

Increasing Society's Knowledge about The Prevention of Respiratory, Hypertension, and Tb Pulmonary Diseases in Lihu Village, Railaco Administrative Post, Ermera Municipality, Timor-Leste, from August to October 2023

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Abstract: The problem that occurs in Lihu village in various places is that some houses do not have basic sanitation, there is no access to clean water, lack of awareness to dispose of waste properly, and inadequate waste management. A total of 262 children aged 0-6 (14.86% of the population) have various illnesses, with 39 diagnosed with medical conditions such as IRA (57.14%), diarrhea (25.71%), skin diseases (11.42%), epilepsy (2.85%), and asthma (2.85%). Out of the 413 young people (23.43% of the population), two have been diagnosed with medical illnesses rheumatoid arthritis (50%) and TB (50%). A significant number of people are at high risk of respiratory and cardiovascular diseases due to smoking (42.61%) and alcohol consumption (54.72%). A total of 90 elderly people aged above 60 represent 5.10% of the population, out of which 39 have been diagnosed with various illnesses, including DM (2.56%), RA (23.07%), hypertension (28.2%), IRA (5%), stroke (2%), gastritis (5%), TB (12.8%), liver disease (2%), asthma (15%), and skin disease (2%).

Objective: The objective is to use community service to serve the community, through the resolution of their problems based on data obtained and promotion of their health. It is hoped that the community will understand and value their food chains, which play a principal role in the development of their bodies, and increase their knowledge to prevent illnesses. Through this community service, students can apply their academic skills to benefit the community. **Method of community service:** The

implementation of the community health service activity uses an experimental method with a community trial approach. The implementation stage of the community health service activity started on August 25th until October 7th, 2023, in Liho village, Rai Iako subdistrict, Ermera municipality Timor Leste. In the first stage of implementation, data was collected in the health center and entered the community to obtain information about the prevalent illnesses. Following this, the community was informed of the results and agreed to implement the program.
Result: *The result of the community service is an increase in the community's knowledge regarding the prevention of illnesses and most communities are satisfied with the implementation.*

Introduction

Community nursing care is an effort that provides care similar to an integrated part of the healthcare system (Sciences, Division, & Health, 2019) implemented by nurses who are overseen by other healthcare teams to ensure that the community can achieve higher levels of health for individuals, families, and communities (Flaherty & Bartels, 2019). The main objective is to achieve optimal results that require active participation from all communities with the healthcare team (Greenhalgh, Jackson, Shaw, & Janamian, 2016). The main objective of national development is to increase the quality of healthcare support and continuous resources (Kruk et al., 2018).

This is based on the national development vision through health development, which aims to achieve and realize a healthy life (Rahman & Qattan, 2021). To achieve this objective, there must be a national development program with continuity that is planned in accordance with its direction (McKay, 2022). Through efforts in community health and care, students can help the community to understand the importance of health in life and transform unhealthy communities into healthy ones (Jackson, 2011).

Based on data from Suku Liho (2022), Suku Liho Chief, Mr. Bernardo dos Santos Babo, reports that the total population is 1,750 inhabitants, 883 male inhabitants with a percentage of 50.45%, and 867 female inhabitants with a percentage of 49.54%. Suku Liho's total area is 14.79 km², consisting of four sub-villages: Sub-villages Hi: 5.34 km², Sub villages Rae Udo: 3.15 km². Sub villages Camalpun covers an area of 3.20 square kilometers a sub villages CamalRahei covers an area of 3.10 square kilometers, both located in the Railaco Administrative Post, Ermera Municipality. According to data from Suku Liho (August October 2023), the total population is 1,762 inhabitants, with 900 men making up 51% and 867 women making up 45%, and a total of 378 households. Based on data from the Railaco Community

Health Center in July and August 2023, under the Ermera Health Services Directorate (Results Monitoring Framework for Monthly Program Activity Indicators), there were 1,495 consultations in July and 800 people in August.

According to Dr. Dircia from the Community Health Center, the community in Suku Liho is very active in health programs. Currently, the main illnesses affecting children are red eyes, diarrhea, vomiting, peeing, and body heat. The reproductive age group majority suffers from high tension and STIs (white hair disease) (Boutrin & Williams, 2021), while the elderly suffer from hypertension, red hair disease, cholesterol, and complicated illnesses that require complete exams and continuous treatment, which may have to be referred to Dili.

The results of the research by the UNTL Nursing Student Team in Liho village, Railaco Administrative Post, Ermera Municipality, Timor Leste from August to October 2023 showed that the majority of the community, especially children, youths, and the elderly, suffer from hypertension, asthma, acute respiratory infections, pulmonary TB, diarrhea, and rheumatoid arthritis. Contributing factors include smoking, drinking palm wine, inadequate food, lack of self-care, and poor environmental hygiene. In order to cause illnesses such as hypertension, diabetes, acute respiratory infection, and skin ailments that the community suffers from to be resolved, an approach was made with the Community Health Centre to promote health to the community with the aim of increasing their knowledge to prevent illnesses when they suffer from them for the first time. The approach was also made with the Village Chiefs to resolve the issue of clean water, which was lacking in certain areas, to construct a bathroom, a water tank, to provide notice signs and garbage cans, and to conduct a general clean up to prevent and minimize infectious diseases and illnesses that spread in the community.

Method

The implementation activity of community health services utilized the Experimental method with community trial approach (Solomon, Cavanaugh, & Draine, 2009). The first stage of implementing community health services began on August 25 to October 7, 2023, in the village of Liho, administrative post of Rai-lako, Ermera municipality, in 2023. In the first implementation stage of community health services, data was collected by visiting the health centre and entering the community to collect data on the illnesses that the community suffers from most frequently. The community health service team then disseminated the data collection results, followed by concurrence with the community to implement the defined program.

Process of collecting data



Figure 1. Preparation for research



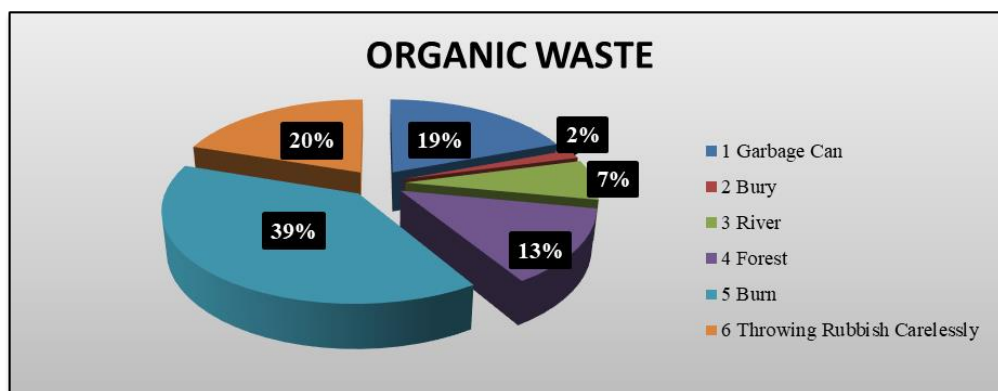
Fig 2. Data table

Results and Discussions

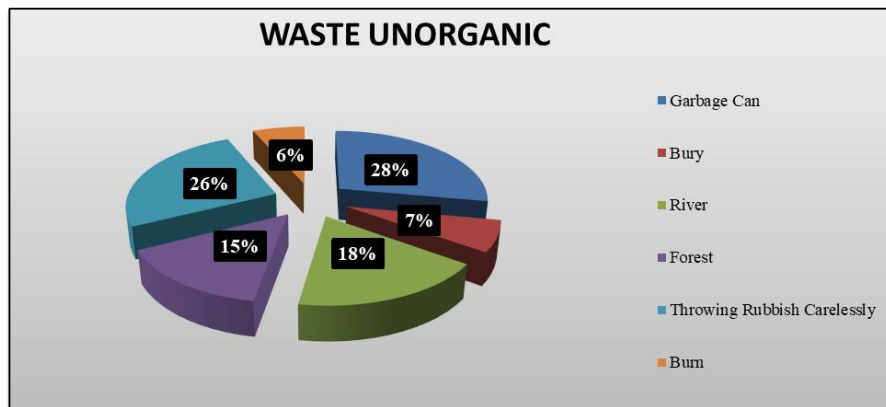
The implementation stage of community health services starts with collecting data in the community. By entering and leaving each village, data that is credible and can help understand the problems that the community suffers from in Suco Liho is obtained. Then, the team will refer to the data and create tables.

Starting to approach and make tables, students begin to prepare plans to solve community problems. There are five problems that the community faces based on the health working group: environmental problems, the risk of illness for children, youth, the elderly reproductive couple, and the aged, as well as promoting the community.

Health Working Group Environment



Based on the chart showing the distribution of waste containers, the majority (39%) of organic waste is found in litter spots, while the minority (2%) is buried.



Based on the diagram, it shows that the distribution of one type of waste, which is non-organic waste, is mostly found in litter spots (28%) while a minority is properly disposed of (6%).

1. The construction of toilets and posting announcements will be done in Hi Village



Figure 3. Toilet



Figure 4. Kuadru Avizu

In the entire Lihu Tribe, only 1.5% of the villages do not have a proper waste disposal site. Therefore, students will provide an example by setting up a waste disposal site for the community. The community must raise awareness in order to not dispose of waste in the river because it will have a big impact on their health and will increase the risk of floods during the rainy season.

A garbage disposal site will be constructed in Camalpun subvillage.



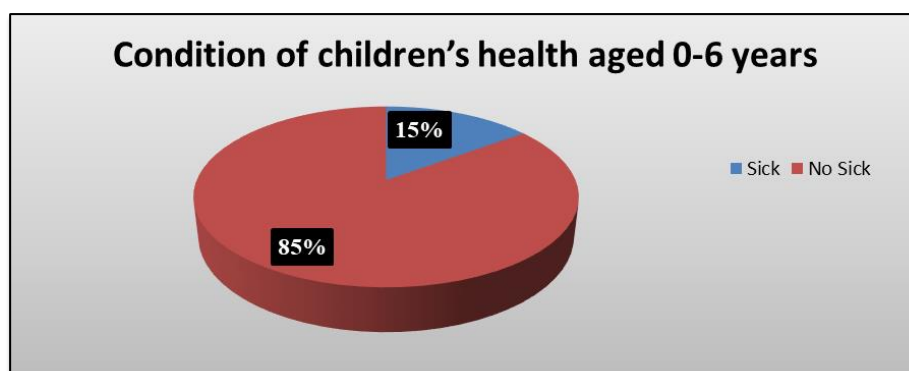
2. It is important to maintain and create a healthy environment by properly disposing of waste in order to prevent infectious diseases from affecting the community.
3. Build a potable water tank in Rae-Udo and Camal-Rahei Sub-Village



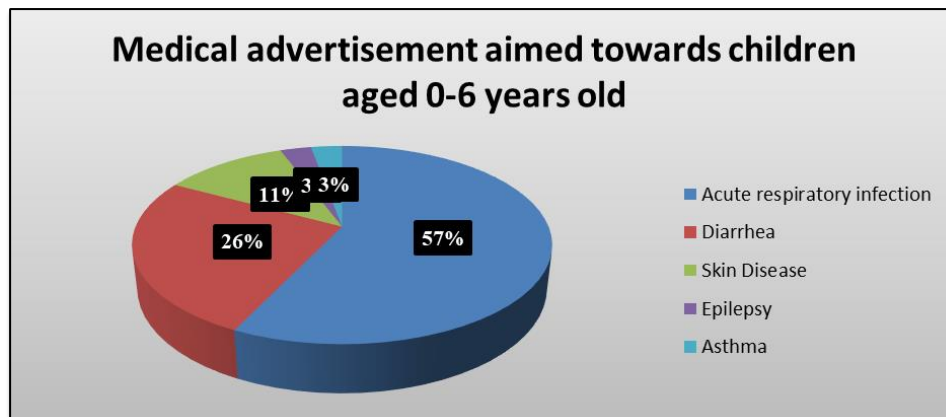
Figure 6. Potable water tank in Rae-Udo

After the construction of this potable water tank, the community can access clean water easily and without any problems related to water in Liho village

Health Group Service for Children



Based on the diagram above, regarding the condition of children's health aged 0 6 years, the majority (85%) are in good condition and the minority (15%) are sick.



Based on the diagram above, there is a medical advertisement aimed towards children aged 0-6 years old, with the majority having IRA (57%) and a minority having asthma (3%).

Plan:

1. Provide healthcare promotion for children, including:
 - a. Demonstrating how to wash hands properly. This will help children understand better and get used to the habit of washing their hands before and after eating and doing other activities.



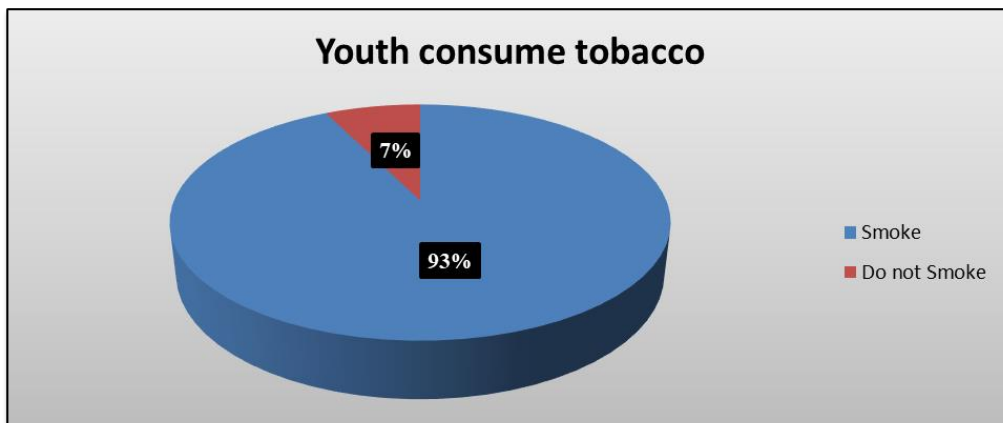
Figure 7. Demonstrating proper hand washing technique with soap

- b. Wiping teeth with a toothbrush. This will help maintain oral hygiene and continue to make it a healthy habit.

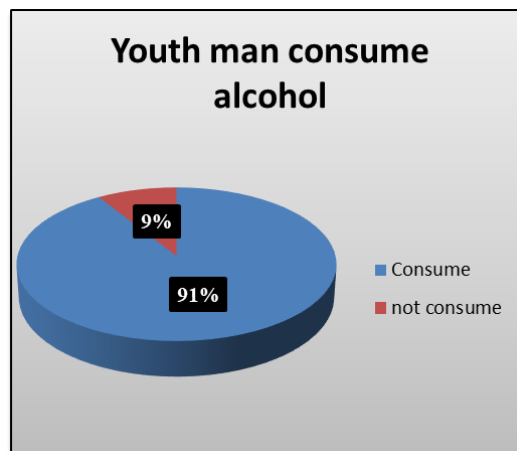


Figure 8. Photo together after providing oral hygiene promotion and distributing hygiene items to children

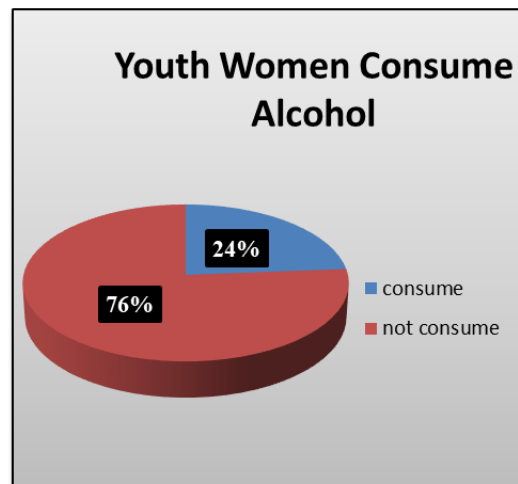
Health Service Working Group for Youth



Based on the diagram on the top, Youth consume tobacco, the majority smoke 93% and the minority do not smoke with 7%.



Based on the diagram on the top, Youth man consume alcohol, the majority 91% and the minority do not consume alcohol 9%.



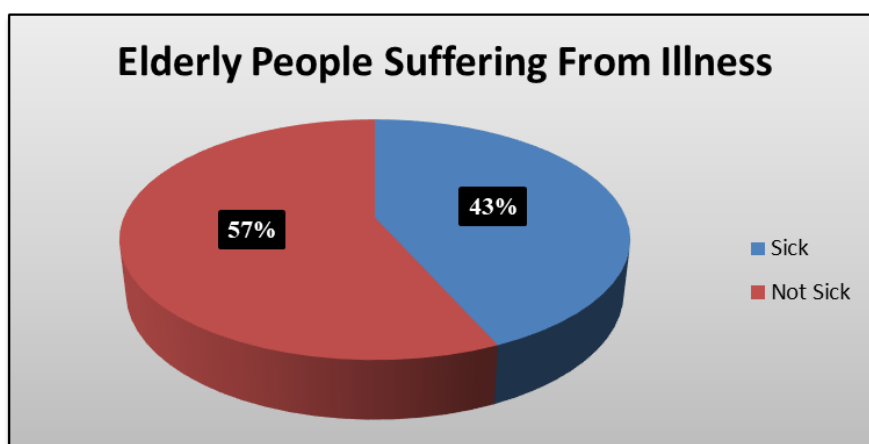
Based on the diagram on the top, Youth women do not consume alcohol, the majority 75% and the minority consume alcohol 24%.

Provide health promotion to young people in regard to prevention and treatment for Pulmonary TB at NOSSEF Railaco Vila Catholic High School.

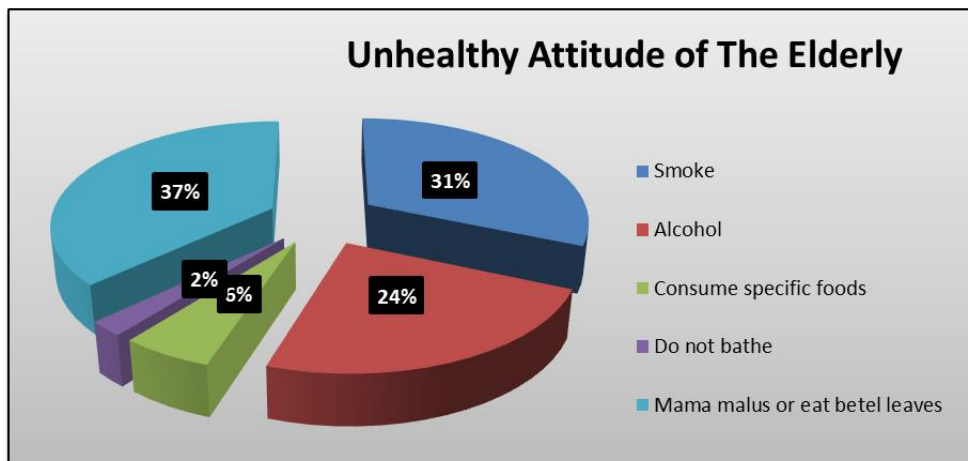


Figure 9. Stage a presentation.

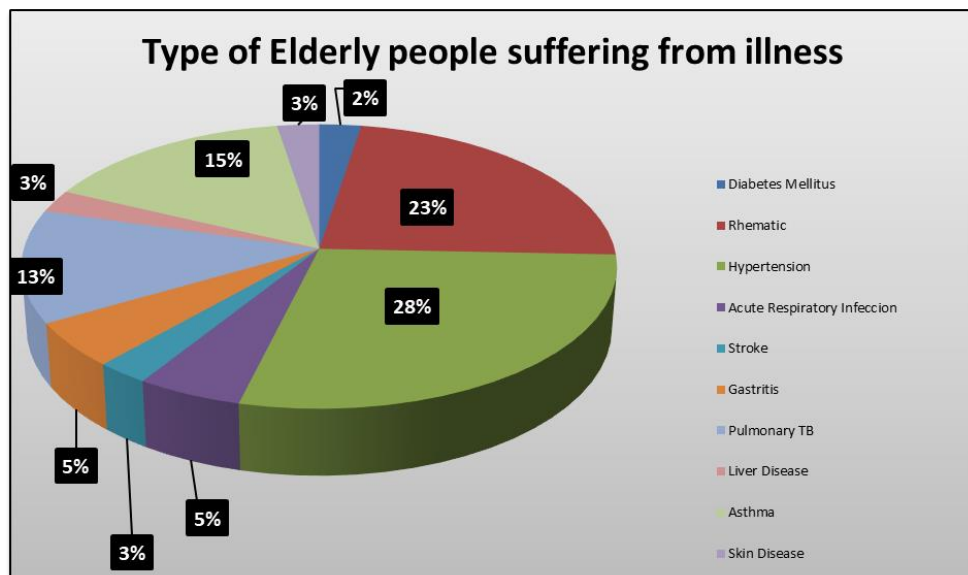
Health Service Working Group for Age



Based on diagram above the distribution of elderly people who suffer from the disease, the majority do not exist (57%) and the minority does (43%)



Based on diagram above the distribution unhealthy attitude of the elderly, the majority “Mama Malus” or eat betel leaves (37%) and the minority do not bathe (2%).



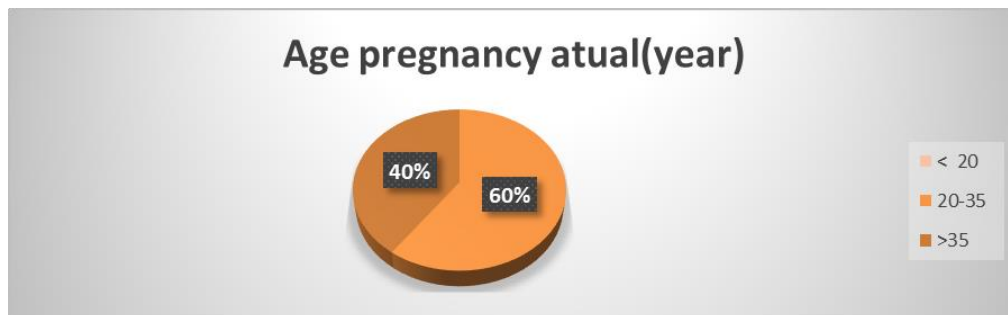
Based on diagram above the distribution type of elderly people suffering from illness, the majority of elderly suffer from hypertension (28%) and the minority suffer from skin diseases (3%).

Carrying out health promotion for the aged in the community in Suku Liho, Railaco Administrative Post, Ermera Municipality, regarding how to prevent hypertension and TB pulmonary diseases.

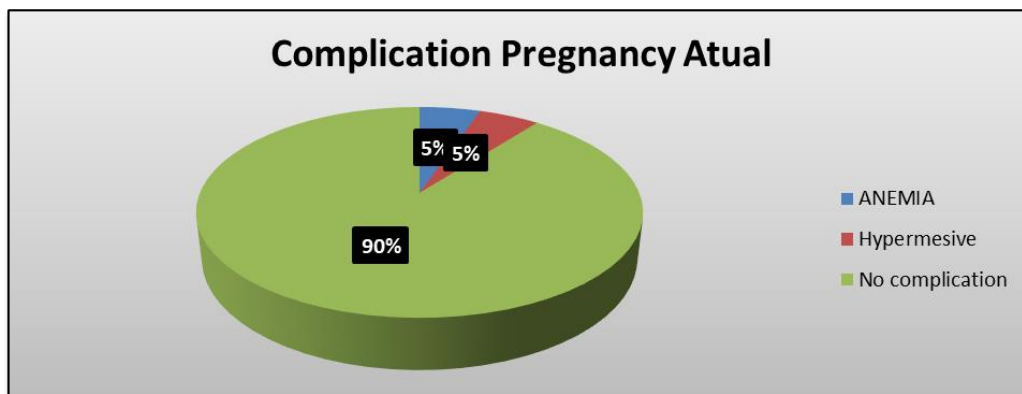


Figure 10. Aproximatly for the family age care.

Health Service Group for Pregnancy



Based on the diagram above, in the upper age range of expectant mothers, the majority are between 20-35 years old (60%) and the minority are above 35 years old (40%).



Based on the diagram above, the majority of expectant mothers currently have no complications (89.47%) and the minority have either Anemia (5.2%) or hyperemesis (5.2%).

Provide health promotion to expectant mothers regarding malnutrition diseases. This will increase the knowledge of mothers and allow them to provide better nutrition for the fetal development (Marshall et al., 2022). Consequently, the team will approach expectant mothers and provide clear explanations regarding the nutritious diet that will provide great advantages for fetal development (Hsu & Tain, 2019). In addition, the families will also be informed about malnutrition diseases. The health center will recommend expectant mothers

to be diligent in controlling their health and conduct check up at the community health center.



Figure 12. Provide for the pregnancy

Result

A. Health And Environment Working Group

Interventions carried out for the Liho community, Railaco administrative post, Ermera municipality were:

1. Building tanks
2. Building toilets
3. Building garbage disposal sites
4. Constructing notice boards

Then, implementation was done to solve the environmental problems faced by the Liho community in the Railaco administrative post of the Ermera municipality. After the implementation, the communities understood the importance of keeping their environment healthy.

B. Child Health Working Group

Interventions carried out for the Liho community, Railaco administrative post, Ermera municipality were:

1. Conducting health promotion for children in the community of Liho, Railaco administrative post, Ermera municipality including handwashing and tooth brushing techniques.
2. Distributing leaflets

After the implementation of health promotion and leaflet distribution for children in the Liho community, Railaco administrative post, Ermera municipality, the children understood, knew and applied hand washing and toothbrushing techniques.

C. Health Service Group For Youth

The intervention carried out for the community in Suku Liho, Railaco Administrative Post, Ermera Municipality is:

1. Carrying out health promotion for the youth in the community in Suku Liho, Railaco Administrative Post, Ermera Municipality, regarding how to prevent TB pulmonary diseases.
2. Distributing leaflets.

After implementing the health promotion and distributing leaflets for the youth in the community in Suku Liho, Railaco Administrative Post, Ermera Municipality....the youth understand and know how to prevent TB pulmonary diseases

D. Health Service Group For The Aged

The intervention carried out for the community in Suku Liho, Railaco Administrative Post, Ermera Municipality is:

1. Carrying out health promotion for the aged in the community in Suku Liho, Railaco Administrative Post, Ermera Municipality, regarding how to prevent hypertension and TB pulmonary diseases.
2. Distributing leaflets.

After implementing the health promotion and distributing leaflets for the aged in the community in Suku Liho, Railaco Administrative Post, Ermera Municipality the aged understand and know how to prevent hypertension and TB pulmonary diseases.

E. Health Service Group For Pregnant Women

The intervention carried out for the community in Suku Liho, Railaco Administrative Post, Ermera Municipality is:

1. Carrying out health promotion for pregnant women in the community in Suku Liho, Railaco Administrative Post, Ermera Municipality, regarding how to prevent malnutrition.
2. Distributing leaflets.

After implementing the health promotion and distributing leaflets for pregnant women in the community in Suku Liho, Railaco Administrative Post, Ermera Municipality....the pregnant women understand and know how to prevent malnutrition.

Kesimpulan

Through this activity, knowledge of the community can be further increased in order to prevent diseases such as IRA, Asthma, Pulmonary TB, Diarrhea, Hypertension, and Malnutrition. It is important to take care of their own hygiene, especially the personnel.

Therefore, the community of Suku Liho, Railaco administrative post, Ermera Municipality can implement it in their daily lives.

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