



“KNOWLEDGE AND PRACTICES OF LARION BAJO RESIDENTS TOWARDS MALARIA”

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ABSTRACT

This research study presents the knowledge, and practices of the Larion Bajo, Tuguegarao City residents towards malaria. Majority of the respondents ranges from 36-41 years old, high school graduates, Roman Catholic having P5,001- 10,000 monthly income with 3-4 children. Majority of the respondents believe that fever, chilling, fatigue and vomiting are symptoms of malaria. They also believe that mosquito bites and blood transfusion from infected donors are modes of transmitting malaria. Taking anti-malarial drug, using insecticide-treated mosquito nets and avoiding mosquito bites can prevent malaria. The result of the study reveals that the respondents are knowledgeable on the symptoms, transmission, prevention and treatment of viral influenza. As presented in the tables, it indicates however; that not all the transmission, prevention and treatment of malaria are known to the respondents. The respondents have practice and proper measures towards malaria. They know the appropriate action if they or anyone in the family have the disease.

KEYWORDS: *Malaria, knowledge, practices, transmission, prevention*

INTRODUCTION

Malaria is the world's deadliest disease and the world's number one parasitic killer. It kills an estimated 1 million to 3 million people a year. About 90 percent of the victims are children under 5 in poor countries in Africa. A child dies of malaria every 12 to 30 seconds and about 25 percent of all childhood deaths in the Third World are the result of malaria.

According to the statistics by World Health Organization, over 12 million people in the Philippines (almost 13% of the population) are at high-risk of malaria causing death. Most malaria cases in the country occur in swampy, hilly, mountainous regions and forested area that is infested with Plasmodium and any other deadly species. Plasmodium species can transfer virus by puncturing the human skin where the virus will then flow on the



human's bloodstream, spreading in the whole body. Malaria can kill an individual in just an hour, if the one being infected is not aware that he's been bitten. So in order to stop the increasing cases of malaria, the World Health Organization, together with the Department of Health created various programs that tackled about treatments and awareness about the disease.

Malaria is one of the major global public health challenges with an estimated 225 million clinical cases and more than 655,000 deaths in 2011, mainly in children aged less than five years old from sub-Saharan Africa. However, recent studies have found that the mortality may be grossly underestimated (Babalola 1998, Chatterjee 2005, Chen, 2000). In Europe, malaria has been eradicated except in Azerbaijan, Georgia, Kyrgyzstan, Tajikistan and Turkey (Craig and Scherf 2001). It is estimated that 25-30 million individuals travel annually from Europe to areas with malaria transmission. Most infections due to *P. falciparum* become symptomatic within 30 days after return from the malaria endemic area, but longer incubation periods are seen with the other species and are prolonged by incomplete malaria chemoprophylaxis which may suppress parasitaemia without achieving full protection. A recent study from Portugal including 284 patients (46% non-immunes and 54% semi-immunes) found that the diagnosis was made between the day of return from the malarious area and up to 47 days later; a single non-immune patient was first diagnosed on the 120th day after leaving Angola. Prodromal symptoms, which may precede the fever for up to two days are fatigue, loss of appetite, headache and body pains. In non-immune patients, malaria usually starts suddenly with a severe feeling of sickness and fever - often reaching 39°C and higher (Alles et al, 1998). Not all patients show typical fever paroxysms and absence of fever does not remove the suspicion of malaria in an ill patient. A regular fever pattern is not always present. If present, the frequency of the febrile episodes depends on the parasite species, occurring every 48 hours (tertian) for *P. vivax* and *P. ovale*, every 72 hours (quartan) for *P. malariae* and 24 hours (quotidian) for *P. knowlesi*. In *P. Falciparum* malaria the fever usually lacks a regular pattern. Common symptoms are headache and myalgia. Other symptoms may include nausea, vomiting, dry cough, icterus, confusion and respiratory distress. Compromised circulation leads to renal failure and impaired tissue perfusion resulting in acidosis. Gastrointestinal complaints unrelated to treatment, including vomiting and diarrhoea are less frequent. Patients with significant



fever paroxysms may initially have a normal temperature between the fevers and feel relatively well.

Indoor Residual Spraying (IRS) IRS is a highly-effective strategy for combating malaria and may provide a lasting impact in areas of intense transmission. Unfortunately, the availability of low-risk and cost-effective insecticides is diminishing due to increasing mosquito resistance and little development of new compounds over the past 20 years. Mosquito Nets Mosquito nets, particularly insecticide-treated nets, are a highly recommended strategy for the prevention of malaria. Mosquito nets serve as the principal prevention strategy against malaria because they are cost-effective, efficacious, and more available than other strategies. Long-lasting insecticide nets have recently been developed and provide protection for up to five years. Most of the mosquitoes that carry the malaria parasite bite individuals during the night. Bed nets protect individuals from the mosquitoes during this time by preventing contact and thus reducing the risk of malaria. Furthermore, if treated with the insecticide, the net repels mosquitoes and shorten the life of the mosquito. The use of mosquito nets has consistently shown a reduction in malaria 10 cases and overall mortality related to malaria. (World Health Organization, World Malaria Report 2005, Roll Back Malaria Infosheet 2006). All of these physical prevention methods require the availability of health infrastructure and education campaigns to effectively implement strategies and educate populations on the need for malaria control.

STATEMENT OF THE PROBLEM

This study was conducted to determine the knowledge and practices of Larion Bajo, Tuguegarao City residents towards malaria.

Specifically, the study attempted to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 Age
 - 1.2 Educational Background
 - 1.3 Family Income
 - 1.4 Religion
 - 1.5 Size of the family
2. What is the level of knowledge of the respondents in the disease malaria in terms of:



- 2.1 Symptoms of the disease
- 2.2 Transmission of the disease
- 2.3 Prevention of the disease
3. What are the practices of the respondents to the disease malaria?

METHODOLOGY

Research Design

The researcher used the descriptive correlation design utilizing questionnaire as primary tool in gathering the needed data of the study.

Respondents and Sampling Procedure

The respondents were the mothers. 10 % of mothers were interviewed per zone in LarionBajo, Tuguegarao City, Cagayan.

Data Analysis

The data gathered through sets of questionnaire was tallied and interpreted through frequency count.

RESULTS AND DISCUSSION

Profile of the respondents

Table 1 presents the distribution of the respondents according to age. Majority of the respondents belongs to 36-41 years old and the lowest belongs to 18-23 years old.

Table1. Distribution of the age of the respondents

Age	Frequency	Percentage
18-23	1	1.42
24-29	8	11.42
30-35	9	12.85
36-41	12	17.14
42-47	11	15.71
48-53	8	11.42



54-59	9	12.85
60-64	7	10
65-69	2	2.85
70-75	3	4.28
Total:	70	100

Table 2 presents the distribution of the respondents according to their educational attainment. Majority of the respondents were high school graduate, while 6 out of 70 respondents were college graduate.

Table2. Distribution of the respondents according to their educational Attainment

Educational Attainment	Frequency	Percentage
Elementary Undergraduate	8	11.42
Elementary Graduate	17	24.29
High School Undergraduate	11	15.71
High School Graduate	21	30
Vocational Undergraduate	0	0
Vocational Graduate	0	0
College Undergraduate	7	10
College Graduate	6	8.57
Total:	70	100

Table 3 presents the family income of the respondents per month. Majority of the respondents has a family income of P5,001 to P10,000 while the least has a monthly income of P10,001 to P20,000.



Table3. Distribution of family income

Family Income	Frequency	Percentage
Php 5,000 and below	29	41.43
Php 5,001 to P10,000	36	51.43
Php 10,001 to 20,000	2	2.86
Php 20,001- 30,000	3	4.29
Php 30,001 and above	0	0
Total:	70	100

Table 4 presents the distribution of the respondents according to their religion. Majority of the respondents are Roman Catholic while there are no Iglesiasni Cristo among the respondents.

Table4. Distribution of the respondents in terms of religion

Religion	Frequency	Percentage
Roman Catholic	67	95.71
Iglesiani Cristo	0	0
Born Again	2	2.85
Jehovahs Witnesses	1	1.42
Total:	70	100

Table 5 presents the number of children per family. Majority has 3-4 children, while there are 5 respondents whose number of children is 5 and above.

Table5. Distribution of the respondents according to the number of children

Number of Children	Frequency	Percentage
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1-2	8	11.43
3-4	31	44.29
4-5	26	37.14
5 and above	5	7.14
Total:	70	100

KNOWLEDGE of Larion Bajo residents towards Malaria

Table 6 presents the knowledge of the respondents regarding the symptoms of malaria. 62 out of 70 respondents know that fever is one of the symptoms of malaria. 48 respondents know that a chill is one of the symptoms of malaria. 12 respondents know that sweating is one of the symptoms of malaria. 33 respondents know that fatigue is one of the symptoms of malaria. 25 respondents know that muscle pain is one of the symptoms of malaria. 13 respondents know that nausea is one of the symptoms of malaria. 32 respondents know that vomiting is one of the symptoms of malaria. 3 respondents know that dry cough is one of the symptoms of malaria.

Table 6. Distribution of respondents according to knowledge on symptoms of malaria

1. Which/What are the Symptoms of Malaria?	Frequency	Percentage
Fever	62	88.57



Chills	48	68.57
Sweating	12	17.14
Fatigue	33	47.14
Muscle pain	25	35.71
Nausea	13	18.57
Vomiting	32	45.71
Dry cough	3	4.28
Enlarged spleen	0	0

Table 7 presents the knowledge of the respondents on the modes of transmission of malaria. Majority of the respondents believe that malaria can be transmitted thru mosquito bites while there were few of the respondents believe that it can be transmitted from a malaria victim.

Table 7. Distribution of respondents according to knowledge on transmission of malaria

2. Which/What are the modes of transmission of Malaria?	Frequency	Percentage
Needle stick injury	35	50
Transfusion of blood infected donors	43	61.42
Mosquito bites	68	97.14
Transmitted from a malaria victim	28	40

Table 8 presents the knowledge of the respondents on the cure of the disease malaria. Majority of the respondents believe that taking anti-malarial medication can cure malaria and 1 respondent believe that taking chloroquine and mefloquine cures of the disease malaria.

Table 8. Distribution of respondents according to knowledge on treatment of malaria



3. Which/What are the treatment of the disease malaria?	Frequency	Percentage
Anti-malarial medication	65	92.85
Take herbal medicine	33	47.14
Take chloroquine as medicine	1	1.42
Take mefloquine as medicine	1	1.42
Take paracetamol tablet	43	61.42

Table 9 presents the knowledge of the respondents on the prevention of malaria. Majority of the respondents believe that using insecticide-treated nets can prevent malaria, while few of them believes that taking preventive medicines can prevent malaria.

Table 9. Distribution of respondents according to knowledge on prevention of malaria

4. Which/What are the prevention of malaria?	Frequency	Percentage
Avoid mosquito bites	62	88.57
Use mosquito repellent cream	50	71.42
Use insecticide-treated mosquito nets	65	92.85
Take preventive medicines	20	28.57

PRACTICES

Table 10 presents the practices of the respondents to prevent malaria. Majority of the respondents use mosquito nests, clean the house, use repellent lotion, used katol and they do not stock water in cans.

Table 10. Distribution of respondents according to practices on the prevention of malaria

Practices	Yes	No
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	Frequency	Percentage	Frequency	Percentage
I can prevent malaria using mosquito nets	70	100	0	0
I can prevent malaria by not stocking water in cans.	70	100	0	0
I can prevent malaria by cleaning the house.	65	92.86	5	7.14
I can prevent malaria by using repellent lotion	48	68.57	22	31.43
I can prevent malaria by using mosquito coil (katol)	53	75.71	17	24.29

CONCLUSION

The result of the study reveals that the respondents are knowledgeable on the symptoms, transmission, prevention and treatment of viral influenza. As presented in the tables, it indicates however; that not all the transmission, prevention and treatment of malaria are known to the respondents. The respondents have a good practice and proper measures in preventing malaria. They know the appropriate action if anyone in the family will have the disease.

RECOMMENDATIONS

Based on the previous findings and conclusion of the study, the researchers suggests the following.

1. They can widen their knowledge about malaria by joining discussions or meetings when health workers disseminate information to the community.
2. The community should unite altogether to clean the surroundings in order to prevent outbreak of malaria.
3. Barangay Health office must conduct monthly awareness program about malaria and other diseases.

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