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Level of Community Knowledge About Medicine for Adult Worms in Baru Village Siantar Utara District

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ABSTRACT

Worm disease can cause problems because it causes loss of carbohydrates and protein as well as blood loss, thereby reducing the quality of human resources. The largest nematodes and infecting hundreds of millions of people are roundworms (Ascaris lumbricoides), whipworms (Trichuris and hookworms (Ancylostoma duodenale Necatoramericanus). These types of worms are widely found and easy to grow in tropical and subtropical Asia. And public awareness of the disease is still low. In particular, the new Kelurahan is one of the kelurahan located in Pemangsiantar, which is one of the kelurahan with a dense population, with various age levels. Therefore the authors measure the level of public knowledge of adult worm disease. From the results of the research that the author did using questionnaire data using respondent data with sample data as many as 30 respondents, it was found that the new urban village had a good level of knowledge about the disease, the data can be seen from testing data using the SPSS application with a level of correlation accuracy, the good one.

Keywords:

Adult Worm Disease, Community, SPSS Application

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1. INTRODUCTION

The growth of intestinal bacteria needs to be controlled with regular worming, intestinal worms are a disease where a person has worms in his intestines. Worm disease can cause problems because it causes loss of carbohydrates and protein as well as blood loss, thereby reducing the quality of human resources. The largest nematodes and infecting hundreds of millions of people are roundworms (*Ascaris lumbricoides*), whipworms (*Trichuris trichiura*), and hookworms (*Ancylostoma duodenale* and *Necatoramericanus*). These types of worms are widely found and easy to grow in tropical and subtropical Asia, especially China, India, and Southeast Asia [12].

WHO estimates that nearly 2 billion people are infected with helminths through soil (soil transmitted helminths). It is estimated that 1.05 billion people are infected with whipworms (Trichuris trichiura), and 1.3 billion people are infected with roundworms (Ascaris lumbricoides) (Peter J et al, in Titi Widya, 2014). Many children suffer from intestinal worms caused by roundworms (Ascaris lumbricoides) and an estimated 59 million cases. While the prevalence of worms in Indonesia is still very high and it is predicted that 60-80% of children suffer from worms, the prevalence of worms in elementary school children in South Sumatra is 45.5% roundworm infections, 60% whipworm infections, and 46.3% hookworms. Meanwhile, based on the research results of the Kusuma Buana Jakarta Foundation in 2002, the rate of intestinal worms in DKI Jakarta was relatively high at around 78.6% and the incidence generally affects elementary school-aged children.

In fact, the prevalence of worms on an island in the Thousand Islands reaches 95% [6] and it is predicted that 60-80% of children suffer from intestinal worms. Based on research [6] the prevalence of worms in elementary school children in South Sumatra is 45.5% roundworm infections, 60% whipworm infections, and 46.3% hookworms.

The new urban village is one of the villages in Pematangsiantar, which is one of the most densely populated villages, with various age levels.

1.1 Deworming

Worm medicine (Greek anti = opponent, *helmintes* = worm) is a medicine that can destroy worms in human and animal bodies. This term includes all substances that work locally to dispel worms from the gastrointestinal tract as well as systemic drugs that eradicate worms and their larvae that infest organs and body tissues [12].

Many anthelmintics in therapeutic doses only paralyze the worms, so they don't kill them. In order to prevent parasites from becoming active again or the remains of dead worms causing an allergic reaction, they must be removed as soon as possible. Anthelmintics themselves should be taken once every 6 months regularly to prevent reinfection. Most anthelmintics are effective against one type of worm, so proper diagnosis is needed before using certain drugs [4].

1.2 Worms in Adults

a. Symptoms of worms due to pinworms

Pinworms are one of the most common intestinal worms, both in children and adults. This pinworm infection is better known as keremian [8]. Some of the symptoms of worms caused by pinworms are:

- i. Itching around the anus, especially at night and can interfere with sleep
- ii. Skin irritation and rash around the anus due to frequent scratching
- iii. Stomach pain and nausea
- iv. Decreased appetite
- b. Symptoms of worms caused by hookworms

Itching and rashes on the feet are early symptoms of a hookworm infection that often goes unnoticed. These symptoms can occur when hookworms enter the skin [9]. After the skin, worms can enter the digestive system and cause several, such as:

- i. Stomach ache
- ii. Diarrhea
- iii. Decreased appetite
- iv. Weight loss
- v. Fatigue
- vi. Anemia
- c. Symptoms of worms due to roundworms

People who suffer from roundworm infection or ascariasis will experience symptoms that are divided into 2 stages, namely symptoms when the larvae are in the lungs and throat, then when the larvae return to the intestine and become adult worms [13].

Symptoms that can be felt in the first stage include cough, fever, shortness of breath, and wheezing . While the symptoms of the second stage or when the adult worms are in the intestine are:

- i. Stomach ache
- ii. Nausea and vomiting.
- iii. Diarrhea
- iv. bloody CHAPTER
- v. Loss of appetite and weight
- d. Symptoms of worms caused by tapeworms

Symptoms of worms caused by tapeworms vary, depending on the location of the larval infection in the body. If the larvae infect the intestines, symptoms may include nausea, weakness, diarrhea, and decreased appetite and weight. If tapeworm larvae move out of the intestines and into other organs, the symptoms of worms that appear can be severe and dangerous, including:

- i. Headaches and seizures if they attack the brain
- ii. Lumps or cysts on the liver
- iii. Allergic reaction
- e. Symptoms of intestinal worms due to trichinosis worms

Trichinosis is a disease caused by a species of roundworm called *Trichinella* that can infect the intestines and muscles. When first infected with this worm, sufferers may not feel symptoms. However, sometimes there are also those who experience diarrhea, stomach cramps, fatigue, nausea, and vomiting. A week after the initial infection, *Trichinella worm larvae* can infect muscle tissue. Some of the symptoms that can appear are:

- i. Joint and muscle pain
- ii. High fever
- iii. Headache
- iv. Swelling of the face
- v. Sensitivity to light

Symptoms of intestinal worms in adults should not be underestimated because this parasitic infection can cause fatal complications, although the occurrence is rare. Generally, symptoms of worms in adults can be overcome by taking worm medicine according to the type of worm infection. However, make sure to always follow the instructions listed on the packaging and doctor's recommendations. Then, it is recommended to continue to maintain a clean life to avoid worm infection.

2. METHOD

2.1 Types of research

The research method used in this study is a qualitative analysis with a prospective method, which means the method of diagnosing the course of the disease based on the time sequence.

2.2 Location and Time of Research

This research was conducted in the Baru Village, North Siantar District, Pematangsiantar. This research was conducted from July to August 2021.

2.3 Population and Sample

The population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions [10]. In this study, the target population is the community of Kelurahan Baru, District of North Siantar. The sample in this study was people aged 17 to 55 years in Baru Village, North Siantar District . Samples were taken randomly by grouping ages into 4 groups so that a sample of 30 respondents was obtained .

2.4 Data Collection Method

This research is a qualitative research with analytical descriptive method. Qualifications of the level of knowledge, culture, and socioeconomic are categorized as follows.

Value above 6 = good. Values 2 to 5 = moderate Value below 2 = bad

2.5 Validity and Reliability Test

Test v validity This study was conducted on the community of Sukapeace Sub-district, North Siantar Sub-district, as many as 30 people aged 17 to 55 years. Validity test is said to be valid if r count > r $_{table}$. The reliability test was carried out simultaneously on all statements. If the alpha value > 0.60 is called then the instrument has good and reliable reliability. If the alpha value > 0.60 (reliable) and vice versa if the alpha value is less than < 0.60 then the instrument is not reliable.

2.6 Data Analysis

The data obtained from the results of the distribution of respondents' questionnaires are presented in the form of tables and diagrams using the SPSS version 22 program.

2.7 Research Ethics

This study uses ethics where each respondent is asked to fill out the questionnaire voluntarily while maintaining the confidentiality of the respondents.

3. RESULTS AND DISCUSSION

1. Validity and Reliability Test

For the level of validity, a significance test was carried out by comparing the calculated r value with the r table value. For degree of freedom (df) = nk in this case n is the number of samples and k is the number of constructs. In this case, the magnitude of df can be calculated as 30-2 or df = 28 with alpha 0.6 obtained r table 0.361; if the calculated r (for each question item can be seen in the corrected item total correlation column) is greater than r table and the r value is positive, then the question item is said to be valid. Test v validity This study was conducted on the community of Sukapeace Sub-district, North Siantar Sub-district, as many as 30 people aged 17 to 55 years. Validity test is said to be valid if r count > r_{table} .

Table 1 Recap of Instrument Validity Test Results

Variable	Question Items	Corrected item question total Correlation	r table	Note:
worms	P1	0.406	0.361	Valid
	P2	0.437	0.361	Valid
	P3	0.451	0.361	Valid
	P4	0.414	0.361	Valid
	P5	0.699	0.361	Valid
ΞΈ	P6	0,487	0,361	Valid
KNOWLE DGE	P7	0,418	0,361	Valid
	P8	0,495	0,361	Valid
	P9	0,595	0,361	Valid
BUDAYA	P10	0,502	0,361	Valid
	P11	0,533	0,361	Valid
	P12	0,391	0,361	Valid
	P13	0,538	0,361	Valid
	P14	0,514	0,361	Valid
	P15	0,519	0,361	Valid
SOSIAL EKONOMI	P16	0,588	0,361	Valid
	P17	0,409	0,361	Valid
	P18	0,379	0,361	Valid
	P19	0,499	0,361	Valid
	P20	0,564	0,361	Valid

Data source: processed SPSS output, 2021

From the tables above, it can be seen that each question item has r count > from r table (0.361) and is positive. Thus, the question items are declared valid. To test the reliability of cronbcah alpha to measure the consistency of the questionnaire used. Test was carried out simultaneously on all statements. If the alpha value > 0.60 is called then the instrument has good and reliable reliability. If the alpha value > 0.60 (reliable) and vice versa if the alpha value is less than < 0.60 then the instrument is not reliable.

Table 2 Recap of Instrument Reliability Test Results

Variable	Coefficient Reliability	Cronbach Alpha	Information
worms	6 Question Items	0.642	Reliable
KNOWLEDGE	5 Question Items	0.626	Reliable
CULTURE	7 Question Items	0.679	Reliable
SOCIAL ECONOMIC	6 Question Items	0.651	Reliable

Data source: processed SPSS output, 2021

From the description of the table above, it can be seen that each variable has a Cronbach Alpha > 0.60. Thus the variables (worms, knowledge, culture and socio-economics) can be said to be reliable.

2 Level of Knowledge Questionnaire

From table 2 it can be concluded that the knowledge of the people of Kelurahan Baru is good as many as 28 people (93.3%), while as many as 2 people (6.7%). For the culture of the Kelurahan Baru community towards the use of adult deworming drugs, as many as 30 people (100%). For the socio-economic status of the people of Kelurahan Baru, 30 people (100%) had good use of adult deworming drugs.

4. CONCLUSION

From result study and discussion from cake sionary about level knowledge Public about use drug worm Mature in New Village Subdistrict North Siantar then can be concluded that knowledge Public Ward New good as many as 28 people (93.3%), moderate as many as 2 people (6,7%). For the culture of the Kelurahan Baru community towards the use of adult deworming drugs, as many as 30 people (100%). For the socio-economic status of the people of Kelurahan Baru, 30 people (100%) had good use of adult deworming drugs.

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