Analysis Of Hospital Assistant Behavior On Medical Waste Handling System In Hva Pare Hospital

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ABSTRACT

Improper handling of medical waste, the janitor as the manager must have behavior in accordance with applicable medical waste processing standards. It is necessary to know what factors cause the behavior of janitors not yet according to existing standards. The purpose of this study was to determine the effect of Hospital Officers' Behavior on medical waste handling systems in HVA Hospital Pare.

The design of this study is observation / survey with a cross-sectional approach. The sampling technique is purposive sampling. The sample in this study were 53 people. Independent variables were the behavior of officers and the dependent variable was medical waste handling. The statistical test is linear regression.

The results showed good behavior as many as 32 respondents (60.4%) of a total of 53 respondents, medical treatment of medical waste was as much as 30 respondents (56.6%) out of a total of 53 respondents. The results of the analysis showed that there was an influence of the Behavior of Cleaning Officers on the Medical Waste Treatment System in HVA Pare Hospital with a significant value = 0.002 <0.05.

Handling medical waste in hospitals HVA is influenced by good behavior to improve the comfort of the hospital environment. Clean hospitals can deal with medical waste that is correct in accordance with existing SOPs so as not to contract infectious diseases from medical objects that have been used.

BACKGROUND

In achieving goals in the health sector, hospital services are an integral part of health services in general, which requires careful handling and attention. According to Djasio Sanrope (2013) that hospital sanitation services are held in order to create a comfortable, clean hospital environment as a supporter of efforts to cure patients, in addition to preventing the occurrence of nosocomial infectious diseases among patients, to healthy people both hospital officers and visitors.

The large number of visitors and complex activities in hospitals affect the waste products produced. Hospital waste is a waste material that can cause environmental health problems because various materials depend on it and have an impact on health. Hospitals are a lot of waste producers every day and are often toxic, especially solid waste, both medical waste and non-medical waste.

Health service waste generated according to the country's national income level, for high-income countries for all health-care waste can reach 1.1-12kg per person every year, and hazardous health-care waste is 0.4 - 5.5kg per person every year, in income countries medium for all health care waste shows a rate of 0.8 - 6kg per person per year while the hazardous health services is 0.3 - 0.4 kg per person per year, while low income countries all health service waste produces 0.5-3kg per person per year year (WHO, 2015).

In Indonesia's health profile (Kemenkes, 2017), it was revealed that all hospitals in Indonesia amounted to 2,776. The results of a study of 101 hospitals in East Java showed that the average production of garbage was 40 tons of medical waste / day. Further analysis shows that the production of waste in the form of domestic waste is 76.8% and in the form of infectious waste by 23.2%. It is estimated that nationally the production of hospital waste is 366 tons / day. From this description, it can be imagined how big the potential of the hospital is to pollute the environment and the possibility of causing accidents and transmission of disease (Candra, 2016).

Based on the profile of the Kediri district health office in 2017, all hospitals in Kediri Regency were disclosed with 22 units, out of the total number of hospitals producing medical waste around ± 460 kg of medical waste / day which included medical and non-medical waste located throughout hospitals in the district Kediri. (Kediri District Health Office, 2017).

Based on preliminary observations conducted in April 2018 at the HVA Pare Hospital medical waste disposal site, it was discovered that there were some bad habits of janitors who could cause the spread of disease to waste management officers because ordinary waste became a place for buried organisms and became a nest of insects and rat. Besides that, in waste also contains various toxic chemicals and sharp objects that can cause health problems and injuries. Dust particles in rubbish can cause air pollution which will cause disease and contaminate medical and food equipment, for example the behavior of janitors does not use personal protective equipment when working such as gloves, scorn, masks, closed shoes and hats that should be used when taking garbage or when sorting out garbage so there is no risk of infection in transmitting the disease to take out garbage. Based on observations made on 5 cleaning staff, it was found that only one person had behavior that was in accordance with the standard of medical waste treatment at HVA Hospital. Pare is sorting waste such as surgical dressings, swabs and all contaminated waste from the operating room, sorting used syringes , other sharp objects, sorting waste in the laboratory and postpartum rooms, sorting chemical waste and pharmaceutical materials, and sorting dispsable bed-pan coatings according to the class then the place of storage to be stored in containers / bags labeled according to the type of waste, then the garbage will be transported to the place of final disposal destroyed by incinerator or by using the sanitary landfill method.

The impact of medical waste on hospitals and the surrounding environment of the hospital such as disruption of comfort and environmental aesthetics due to landfilling of waste, muddy water that can reduce the quality of buildings around the hospital, damage to plants caused by viruses, human health disorders which can also be caused by various types bacteria, viruses, chemical compounds, pesticides, and heavy metals such as Hg, Pb and Cd from the dentistry department. Poor management of hospital waste will be a good place for disease vectors such as flies and mice.

Processing hospital waste is very important. This is based on the existence of a hospital as a health service facility, a gathering place for sick people as a health service facility, a gathering place for sick people and healthy people, or can be a place of disease transmission and enabling environmental pollution and health problems, to avoid this hospitals need to be maintained properly (Kepmenkes No.1204 / Menkes SK / X / 2004) concerning Hospital Environmental Health Requirements. Hospital medical waste management, which is part of environmental health efforts, also aims to protect the public from the danger of harm caused by hospital waste. The proper handling of medical waste causes the illness and death of hospital residents, paramedics and patients, including infection nosocomial (Ministry of Health, 2013).

The observation results on the domestic waste management system in private practice midwives that carried out the management system were only 45.2%. Management of hospital waste must be carried out correctly and effectively and meet sanitation requirements (Dewi Mustika, 2015).

Shelter affects medical waste management in the regional public service agency (BLUD) Dr. Zainoel Banda Aceh Abidin Regional General Hospital in 2012 (Aulia Andarnita, 2012).

RESEARCH PURPOSES

To determine the effect of hospital staff behavior on the medical waste handling system in the HVA hospital.

RESEARCH METHODS

The design of this study is observation / survey with a cross-sectional approach. The sampling technique is purposive sampling. The sample in this study were 53 people. Independent variables were the behavior of officers and the dependent variable was medical waste handling. The statistical test is linear regression.

RESULTS
Subject Characteristics
Table 1. The characteristics of respondents in this study included age, gender, profession, behavior and waste treatment system.

No	Characteristics	ΣN	$\Sigma\%$
1	**Age (year)**		
	20-30	21	40
	31-40	25	47
	41-50	7	13
2	**Gender**		
	Man	20	44
	Female	33	56
3	**Profession**		
	Doctor	8	15,1
	Midwife	17	32,1
	Nurse	23	43,3
	Analyst	2	3,8
	Farmako	3	5,7
4	**Behavior**		
	Good	32	60,4
	Enough	11	50,8
	Less	10	1829
5	**Treatment system**		
	Good	30	56,6
	Enough	17	32,1
	Less	6	11,3
	Total	**53**	**100**

STATISTICAL TEST RESULTS

Table 2. Behavior Analysis of Cleaning Officers on Medical Waste Management System in HVA Pare Hospital (September 4 - 12, 2018)

Variable	Significant value
Behavior of Hygiene Officers Against Medical Waste Handling Systems in HVA Pare Hospitals	0,002

Based on linear regression statistical tests that have been done, it can be seen that the significant value = 0.002 <0.05 so that H1 is accepted, which means that there is an influence of the Behavior of Hygiene Officers on the Medical Waste Management System in HVA Pare Hospital.

DISCUSSION

Behavior of Hospital Officers in HVA PARE Hospital

Based on the results of the study showed that some HVA Hospital officers behaved well as many as 32 respondents (60.4%) out of a total of 53 respondents.

Based on the results of the study it can be seen that hospital staff have good behavior in handling medical waste according to the type of waste that has been provided by the hospital. Good behavior can be influenced by factors that can support the behavior of hospital officials to manage waste properly, including the condition of the work environment can affect knowledge which ultimately affects the behavior of respondents implementation of awareness of the management of medical waste is the availability of work facilities and facilities to obtain information about the availability of books reference, easy access to research.

According to Catherine (2012) the role of health education institutions to teach the principles of precaution standards in which there are principles of infectious waste management, in this case health education is an institution Informal education in the hospital environment does not currently have an adequate library in providing books related to standard precautions and there is no regular training schedule for handling nosocomial infections from the hospital.

Based on the results of the study it can be said that the behavior of hospital staff can behave well in processing medical waste because the officers are given special training regarding the process of sorting, storage, transportation, temporary disposal, then final disposal site. Hospital staff perform functions according to the SOP in processing medical waste and always pay attention to aspects of self-protection when managing medical waste to prevent infection from occurring.

Medical Waste Management System in HVA PARE Hospital

Based on the results of the study, it was shown that some of the HVA Pare Hospital officers were able to manage medical waste well, namely as many as 30 respondents (56.6%) out of a total of 53 respondents.

Medical waste / hospital waste is all waste produced by hospital activities and other supporting activities which are generally divided into two major groups namely medical and non-medical waste both solid and liquid (Asmadi, 2013).

Medical waste is waste originating from medical services, dental care, pharmacy, or similar research, treatment, care, or education that use materials that are toxic, infectious, dangerous or can be dangerous unless they are carried out with certain safeguards (Adisasmito, 2014).

Based on the results of research on the waste treatment system in HVA Pare Hospital, a good medical waste management system is obtained. The medical waste treatment system in the hospital is carried out in accordance with the procedure so that the implementation can be carried out properly. Processing system consisting of: separation, collection, transportation, and destruction, if the system is carried out properly, there will be no accident caused by improper storage of medical waste. The environment around the hospital will be safe from medical waste, there will be no spread of infectious diseases from sharp objects that have been used.

This study can be said that the medical waste treatment system can run well if the system in the hospital can comply so that it does not cause infection from medical devices that have been used. If the management of the disposal is not correct, the syringe can transmit the disease to other patients, visitors to hospitals, health workers, and the general public. And if it is directly disposed to the landfill it can result in garbage scavengers who often come to the final disposal site of the waste can be exposed to infectious diseases due to medical waste that is not properly destroyed before being dumped into the landfill.

Behavior Analysis of Hospital Officers Against Medical Waste Management Systems at HVA PARE Hospital

Based on the linear regression statistical test that has been done, it can be seen that the significant value = 0.002 <0.05 so that H1 is accepted, which means that there is an influence of the Behavior of Cleaning Officers on the Medical Waste Treatment System in HVA Pare Hospital.

According to Notoatmojo (2012) behavior (human) is all activities or human activities, both those that can be observed directly or which cannot be observed by outsiders, behavior is a response or reaction to someone's stimulus (external stimulation). Therefore this behavior occurs by passing the process of the stimulus to the organism and then the organism responds, it is called SO-R or Stimulus-Organism Response.

The behavior of hospital staff is influenced by age, sex and hospital staff. Where the age is getting enough, the level of maturity and someone's strength will be more mature in thinking and working in knowing the processing of medical waste that is in the room there is a hospital environment. Gender is also one of the factors that influence behavior because female sex is more effective in maintaining room cleanliness or the hospital environment, women love beauty more than men so that medical waste processing systems can be made better according to the type of medical waste. As well as hospital staff where the treatment is more related to medical waste in the room because the action taken will produce unused medical waste in the form of syringes, infusion bottles, vial / ampoule drugs that can make other cleaners happy when sorting or transporting the final disposal site.

CONCLUSION
1. A small proportion of respondents indicated that HVA Pare Hospital officers behaved well as many as 32 respondents (60.4%) from a total of 53 respondents.
2. Most of the shows that HVA Pare Hospital staff can manage medical waste well as many as 30 respondents (56.6%) from a total of 53 respondents.
3. There is an influence of the Behavior of Cleaning Officers on the Medical Waste Treatment System in HVA Pare Hospital with a significant value = 0.002 <0.05.

SUGGESTION

This research can be used as a reference or library source in adding learning material in addition to a theoretical or theoretical learning system so that students can learn by adjusting between theories and research hypotheses in the field, especially research on the analysis of hospital staff behavior on medical waste treatment systems at HVA Hospital Pare.

For hospital management, it can be used as input in determining the permanent procedure for processing medical waste.

BIBLIOGRAPHY

Adisasmito, W. 2015.*sistem Kesehatan.* Jakarta: PT.Grafindo Persada.

Arikunto, S. (2013). *Prosedur Penelitian: Suatu Pendekatan Praktek.*Rineka Cipta.

⸺ , 2014. *Metode Penelitian Kuantitatif, Kualitatif, dan Kombinasi (Mixed Methods).* Bandung : Alfabeta

Chandra B. (2016). *Pengantar Kesehatan Lingkungan.* Jakarta: Penerbit Buku Kedokteran EGC.

Depkes RI, 2013. *Riset Kesehatan Dasar.* Jakarta: Badan Penelitian dan Pengembangan Kesehatan Kementrian Kesehatan RI.

Hidayat, Alimul Aziz., 2013. *Metodologi Penelitian Dan Teknik Analisa Data.* Jakarta : Salemba Medika.

Fitriani, S.2015. *Promosi Kesehatan. Ed.1.* Yogyakarta: Graha Ilmu.

Kotter, Jhon P dan James L.Heskett. 2009. *Dampak Buadaya Perusahaan Terhadap Kinerja.* New York :The Free Prees A Divission Simon and Schuster inc.

Moleong, Lexy J. (2013). *Metodologi Penelitian Kualitatif.* Bandung PT Remaja Rosdakarya Offiset

Notoatmodjo, 2013. *Pendidikan dan Perilaku Kesehatan* .Jakarta : Rineka Cipta.

⸺⸺ , 2013. *Promosi Kesehatan dan Ilmu Perilaku.* Jakarta: Rineka Cipta.

Nurain, K. Zuhriana. Yusuf dan A. Ramly. (2012). *Tinjauan Pengelolaan Sampah Medis Dan Non Medis Di Rumah Sakit Umum Daerah Prof DR. H. Aloei Saboe* (Suatu Penelitian Deskriptif yang Dilakukan di RSUD. Prof. Dr. H. Aloei Saboe). [Tesis]. Universitas Negeri Gorontalo.

Nursalam, 2012. *Pendekatan praktis metodologi riset keperawatan.*Jakarta: Info Medika.

Sanrope, Djasio. 2013., *Pedoman Studi Penyahatan Air Bersih Sekolah Pembantu Penilik Hygine.*Jakarta : Proyek pengembangan pendidikan tenaga sanita pusat, pusat pendidikan dan latihan pegawai depertemen kesehatan RI.

Sugiyono. 2013. *Metode Penelitian Kuantitatif kualitatif dan R&D.* Bandung : Alfabeta.

Tietjen, Linda dkk. 2013. ,*Panduan Pencegahan Infeksi Unutk fasilitas pelayanan*

kesehatan *Dengan Sumber Daya Terbatas.* Jakarta : Yayasan bina Pustaka Surwano Prawiro Harjo.

PERMENKES RI No. 1204/Menkes/SK/X/ 2004 *tentang Persyaratan Kesehatan Lingkungan Rumah Sakit*

Wawan, A dan Dewi. M , 2010. *Teori & Pengukuran Pengetahuan Sikap Dan Perilaku Manusia*. Yogyakarta: Nuha Medika

WHO. 2015. *Pengelolaan Aman Limbah Layanan Kesehatan*. Jakarta: Penerbit Buku Kedokteran EGC