

## **Kepemimpinan Kepala Perawat dan Kepatuhan terhadap Pencegahan Infeksi Nosokomial**

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### **Abstrak**

Penelitian ini bertujuan untuk menjelaskan pengaruh kepemimpinan kepala ruangan dan kepatuhan perawat dalam mencuci tangan dan menggunakan sarung tangan untuk mencegah infeksi nosokomial di Ruang Rawat Inap Bedah dan Penyakit Dalam di BLUD RSUD dr. Doris Sylvanus Palangka Raya. Penelitian ini menggunakan desain cross-sectional. Perawat yang menyatakan kepala ruangan memiliki kepemimpinan yang baik sebanyak 85,48%, hanya 14,51% perawat menyatakan cukup dan tidak ada yang menyatakan kurang. Didapatkan p-value 0,011 (<0,05), ada pengaruh yang signifikan antara kepemimpinan kepala ruangan dengan pencegahan infeksi nosokomial. Tingkat kepatuhan perawat dalam mencuci tangan dan menggunakan sarung tangan dalam melakukan pelayanan keperawatan adalah 95,16% dengan kepatuhan baik, sedangkan 4,48% memiliki kepatuhan kurang dan didapatkan p-value 0,013 (<0,05).

**Kata kunci:** kepemimpinan kepala ruangan; kepatuhan perawat; infeksi nosokomial

### ***Chief Nurse Leadership and Nursing Compliance Toward The Prevention of Nosocomial Infections***

#### ***Abstract***

*This study aims to determine the influence of the chief nurse leadership and the compliance of nurses in hand washing and the use of handsooon to prevent nosocomial infections in the inpatient ward of Surgery and Internal Medicine in the dr. Doris Sylvanus Hospital Palangka Raya. This research used a cross-sectional design. The chief nurse had a good leadership of 85.48%, only 14.51% of enough and no one lack. Obtained p-value 0.011 (<0.05), there was a significant influence between the chief nurse leadership on the prevention of nosocomial infections. The level nursing compliance in handwashing and the use of handsooon was 95.16% with good compliance, while 4.48% had less compliance and obtained a p-value of 0.013 (<0.05).*

**Keywords:** chief nurse leadership; nurse compliance; nosocomial infection

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## PENDAHULUAN

Nosocomial infection is an infection obtained by a patient during hospitalization and shows symptoms of infection after 72 hours of treatment and signs of infection do not occur when the patient enters the hospital. The occurrence of nosocomial infections raises several problems, namely increased morbidity and mortality, additional days of care, increased costs of care and dissatisfaction for patients and their families towards health services (Ministry of Labor and Transmigration of the Republic of Indonesia, 1970).

Based on WHO data, nosocomial infections cause 1.4 million deaths every day worldwide. In developing countries including Indonesia, the average prevalence of nosocomial infections is around 9.1% with variations of 6.1%-16.0%. In Indonesia, the incidence of nosocomial infections in government hospitals is 55.1% with 1,527 patients out of 160,417 at risk, while 35.7% for private hospitals with 991 patients from 130,047 at risk. (Fitriyastanti & Sulchan, 2009).

Nurses are one of the health workers who are most at risk of nosocomial infections. This is because nurses occupy the front line in providing nursing care to patients every day which results in nurses being very at risk of contracting the disease suffered by patients (Alvarado C, 2000).

Efforts that can be made by nurses to reduce the risk of transmission of nosocomial infections by implementing Indonesian government policies contained in the Minister of Health Decree Number 270/Menkes/III/2007 and 381/Menkes/III/2007. Establishment of Infectious Disease Control is needed at each hospital. Control is done with use awareness standards through hand washing and the use of handsocon (Saragih & Rumapea, 2012).

Research conducted by Saragih (2012) and Pratami (2013) states that hand washing can reduce 20-58% of the incidence of nosocomial infections, but the implementation of hand washing itself has not received a maximum response. In developing countries, failure to carry out handwashing is often triggered by limited funds to procure facilities causing a lack of adherence to compliance with the procedures for implementing handwashing and the use of handsocon when taking patient care actions (Saragih & Rumapea, 2012; Pratami et al, 2013).

Based on the research conducted by Wulandari (2014), there is an influence of nurses' adherence to the prevention of nosocomial infections. The chief nurse as a service leader in the inpatient room has an important role in the prevention of nosocomial infections in the hospital. The research conducted by Safitri, et al. (2013) states that there is a relationship between chief nurse management functions and nurses' motivation in taking nosocomial infection prevention measures, the better the function of chief nurse management will further improve the quality of actions carried out by the nurse space is able to motivate nurses to carry out compliance measures to prevent nosocomial infections (Rotti et al., 2014; Safitri et al, 2013).

The research conducted by Wulandari (2014) states that there is an influence of the chief nurse management function on the prevention of nosocomial infections where the better the management function of the chief nurse is the better prevention of nosocomial infections. This was supported by research conducted by Sudariani et al. (2016) stating that leadership competencies influence the motivation and

performance of nurses in the ward they lead. Efforts to prevent nosocomial infections need supporting actions towards better change, especially for nurses who have the greatest risk of nosocomial infections.

### METODE

The study design used was observational analytic using a cross-sectional method approach. The study was conducted in the inpatient ward of Surgery and Internal Medicine about the influence of the leadership of the chief nurse and the compliance of nurses in doing hand washing and the use of handscoon to prevent nosocomial infections.

The subjects in this study were all nurses in the inpatient ward of Surgery and Internal Medicine at the BLUD RSUD dr. Doris Sylvanus Hospital Palangka Raya was chosen by the total sampling technique which is taking all the existing populations.

The independent variable in this study was the leadership of the head of the room and the compliance of nurses in doing hand washing and the use of handscoon. While the dependent variable in this study is the prevention of nosocomial infections.

### HASIL DAN PEMBAHASAN

Hasil dan pembahasan mengandung paparan hasil analisis yang terkait dengan pertanyaan penelitian. Setiap hasil penelitian harus didiskusikan. Pembahasan berisi makna hasil dan perbandingan dengan teori dan/atau hasilpenelitian serupa. Panjang hasil pemaparan dan pembahasan 40-60% dari panjang artikel.

**Table 1.** Function of Chief Nurse Leadership, Nurse Compliance, and Prevention of Nosocomial Infection

Variable	Frequency	Percentage (%)
<b>Leadership of Chief Nurse</b>		
Sufficient	9	14.51
Good	53	85.48
<b>Compliance of Nurse</b>		
Sufficient	3	4.84
Good	59	95.16
<b>Prevention of Nosocomial Infection</b>		
Sufficient	1	1.61
Good	62	93.39

Based on table 1, nurses who stated that the chief nurse had carried out leadership well by 85.48%, only 14.51% of nurses stated enough and none stated lacked. The level of compliance of nurses in surgical inpatient rooms and in carrying out handwashing and handscoon when carrying out nursing care was 95.16% with good compliance, while 4.48% had sufficient compliance. The prevention level of nosocomial infection in good category as 98.39%, while 1.61% of nurses considered sufficient.

**Table 2.** Analysis of Chief Nurse Leadership, Nurse Compliance, and Prevention of Nosocomial Infection

Variable	p-value	Spearman correlation
Leadership of Chief Nurse and Prevention of Nosocomial Infection	0.011	0.325
Compliance of Nurse and Prevention of Nosocomial Infection	0.013	0.317

Based on table 2, the result is p-value for the chief nurse leadership variable is 0.011 or  $<0.05$ . So,  $H_0$  is rejected which can be interpreted as there is influence of the chief nurse leadership against the prevention of nosocomial infections with a correlation coefficient of 0.325. This coefficient value is positive which means that the better the function of management of the chief nurse, the better prevention of nosocomial infections.

Based on table 2, the result is p-value for the variable nurse compliance is 0.013 or  $<0.05$ . So,  $H_0$  is rejected which can be interpreted as there is influence of nurse compliance to the prevention of nosocomial infections with a correlation coefficient of 0.317. This coefficient value is positive which means that the better the nurse's compliance, the better the prevention of nosocomial infections.

The results of this study stated that the chief nurse had run a leadership better. This can illustrate that the chief nurses realize that in managing the inpatient room, they do not only implement the assignment system, namely the team method, but in implementing this method the chief nurse still has to be directly involved in handling the patient. The head of space is a nursing manager who is directly related to health service activities for patients. Head of space as a lower manager in nursing must be able to carry out management functions so that organizational goals can be achieved. Nursing management is a series of functions and activities that simultaneously interact in completing work through nursing staff members to improve the effectiveness and efficiency of quality nursing services (Anwar et al, 2016).

The level of compliance of nurses in surgical inpatient rooms and diseases in carrying out handwashing measures and the use of handsocon when performing good compliance nursing care is greater than adequate or less. This result is inversely proportional to the preliminary observations stating that nurses in surgical inpatient and internal medicine rooms still do not get used to washing their hands using handsocon when taking nursing care. This difference is caused by the transfer of inpatient surgical and internal medicine rooms to new buildings which have complete facilities. This proves that without the availability of adequate facilities nurses cannot take action in accordance with the procedure. Some facilities that must be in the room as personal protective equipment (PPE) are one of the handsocons. Handsocons are the most important barrier to preventing the spread of infection. In addition, sinks, antiseptic soap and flowing water are also very needed to support the prevention of nosocomial infections (Indonesian Ministry of Health, 2017; Salawati, 2012).

The rate of prevention of nosocomial infection in the good category is greater than the adequate category. In this study nosocomial infection prevention measures can be carried out by handwashing activities continuously before and after nursing

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care. Hand washing is also the best method to prevent the transmission of microorganisms. It has been proven that the act of washing hands significantly decreases infection (Abubakar et al, 2017).

The presence of nosocomial infections leads to increased emotional stress that decreases ability and quality of life, length of stay in hospital so that the cost of care increases, increased use of drugs, the need for isolation of patients, the use of additional laboratory examinations and other diagnostic studies and the increasing number of deaths at home sick (Mariana et al, 2015). Prevention of nosocomial infection is an important component in the implementation of patient safety in hospitals and provide effective leadership in this regard is the ability of a leader in providing a balance between giving tasks and manage personnel and facilitate the resolution of problems in the gap between the capabilities, procedures, organizational structure, and motivation. Effective leadership requires mastery of the leader in the existing tasks and manpower, so that job satisfaction can be achieved. Assessment of respondents who assessed effective leadership in the high category, it can be said that the effective leadership of the head of space from the aspects of knowledge, self-awareness, communication, energy use, goal setting, and action taking was well implemented (Doll J & Sellwood M. 2008).

Leadership supports increasing patient safety efforts needed in order to improve patient safety and reduce unexpected events, and leadership is one of the most prominent dimensions in measuring patient safety culture (Ginsburg et al. 2010). The chief nurse is the direct leader of the nurse nurse who deals directly with the process of handling patients in the care room and has a critical role in supporting the patient safety culture with effective leadership to create a positive environment for patient safety. Effective leaders will be able to influence and include their subordinates in the organization's activities with clear objectives based on a predetermined time target (Dollan J & Sellwood M. 2008).

The results of this study are in line with the research conducted by Nivalinda et al (2013) which states that the chief nurse can influence strategies and efforts to move nurses within the scope of their authority to jointly implement a patient safety culture (Nivalinda, 2013 ). In line with the opinion of Anugrahini (2010) which states that there is a significant relationship between the leadership of the chief nurse and the compliance of nurses in implementing patient safety guidelines at Harapan Kita Jakarta Hospital (Anugrahini, 2010).

Wulandari's research (2014) was also in leadership on the prevention of nosocomial infections with a correlation coefficient of 0.299. This coefficient value is positive, which means that the better the management function of a chief nurse, the better prevention of nosocomial infections by nurses in the room, according to Safitri, et al. (2013), the effect is caused by the motivation obtained by nurses from the chief nurse will create a perception to always carry out actions to prevent nosocomial infections.

This result is in accordance with the research conducted by Atihuta, et al. (2010) which states that from the results of the chi-square test it was found that there is an influence between the management function and service quality performance. With good service quality performance, it will have the opportunity

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to increase the success of nosocomial infection control and will have a positive impact on the incidence of nosocomial infections (Atihuta JA. 2010).

The results of this study are in line with the research conducted by Mulyani et al. (2013), which showed a significant relationship between nurses' adherence to doing six-step hand washing step five moments with phlebitis incidence in RSI Kendal Hospital (p-value = 0.031). Phlebitis is one of the diseases caused by nosocomial infections.

Washing behavior nurse's hand is one of the factors has a major influence on the health of nurses in preventing the occurrence of nosocomial infections (Tohamik, 2003). One component of the alertness and effort to reduce nosocomial infections is to use the right hand hygiene guidelines and implement them effectively (Indonesian Ministry of Health, 2007).

Compliance is the basic capital of someone behaving. Changes the attitude and behavior of individuals begins with process compliance, identification, and the last stage in the form of internalization. At first the individual obeys advice/instruction without the willingness to take such action and often because he wants to avoid punishment/sanction if he is not obedient, or to get a promised reward if he obeys the recommendation. This stage is called the compliance stage (Kelman HC, 1958).

Based on the research of Surahmat (2014) there is an influence of nurse compliance on the prevention of nosocomial infections. This coefficient value is positive which means that the better the nurse's compliance, the better the prevention of nosocomial infection with a weak correlation.

Some actions increase the potential for disease transmission, namely not washing hands, not use handsoons, handling sharp objects that are wrong, inadequate decontamination technique, and lack of resources to implement universal precaution principle. The research done at Karyadi Hospital Semarang (2003) show the energy compliance rate health to implement implementation some universal elements of less precaution from 50%. Preliminary studies conducted at Abdoel Muluk Hospital in 2006 shows 58% of health workers experience exposure to blood and body fluids (Vincent JL, 2003).

The research conducted by Saragih (2012) at Columbia Asia Medan Hospital showed that nurses at the hospital had 72.61% hand washing compliance. This result is not in accordance with the minimum compliance rate of <75% whereas washing hands before and after taking nursing care can reduce 20-40% to occur in nosocomial infections.

Research conducted by Pratami (2013), found nosocomial infection-causing bacteria in the hands of paramedics and non-paramedics. The presence of bacterial contamination is caused by non-compliance with nurse's hand washing. Therefore, the compliance of nurses in washing can reduce the number of germs in the hand by 58% and for maximum results when doing hand washing as a nurse using antiseptic.

## SIMPULAN

Chief nurse in the inpatient room of Surgery and Internal Medicine at the BLUD RSUD dr. Doris Sylvanus Hospital Palangka Raya based on nurses'

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statements as many as 53 respondents (85.48%) stating the leadership of the chief nurse in a good category and as many as 9 respondents (14.51%) stated in a sufficient category. Obedience of nurses in hand washing and use of handscoon in the inpatient room of Surgery and Internal Medicine at the BLUD RSUD dr. Doris Sylvanus Hospital Palangka Raya based on nurses' statements as many as 59 respondents (95.16%) had good compliance, while as many as 3 respondents (4.48%) had sufficient compliance. Prevention of nosocomial infections in the inpatient room of Surgery and Internal Medicine at the BLUD RSUD dr. Doris Sylvanus Hospital Palangka Raya based on nurses' statements as many as 62 respondents (98.39%) in good category, while 1 respondent (1.61%) in sufficient category.

The influence of the leadership of the chief nurse on the prevention of nosocomial infections in the inpatient room of Surgery and Internal Medicine in the BLUD of the RSUD dr. Doris Sylvanus Hospital Palangka Raya obtained a p-value  $0.011 < \alpha (0.05)$  which means that there is influence of the leadership of the chief nurse on the prevention of nosocomial infection with a correlation coefficient of 0.325. This coefficient value is positive which means that the better the function of management of the chief nurse, the better prevention of nosocomial infections. The effect of hand washing and the use of handscoons on the prevention of nosocomial infections in nurses in the inpatient room of Surgery and Internal Medicine at the BLUD RSUD dr. Doris Sylvanus Hospital Palangka Raya obtained a p-value  $0.013 < \alpha (0.05)$  which means that there is an influence of nurses' compliance to the prevention of nosocomial infection with a correlation coefficient of 0.317. This coefficient value is positive which means that the better the nurse's compliance, the better the prevention of nosocomial infections.

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