth about the various perceptions or experiences nurses apply SOP control Infection nosocomial.

2 METHOD

This research was conducted at X General Hospital, with reason based on one mission of X General Hospital that prioritize patient safety in health service delivery and in order to increase hospital accreditation to level of plenary.

The study used a qualitative study with descriptive phenomenology design. This design was chosen so that the participants' experience can be explored to be more exposed so that the nurse's experiences applying the nosocomial SOP control infection can be illustrated.

Participants in this study were 10 nurses selected by purposive sampling technique. Data collection was conducted in-depth interview, and field notes were then made in verbatim and analyzed using

Colaizzi's approach. In this study also pay attention to data reliability and ethical research principles.

3 RESULTS AND DISCUSSION

3.1 Results

Researchers collect data by in-depth interview method and field note. The results of interviews in the form of written transcripts carried out content analysis with the help of software Welf-QDA. Based on the analysis results found 5 themes are:

1) Seek nurse prevention by strictly implementing SOP.

The nurse uses SOP every action to the patient to prevent infection. This is because with the SOP and follow the rules / guidelines in the SOP will be able to prevent the occurrence of mistakes made by the nurse during providing care to the patient. This corresponds to the participant's statement

"Meaning the standard operational procedures so the rules are what we use if the action to the patient so that the nurse is not wrong so the patient was not infected his infection during treatment" [Participant 1].

"The rule for us to use is that the infection does not occur in this hospital especially in the patient" [Participant 4].

Nurses make SOP as work instructions in implementing nursing actions to patients to prevent the occurrence of infection. This statement corresponds to the participant's expression:

"Instructions for nurses let how infections do not occur the same patients and the nurse it self" [Participant 6]

"As a nurse's work instructions to the patient..so with that there, the nurse knows what to follow so that the infection does not happen to the patient" [Participant 8].

Nurses perform nursing actions by following the steps in accordance with the SOP that has been established by the hospital to prevent the occurrence of infection. This is supported by the participant's statement as follows

"Yes because there SOP there are steps of action...what we want to do the procedure to the patient so that's the follow let me do it wrong so it

does not happen infection"
[Participant 1].

"All there is a clear sequence of action steps to be followed, so to be wrong it is unlikely to be infected"
[Participant 2].

"The workflow steps in the SOP it's clear how to make no wrong so yes it we follow let not infection"
[Participant 5].

2) Safeguarding nursing actions

Hand washing is one of the habits performed by the nurse before contact with the patient to perform nursing actions. This statement is in accordance with the phrase:

"I always apply hand washing, whatever the circumstance because I think it's the main thing that we do in the beginning to prevent infection let me keep all the time I wash my hands to keep the infection does not happen." [Participant 4].

"I think the most important wash hand is yes..that I do for the patient's safety and for myself because the hand is the intermediary most quickly spread the infection..so yes it must be done as often as possible yes five moments that" [Participant 7].

For nurses personal protective equipment (PPE) is considered something that is necessary in performing nursing actions to the patient. This is supported by the participant's statement:

"Always use the PPE every action ..in addition to prevent infection to the patient, yes of course for us also let's just want to install infusion we must use handsoon is let the action remain sterile so" [Participant 3].

"If for example in SOP mentioned using mask, yes we must use"
[Participant 6].

"The action that we usually deal with the blood of the patient, yes in the SPO there must be a handwashing nurse and wear personal protective devices such as handsoon ..so if it does we join yes the possibility of nosocomial infection is very big .. can from nurse to patient or from patient to nurse can "[Participant 7].

Nurses pay attention to septic and aseptic techniques. Septic and aseptic techniques are

necessary to be considered and applied in every action to the patient to prevent infection. In accordance with the participant's expression:

"Keeping the environment around the hospital from infectious causes such as blood splashes or other body fluids we have to clean" [Participant 1].

"For example if because of characteryes we must be careful sterile..not forget to wash hands, do not forget disinfection genitalia area..not sure so yes urinary tract infection is patient" [Participant 2].

3) Ensuring satisfaction in nursing service.

Emotional satisfaction of nurses with categories: feel easy, feel safe, independent in nursing action, and confident. Nurses feel with the existence of standard operational procedures can facilitate nurses in performing nursing actions to patients. This is in accordance with the participant's expression

"We are easy to work because there is SOP to prevent infection"[Participant 1].

" SOP helps me to take action easily"
[Participant 6].

"Definitely make it easier for the nurse who is in SOP that there is already action steps where so we do not cause infection to the patient"
[Participant 7].

The nurse states that in performing nursing actions to the patient it is important to create a sense of security for both the patient and the nurse itself. In accordance with the participant's expression:

"I certainly feel safe every willing to action to the patient..because work according to SOP things that seem trivial we must follow to be safe"
[Participant 4].

"So if we follow the possibility of wrong it must be small until there is no even ..that's why we are safe .. we are free from complement for example, we are free from infection"
[Participant 7]

Self-reliance of nurses performing nursing actions indicates a nurse's ability to meet the patient's needs. This is supported by the participant's statement as follows:

"All done alone, do not have to be assisted by friends ..because we understand the SOP so we know what

is done and understand yourself how not to have infection" [Participant 2].

"Increase our independence, so if the work to already know how the action was going to be done with should not have an infection to the patient or ourselves" [Participant 5].

"Nurses can work to alone, know what actions will be done to patients according to SOP even if the infection is not there" [Participant 9].

One's beliefs will feel confident and able to behave according to his or her expectations and desires. It is like a participant's expression:

"I am sure with my actions..no hesitations..so I cannot be wrong-wrong..Unless if not come SOP it was yes it could be a mistake right trust infection the patient..That's the point SOP was made hospital "[Participant 2].

"I do with confidence..I believe my actions are true to the patient..because of the time in education we were taught like that" [Participant 3].

"I am sure of taking action.I am confident I am capable of doing such actions without threatening the patient's safety, without causing any infections to the patient"[Participant8]

Provide patient satisfaction with the categories namely: nurses work properly, not harming the patient, responsible nurses. Nurses apply SOP correctly in every nursing action to ensure patient safety in the hospital. This is supported by the participant's statement:

"We as a nurse must really apply the SOP because it is related to patient patient's life safety..we nurse also feel safe if work free from mistake when join SOP " [Participant 1].

"The important thing remains the action to the patient is right, do not let there's complement let it safe" [Participant 2].

"So if there is more SOP directed..we really be how the actions we must do so as not to cause infection" [Participant 4].

No harm is a nurse's effort to ensure patient satisfaction at the hospital. As for this is related to the participant's statement:

"we assure the patient's safety by complying with the SOP to prevent infection ... we guarantee his recovery by undergoing the treatment we provide properly and not making him material or mental loss" [Participant 4].

"Do not let there is a disadvantage to the patient, how to be satisfied yes we must note the service for him because with so later automatically the patient will return to our hospital" [Participant 8].

Each nurse carries out the actions to the patient with a sense of responsibility to ensure patient satisfaction with the services provided. This is supported by the participant's statement:

"No matter what the circumstances we still do the action with full responsibility to the patient" [Participant 3].

"My kick yes positioned the patient like myself so yes so far yes with full responsibility" [Participant 6].

"I take responsibility .. I am afraid to make mistakes, I do not want because of a little patient complement, can get my SP ..do not dare, should be wary is the same so-so" [Participant 8].

4) Creating cooperation and effective communication as the key to make patient safe.

Patient safety in the hospital can be improved by creating cooperation between patient and family as well as all parties in the hospital and effective communication in service process. It is described in the sub-themes of: fostering cooperation related to patient safety, and using effective communication. Nurses make cooperation as necessary to ensure patient safety at the hospital. This is supported by the participant's statement

"All parties must cooperate with each other..nurse cooperation with patients and families should also, because families must have an important role also to keep the patient's safety. [Participant 3].

"Same family also we love..we give education how to prevent the happening of infection, family help to help keep patient safety also" [Participant 5].

"The mutual cooperation of each party in this hospital in maintaining

patient safety for the common good"
[Participant 4].

"In addition to involving our family yes each of the officials yes each other cooperation is in healing the patient yes with attention to the patient's own safety how let infections" [Participant 9].

Effective communication is the most important thing applied by hospital nurses to prevent infection and ensure patient safety. This is supported by the participant's statement as follows:

"Fellow nurses have a good relationship, same patient and family so.. good communication, good relationship with all parties of this hospital" [Participant 7].

"Effective communication is the prevention of infection ..fellow nurses, same doctors, patient families are also important" [Participant 10].

"Effective communication is..it is important we apply in the hospital let me not information about patient safety let not happen things that are not want" [Participant 5]

"Here is applied SBAR so if I feel that effective communication is the most important ..because if it is wrong we communicate convey something related patients yes can risk mistakes that happen" [Participant 9].

5) Positive support of hospital management on infection prevention and control.

The implementation of a patient safety program requires the support of a hospital management organization such as an additional nurse worker, given information on infection prevention, and facilitates nurse needs. This is supported by the participant's statement:

"Additional nurses want to be not overwhelmed, all can be achieved ..let the patient's safety is also guaranteed because nurses are quite able to work well" [Participant 1].

"The number of nurses wants to be added...let the work load decrease" [Participant 2].

"It's about nosocomial infection was also often reminded ..given the latest information about infection prevention" [Participant 2].

"We are here the average nurse diploma, yes certainly less is the science of his theory because we need to be given the latest information related to how to relieve infection"
[Participant 4].

Fulfillment of nurse needs such as increased knowledge of infection prevention and control facilitated through seminars and training is the expectation of nurses on hospital management. This is supported by the participant's statement:

"Nurses are often in the seminars or training so ..nosocomial infection is a lot of his knowledge, let me add knowledge" [Participant 3].

"Improve the nurse's knowledge about patient's safety..why it is important, in SOP there is how to prevent infection..but want training there also..let's have a refresh so same nurse" [Participant 6].

3.2 Discussion

The patient's safety in the hospital is a system where the hospital makes the patients care because of risk assessment, incident identification and analysis, the ability to learn from incidents and follow-up, and the implementation of solutions to minimize risks and prevent injuries caused by mistakes caused carrying out an action or not taking appropriate action. Participants say SOP as a rule to be followed in performing nursing actions to patients. This is because with the SOP and follow the rules / guidelines in the SOP will be able to prevent the occurrence of mistakes made by the nurse during providing care to the patient.

Groves, Meisenbach, and Scott-Cawiezell argue that patient safety aims to improve the quality of care and avoid malpractice demands, so that standard operational procedures should be used as a reference in providing services to patients (Groves, Meisenbach, & Scott-Cawiezell, 2011). Haile, Engeda, and Abdo's research showed that most of the nurses had the same level of compliance as the prevention standard, that is 60 people (88,2%) while the nurse who had the unfair compliance level of 8 people (11,8%) (Haile, Engeda, & Abdo, 2017).

Important findings in the study that nurses consider the SOP as a mandatory rule to obey the goal of preventing the occurrence of errors causing the infection while providing care to the patient and applying it strictly to ensure patient safety in the hospital. As described in the National Patient Safety

Goals Hospital based on Joint Commission International that the achievement of patient safety is to reduce the risk of nosocomial infections, one tool to prevent the risk of nosocomial infections in hospitals by applying highly valued SOP nosocomial control infection in an effort to prevent potential an unexpected infection event (JCI, 2015).

A risk-conscious culture of culture should be embedded in every health care provider and hospital healthcare provider and increase the motivation for infection prevention and control as a culture rooted in the hospital. Participants in this study revealed that the role of nurses in infection control is to provide safe nursing services by performing the correct hand washing technique and performed within 5 moments and making it a habit to avoid transmission of infection to patients in the hospital.

In line with Najafi's, Nejjad, and Rafii research mentioned that the related solution of no safety culture pressure in maintaining hand hygiene at all levels is to make it a habit (Najafi, Nejjad, & Rafii, 2013). This is also supported by the theories of Kadi and Salati which state that the implementation of nursing care practices for the control of nosocomial infections is part of the role of nurses in hospitals that begin with maintaining hand hygiene (Kadi & Salati, 2012).

The use of personal protective equipment such as gloves and masks is a key component in minimizing the spread of the disease and maintaining an infection-free environment as well as protective measures by nurses and patients on disease transmission. Participants in this study revealed that the use of personal protective equipment such as gloves and masks is done to minimize the occurrence of transmission of infections directly or indirectly from the nurse to the patient or vice versa. Supported by Kang's research, O'donnell, and Colaianne states that nurses who use gloves will be able to provide protection for transmission of infection directly to patients, while masks are expected to provide protection against indirect transmission of infection through air borne (Kang et al, (2016).

Environmental cleaning is done to remove all foreign materials such as dirt, body fluids, and organic matter from the environment surrounding the hospital. Participants stated that performing aseptic techniques on each nursing action as in the medication set and wound care. Medical set up in accordance with the hospital designated SOP, the nurse uses disposable gloves, and the nurse also sterilizes the contaminated apparatus for preparation

at any time to be reused. Participants also always disinfect the area of infusion by using alcohol.

As research conducted by Mariana and Baharuddin mentioned that wound care techniques using Nacl 0.9% and pay attention to aseptic techniques. Aseptic action is performed to reduce and prevent the occurrence of inflammation. Based on the results of this study, it can be concluded that sterile equipment and personnel concerned with septic and aseptic techniques such as the sterility of all instruments used in nursing actions, hand washing, the use of personal protective equipment such as gloves and mask usage have an important role in preventing and control of the occurrence of nosocomial infections in hospitals.

Application SOP of nosocomial control infection is necessary to be performed by nurses. Mistakes in the service process were caused by various causes, among others, caused by health workers 85% and caused by equipment 15%. Participants in this study stated that in performing nursing actions to patients it is important to create a sense of security for both the patient and the nurse itself, to reduce the rate of KTD and KNC in the hospital. This is in line with the research by Nicklin and McVeety that safe health services are the right of patients and health workers to meet patient satisfaction and it becomes the hospital's obligation to provide safe health services (Nicklin & McVeety, 2012).

One of the functions of nurses is an independent function which is an independent function and not dependent on others, where nurses in performing their duties are carried out on their own with their own decisions in taking action in order to meet basic human needs such as fulfillment of physiological needs, fulfillment of security and comfort needs, love of love, self-fulfillment and self-actualization (Potter & Perry, 2010). It was revealed by the participants that it is important to have independence for nurses to improve their skills and knowledge about nursing actions given to patients.

In line with research conducted by Natasia, Loekqijana and Kurniawati concluded that the nurse's compliance with SOP implementation is also influenced by the level of knowledge and independence of nurses in performing nursing actions, because it will affect the quality of nursing services provided in preventing errors and ensuring patient safety at the hospital (Natasia, Loekqijana, & Kurniawati, 2014). Participants also revealed that with the belief that a person will feel confident and able to behave in accordance with expectations and wishes, a nurse who has the confidence will show a positive attitude that enables him to develop a good

assessment of himself and the environment / situation he faces.

Responsibility refers to the execution of tasks associated with the role of the nurse when providing a properly performed nursing action and evaluating his response. In this study, the nurses stated that they always perform their duties based on service standards. The responsible nurse will remain competent in knowledge and ability, and demonstrate a willingness to act according to the professional ethical guidelines. This is in line with Arma's research that the nurse is responsible for patient safety which aims to improve the quality of service so that standard operational procedures should be used as a reference in providing nursing services to patients (Arma, 2012).

Cosway, Stevens and Panesar say that nurses prioritize the protection and safety of the patient in performing his nursing duties, and do not cause any harm to the patient means that it includes security, courtesy, able to cultivate the confidence of his patients and also means that hazards, risks and hesitations (Cosway, Stevens, & Panesar, 2012). It is in accordance with the disclosed by the participants that the aspect of the guarantee does not harm the patient is promising something for the recovery of the patient by assigning according to the specified SOP and it is regarded relatively by the nurse. All actions of nurse service is done continuously in order to improve the quality of service in order to occur patient satisfaction and possible will form patient loyalty.

Cooperation is an effort with complementary skills and committed to common goals, performance goals and approaches that are shared responsibly. The nurse's relationship with the patient and his family is more of a mutual relationship. Effective communication is a key element of patient safety goals because errors in communication are the first cause of patient safety problems. Good communication prevents errors and can improve patient safety (White, 2012).

Casey & Wallis's research revealed that inaccuracies of information can have a serious impact on patients, nearly 70% of events that result in serious death or injury in hospitals are due to poor communication (Casey & Wallis, 2011). Participants stated that good communication should be created to facilitate the implementation of nursing care to patients. Improved communications allow nurses to exchange information about patients as needed accurately, provide opportunities to visualize patients and ask questions about something that is poorly understood, while improving nurse awareness

of the impact of communication on patient safety and service satisfaction.

Griffiths, Renz, and Rafferty stated that factors that influence the risk of infection in the hospital one of which is the workload that is not in accordance with the staff / nurses are available (Griffiths, Renz, & Rafferty, 2008). While Armstrong argued that the workload of nurses is an indicator that resulted in the occurrence of nosocomial infections in the hospital. Nursing work load is also affected by the number of nurses, number of patients, patient condition and nurse work system (Armstrong, 2009). It is also a hope for participants that sufficient number of nurses will be able to improve patient safety in hospital.

Casida and Parker argue that superior performance and effective organization is a consistent display of nurse managers leadership style with transformational behavior (Casida & Parker, 2011). Mulyatiningsih's research revealed that professional leaders are able to facilitate staff in self-development through training as it is necessary to improve nurse's ability to perform nursing actions with regard to infection prevention and control aspects. The training should be followed by all nurses but also need periodic refreshes for nurses so that the implementation of patient safety can be carried out in accordance with the development of science and technology (Mulyatiningsih, 2013).

Based on above, it can be concluded that participants stated the importance of support from superiors and management in improving patient safety and the hope that participants are career development, because there is no career development program from the hospital itself. Expected career development here is also an increase in education, training, seminars, workshops, etc. and followed by all nurses.

4 CONCLUSIONS

Based on the results of this study can be concluded that the experience of nurses apply SOP nosocomial control infection get the theme that is: seek nurse prevention by strictly implementing SOP; safe guarding nursing actions; ensuring satisfaction in nursing service; creating cooperation and effective communication as the key to make patient safe and positive support from related hospital management infection prevention and control.

The themes that emerged in this study indicate nurse compliance in apply of SOP nosocomial control infections to prevent infection. This study can be used by hospitals, especially to prevent and

control infection teams increase support for nurses by conducting regular training about prevent and control infection, so that increases understanding nurses about infection risk identification that can occur every nurse workplace.

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