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# The Relationship between Nurse Oversight and the Compliance of Nurses to Dispose Medical and Non-Medical Waste in Padang Lawas Hospital

### Dewi Astuti Pasaribu

STIKes Sumatra, Jl Jamin Ginting, Lau Cih, Medan Tuntung, Medan, 20136, Indonesia

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ABSTRACT

Keywords: Role, Infection Prevention Control Nurse, Supervision Prevent and infection control nurses are a professional and practitioner in hospitals and other health facilities. Based on the health ministry, every hospital must prevent transmission of infection. Nurse adherence is an intervention to separate medical garbage exactly. This research is quantitative correlational research aimed at analyzing correlation supervision of infection prevention control nurses with adherence managing medical and non-medical waste in Padang Lawas Hospital year 2018 with samples was 37 respondents. The results of the research obtained that 28.6% or 18 respondents of supervision performed by IPCN nurses were moderate and 18.9% or 7 respondents of supervision performed by IPCN nurses were less good. Nurses adherence good medical and nonmedical waste management was 22 respondents (59.5%). It was concluded that any correlation between the infection Prevention Control Nurse supervision and nurse adherence medical and nonmedical waste management (p value = 0.001). it is recommended that IPCN nurses provide more supervision until the low infection rate in hospitals.

E-mail: dewiastutipasaribu@gmail.com

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#### 1. Introduction

Infection Prevention and Control in hospitals (PPIRS) which effectively illustrate the quality of good hospital services. Considering the importance of the Hospital Infection Prevention and Control Program (PPIRS), in 1976 the Join Commission on the Acreditation of Health Care Organization (JCAHO) included the activities of supervision, reporting, evaluation of care, organizations related to the prevention and control of HAIs to become a requirement for accreditation hospital which is a measure of the quality of health services in hospitals or other health facilities (WHO, 2014).

The World Health Organization (WHO) together with the Ministry of Health in 1997 conducted a survey of waste management in 88 hospitals outside Jakarta. Hospital waste management in Indonesia reaches 23.3%. This value has not yet reached the WHO criteria, which is a good percentage of medical waste 15%. Elina's research in 2007 at Banda Aceh Hospital, the management of medical waste was obtained separation that did not meet the requirements of 25%, garbage collection that did not meet the requirements of 37.5%, transportation of medical waste those who do not meet the requirements of 12.5%; and the processing of medical waste that does not meet the requirements of 25%.

Based on Solikhah Sudiharti's research in 2011 on "Relationship between Knowledge and Attitudes with Nurse Behavior in Disposing of Medical Waste in PKU Muhammadiyah Hospital in Yogyakarta" shows that there is a strong and positive relationship between the level of knowledge and behavior of nurses in medical waste disposal in PKU Muhammadiyah Hospital in Yogyakarta namely 0.002 (p <0.05) and that there is a strong and positive relationship between the level of attitudes and behavior of nurses in the disposal of medical waste at PKU Muhammadiyah Hospital in Yogyakarta which is 0.000 (p <0.05).

Infections related to health services, namely Hospitals, are currently one of the causes of increased morbidity and mortality in hospitals. HAIs can be a new health problem, both in developing countries and in developed countries. Therefore hospitals are required to be able to provide quality services in accordance with predetermined standards and must be applied by all health care workers (Darmadi, 2008).

Health Care Associated Infection (HAIs) or Hospital Infection is a serious problem for all health care facilities throughout the world, including in Indonesia. Research conducted by the National Nosocomial Infections Surveillance (NNIS) and Centers of Disease Control and Prevention's (CDC's) in 2002 reported that 5 to 6 cases of HAIs from every 100 hospital visits. An estimated 2 million cases of HAIs occur every year in the United States with a fund of 2 billion dollars. Other research conducted by the World Health Organization (WHO) in 2002 showed that around 8.7% of 55

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hospitals in 14 countries representing 4 WHO regions with a European prevalence of 7.7%, Middle East 9.0%, Asia Southeast 10% and west pacific 11.8% (MOH RI, 2008).

Nursing as the largest part (40-60%) of health workers in hospitals (Gilles, 1994), also plays an important role in controlling this nosocomial infection. Nurses are very instrumental in controlling infection because nurses are health practitioners who deal directly with clients and infectious material in the treatment room. The work success of implementing nurses will largely depend on managerial nursing efforts (Simamora, 2012).

PPIRS Committee in Padang General Hospital consists of various professions. From its organizational structure, the old Padang Hospital PPIRS consists of the Chairperson, secretary, person in charge of the PPI Team, 7 IPCNs (Infection Preventing Control Nurse) and 40 people from the Infection Preventing Control Link Nurse (IPCLN) / Infection Preventing Control Link Staff (IPCLS) at each unit / inpatient Padang old hospital. Every day IPCN conducts surveys and monitoring of the implementation of hospital infection prevention and control in each room / unit of their respective responsibilities (PPIRS Committee of Padang Legas Hospital).

Each IPCN member will inspect all units in the hospital and will check each trash bin whether it is suitable for the garbage dumped with the disposal site. For example gloves are not put in non-medical samaph bins, or food waste is not put in yellow or medical bins, or syringe bodies are not put in medical bins. But in the field there are still food samples found in medical bins, syringe bodies in medical bins and gloves in non medical bins. From the results of interviews conducted by researchers of 10 nurses, 4 said they always dispose of trash according to its place,

#### 2. Research Methods

This type of research is a type of quantitative correlation research with cross sectional design that is to analyze Relationship of nurses 'supervision of IPCN (Infection Prevention Control Nurse) with nurses' compliance in disposing medical and non-medical rubbish at Padang Lawas Hospital. The population is the whole object of the study or the object under study (Notoadmodjo, 2012). The population in this study were all nurses at Padang Lawas Hospital namely as many as 184 people from the total number of rooms 10. The sample is a portion taken from the whole object under study that is considered to represent. In taking this research sample used certain methods or techniques so that the sample as much as possible represents the population (Notoatmodjo, 2012). The number of samples in this study was determined using the Slovin formula in Notoadmodjo 2012 and took 20% of the population to be 37 people, using inclusion criteria. The inclusion criterion is the criterion that the research subjects can represent in the research sample that qualifies as a sample that is the nurse from each room who is willing to be the sample in this study. To obtain information from respondents, researchers used a data collection tool in the form of a questionnaire made by the researcher based on the concept. This questionnaire contains statements about the supervision of nurses IPCN and statements about nurse compliance, wherein the statement of supervision of nurses IPCN consists of 15 statements, yes given a score of 1 and not given a score of 0. While for statements of nurse compliance consists of 15 statements Yes given a score of 1 and not given score 0.Data analysis uses univariate, bivariate analysis with Chi Square.

#### 3. Results and Discussion

#### a. Research Result

The results showed that the supervision of IPCN nurses in sorting medical and non-medical rubbish in Padang Lawas Hospital in 2018 the majority were enough as many as 18 respondents (28.6%) and poor minority as many as 7 people (18.9%). The results of the study can be seen more clearly in table 1.

**Table 1**Distribution of Respondents by IPCN Nurse Oversight Category in Padang Lawas Regional Hospital in 2018

No	IPCN Nurse Supervision	Frequency (f)	Percentage (%)
1	Good	12	32.4
2	Enough	18	48.6
3	Less	7	19.0

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Total	37	100.0

The results showed that the compliance of Disposing Medical and Non-Medical Waste in the Padang Lawas Hospital in 2018 the majority were 22 people (59.5%) and the minority were not compliant as many as 15 people (40.5%). The results of the study can be seen more clearly in table 2.

Table 2
Distribution of Respondents by Category of Compliance Disposing of Medical and Non-Medical Waste in Padang Lawas
Hospital in 2018

No	Disposal of Medical and Non-Medical Waste	Frequency (f)	Percentage (%)
1	Obedient	22	59.5
2	Not obey	15	40.5
	Total	37	100.0

The results showed that the statistical test results of the Relationship of Nurse Oversight IPCN (Infection Prevention Control Nurse) With Nurse Compliance Disposing Medical And Non-Medical Waste in Padang Lawas Hospital in 2018 obtained a p value of 0.001. The results of the study can be seen more clearly in table 3.

**Table 3**.

RelationshipIPCN Nurse Supervision With Nurse Compliance Disposes of Medical and Non-Medical Waste In Padang Lawas
Hospital in 2018 (n = 37)

No	IPCN Nurse	Disposal of Medical and Non-Medical Waste				Total		Score
	Supervision	Obed	Obedient Not obey		]		ρ	
		f	%	f	%	f	%	
1	Good	12	32.4	0	0	12	32.4	0.001
2	Enough	8	20.1	10	28.5	18	48.6	
3	Less	2	7	5	12	7	19	
Total		22	59.5	15	40.5	37	100	

### b. Discussion

Role in the field of nursing is a way to state in the implementation of nursing services and educational institutions, research and can develop nursing care in fostering cooperation from other health workers and can meet the needs of patients in taking action. The role is the behavior expected by someone towards others in meeting those needs. in the case of nurses can provide nursing care, make a defense for clients, collaborators in fostering cooperation with other professions and colleagues, consultants in the workforce and clients of the methodology system, as well as attitudes. The role is basically a set of behavior expected by others towards someone, according to their position in a system.

Indonesia Public Health Information (2014) also mentioned that nurses had the first role in the task of managing hospital waste, namely the task of sorting out medical and non-medical waste. This is also supported by Djohan & Halim (2013), which states that nurses are one of the solid waste management staff where nurses are tasked with separating medical and non-medical waste in each functional service unit where the nurse works.

Compliance is a basic asset of someone behaving. According to Kelman (2011) in Sarwono (2013) it is explained that changes in individual attitudes and behavior begin with a process of compliance, identification, and the final stage of internalization. Initially the individual obeys the advice / instructions without being willing to take the action and often wants to avoid punishment / sanctions if he is not compliant, or to get the promised benefits if he obeys the recommendation. This stage is called the compliance phase. Usually the changes that occur at this stage are temporary, meaning that the action is carried out while there is still supervision. But once the monitoring loosens / disappears, that behavior is abandoned ...

Compliance is the level of someone in implementing a rule in and the suggested behavior. The definition of obedience is obeying an order or a rule. Compliance is the level of compliance of a person in carrying out treatments, medications, and behaviors suggested by nurses, doctors, and other health workers (Bart, 2014).

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(JCAHO) included the activities of supervision, reporting, evaluation of care, organizations related to the prevention and control of HAIs to become a requirement for accreditation hospital which is a measure of the quality of health services in hospitals or other health facilities (WHO, 2014).

The behavior of handling waste that is not good will result in the emergence of nosocomial infections. Nosocomial cases can occur in the environmental health department of the hospital through pollution from hospital waste, especially waste collection officers who are in direct contact with the process of collecting and managing such waste.

### 4. Conclusion

- 1) The supervision of IPCN nurses in sorting medical and non-medical rubbish at the Padang Lawas Hospital in 2018 was sufficient for the majority of 18 respondents (28.6%) and the minority was 7 people (18.9%).
- 2) Compliance Disposing of Medical and Non-Medical Waste in 2018 Padang Lawas Hospital the majority complied with 22 people (59.5%) and the minority disobeyed by 15 people (40.5%).
- 3) The Relationship between Nurse Oversight of IPCN (Infection Prevention Control Nurse) and Nurse Compliance Disposing of Medical and Non-Medical Waste in Padang Lawas Hospital in 2018 obtained a p value of 0.001

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