

Analysis of the Non-Medical Waste Management System at Kabelota Donggala Hospital

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ABSTRACT: Hospital waste management in Indonesia still faces obstacles, causing environmental and health impacts. A sustainable management system is needed, especially the non-medical waste processing process at the Donggala Kabelota Regional Hospital, including sorting, containerization, transportation and final processing. The type of research method used is a qualitative type aimed at describing the non-medical waste management system at the Kabelota Donggala Regional Hospital. This research was carried out through observation and interviews with six informants which were carried out from November to December 2024. The results of the research showed that from the results of interviews with 6 informants it was found that the process of sorting, storing and storing waste in temporary storage areas (TPS) did not meet the standards, while for the transportation and final processing variables it was in accordance with the standards of Minister of Health Regulation No. 7 of 2019, so that there is still a need for improvement and special attention from the hospital in terms of facilities and infrastructure as well as the non-medical waste management process starting from sorting, containerization, transportation and storage in temporary storage areas. The conclusions and suggestions from this research are that the management of non-medical waste at the Kabelota Donggala Regional Hospital for the processes of sorting, containing, storing waste in temporary storage areas (TPS) is not appropriate, while the transportation and final processing processes are appropriate. Therefore, it is recommended that hospitals further increase the capacity of human resources, especially waste management officers, as well as add and update facilities and infrastructure that support a better waste management system.

Keywords: Waste management, non-medical waste, Hospital.



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INTRODUCTION

Garbage is defined as waste material that poses a risk to the health of humans and other living things. Basically, waste is anything that has no economic value that is thrown away or wasted from a source due to natural or human activities (Irawan, 2022).

Waste produced specifically from households, industry, special facilities, social facilities, public facilities, and/or other facilities is referred to as household waste. This type of waste must be managed in a methodical, comprehensive and sustainable manner. Waste management is a process that involves the participation of various parties, including the community, private sector and local government (Donggala Regency Regional Regulation No. 11 of 2019).

Waste has become a crucial environmental problem in Indonesia. Households produce organic and inorganic waste every day. Unfortunately, a lot of rubbish is thrown away carelessly, which ultimately damages the ecosystem. Every year, the volume of waste produced increases in proportion to population growth. The government has tried to deal with this problem in various ways, especially with inorganic waste, but these efforts have not been completely successful. Due to the high amount of waste in Indonesia, the government is still having difficulty finding the right solution to this problem. Several things that also create obstacles in waste management are limited trash can facilities, some of the available trash cans are no longer suitable for use and are only placed in certain locations. (Batubara et al., 2022).

Lack of effective waste management results in various environmental problems. Waste has several consequences, including a dirty environment, the emergence of various diseases due to flooding, loss of organic content in agricultural land, and global warming. Therefore, waste management requires collective awareness and dedication. Education about the importance of cleanliness, outreach about waste management, and assistance with waste bin facilities are all key steps to increase public knowledge about waste management (Yuwana & Adlan, 2021).

According to Donggala Regency Regional Regulation No. 7 of 2011, management of household waste and similar household waste in hospitals includes sorting, collecting, transporting, processing and final processing of waste, including redistribution of waste and/or residue from previous processing (Donggala Regional Regulation, 2011).

The majority of hospitals in Indonesia, according to research on hospital waste processing, have separated medical and non-medical waste (80.7%). However, only about 20.5% use special waste containers with various colors and markings (Kotika, Gracela Claudia., 2023).

Waste can be generated as a result of the provision of health services. Waste from daily activities is known as hospital waste. Depending on the concentration or amount, hazardous elements found in hospital waste can be detrimental to human health and the environment (Law No. 18 of 2008).

Environmental sustainability is a very important concern in national health services. When compared with other specialties, research on palliative care that utilizes resources from medical and non-medical waste is still relatively small. This shows an urgent need. (Dokal et al., 2022)

The World Health Organization (WHO) estimates that general waste accounts for about 80% of the waste generated by health facilities, including hospitals, with hazardous waste—which can be

radioactive, toxic, or infectious—accounting for the remaining 20%. Infectious or body tissue waste accounts for 15% of the waste produced, followed by sharps waste (1%), chemical and pharmaceutical waste (3%), and radioactive and genotoxic waste (1%). The 2019 Indonesian Health Profile states that there are 533 specialist hospitals and 2,344 general hospitals in Indonesia (Kotika, Gracela Claudia., 2023).

The Donggala Regency Government has a category C hospital known as the Kabelota Donggala Regional General Hospital. The current handling of non-medical solid waste at the Kabelota Donggala Regional Hospital is guided by SPO (Standard Operating Procedures). The sanitation guidelines policy in the area of the Kabelota Regional Hospital in Donggala Regency is regulated by the Decree of the Director of the Kabelota Donggala Regional Hospital No. 445 / 003 / SK – Hospital Sanitation / 1 / 2022, but in its implementation of course there are still several obstacles such as the provision of inadequate facilities. The head of the non-medical support section supervises officers at the Kabelota Donggala Regional General Hospital who handle non-medical waste management issues. Sanitation workers and ten cleaning services also helped.

An initial survey showed that non-medical waste at the Kabelota Donggala Regional General Hospital did not differ at all between organic and inorganic waste. Non-medical waste containers are often not closed. Apart from that, there is rubbish that is thrown carelessly. Good waste management is essential for public and environmental health, as well as patient and staff safety. With the increase in waste in the health sector, researchers consider it important to evaluate and optimize existing waste management strategies.

Based on the researcher's initial survey with sanitation installation officers at the Kabelota Donggala Regional Hospital, it shows that there is no separation of non-medical waste containers, with collection carried out every day, then the waste is stored in the TPS where the TPS building at the hospital is still partially open so that animals such as cats can still enter. An open TPS can cause the rubbish inside to easily scatter outside and can cause odors.

Thus, researchers want to conduct research entitled 'Analysis of the Non-Medical Waste Management System at the Kabelota Donggala Regional Hospital'.

Based on the background, the problem formulation is as follows: What is the Analysis of the Non-Medical Waste Management System at the Kabelota Donggala Regional Hospital?

Therefore, this research aims to find out how non-medical waste is managed at the Kabelota Donggala Regional Hospital. It is hoped that this research can increase knowledge, experience, understanding and insight in expanding the horizons through research, the results of the research can be used as a reference for further research. Apart from that, it is hoped that this research can provide input to the Kabelota Donggala Regional Hospital in making policies and programs.

METHOD

This research aims to determine the non-medical waste management system at the Kabelota Donggala Regional Hospital using a qualitative descriptive approach. This method was chosen because it allows researchers to understand in depth the dynamics and processes of waste

management through in-depth interview techniques and direct observation in the field. The research was carried out at Donggala Banawa Regional Hospital, Donggala Regency, from November to December 2024. The informants in this research consisted of five parties who have strategic and operational roles in waste management, namely the Director of Kabelota Donggala Regional Hospital, Head of Medical and Non-Medical Support Division, two sanitation officers, and two cleaning service officers. The technique for determining informants is carried out using purposive sampling, namely selection based on certain considerations that are relevant to the research objectives. In this case, informants were chosen because they have in-depth knowledge and direct experience regarding the non-medical waste management system in the hospital under study, as explained by Sugiyono (2022). This approach allows researchers to obtain more accurate, contextual and relevant data to answer the focus of the problem in this research.

In this qualitative research, researchers used several data collection techniques suggested by Sugiyono (2022), namely observation, interviews and documentation studies. The observation technique is carried out by directly observing the activities and processes of non-medical waste management at the Kabelota Donggala Regional Hospital, both planned and unplanned, to identify the root of problems that may arise in daily practice. As explained by Hardani et al. (2020), observation allows researchers to obtain natural and contextual data from the environment being studied. In addition, in-depth interviews were conducted with informants who had been determined through purposive sampling techniques, namely individuals who had knowledge and direct involvement in hospital waste management. Interviews were used to explore more comprehensive information regarding procedures, obstacles and perceptions of field implementers regarding non-medical waste management systems (Hardani et al., 2020). Documentation techniques are also used to complete data from observations and interviews, by reviewing various related written documents, such as work guidelines, activity reports, and internal hospital records. Documentation as a data collection technique aims to strengthen the validity and integrity of the data obtained (Hardani et al., 2020). By combining these three techniques, it is hoped that this research will be able to provide a complete and in-depth picture of non-medical waste management at the Kabelota Donggala Regional Hospital.

Data analysis in this research was carried out through a systematic process which included selecting, grouping and organizing information obtained from field notes, observation results, in-depth interviews and documentation. This process aims to obtain a deeper, more meaningful and unique understanding, as well as produce new findings that are descriptive, categorical, or in the form of interconnected patterns between categories of research objects (Sugiyono, 2022). The analysis stage begins with data collection activities, which are carried out through direct interaction with informants as well as reviewing documents relevant to non-medical waste management system problems. After the data is collected, the next stage is data reduction, namely the process of selecting and filtering important information as well as grouping data based on relevant thematic categories. This stage allows researchers to develop a comprehensive understanding of the object being studied, by eliminating irrelevant information. The reduced data is then presented in the form of a systematic, concise and clear description so that it can be analyzed in depth to answer the research focus. The final stage is drawing conclusions and verifying data, namely the process of critical reflection on the results of the analysis that has been carried out, where the researcher re-examines temporary conclusions based on field data. Validation of results is also carried out

through discussions with colleagues to ensure scientific accuracy and truth. The entire analysis process uses a descriptive approach which aims to explain and interpret the findings comprehensively and contextually.

RESULTS AND DISCUSSION

1) Non-medical waste management process

Sorting

At the Kabelota Donggala Regional Hospital, the process of sorting medical and non-medical waste has begun in all production rooms. Especially for non-medical waste, there is no classification between organic and inorganic waste.

Container

This has been carried out in all rooms that produce non-medical waste, according to the results of research that has been carried out on the process of containing non-medical waste at the Kabelota Donggala Regional Hospital, non-medical waste containers are still combined with organic and inorganic waste, there are still non-medical waste containers that do not comply with the provisions.

Transportation

Every day transportation officers use trash carts to transport non-medical waste to temporary waste storage sites (TPS). This process is carried out to ensure that the waste is safe to dispose of.

Temporary storage

Before being delivered by a third party, non-medical waste that has been transported from the source room is first moved to a temporary storage area located at the back of the hospital.

Final processing

The Donggala Regency Environmental Service is the third party involved in the final processing of non-medical waste at the Kabelota Donggala Regional Hospital.

2). Characteristics of the respondent group

Quality of informants Data collection was carried out in the non-medical waste area of the Kabelota Donggala Regional General Hospital. For this research, information was provided by six respondents. Obtained data based on the following table:

Table 1 Characteristics of Respondent Groups

No	No	Age (Thn)	Gender	Educ ation	Working Time (Years)	Department
1	Informant 1	41	Man	S1	4	Director
2	Informant 2	50	Woman	S2	19	Head of medical and non- medical support
3	Informant 3	50	Woman	S1	12	Sanitation Officer
4	Informant 4	25	Man	D3	1 Thn 11 bln	Sanitation Officer
5	Informant 5	44	Woman	SD	15	<i>Cleaning Service</i>
6	Informant 6	43	Woman	SD	15	<i>Cleaning Service</i>

Source : *Data primer*, 2024

3). Interview results

Director and head of non-medical support at the Kabelota Donggala Regional Hospital

- Is there an organizational structure for waste management at the Kabelota Donggala Regional Hospital?
 - (Informant 1) exists
 - (Informant 2) then for the organizational structure, take the person in charge of the organization, waste management structure, too
- Who is responsible for managing non-medical waste at the Kabelota Donggala Regional Hospital?
 - (Informant 1) The person in charge of non-medical waste management at RSUD is the head of the non-medical supporting section of Kuncita, in this case Mr. Romi
 - (Informant 2) There is one person responsible for managing non-medical waste
- How many non-medical waste management staff/officers are at the Kabelota Donggala Regional Hospital?
 - (Informant 1) there were 10 people
 - (Informant 2) If we trace the number of non-medical waste management staff, it means starting from ee sorting from the room, then from CS for transporting it out from outside then there is a special transport to the landfill, ee there must be a special transport for waste to the disposal site, finally, yes, we do have a TPS too.
- Is the number of staff/non-medical waste management at the Kabelota Donggala Regional

Hospital sufficient?

- (Informant 1) is actually not sufficient with a cable area area of approximately 4 hectares, but there are problems related to the procurement of manpower.
 - (Informant 2) the number of non-medical waste management staff is sufficient
5. Are there sufficient financial resources for non-medical waste management activities?
- (Informant 1) for non-medical waste management (transportation by DLH is still free)
 - (Informant 2) financial resources are sufficient for waste processing activities, this is sufficient because we have a third party to manage it
6. Where does non-medical hospital waste come from?
- (Informant 1) Non-medical hospital waste comes from food waste from all kinds of patients' families.
 - (Informant 2) from ee rooms, all the rooms in Kabelota that provide services
7. What do you think is the non-medical waste sorting process at the Kabelota Donggala Regional Hospital?
- (Informant 1) I think it's because the trash cans are also differentiated between medical and non-medical waste
 - (Informant 2) already, there is already sorting because it is clear that non-medical waste is from medical waste, the bottles are all clearly separated, accompanied by the color of the waste bags, yes, that's it, it's there.
8. What do you think is the non-medical waste storage process at the Kabelota Donggala Regional Hospital?
- (Informant 1) exists and is socialized
 - (Informant 2) the process for containing non-medical waste is also clearly marked with color markings and the color of the bag.
9. What do you think is the process of transporting non-medical waste at the Kabelota Donggala Regional Hospital?
- (Informant 1) ee, the non-medical waste from Kabalota is currently being transported by the Donggala district environmental service
 - (Informant 2) ee the process of transporting non-medical waste is by trolley, yes, there is a trash trolley
10. What do you think is the process for storing non-medical waste at the TPS at the Kabelota Donggala Regional Hospital?
- (Informant 1) Bagusji has a place to store non-medical waste

- (Informant 2) continues to store non-medical waste at the TPS. Later, if you are there, you can take a photo of the place where we have the TPS.
11. What do you think is the final processing process for non-medical waste at RSUD Kabelota Donggala?
- (Informant 1) The final processing is at the final waste disposal site by DLH
 - (Informant 2) yes the final processing is done by a third party too, oh yes non-medical is TPA from DLH
12. What obstacles exist during the process of managing non-medical waste at the Kabelota Donggala Regional Hospital?
- (Informant 1) This is a visitor who doesn't throw rubbish at random.
 - (Informant 2) there aren't any, eh
13. How to overcome the obstacles that exist during the non-medical waste management process at the Kabelota Donggala Regional Hospital?
- (Informant 1) let's increase the energy, ee
 - (Informant 2) there are no problems
14. What do you think are the facilities for waste management? What are the facilities for waste management and when will these facilities and infrastructure be updated?
- (Informant 1) waste management facilities still need to be added and updated every year
 - (Informant 2) if the ee facilities, perhaps we should be bigger... with a TPS marking because there is no name for the marker, even though we already have a TPS but there is no marker that this is the ee TPS, which means just the name is to be attached.
15. What do you think, what methods are used in waste management at the Kabelota Regional Hospital?
- (Informant 1) is carried out starting from the room, namely sorting, containerization, transportation, storage at the TPS and final management by the Environmental Service.
 - (Informant 2) the method is non-medical too, that's the test, yes, from the sorting from the start, yes, is that the term for sorting, yes, the sorting is transportation, TPS to TPA, yes.

Sanitation officers and *Cleaning Service* Kabelota Donggala Regional Hospital

1. How many officers handle non-medical waste management at the Kabelota Donggala Regional Hospital?
- (Informant 3) If there are 3 non-medical waste officers, one is responsible according to his education. If there are 2 he is seconded there because he has a high school education, this one is for waste transportation.

- (Informant 4) for the person in charge there is 1 person and for the subordinate staff there are 2 to lift from the room to the polling station 2 Cs 8
 - (Informant 5) eight
 - (Informant 6) ten people
2. Is there a schedule for transporting non-medical waste to the TPS?
- (Informant 3) There is no schedule because they carry out rubbish every day
 - (Informant 4) schedule... every day
 - (Informant 5) exists
 - (Informant 6) exists
3. How many times a week is the garbage transported to the final dump?
- (Informant 3) twice a week
 - (Informant 4) oo twice, twice a week
 - (Informant 5) twice
 - (Informant 6) twice
4. Is there separation of organic and inorganic waste?
- (Informant 3) There is no waste sorting for separating organic and inorganic waste
 - (Informant 4) Well, at the moment there isn't one yet
 - (Informant 5) none
 - (Informant 6) none
5. Do you know the function of the color of the trash can or trash bag?
- (Informant 3) Yes, black is for non-medical general waste, yellow is medical waste
 - (Informant 4) yes
 - (Informant 5) some are black and some are yellow
 - (Informant 6) yes, medical is yellow, normal waste is black
6. What types of non-medical waste are generated from hospital activities?
- (Informant 3) For example, paper, food wrapping
 - container of drinking water
 - (Informant 4) who are mostly organic
 - (Informant 5) there is a bottle of Aqua Anu rice wrapper

- (Informant 6) bottles, snack wrappers, aqua glasses.
7. How many times is non-medical waste collected per day?
- (Informant 3) once in the morning
 - (Informant 4) only once a day
 - (Informant 5) once
 - (Informant 6) once
8. Please state the type of PPE that you use in the process of managing non-medical waste in hospitals?
- (Informant 3) Usually in the hospital here they wear masks with gloves
 - (Informant 4) if for CS We give them helmets, handsoens, masks, boots and PPE, normal Hasmat clothes, sometimes we don't use them anymore.
 - (Informant 5) apron, *glove scone*, shoe mask
 - (Informant 6) handsoen, mask, boots.
9. What do you think are the obstacles faced while carrying out waste management duties at the Kabelota Donggala Regional Hospital?
- (Informant 3) Yes, actually it still is because it still exists, because there is still inappropriate sorting of medical and non-medical waste, it is still mixed with medical waste, it is still found.
 - (Informant 4) The only problem here is that the rubbish is scattered on the floor indoors, usually cats
 - (Informant 5) Nothing
 - (Informant 6) Nothing
10. What do you think about availability *trolly* in the process of transporting waste at the Kabelota Donggala Regional Hospital?
- (Informant 3) *trolly* There are also social walks with the officers now
 - (Informant 4) *trolly* there is one person here
 - (Informant 5) there is, yes, I have
 - (Informant 6) *trollynya* there, walking.
11. What do you think about the facilities and infrastructure for managing non-medical waste at the Kabelota Donggala Regional Hospital?
- (Informant 3) is adequate, but there is no separation between organic and inorganic waste.
 - (Informant 4) the facilities and infrastructure are quite adequate

- (Informant 5) Good, yes
 - (Informant 6) is good
12. What do you think is the non-medical waste sorting process at the Kabelota Donggala Regional Hospital?
- (Informant 3) there is already sorting but there is no sorting of organic and inorganic waste yet.
 - (Informant 4) if not yet, ma'am, the sorting process is because from that room the patient's family immediately has their rubbish removed, so the CS immediately collects the cashier and takes it to the trolley to take it to the TPS.
 - (Informant 5) not yet
 - (Informant 6) it doesn't exist yet, it hasn't been socialized yet
13. What do you think is the non-medical waste storage process at the Kabelota Donggala Regional Hospital?
- (Informant 3) there is... it is already running and has also been socialized.
 - (Informant 4) is closed here
 - (Informant 5) Yes, yes, I have
 - (Informant 6) It doesn't exist yet, it hasn't been socialized yet
14. What do you think is the process of transporting non-medical waste at the Kabelota Donggala Regional Hospital?
- (Informant 3) At the Kabelota Hospital, it is now running, it has been socialized and the transportation is carried out every day in the morning.
 - (Informant 4) just one day, then continue again the next day
 - (Informant 5) there is, yes, there is
 - (Informant 6) yes there is, it's running.
15. What do you think is the process for storing non-medical waste at the Kabelota Donggala Regional Hospital TPS?
- (Informant 3) yes, it is still open, not yet in accordance with standards
 - (Informant 4) It's safe, out of reach of animals
 - (Informant 5) Yes, walking
 - (Informant 6) it is stored in the warehouse at the back.
16. What do you think is the final processing process for non-medical waste at RSUD Kabelota Donggala?

- (Informant 3) a' if the final waste processing is picked up by DLH twice a week, it is already running
 - (Informant 4) is a third party, from DLH
 - (Informant 5) yes, third party Informant 6) Yes, at such and such a place after it was lifted, there used to be a place, then that was it then went to the landfill
17. What obstacles exist during the process of managing non-medical waste at the Kabelota Donggala Regional Hospital?
- (Informant 3) actually there is, actually it's twice a week but it takes quite a long time so the rubbish just piles up there.
 - (Informant 4) Right now, there is no mother to hinder him
 - (Informant 5) Nothing
 - (Informant 6) Nothing
18. How to overcome the obstacles that exist during the non-medical waste management process at the Kabelota Donggala Regional Hospital?
- (Informant 3) the way to overcome it is not to pick up the garbage twice a week, for example once a week, but every day but the name is also that we have cooperation with DLH so we adapt
 - (Informant 4) none
 - (Informant 5) none
 - (Informant 6) Nothing
19. What do you think about the facilities for waste management? What are the facilities for waste management and when will these facilities and infrastructure be updated?
- (Informant 3) actually it's already running, but once a year because we're also waiting for the budget, budget once a year so we put it all in there and everything we want to update.
 - (Informant 4) Hey, next year's plans are for the mother to enlarge the temporary storage container for the TPS again, do you want to close it neatly again because the metal fence allows animals to enter, it's closed but the animals can still reach it?
 - (Informant 5) yes, walking
 - (Informant 6) yes, it is usually replaced if something is damaged

Non-Medical Waste Management

Sorting

From the results of interviews and observations conducted at the Kabelota Donggala Regional Hospital, every room that produces waste is used for the waste sorting process at the Kabelota Donggala Regional Hospital. Yellow bags are used for infectious waste, *safety box* used for sharp infectious waste, and black bags are used for non-medical waste. However, the process of sorting non-medical waste has not been carried out, that is, there has not been a separation between organic and inorganic waste, this is of course not in accordance with Minister of Health Regulation no. 7 of 2019. this is in line with this research. Ayu L A, (2023) at Citra Arafik Hospital in 2023, there was no separation between organic and inorganic waste, as well as research conducted by Kotika et al, (2023) at Budi Agung Hospital that there was no separation between organic and inorganic waste, the waste was still put together in one bag.



Figure 5.2 Waste sorting at Kabelota Donggala Regional Hospital

Container

From the results interviews conducted at the Kabelota Donggala Regional Hospital stated that there were no separate containers for organic and inorganic waste during the non-medical waste storage process at the Kabelota Donggala Regional Hospital. Based on the results of a survey conducted in the hospital environment, there were still three trash bins without lids, which of course is not in accordance with the Republic of Indonesia Minister of Health Regulation No. 7 of 2019 concerning hospital environmental health.

This is in line with research conducted by Fitri, A (2022) at the Ibnu Sina Islamic Hospital, Padang Panjang, which stated that there were no special organic and inorganic waste bins provided, while research conducted by T. Khairul Razi et.al (2022) at the Tgk Regional General Hospital. Chik Dirno Sigli in Pidie Regency is the opposite, which has 100% closed and easy-to-open containers.

Transportation

From the results interviews and observations at the Kabelota Donggala Regional Hospital. The process of transporting non-medical waste from waste producing sources to the TPS is carried out every day, namely in the morning using a transport trolley, this is in accordance with the Regulation of the Minister of Health of the Republic of Indonesia No. 7 of 2019.

This is in line with research by Fitri, A (2022) at the Ibnu Sina Islamic Hospital Padang Panjang who reported that trash trolleys are used to move rubbish from the room every day. Transportation of non-medical waste from the source room is carried out periodically during off-peak hours using a rubbish trolley, this is This is also in line with research conducted by Kotika et al, (2023) at Budi Agung Hospital that transportation is carried out every day starting from the source of production to the TPS.



Figure 3 transportation process to TPS

Storage at TPS

From the results of interviews and observations conducted at the Kabelota Donggala Regional Hospital, the hospital has a hospital waste storage building (TPS) located behind the hospital, in front of the road which is easily accessible by transport vehicles. The TPS building is a permanent building with cement walls, there are still holes that are not tightly closed, which allows animals to enter and damage the black plastic that wraps the waste, causing the waste to scatter, which can cause an unpleasant odor in the hospital environment. This is of course not in accordance with the standards according to the Regulation of the Minister of Health of the Republic of Indonesia No. 7 of 2019.



Figure 4 TPS of Kabelota Donggala Regional Hospital

According to research by Laras (2023), most of the household waste thrown into TPS still contains loose black plastic, which causes the material to spread, while research conducted by Fitri, A (2022) at RSI Ibnu Sina Padang Panjang found that the hospital does not yet have a TPS for non-medical waste, this is certainly not in accordance with the Regulation of the Minister of Health of the Republic of Indonesia No. 7 of 2019.

Final Processing

Based on the results of interviews and observations, it can be seen that the final processing of non-medical waste at the Kabelota Donggala Regional Hospital is carried out by a third party, namely DLH (Environmental Service).

This is in line with research conducted by Fitri, A (2021) at RSI Ibnu Sina Padang Panjang that the final processing of non-medical waste is managed by the Padang City Government. This is also in line with research by Laras (2023) which explains how the Citra Arafik Hospital handles non-medical waste in collaboration with the Environment and Forestry Service as a third party. Panjang This is of course in accordance with the Republic of Indonesia Minister of Health Regulation No. 7 of 2019, which stipulates that household waste can be destroyed in hospital incinerators or transported using hospital waste trucks or in collaboration with outside parties.



Figure 5. The process of transporting waste by DLH to the landfill

CONCLUSION

Based on the results of observations and interviews conducted with various informants, it can be concluded that the process of managing non-medical waste in the organic and inorganic categories at the Kabelota Donggala Regional General Hospital (RSUD) still shows several inconsistencies with the provisions contained in the Regulation of the Minister of Health of the Republic of Indonesia (PERMENKES RI) No. 7 of 2019. At the sorting and containerization stage, implementation in the field did not fully meet the standards set out in the regulation. This shows the need to increase understanding and implementation of appropriate procedures in the initial management of non-medical waste. Meanwhile, at the transportation stage, implementation has proceeded in accordance with applicable regulations, showing compliance with standard operational procedures in this aspect. However, temporary storage in Temporary Storage Places (TPS) of waste is still not in accordance with regulations, so it has the potential to pose risks to the environment and health. As for the final stage of non-medical waste processing, the process is in accordance with the stipulated provisions, indicating that there is a good final effort in maintaining the quality of waste management in hospitals. Based on these findings, researchers are exploring in more depth the mechanisms and effectiveness of existing waste management in hospitals to support the implementation of more optimal and sustainable policies.

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