

# Relationship Between Supervising the Head of the Room and Hand Washing at Siloam Dhirga Surya Hospital Medan

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## ABSTRACT

Hand washing is a intervention which as not important by nurses, but it is a really important thing to prevent nosocomial infection in hospital. Supervision assumed with relationship with intervention by nurses for hand washing. The research applied correlation analytic design with cross sectional approach. The location of the research was Siloam Dhirga Surya Hospital Medan. The research population were 77 respondents, taken by using total sampling technique. Data analysis with univariate and bivariate methods and using chi-square test with significant level 95% ( $\alpha = 0.05$ ). The results showed that 71.4% of supervision performed by ward heads was good, 28.6% of supervision performed by ward heads was less good. Nurses performed good hand washing (66.2%), and nurses performed less good hand washing (33.8%). It was concluded that any correlation between the ward heads' supervision and nurses' hand washing ( $p$  value=0.000). More good supervision by ward head and then more good nurses performed hand washing. It is recommended that the hospital management improve nurse behavior in performing hand washing to prevent from nosocomial infection.

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## 1. Introduction

The hospital is a very complex medical service unit, its complexity is not only in terms of the types and types of diseases that should get the attention of doctors and nurses to establish the diagnosis and treatment, but also that needs attention is the prevention of disease transmission (Saragih, 2014 ). Hospitals cannot be separated from the treatment and care of patients with cases of infectious diseases, with the possibility of various kinds of microbes as the cause. Where a number of medical personnel simultaneously to interact directly or indirectly with patients treated in hospitals, for example nurses who deal with patients who can be at high risk of getting an infection (Darmadi, 2012). Infection is an invasion of the body or pathogens of microorganisms that can cause pain. If microorganisms fail to cause serious injury to cells or tissues, the infection is called asymptomatic and which occurs through transmission from the environment or health workers, this is called a nosocomial infection (Septiari, 2012).

One of the parameters of quality health services in hospitals is the control of nosocomial infections. The inpatient unit as a hospital service facility is inseparable as a source of nosocomial infection. This is because patient care involves many parties on duty in the inpatient area to be an intermediate factor for cross infection among patients. Nosocomial infections are mainly caused by urine stools, infusion needle infections, respiratory infections, skin infections from surgical wounds and septicemia. This situation allows nosocomial infection. One effort to prevent nosocomial infection is by effective hand washing (Perdalin, 2013).

According to the World Health Organization (WHO, 2013) nosocomial infection is an infection that does not exist or is not in the incubation period before entering the hospital, the most frequent source of infection obtained at the hands of nurses (Saputra, 2011). Nosocomial infection is a problem in hospitals around the world 1.7 million per year, and nearly 100,000 deaths are caused by nosocomial infections in America (Sumiarty, 2014).

One of the efforts to prevent infection in hospitals, nurses do handwashing before and after nursing actions. Washing hands is one of the applications of nurses in the prevention of nosocomial infections where hand hygiene is a procedure of cleaning hands using soap or antiseptics under running water or by using a hand scrub that aims to remove dirt from the skin mechanically and reduce the number of temporary microorganisms (Perdalin, 2010). Hand hygiene is important because hands are an effective way of transferring microorganisms, giving health professionals who often come into contact with patients to spread microorganisms that commonly cause nosocomial infections. Preventing nosocomial infections remains a priority in hospitals and needs to be

sustained in accordance with safe and routine practices, which include standardized infection control precautions to protect staff and patients from microorganisms that can cause infections. Hand hygiene must be done during treatment, that is before taking nursing action and after taking nursing action (Saputra, 2011).

Supervision in the use of self-protection equipment is one of the factors that influence compliance with the use of self-protection equipment by nurses. Supervision of the head of the room on the nurse must be done by 100%. Supervision of personal protective equipment is carried out by the head of the room through the activities of guidance, direction, observation, motivation and evaluation of his staff in carrying out activities or daily tasks (Arwani, 2012). Supervision is a managerial function that regulates all group activities to fit the plan and measure the progress that has been achieved. Supervision of the head of the room through supervision activities, is an important part to improve work effectiveness, such as increasing the knowledge, skills of subordinates and the lack of mistakes made by subordinates (Suarli & Bachtiar, 2013).

The results of a preliminary study of researchers conducted at Siloam Dhirga Surya Hospital Medan, that in 2014 the nosocomial infection data was 1.75%, and increased in 2015 to 2.20% (Data of Siloam Dhirga Surya Hospital Medan, 2015). Observations made by researchers in the inpatient room of Siloam Dhirga Surya Hospital in Medan by observing as many as 15 nurses in providing nursing care to patients, obtained temporary results that 7 people are not routine or are not accustomed to washing their hands before or after taking action, while 8 people do hand washing routine. There are also nurses who do hand washing but only with water do not use soap. When the researchers asked the nurse why they didn't wash their hands routinely before taking action, they got the answer that their hands were always clean, lazy because they had to wash their hands back and forth. Lack of supervision from the head of the room in supervising nurses in the act of washing hands causes nurses to trivialize the act of washing hands before and after nursing actions. This is unfortunate because it can affect the transmission of infection from patient to nurse or from patient to patient. Lack of supervision from the head of the room in supervising nurses in the act of washing hands causes nurses to trivialize the act of washing hands before and after nursing actions. This is unfortunate because it can affect the transmission of infection from patient to nurse or from patient to patient. Lack of supervision from the head of the room in supervising nurses in the act of washing hands causes nurses to trivialize the act of washing hands before and after nursing actions. This is unfortunate because it can affect the transmission of infection from patient to nurse or from patient to patient.

## 2. Research Methods

This type of research is quantitative research using cross sectional method, which is a study that studies the dynamics of the correlation between risk factors and effects, by way of approach, observation or data collection at one time, namely the dependent variable and independent variables are observed at the same time (Notoadmojo, 2005). In this case the relationship identified is the relationship between the independent variable namely the supervision of the head of the room with the dependent variable namely the act of washing hands. The population of this research is all 77 nurses in Siloam Dhirga Surya Hospital. The head of the room was not included in the population because the study respondents were nurses. Regarding the head room surveillance variable, it is seen from the perception of the executive nurse not from the head of the room. The sample of this study was taken as a whole population of 77 nurses (total sampling). The instrument used in this study consisted of 3 questionnaires. The first questionnaire was a questionnaire for respondents' characteristics consisting of: age, sex, last education, and length of work for each one. The second questionnaire is a questionnaire to measure the independent variables (supervision of the head of the room) as many as 20 questions using the Guttman scale answer choices namely 'do' score 1 and 'not done' score 0. The third questionnaire is a questionnaire to measure the dependent variable (washing action hands) as many as 6 questions using answer choices namely 'done' score 1 and 'not done' score 0. The first questionnaire was a questionnaire consisting of respondents' characteristics: age, sex, last education, and length of work of each question. The second questionnaire is a questionnaire to measure the independent variables (supervision of the head of the room) as many as 20 questions using the Guttman scale answer choices namely 'do' score 1 and 'not do' score 0. The third questionnaire is a questionnaire to measure the dependent variable (act

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of washing hands) as much as 6 questions using answer choices namely 'done' score 1 and 'not done' score 0. The first questionnaire was a questionnaire consisting of respondents' characteristics: age, sex, last education, and length of work of each question. The second questionnaire is a questionnaire to measure the independent variables (supervision of the head of the room) as many as 20 questions using the Guttman scale answer choices namely 'do' score 1 and 'not do' score 0. The third questionnaire is a questionnaire to measure the dependent variable (act of washing hands) as much as 6 questions using answer choices namely 'done' score 1 and 'not done' score 0. Data analysis uses univariate, bivariate analysis with *chi-square*.

### 3. Results and Discussion

#### a. Research Result

The results showed that the majority of respondents stated that supervision conducted by the head of the room in the good category was 55 people (71.4%), the minority of respondents stated that the supervision of the room head was not good as many as 22 people (28.6%). The results of the study can be seen more clearly in table 1.

**Table 1**  
Distribution of Respondents by Category of Supervisor of the Room at Siloam Dhirga Surya Hospital Medan

No	Supervising the Head of the Room	Frequency (f)	Percentage (%)
1	Good	55	71.4
2	Not good	22	28.6
	Total	77	100.0

The results showed that the majority of respondents' actions in washing their hands in the good category were 51 people (66.2%), while the minority did the hand washing in the bad category by 20 people (33.8%). The results of the study can be seen more clearly in table 2.

**Table 2**  
Distribution of Respondents by Category Hand Washing Actions at Siloam Dhirga Surya Hospital Medan

No	Washing Hands	Frequency (f)	Percentage (%)
1	Good	51	66.2
2	Not good	26	33.8
	Total	77	100.0

The results showed that of the 49 respondents who stated the supervision of the head of the room both the majority did the act of washing hands in the good category of 45 people (91.8%). Of the 28 respondents who stated that the supervision of the head of the room in the poor category, the majority did hand washing less well as many as 22 people (78.6%). Bivariate test results using Chi-Square showed that the p-value of 0,000 < 0.05 means that there was a significant relationship between the supervisor of the room chief and the act of washing hands at Siloam Dhirga Surya Hospital Medan. The results of the study can be seen more clearly in table 3.

**Table 3.**  
Relationship between Head Supervision and Hand Washing at Siloam Dhirga Surya Hospital Medan (n = 77)

No	Supervising the Head of the Room	Washing Hands				Total		Score $\rho$
		Good		Not good		f	%	
		F	%	f	%			
1	Good	45	50.2	10	21.2	55	71.4	0.00
2	Not good	6	16	16	12.6	22	28.6	
	Total	51	66.2	26	33.8	77	100.0	

#### b. Discussion

Supervision in nursing is part of the direction and supervision function, namely in the form of clinical supervision. Clinical supervision is an activity where the nurse supervisor observes the activities of other nurses when performing nursing actions. Clinical supervision provides teaching,

direction, observation, and evaluation so that nurses can develop their abilities and overcome their limitations in conducting nursing care in accordance with standards (Robbins, 2012). The results of this study are in line with research conducted by Alvionia (2015) that the function of head room supervision is effective or performed on nurses' compliance in the prevention of nosocomial infection through handwashing at Santoso Yusuf Hospital in Bandung to get data of 53.5% but not compliant in application of nosocomial infection control.

According to Perry & Potter (2013), hand washing is the most important basic technique in preventing and controlling infection. Washing hands is the process of removing dirt and dust mechanically from the skin of both hands by using soap and water (Tietjen, 2014). Washing hands is the main requirement that must be met before taking nursing action, for example: putting an IV, taking a specimen. Infection resulting from the provision of health services or occur in health care facilities. These infections are associated with diagnostic or therapeutic procedures and often include prolonged hospital stay (Perry & Potter, 2013).

The act of washing hands by nurses that is not done properly is likely because nurses are less concerned and aware of the dangers of nosocomial infections that will occur, as well as lack of compliance with applicable regulations at the Dhirga Surya Hospital in Medan about five moments for hand hygiene (5 moments of hand washing) ie Before contact with the patient, Before aseptic action, After being exposed to the patient's body fluids, After contact with the patient, After contact with the environment around the patient.

The results of this study are in line with the research conducted by Hanifah (2015) who examined at Wonosari Regional Hospital getting the result that there was a relationship between the supervision of the head of the room and the level of compliance of nurses in performing handwashing actions at the Wonosari Regional Hospital which obtained a p-value of 0,000 because the p value <0.05 .

#### 4. Conclusion

- 1) Supervision carried out by the head of the room according to nurses in the good category (71.4%), a minority of nurses expressed less good (28.6%).
- 2) The nurses' act in washing their hands was good (66.2%), while the minority was not good (33.8%).
- 3) Supervision of the head of the room is significantly related to the act of washing hands at Siloam Dhirga Surya Hospital Medan,  $p = 0,000 < 0.05$ . The better supervision by the head of the room, the better the nurses' actions in washing their hands.

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