

Analysis Of Management Of Medical And Non-Medical Solid Waste In Puskesmas Perawatan Kota Bengkulu

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Abstract - Medical and non-medical solid waste Puskesmas can be one of the causes of the spread of diseases and can disrupt the environment if not managed properly. The research objective was to find out the description of medical and nonmedical waste management in the Bengkulu City Health Center. Method: This study uses a qualitative descriptive method. Population and sample in this study amounted to three Bengkulu City Health Centers. Data analysis using univariate analysis. Results: The results showed that the highest volume of medical and non-medical solid waste management at the Betungan Health Center. On sorting and placing it fulfills the requirements with 100% rating. For collection and transportation as well as destruction or management do not meet the requirements with a total of 0 rating. It is expected that the Care Center will pay more attention to and improve the management of medical and non-medical solid waste from sorting, storage and most importantly the collection and transportation as well as destruction or management.

Keywords: Management, Solid Waste, Medical, Non-Medical

I. INTRODUCTION

The Puskesmas is a technical implementation unit of the district/city health office located in the district/city area to carry out operational tasks for health development in a work area. The construction of Puskesmas in each sub-district has a significant role in maintaining public health. Health care activities organized by the Puskesmas encourage the community to be independent in maintaining good health directly through efforts to restore and maintain health and through efforts to increase awareness of promotive and preventive efforts (MOH, 2011). Health services carried out by several Puskesmas in Bengkulu City can have a positive and negative impact. A positive impact is to improve the health status of the community and increase public knowledge in the health sector. While the negative impacts resulting from health services are waste generated from health care activities can cause disease and pollution

Waste is something that is not used, is not used, is not liked or something that is discarded that comes from human activities and does not occur by itself. The general waste is divided into three, namely liquid waste, gas waste, and solid waste. Solid hospital / puskesmas waste is all solid hospital waste as a result of hospital activities consisting of medical and non-medical solid waste. The medical solid waste of the puskesmas is waste consisting of infectious waste, pathological waste, sharps waste, pharmaceutical waste, cytotoxic waste, chemical waste, and radioactive waste. Non-medical solid waste is waste

generated from hospital activities/health centers outside of medicine that comes from kitchens, offices, parks, and courtyards, which can be reused if there is technology (Kepmenkes, 2004). The waste generated from medical efforts such as health centers, polyclinics, and hospitals is the type of waste included in the biohazard category, which is a type of waste that is very harmful to the environment, where there are many viruses, bacteria, and other harmful substances that must be destroyed by the road is burned in temperatures above 10000 centigrade (LPKL, 2009).

However, the management of medical solid waste originating from hospitals, health centers, medical centers and medical laboratories in Indonesia is still below the environmental health standards, because it is generally disposed of in a landfill. The results show that out of 20 out of 1000 health workers are at risk of infection due to sharp waste, and 180 of 1000 janitors risk being infected due to improper waste management. Based on data from France, in 1992 there were 8 cases of HIV suffered by officers who were infected with sharp objects, while in the US in 1996 there were 51 cases.

The World Health Organization in 2004 reported about 0.14 kg of medical waste per day in Indonesian hospitals or around 400 tons per year (Intan, 2011). The final report on Health Facility Research says that nationally there are 64, 6% of health centers have done the medical and non-medical waste separation. Only 26, 8% of Puskesmas have incinerators. While 73, the remaining 2% do not have the facility which shows that the management of solid medical waste is still wrong.

Research conducted at several hospitals in Jakarta found the quality or characteristics and volume of medical solid waste produced by hospitals per day as follows: infectious waste 2.5 kg-53 kg, sharps waste 0.8 kg-60 kg, waste body tissue 0.8 kg-3 kg, chemical waste 0.5 kg-3.3 kg, plastic waste two kg-6.6 kg.

From the results of the DG PPPL survey conducted on Puskesmas medical solid waste, the average generation of medical solid waste is as much as 7.5 grams/patient/ day. The composition of puskesmas' solid waste generation includes 65% of immunizations, 25% of contraception and the rest from medical care. The number of syringes used every year continues to increase, in 2003 for therapeutic activities reached 300 million syringes, while for immunization there were 50 million syringes (DG PPPL, 2008).

The average Puskesmas that provides hospitalization has problems regarding waste. The results of a study of 100 hospitals in Java and Bali that served inpatients showed that the average waste production was 3.2 kg per day. Further analysis shows that the production of solid waste in the form of non-medical solid waste is 76.8% and in the form of infectious

waste is 23.2% (Riyastri, 2010). This explains that a large number of patients, especially those hospitalized, relate to the amount of medical waste generated at the hospital/health center. As an illustration, from 2009 to 2011 at Puskesmas B served an average inpatient of 98.22 patients per year, which resulted in a high incidence of medical and non-medical solid waste. If the occupancy rate is higher, the volume of medical and non-medical solid waste will increase.

Improper management of waste will be hazardous for the health facility staff, and also for officers who handle waste (janitor). Medical solid waste has the potential to transmit infections such as Hepatitis B virus (HBV), Hepatitis C virus (HCV), Human Immunodeficiency Virus (HIV) to humans. Another impact caused by the presence of medical waste is a decrease in environmental quality which results in comfort and aesthetic disturbances. The appearance of the puskesmas can have a psychological effect on service users because there is a wrong impression due to waste that is not handled correctly. Management of medical solid waste includes waste segregation, collection, transportation on site, shelter with provisions and storage of medical waste up to 48 hours for the rainy season and 24 hours for the dry season, off-site transportation and then destruction. For the management of non-medical solid waste by sorting and preparing non-medical solid waste, the collection, storage and transportation and then processing and destroying (Kepmenkes, 2004).

In the 2014 Indonesian Health Profile, all health centers in the province of Bengkulu revealed 180 units, including 45 health care centers and 135 non-treatment health centers. In the city of Bengkulu, 20 health centers are consisting of 17 non-health care centers and three nursing care centers. The Bengkulu City Health Center includes the Beringin Raya Health Center, Ratu Agung Care Health Center, and the Betungan Nursing Health Center (Bengkulu City Health Office, 2015).

After the researchers conducted the initial survey three times on January 26 to February 3, 2016, at the Nursing Health Center in the city of Bengkulu (Puskesmas Beringin Raya, Puskesmas Ratu Agung, and Puskesmas Betungan), it was known that the management of medical and non-medical solid waste had not met the requirements. Existing health workers, sanitarians and cleaning service have not adequately managed medical and non-medical solid waste. At the stage of waste grouping, there are still nurses who are lazy to put the waste produced according to their place, the discovery of medical and non-medical solid waste in one place. Medical solid waste at the Health Care Center has not yet been put into the container according to its type, there is a buildup of medical solid waste that is destroyed within a period of three months to a year later with the incinerator resulting from collaboration with other health centers because the existing incinerator cannot be

used properly. At the beginning of the survey, it was known that the volume of medical solid waste in the Betungan Nursing Health Center is 2 kg, 3.5 kg in Beringin Raya Health Center and 5.5 kg in Nursing Care Center (Siswanda, 2014)

According to the Minister of Health Regulation No. 1204 of 2004 concerning Environmental Health Requirements for Hospitals / Puskesmas that do not have incinerators, medical solid waste must be destroyed through cooperation with other hospitals or other parties that have incinerators to be destroyed no later than 24 hours during the season drought and 48 hours for the rainy season when stored at room temperature. The presence of an accumulation of non-medical solid waste at the location of the puskesmas is also a problem because it disrupts the aesthetics and beauty of the puskesmas.

Based on the above background, researchers are interested in analyzing medical and non-medical solid waste management which includes sorting, holding, collecting and transporting, as well as destruction or final disposal of medical and non-medical solid waste in the Bengkulu City Health Center.

II. METHODS

The type of research used is descriptive research with a qualitative approach that aims to find out how to manage medical and non-medical solid waste in Bengkulu City Health Center 2016 in an objective manner, then analyzed to determine the management of medical and non-medical solid waste in the Bengkulu City Health Center. Conditions or do not meet the requirements. The population and sample of this study are the Nursing Health Center which includes the Raya Banyan Nursing Health Center, Betungan Nursing Health Center and Ratu Agung Care Health Center in the City of Bengkulu.

III. RESULT

This study uses univariate analysis which aims to describe the frequency distribution of medical and non-medical solid waste management which includes waste volume, sorting method, waste storage, temporary collection and transportation, and waste management in Bengkulu City Health Center, as follows:

TABLE I. DISTRIBUTION OF THE FREQUENCY OF SUBSTANTIAL WASTE VOLUME AT THE BENGKULU CITY HEALTH CENTER

Nursing Health Center	Medical Solid Waste Volume (Kg / month)	Non-Medical Solid Waste Volume (kg / day)	Solid Waste Amount
Betungan	6,2 kg	6,7 kg	12,9 kg
Beringin Raya	4,1 kg	4.5 kg	8,6 kg
Ratu Agung	5,5 kg	4,7 kg	10,2 kg

TABLE II FREQUENCY DISTRIBUTION OF MEDICAL SOLID WASTE MANAGEMENT IN THE BENGKULU CITY HEALTH CENTER.

No	Rated Variables	Rating Score	Qualify	Did not fulfill the conditions
1	Sorting	60 %	✓	
2	Pewadahan	64 %	✓	
3	Collection and Transportation	12,5 %		✓
4	Destruction or Final Management	57,14 %		✓

Table II analysis of medical solid waste management in Kota Bengkulu Health Center is known that the variables of collecting and transporting and destroying or end management of medical solid waste do not meet the requirements because <60%. The category fulfills the requirements of sorting and placing because the value meets the requirements of $\geq 60\%$.

TABLE III DISTRIBUTION FREQUENCY OF MEDICAL SOLID WASTE GENERATION AT THE BENGKULU CITY HEALTH CENTER

No	Item	Yes	%	No	%	Total
1	is there a place of separation also, a place for medical solid waste storage?	3	100 %	0	0	100
2	Medical solid waste storage sites used strong	3	100%	0	0	100
3	Medical and non-medical solid waste shelters used are watertight	2	66,7%	1	33,3%	100
4	Medical solid waste shelters have a lid of	3	100%	0	0	100
5	Rust resistant medical solid	3	100%	0	0	100

	waste storage place					
6	Medical solid waste storage sites are resistant to sharp also, pointed objects	3	100%	0	0	100
7	Plastic bags are transported every day or less a day if 2/3 of medical solid waste is filled with	0	0	3	100%	100
8	Red radioactive waste reservoir	0	0	3	100%	100
9	Yellow infectious waste, pathology and anatomy reservoir	3	100%	0	0	100
10	Purple cytotoxic waste storage	0	0	3	100%	100
11	The chemical and chemical waste reservoirs are coated with brown plastic	0	0	3	100%	100

Table III shows that the medical solid waste treatment in the Bengkulu City Health Center has already qualify because $7 > 4$ with $100\% > 0$.

TABLE IV. DISTRIBUTION FREQUENCY OF COLLECTION AND TRANSPORTATION OF MEDICAL SOLID WASTE IN THE BENGKULU CITY HEALTH CENTER

No.	Item	Yes	%	No	%	Total
1	Medical and non-medical solid waste collection trucks are separated	0	0	3	100%	100
2	Train transporting medical moreover, non-medical solid waste used in good condition / not Leaking	0	0	3	100%	100
3	Medical and non-medical solid waste transport trains used have a lid	0	0	3	100%	100
4	The medical solid waste transport train used is easily cleaned and emptied	0	0	3	100%	100
5	There is a particular line of medical solid waste carriers	0	0	3	100%	100
6	he Puskesmas has a temporary disposal site (TPS) itself	3	100%	0	100%	100
7	Medical solid waste is transported to temporary shelters \geq two times a day	0	0	3	100%	100

8	The place of waste collectors is disinfected after being emptied	0	0	3	100%	100
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Table 4.4 shows that the collection and transportation of solid waste in the Bengkulu City Health Center is not eligible because of $7 < 1$ with $0 < 100\%$.

TABLE V. DISTRIBUTION OF FREQUENCY OF DESTRUCTION OR MANAGEMENT OF MEDICAL SOLID WASTE IN THE BENGKULU CITY HEALTH CENTER

No.	Item	Yes	%	No	%	Total
1	The Puskesmas has its own temporary shelter for medical solid waste	3	100%	0	0	100
2	Chemical disinfection of infectious waste is carried out	0	0	3	100%	100
3	Waste is transported to the landfill one time a day	0	0	3	100%	100
4	The Puskesmas has an incinerator	3	100%	0	0	100
5	Officers use personal protective equipment (PPE) while working	0	0	3	100%	100
6	There are funds budgeted specifically for handling medical solid waste	3	100%	0	0	100
7	There is an MoU between Puskesmas and parties that carry out medical solid waste management	2	66,7%	1	33,3	100

Table V shows that the destruction or management of medical solid waste in the Nursing Health Center in Bengkulu City has fulfilled the requirements because of $4 > 3$ with $100\% > 0$.

TABLE VI. FREQUENCY DISTRIBUTION OF NON-MEDICAL ROBUST WASTE SORTING METHODS IN BENGKULU CITY HEALTH CENTER

No.	Item	Yes	%	No	%	Total
1	There is a place labeling or color code in the sorting process	1	33,3%	2	66,7%	100
2	Labeling type or color a code is appropriate or not	2	66,7%	1	33,3%	100
3	Is the sorting process carried out by cleaning Service	3	100%	0	0	100

4	Whether sorting non-medical solid waste is done twice a day morning moreover, evening	1	33,3%	2	66,7%	100
5	Is the sorting of medical solid waste has done starting from the source produced by medical solid waste	0	0	3	100%	100

Table VI. shows that segregation of non-medical solid waste in the City Health Center of Bengkulu is not eligible because of $2 < 3$ with $0 < 100\%$.

TABLE VII. DISTRIBUTION OF FREQUENCY OF NON-MEDICAL SOLID WASTE GENERATION AT THE BENGKULU CITY HEALTH CENTER

No.	Item	Yes	%	No	%	Total
1	Is there a place of separation and shelter for non-medical solid waste in each room	3	100%	0	0	100
2	There is at least one fruit in every 20 meters in the waiting / open room	3	100%	0	0	100
3	Non-medical solid waste shelters are used strongly	3	100%	0	0	100
4	Non-medical solid waste storage places are used watertight	3	100%	0	0	100
5	Non-medical solid waste shelters have a lid	3	100%	0	0	100
6	Non-medical solid waste storage shelters	3	100%	0	0	100
7	Nonmedical solid waste shelters are resistant to sharp and pointed objects	0	0	3	100%	100
8	Nonmedical solid waste shelters are resistant to sharp and pointed objects	2	66,7	1	33,3	100

Based on table VII, it is known that the provision of non-medical solid waste has fulfilled the requirements because of $7 > 1$ with $100\% > 0$.

TABLE 4.8. DISTRIBUTION FREQUENCY OF COLLECTION AND TRANSPORTATION OF MEDICAL SOLID WASTE IN THE BENGKULU CITY HEALTH CENTER

No.	Item	Yes	%	No	%	Total
1	Medical and non-medical solid waste collection trucks are separated	0	0	3	100%	100
2	Train transporting medical moreover, non-medical solid waste used in good condition / not leaking	0	0	3	100%	100
3	Medical and non-medical solid waste transport trains used have a lid	0	0	3	100%	100
4	The medical solid waste transport train used is easily cleaned and emptied	0	0	3	100%	100
5	There is a particular line of medical solid waste Carriers	0	0	3	100%	100
6	The Puskesmas has a temporary disposal site (TPS) itself	3	100%	0	0	100
7	Medical solid waste is transported to temporary shelters \geq two times a day	1	33,3%	2	66,7%	100

Based on table VIII. it is known that the collection and transportation of solid waste do not meet the requirements because seven items of questions are

TABLE IX. DISTRIBUTION OF FREQUENCY OF DESTRUCTION OR MANAGEMENT OF MEDICAL SOLID WASTE IN THE BENGKULU CITY HEALTH CENTER

No.	Item	Yes	%	No	%	Total
1.	The Puskesmas has its own temporary shelter for non-medical solid waste	3	100%	0	0	100
2.	The temporary collection the place is disinfected after being emptied	0	0	3	100%	100
3.	Officers use personal protective equipment (PPE) while working	0	0	3	100%	100
4.	Waste is transported to the landfill one time a day	2	66,7%	1	33,3%	100
5.	Non-medical solid waste is immediately destroyed	2	66,7%	1	33,3%	100

Table IX shows that the destruction or management of solid waste in the City Health Center of Bengkulu is eligible because of $3 > 2$ with $66.7\% > 0$.

IV. DISCUSSION

1. The volume of Medical and Non-Medical Solid Waste In this study, the most volume of medical and non-medical solid waste is in the Betungan Nursing Health Center, while the least amount of medical and non-medical waste is in the Beringin Raya Health Center. This study was supported by Pamuna (2012), showing that all existing Puskesmas in Manado City operated for 24 hours, so the amount of medical and non-medical solid waste also increased.

Another study conducted by Pratiwi (2013), shows that the amount or amount of volume of medical and non-medical waste depends on the facilities provided by the Puskesmas and the number of patient visits and Puskesmas accreditation. Such as Puskesmas Nursing A provides inpatient facilities and many patients are being treated which produces medical solid waste as much as 6.2 kg while Puskesmas Nursing B provides inpatient facilities. It is always crowded by patients every day, so the volume of medical waste also produced increases, namely 5.5 kg, Puskesmas Care C also provides inpatient facilities, but currently inpatients and those who seek treatment are few so that the medical solid waste produced is 3.1 Kg.

2. Medical Solid Waste Sorting

Based on table 4.2 about sorting medical solid waste from 5 items: there is place labeling or color code in the sorting process, type of labeling or color code is appropriate or not. The sorting process carried out by cleaning service. The sorting of medical waste done twice a day morning and evening. Whether sorting of medical waste has been carried out starting from the source produced by waste. The results of the sorting of medical solid waste in the City Care Puskesmas not from the five items analyzed did not meet the requirements.

Sorting is not done well, because there are no individual officers to sort solid waste so that officers sometimes enter solid waste. Sorting solid waste should be carried out starting from sources that produce waste (Kepmenkes, 2004). According to Aris (2008), the placement of medical solid waste using plastic bags has not met health standards, medical solid waste containers must be made of durable materials, lightweight, rust resistant, waterproof, and smooth inner surface. Besides that, if medical solid waste using plastic bags allows leakage and will increase the risk of contamination.

3. Medical Solid Waste Treatment

Based on table 4.3 about the preparation of medical solid waste from 11 items including a place of separation and a place for medical solid waste storage in each room. Substantial waste shelters are used actively, solid waste shelters that are used watertight, substantial waste shelters have lids, rust-resistant solid waste shelters, waste shelters resistant to sharp and pointed objects, plastic bags are transported every day or less a day if 2/3 of solid waste is filled. Infection of infectious solid waste, pathology, and anatomy are yellow, radioactive waste reservoirs are red, cytotoxic waste reservoirs are purple, and pharmaceutical and chemical waste reservoirs are coated with brown plastic.

The results of the research at Puskesmas Nursing found that there was no proper storage of medical solid waste, resistant to sharp and sharp objects, the absence of red radioactive waste reservoirs, there was no yellow reservoir of infectious, pathological, and anatomical waste, and no reservoir purple and brown color for cytotoxic waste and pharmaceutical waste. Sharps must be collected in one container without regard to contamination or not. The container must be leakproof, puncture resistant and not easy to open so that unauthorized people cannot open it. Besides that, the container in the room should be coated with black plastic to reduce the risk of disease contamination. According to Chandra (2007), the trash can used must meet the requirements, which must be strong and not easily leaky, has a lid and is easy to open without dirtying the hands, and the size must be suitable so that one person easily transports it.

4. Collection and Transport of Medical Solid Waste

Based on table 4.4 the results of the collection and transportation of medical solid waste from 8 items include: medical and non-medical solid waste collector trains separated, non-medical solid waste transport carriages used in good condition / not leaking, waste transporting trains used have lids, trains the waste carriers used are easy to clean and emptied, there are individual lines of medical and non-medical solid waste carriers, the Puskesmas Care has its temporary disposal site (TPS), solid waste is transported to temporary shelters ≥ 2 times a day.

According to the Indonesian Ministry of Health (2002), that the characteristics of medical solid waste have infectious or toxic properties, if not managed properly, will cause pollution. Furthermore, in the field observation, there was no discovery of medical or medical solid waste transport trains. The Puskesmas still uses the manual method by carrying one place of waste collectors. This can cause discomfort for visitors, patients and other officers who use public lines that cause unpleasant odors and aesthetics.

According to Hapsari (2010) transportation should be used by pushcarts, and periodically cleaned as well as implementing officers equipped with special protective equipment and work clothes, transporting medical solid waste to off-site dumps requires proper implementation procedures and must be obeyed which are involved. The procedure includes meeting local transport regulations that are transported in individual containers, must be healthy and not leaky.

5. Extermination and Final Disposal

Based on Table 4.5 the results of destruction and final disposal of 7 items include: Puskesmas have their temporary shelter for medical solid waste, disinfection with chemicals in infectious waste, waste is transported to TPA 1 time/day. The Puskesmas has an incinerator; officers use personal protective equipment (PPE) while working, there are funds budgeted specifically for handling medical solid waste, there is an MoU between Puskesmas and Parties that carry out medical solid waste management.

There are 2 Health Care Centers to collaborate with other parties for medical solid waste treatment, and 1 Health Care Center conducts its solid waste treatment. The results of research conducted by Pamuna (2012) show that stable waste management systems, especially the elimination of medical solid waste are still constrained, both technically, in fuel costs, and the form of smoke pollution resulting from the destruction of medical solid waste using an incinerator.

Proper management of medical abundance besides relying on good administration and organization. Besides, adequate policies and funding are needed as well as active participation from trained and educated staff. Policies that apply to the management of medical solid waste cannot be effective if they are not applied carefully, consistently and comprehensively (WHO, 2005).

6. Non-Medical Solid Waste Sorting

Based on table 4.6 of the five items observed for there is a place labeling or color code in the sorting process, the type of labeling or color code is appropriate or not. The sorting process carried out by cleaning service. The sorting of medical waste done two times a day morning and evening. Whether sorting of medical waste has been carried out starting from the source produced by waste. The results of the sorting of medical solid waste in the City Care Puskesmas not from the five items analyzed did not meet the requirements.

There is no segregation of dry and wet garbage shelters for each room. This is because only one piece of the litter box is available, and after disposal of non-medical solid waste is immediately put back. It is expected that non-medical solid waste must be segregated between wet and dry waste, with the presence of non-medical substantial waste segregation is expected to be reused, it is expected trash does not become a fly nest and a vector that causes disease either directly or indirectly.

According to the Ministry of Health of the Republic of Indonesia (2004), that Puskesmas waste is a product of activities that can affect various aspects of services performed, then efforts to achieve a health center environment that meets health requirements by maintaining aesthetic value and comfort for all hospital communities, patients, officers and visitors.

7. Non-Medical Solid Waste Treatment

Based on table 4.7 of the eight items observed for the place of separation and the place of medical solid waste storage in each room. Substantial waste shelters are used actively, solid waste shelters that are used watertight, substantial waste shelters have lids, rust-resistant substantial waste shelters, waste shelters resistant to sharp and pointed objects, plastic bags are transported every day or less a day if 2/3 of solid waste is filled.

The requirements of the Ministry of Health of the Republic of Indonesia (2004) that the collection and transportation of solid waste must begin with the discharge of both solid waste in each unit and transportation to the collection of local solid waste or the place of destruction.

8. Collection and Transportation of Temporary Non-Medical Solid Waste Based on table 4.8 of the 7 items observed for the transport of non-medical solid waste, the medical and non-medical solid waste collection collector is separated, the non-medical solid waste transport carriage used in good condition / not leaked, the waste transporting train used has a lid, a waste transporting train the ones used are easy to clean and emptied, there are individual lines of medical and non-medical solid waste carriers, the Puskesmas Care has its own temporary disposal site (TPS), non-medical solid waste is transported to temporary shelters ≥ 2 times a day. Based on observations on

the field of transport lines do not have a particular path; this can lead to inconvenience for visitors, patients and other users of public lines that cause unpleasant odors and aesthetics.

This is not in line with the requirements of the Ministry of Health of Republic of Indonesia (2004) that the collection and transportation of solid waste must begin with the discharge of either local solid waste or to the place of destruction. Collecting and transporting non-medical solid waste from each room to temporary shelters using closed trolleys is recommended separately between transporting medical and non-medical solid waste. Transportation by trolley/train must meet the requirements, namely: the inner surface must be flat and watertight, easy to clean, and quickly filled and emptied, closed and always closed.

According to Soemirat (2000), that the effect of solid waste on health and the environment if direct contact with toxic solid waste, solid waste is corrosive to the body, carcinogenic, teratogenic, causes odor, aesthetic disturbances and results in the soil, water, air pollution.

9. Extermination and Final Disposal

Based on table 4.9 of the five items observed for the destruction and final disposal of non-medical solid waste, solid waste is not transported to TPA 1 time/day. Based on observations in the field the final disposal of solid waste into the landfill is carried out two times/day due to waiting for the solid waste storage place to be fully processed and transported by the janitor and sometimes destroyed by the cleaning service officer.

According to the requirements of the Ministry of Health of the Republic of Indonesia (2004), the effort to reduce volume, change shape or destroy solid waste is carried out at the source. Waste that can still be used should be reused, for organic solid waste can be processed into fertilizer. General (domestic) solid waste is discharged to the final disposal location which is managed by the local government (Pemda), or another body by the applicable laws and regulations.

V. CONCLUSION

1. The highest volume of medical and non-medical solid waste in the Bengkulu City Health Center is the Nursing Care Center Betungan and the least in the Beringin Raya Health Center.

2. Separating medical and non-medical solid waste from Bengkulu City Health Center 100% fulfills the requirements.

3. Medical solid waste treatment and non-medical Bengkulu City Health Center 100% meet the requirements.

4. Temporary collection and transportation of medical and non-medical solid wastes in Kota Bengkulu Health Center do not meet the requirements.

5. Destruction or management of medical solid waste and non-medical Bengkulu City Health Center 66.7% do not meet the requirements.

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