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Environment Sanitation And Patterns Of Disease In Coastal Community At Langnga Mattirosompe Village Pinrang Regency 2015

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Abstract

This type of research is observational research by using descriptive approach with the aim to describe the environmental sanitation and disease patterns in the coastal communities. Samples of research sites, selected using purposive sampling techniques in order to obtain 75 homes. The results showed that water sulpply is qualified as many as 11 (14.7%) and non-qualified 64 (85.3%), latrine is qualified as many as 33 (44%) and do not qualify as many as 42 (56 %), house is qualified as much as 41 (54.7%) and do not qualify as many as 34 (45.3%), trash bin is qualified 4 (5.3%) and do not qualify as many as 71 (94,7%), SPAL qualified by 5 (6.7%) and do not qualify as many as 70 (93.3%), diseases related to environmental sanitation is itching total of 140 cases (7.88%) and diarrhea many as 86 cases (4.84%).

Keywords: Pattern Of Disease, Coastal Community, Environment Sanitation

Introduction

Indonesia is an archipelago geographically situated between the continents of Asia and Australia and between two oceans are the Pacific Ocean and the Indian Ocean consisting of ± 17,508, surrounded by a sea area of about 7.9 km2 and has a shoreline or coast around 81 791 Km. The geographic area caused most of Indonesia's population inhabits the coastal areas, where the pattern is heavily dependent on the state of nature and natural resources available and is predominately fishermen (Supriharyono, 2000).

According to Hendrik L. Blum, community health status is influenced by four factors, namely environmental, behavioral, health services, and heredity. Of these four factors which most influence environmental factors (Soekidjo Notoadmojo, 2000).

Environmental and human interaction takes place continuously and never-ending, o that in the process many shifts and changes in environmental conditions. The city is an integral ecological dynamic in which groups of the population hold interaction with the environment both the physical environment, biological, and social environment.

Many of settlements along the coast is not well organized and well managed affecting local hygiene conditions. As we know, the cleanliness of the environment is closely related to the health of the surrounding community. Based on observations in the field, hygiene conditions in the coastal area of Padang, particularly in the coastal areas of Freshwater West is very alarming. Though there are coastal areas in the downtown area. If observed, the garbage strewn along the coast, both waste from the sea such as organic waste and inorganic trash and as well as waste from households. Another problem found that the unavailability of latrines that meet the criteria of health, lack of sewers / drains and the unavailability of toilets in every home residents.

Based on observation or observation at the venue. Garbage strewn can damage the cleanliness and damage the health. Communities around the coast do not care about cleanliness of their environment, but the local government has provided landfills (TPS) around the population on the coast, but TPS is not used as its function. It is caused by protests from residents whose homes adjacent to the TPS. Residents stated that the existence TPS disrupt air cleanliness in the house because it creates a bad odor. Those problems resulted in the polling station no longer used, so that the garbage left scattered and piled up near their homes.

Another problem found in coastal areas is the problem of garbage disposal wet or domestic wastewater. Disposal of household waste in the coastal areas of Freshwater West is performed by flowing waste into the sea through a pipe, but still many people who throw waste around the house. Society thinks that sand can absorb all the waste that is not waterlogged and does not cause odor. This is an issue that is very worrying because there was no sewer to collect and drain the waste. So let it flow into the yard and around the house, and left to become a puddle in every driveway. If this is allowed to continue, can certainly cause a variety of effects on communities, including causing germs, becomes the breeding of mosquitoes, germs and other bacteria. One of the effects of the problem by the development of an outbreak of dengue fever a while ago (Syarifah Hidayati, 2010).

Environmental sanitation community coastal is still the main problems are often encountered due to the limited supply of clean water, latrines family, wastewater disposal (SPAL), landfills, healthy housing and so is the driver of a variety of diseases such as diarrhea, respiratory infections, malaria, skin diseases, food poisoning and other (Media Research and Development, 2006).

Based on data from South Sulawesi provincial health department in 2008 showed that to South Sulawesi of 7.771.671 people spread in 24 regencies/cities, with clean water coverage 68.04%, shows that of the 582.342 households examined only 88.05% households have latrines, while a healthy amount as much as 466 193 households, or 33.39%, a solid waste disposal 64.27%, 68.54% and healthy housing. When compared with the target of achieving IIS 2010 (80%). Pinrang in 2009 shows that clean water

coverage 69.9%, 59.25% household toilets, waste water drains 55.89%, 89.32% and healthy housing (DHO Pinrang Profile, 2009).

In the District Mattirosompe Village Langnga shows that clean water coverage 34.87%, 89.16% household toilets, sewerage 79.94%, garbage disposal (TPS) 82.34%, and 72.13% healthy housing. While the pattern of disease for 10 types of diseases that exist in the region of Puskesmas Mattombong ie 28.25% respiratory diseases, skin diseases 12.93%, 11.06% diarrhea, poisoning and accidents 10.8%, diseases of the oral cavity 9.29% , other intestinal infectious diseases 8.14%, malaria 7.55%, 5.79% mastoid ear disease, tuberculosis 3.35%, and hypertension (high blood pressure) 2.82% (public health center profile, 2015).

The pattern of disease that occurs based on the 10 highest disease 4 of which are diseases associated with environmental sanitation while others are related to human behavior itself. From the description, the authors chose research sites in the District Mattirosompe, particularly in coastal communities in the Village Langnga to see the picture of the environmental sanitation conditions and disease patterns that exist.

Research Methods

This type of research is observational research with descriptive approach is to describe the variable environmental sanitation and disease patterns in the coastal communities. In this research, the population is a family house in the Village District of Mattirosompe Langnga Pinrang totaling 654 houses. Sample houses research sites, selected using purposive sampling technique with the following criteria: a) The house is located in Biritassi, b) The layout of the house is not far from coastal, c) The house was uninhabitable, d) Willing to be interviewed. From these criteria obtained a sample of 75 houses.

Collecting data in this research consists of primary data and secondary data. The primary data obtained through observation and direct interview to the respondents, using a questionnaire. Secondary data is data concerning the state of the research location obtained from the relevant agencies to this study. In this case the data about the potential of village Langnga data Mattombong health center as the working area of the Village Langnga.

The data obtained were processed manually with the aid of a calculator and SPSS. Then the data is presented in tabular form distribution accompanied by explanations.

Research Result

This research was conducted in the village of the District Langnga Mattirosompe on 28 Novembber - December 14, 2015 which is coastal area. The data collection is done with interviews, questionnaires and direct observation. The research results are as follows:

Characteristics of Respondents
Gender distribution of respondents

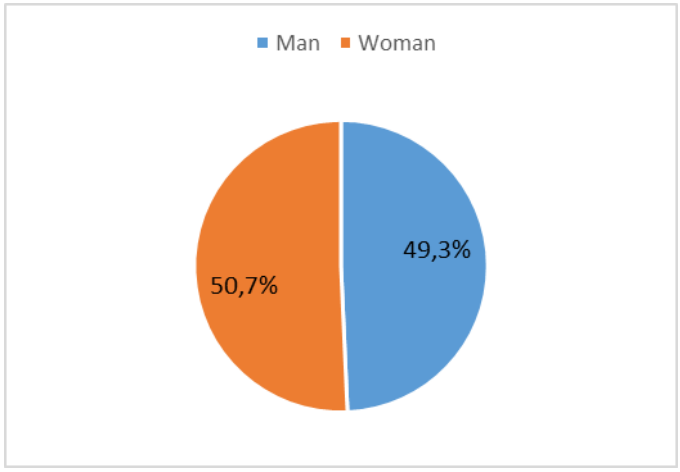

Figure 1. Graph Distribution of Respondents by Gender

Figure 1 shows that the respondents of men as many as 37 people (49.3%) and 38 women (50.7%).

Age distribution of respondents
The age distribution can be seen 0n the figure become

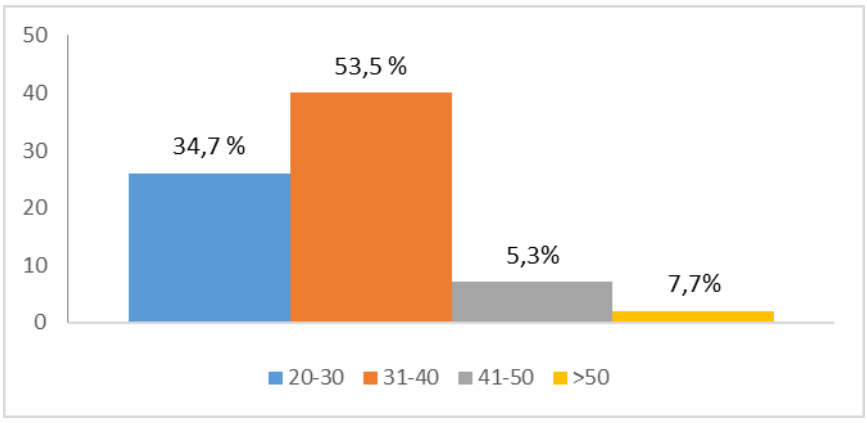

Figure 2. Graph Distribution of Respondents by Age Group

Figure 2 shows that most respondents aged between 31-40 years as many as 40 people (53.3%) and the least aged> 50 years of the two people (2.7%).

Education distribution of respondents

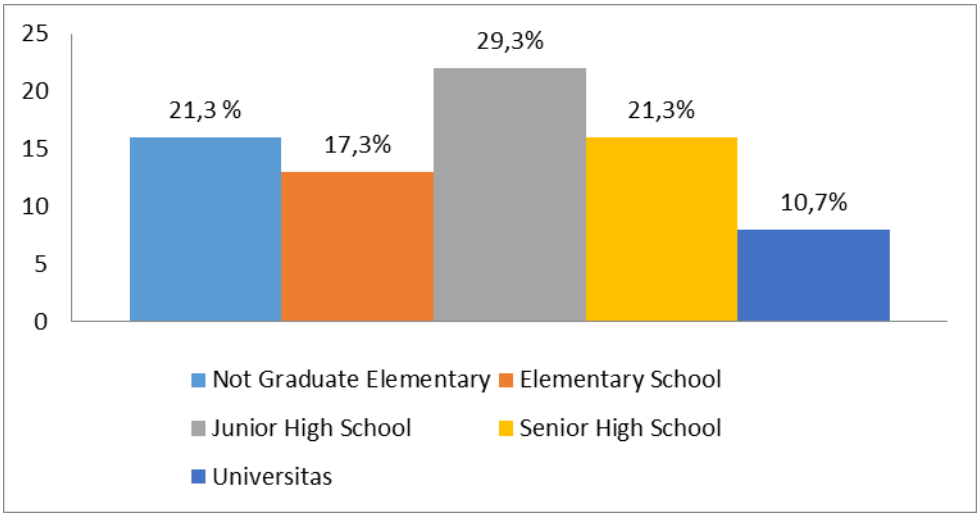

Figure 3. Graph Distribution of Respondents by Education Level

Figure 3 shows that the most educated respondents SMP as many as 22 people (29.3%) and the least of universities as many as eight people (10.7%)

Job distribution of respondents

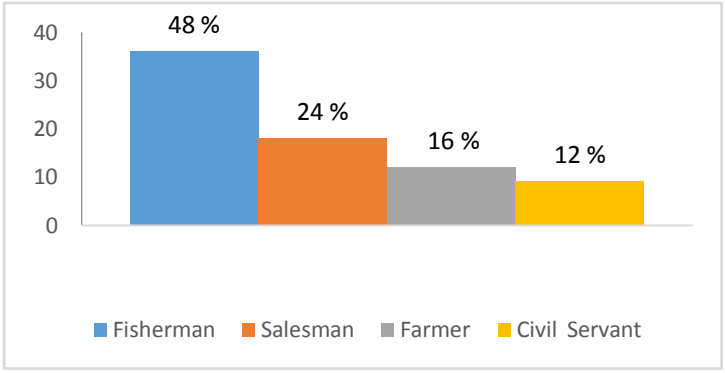

Figure 4. Graph Distribution of Respondents by Job

Figure 4 shows that the respondents work the most are fishermen that as many as 36 people (48%) and the least was as civil servants as many as 9 people (12%).

Characteristics of variables examined
Water Supply

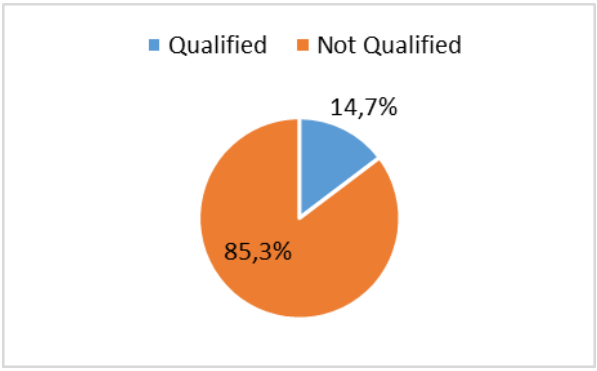

Figure 5. Graph Distribution of respondents Based Water Supply

Figure 5 shows that the water supply is qualified by 11 (14.7%) and non-qualified 64 (85.3%).

Latrine Family

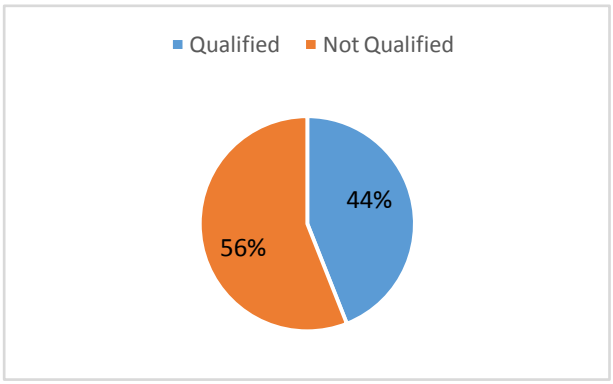

Figure 6. Graph Distribution of Respondents by Family latrine

Figure 6 shows that the latrines qualified as many as 33 (44%) and who do not qualified as many as 42 (56%).

Housing

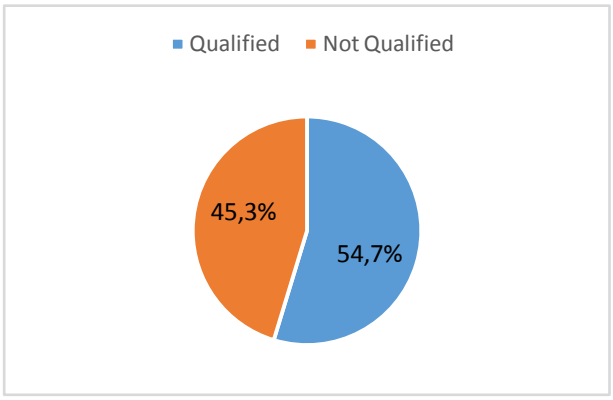

Figure 7. Graph Distribution of Respondents by house condition

Figure 7 shows that a qualified house by 41 (54.7%) and that do not qualified as many as 34 (45.3%).

Trash bin

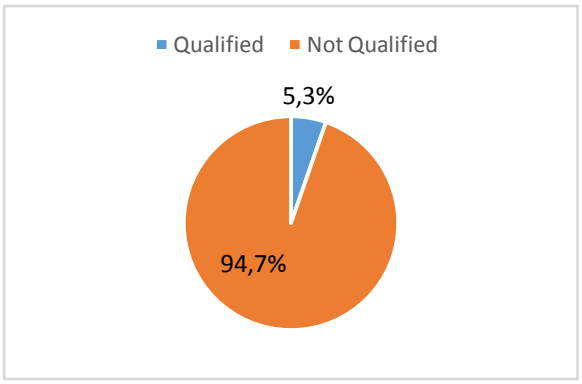

Figure 8. Graph Distribution of Respondents by Trash bin

Figure 8 shows that the trash bin is qualified 4 (5.3%) and were do not qualify as many as 71 (94.7%).

SPAL

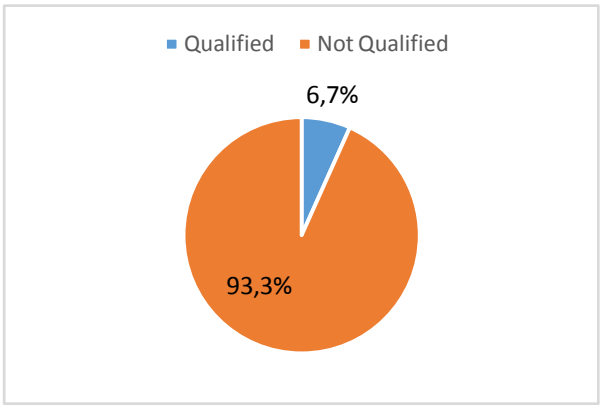

Figure 9. Graph Distribution of Respondents by SPAL

Figure 9 shows that the SPAL qualified by 5 (6.7%) and who do not qualified as many as 70 (93.3%).

Disease patterns

Table 10. Distribution of the Diseases from May to October in Public Health center Mattobong and Langnga Village 2015

No	Disease	Mattobong	Langnga	Total	%
1	ISPA	590	242	832	21.53
2	Skin disease	270	140	410	10.61
3	Diarrhea	231	86	317	8.20
4	Poisoning & Accident	226	0	226	5.85
5	Diseases of the oral cavity	194	545	739	19,12
6	Other intestinal disease infection	170	0	170	4.40
7	Malaria	157	0	157	4.06
8	Mastoid ear disease	121	0	121	3.13
9	TBC	70	0	70	1.81
10	Hypertension	59	202	261	6.75
11	Maag	0	178	178	4.61
12	Wound	0	145	145	3.75
13	Rheumatism	0	142	142	3.67
14	Cough Tightness	0	58	58	1.50
15	Toothache	0	39	39	1.01
	Total	2088	1777	3865	100

Sources: Secondary data

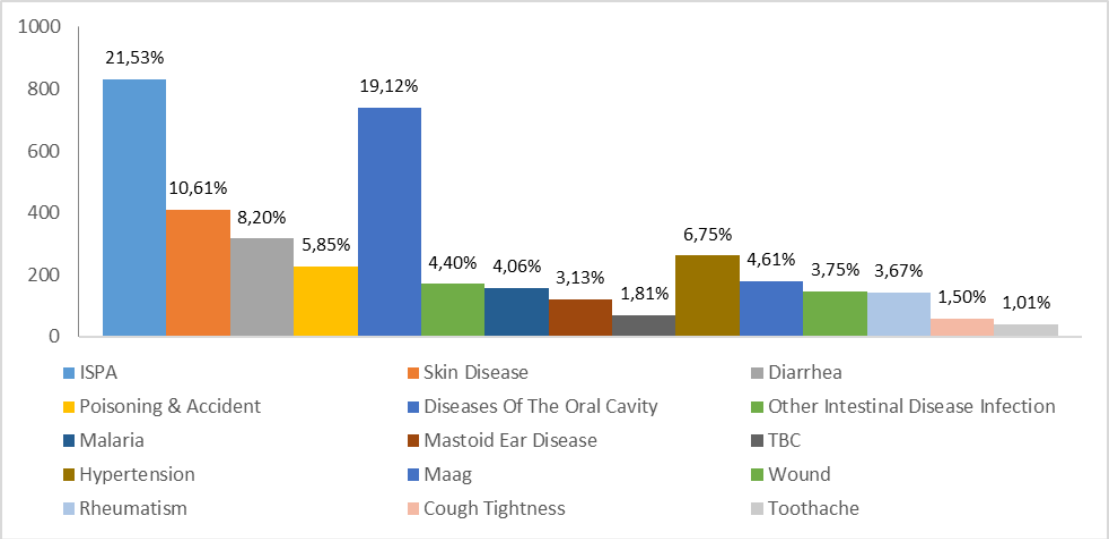

Figure 10. Graph Distribution Diseases on May to October

Figure 10 shows that the disease is most prevalent in Sub Mattobong and Langnga is ISPA is 832 cases (21,53%) and the last was a toothache that 39 cases (1,01%).

DISCUSSION

Water Supply

Diseases caused by the environment can not be denied many of which are directly related to water. Half the population of Indonesia is currently consuming water that do not qualify Bacteriological. Various extraordinary events is often the case related to the quantity and quality of water, because the water including the chain of disease transmission.

Based on the results showed that the water supply of qualified less than those who did not qualify. Clean water supply facilities that are used by people in the study site was dug wells and water taps. Because in terms of quantity does not meet the daily needs of the majority of respondents use rainwater to meet their needs. Given the number of water supply facilities that do not qualify then the risk to contract the disease more like itching, diarrhea, and dysentery.

Observations show that the distance of the wells from pollution sources such as bins and latrines, besides a place to collect rain water left in an open state so as to allow to happen penccmaran. Other factors that can increase the risk of disease outbreaks are mostly ordinary respondents directly consume raw water. The reason they are drinking water that is not cooked is because of habit and perception in the society that the water that has been cooked another taste than water that has not been cooked. There is also a state that the water that comes from Water Supply Company had net so did not need to be cooked again.

Water consumption is limited is a problem that most often we get across the archipelago. According Achmadi (2001) half the population of Indonesia is currently consume water that is not qualify bacteriological and in general are still many residents of Indonesia who live in an environment of low quality, such as access to clean water, basic sanitation, and yet behave in life net impact is felt directly by society itself.

With a sufficient number of conditions of the provision of clean water that does not qualify as compared with the frequency of the appearance of the disease based on environment in general and water-based (water borne deseases) in particular can be seen that the emergence of these diseases is directly proportional to the condition of water supply that does not meet these requirements.

The condition of water supply in the coastal village of Langnga is qualified 11 (14.7%) and not qualified 64 (85.3%). Impact looks at the frequency of occurrence of the disease Itching that appears in almost every month of May - October 2015 recorded a total of 170 patients (7.88%) and diarrhea with 86 (4.84%). This marks still need improvement of clean water so that the water quantity is fulfilled. The results of this study are supported by research conducted by Edi (2005) in the village of Bonto Jai stated that the condition of water supply in the coastal areas many did not qualify due to the soil conditions and the distance from the pollution source nearby.

Family latrines

Based on the research that has been done shows that of the 75 respondents surveyed, which had toilet indicates that the latrines qualified as many as 33 (44%) and who do not qualify as many as 42 (56%). Moreover, house that does not have latrines, people throwing stools in the pond or on the seafront and there is also in the bush/field and any place. Reasons respondents throw away the stool on the seafront is because it's easier, do not need watering, do not pay to make latrines, latrines are often submerged in sea water and latrines are usually made respondents using a small tub so that its capacity is small.

This suggests that people may not realize the consequences of bowel habits in any place. According Kusnoputranto (1997) excreta disposal in any place will lead to contamination of ground water as happened in the Village Langnga seen along the coast there are a lot of dirt scattered. From the data obtained from the sub-health centers that termsuk diarrheal disease in the ten highest disease that occurs and there is no indication that pollution or contamination of water directly to food caused by the vector.

The results are consistent with research conducted by M. Djanur (2005) found reasons Caddi Island communities in the District Ujung Tanah Makassar dump sludge on the seafront is mainly due to the high cost to make a latrines, although there are public toilets but long unused. In addition, there are also those who say dump the sludge on the seafront because it's easier, do not need watering and do not spend.

Housing

In general, the house occupied by the respondent is the home stage and only a small portion which occupies a stone house which has generally had a kitchen and

kamarisasi. But in general, just a stone house that has the most ventilation and only a few houses on stilts only a fraction are ventilated. The reason was not made ventilation is due to the sea breeze usually blowing and lots of mosquitoes that would go into the house. The result showed that the majority of respondents already have a home room and adequate ventilation, but does not meet the requirements when compared to the number of inhabitants that do not correspond to the area of the house owned.

Besides the problems found is the number of residents who are not balanced by the number of rooms that can cause health problems. This is consistent with that put forward by Samsiah (2003) that the number of rooms that are not balanced by the number of occupants to facilitate the transmission of diseases like tuberculosis, skin diseases and respiratory diseases such as respiratory infection. According to Anwar Daud (2000) rooms housing without causing the transmission of diseases, especially respiratory diseases will easily occur due to lack of space to separate the occupants affected by the disease with other occupants.

Trash bin

Based on the observation that the percentage of respondents who have a garbage disposal that do not meet health requirements still shows significant numbers as many as 71 respondents (94.7%). Existing garbage dump in general do not have a cover and can be flooded in the rainy season so that garbage into the garbage, causing an unpleasant smell, and become breeding grounds for disease vectors. Respondents who did not have a garbage disposal, immediately dispose of their waste in any place, which is at sea and in the ponds, there is also a burning garbage.

From the foregoing, it is clear that public awareness of handling household waste sanitary still low. This is supported by the unavailability of garbage temporary shelters, so that respondents throw garbage anywhere. It is necessary for the handling of the relevant agencies, particularly the Department of Hygiene and local government to create a community environment clean and healthy through waste management is good and sanitary with through counseling and health education to provide understanding about the negative impact that may be caused by the behavior of littering any place, provision of proper garbage disposal in the form of government assistance or non-local.

SPAL

Waste is a dirty water containing various substances that endanger human life, the waste in question in this case the waste water coming from the bathroom, kitchen, laundry and others that may contain pathogenic microorganisms that can cause disease transmission.

From the research results that has been described that respondents with sewerage is only 5 (6.7%) were eligible. Respondents who did not have a sewerage system will give a bad impact on the environment and health of local residents because it can be a source of disease and cause discomfort, if household waste water is left stagnant protracted will be a good medium for the proliferation of pathogenic bacteria. According Kusnoputranto (1997) waste water that is not properly managed would be

dangerous to human health because it can be a carrier of diseases, especially infectious disease that is transmitted through contaminated water such as cholera, hepatitis, thypus abdomiminalis, etc.

To anticipate the circumstances mentioned above it is necessary to take countermeasures which must not be separated from cooperation agencies and the governments and local communities to implement specific programs on how the management of domestic wastewater which is good, and raising public awareness about environmental health and the negative impact on the environment and the health of wastewater disposal in any place through counseling and health education, procurement SPAL (Sewers waste) which meet the health requirements. Wastewater disposal healthy is to drain waste water from the source (kitchen, bathroom) to shelter wastewater smoothly without polluting the environment and can not be reached insects and rodents (Pamsimas, 2011).

Implementation of the program as it is expected that residential neighborhood locals can avoid sewage contamination and diseases that can be transmitted through the waste water so that the status of the main public health at the study site can be improved.

Disease patterns

The pattern of disease is a picture of disease incidence in a given area in a given time. Disease patterns can be known what health problems that exist in an area, and is therefore determined efforts to do and activities are prioritized to implement health efforts.

Based on the results that the disease cough is a disease that most commonly found in a variety of age groups. In general diseases that are related to environmental sanitation that occurs in the Village Langnga are diarrhea and itching. Diarrheal diseases can be caused by contaminated water drunk by people with no prior or contamination of cooked food by flies that have settled in human feces in advance to bring the source of diarrheal diseases in food. While itching can be caused by water wells that do not qualify so unfit for use but people are forced to use it as a means of providing water that is partially insufficient in quantity. Most diseases that occur again mostly related with behavior that wounds and rheumatism as well as associated with diet are hypertension and toothache.

The results of this study are not consistent with research conducted by Edi (2005) conducted on the island Caddi the District of Ujung Tanah Makassar which shows that the disease appeared in the last six months is largely disease-based environment, this proves that the conditions of environmental sanitation bad as the shortage of clean water, latrines, waste water disposal and waste disposal are mostly not qualified can cause many types of diseases such as diarrhea, respiratory infections, skin, typhus, etc.

Conclusion

Based on the results of research conducted on environmental sanitation and disease patterns in the coastal communities Langnga Village the District of Mattirosompe can

be concluded that the provision of clean water qualified 11 (14.7%) and not qualified 64 (85.3%). Family latrine qualified 33 (44%) and not qualified 42 (56%). Housing qualified 41 (54.7%) and not qualified 34 (45.3%). For room and the kitchen has created its own place, but many are not ventilated. The shelter trash qualified 4 (5.3%) and not qualified 71 (94.7%). SPAL is qualified 5 (6.7%) and not qualified 70 (93.3%). Diseases associated with environmental sanitation is Itch (7.88%) and diarrhea (4.84%).

Acknowledgment
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