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IMPACT OF MALARIA ON THE SCHOOL PERFORMANCE OF CHILDREN 5-10 YEARS IN OGOJA LOCAL GOVERNMENT AREA, CROSS RIVER STATE

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Annotation: Malaria is caused by Plasmodium Spp., a parasite that is spread from one person to another through a bite from an infected female Anopheles mosquito. Children are particularly vulnerable to malaria because their immune system is not fully developed, therefore they are at greater risk of getting infected. This study therefore investigated the impact of malaria on the school performance of children 5-10 years in Ogoja Local Government Area, Cross River State.

The study employed descriptive research study design and simple random sampling technique was used in selecting one hundred and thirty (130) respondents attending selected primary schools in Ogoja Local Government Area, which formed the sample of the study. Findings of this study showed that there is good knowledge of malaria among school children 5-10 years, as greater number of respondents 86(68.3%) affirmed that malaria is caused by Plasmodiun Spp., a parasite that is spread from one person to another through a bite from an infected female Anopheles mosquito. The study also identified that there are serious effects of malaria-related school absence on the educational performance of children 5-10 years, as 80(63.5%) affirmed that malaria causes absenteeism among school children and as high as 83(65.9%) of the respondents affirmed that cognitive impairment affects the brain, ability to think, concentrate, solve problems, remember and overall performance of school children. School children 5-10 years serve as health change agents for malaria prevention, as greater number 27(21.4%) and 54(42.9%) of the respondents agreed and strongly agreed that school children have the ability to work as health change agents and be a part of combating malaria.

Conclusively, the study revealed that knowledge of malaria among school children 5-10 years is high and that there are serious effects of malaria-related school absence on the educational performance of children 5-10 years. However, the study recommends that Government and non-governmental agencies should not relent in the effort of creating malaria awareness campaign that focuses on eradication of impact of malaria on the school performance of children 5-10 years. Also, there is need to ensure that mothers protect their children from mosquito bite by ensuring that they sleep under ITN.

Key words: Malaria, School Performance, Children 5-10 Years.

Background to the Study

Malaria is caused by Plasmodiun Spp., a parasite that is spread from one person to another through a bite from an infected female Anopheles mosquito. The most dangerous and deadliest type of malaria is Plasmodium falciparum, since it rapidly multiplies in the human body and causes the most severe, life threatening malaria cases, (World Health Organization, 2017).

Children are particularly vulnerable to malaria because their immune system is not fully developed, therefore they are at greater risk of getting infected. Malaria infections vary in severity depending on the type of malaria a child is infected with. It is divided into two categories: uncomplicated and severe (cerebral) malaria. Symptoms of uncomplicated malaria in children are usually high fever, headache and nausea but there can also be cramps, diarrhoea and vomiting. If a child is suffering from severe malaria he may have seizures, cerebral damage or end up in a coma. Without adequate treatment children are at risk of getting permanent damage to their health or even death (WHO 2017). Children's impaired health can affect their education and increase school absence.

It is estimated that malaria causes about 10 – 20 per cent of all deaths among school children in developing countries. In Africa alone, 2 - 8 per cent of all absenteeism is due to malaria (Lalloo, Olukoya & Olliaro 2016). According to Brooker, Guyatt and Omumbo, (2018), malaria is estimated to contribute between 5% to 8% of all-cause absenteeism among African school children, equivalent to 50% of all preventable absenteeism. Evidence from high transmission settings suggest each episode of clinical malaria is responsible for between 2.4 days and 6.5 days' absenteeism from school and in Southern Nigeria, malaria was reported by caregivers to account for over a third of school days missed. As well as a recognized contributor to anemia among school age children, from an educational perspective, malaria can have a direct impact on intellectual development in children through impaired attention and cognitive function. Despite this, school-age children are significantly less likely to sleep under a bed net, to seek treatment for malaria or to receive care from a formal source, (Brooker, et al, 2018).

Studies show that impacts of malaria in school children are not only absenteeism, but also poor performance and dropouts. It has been shown that children exposed to repeated malaria impair their performance in school and impacts their learning abilities. This can result in children falling behind and facing difficulties in catching up with their classmates or even have to repeat classes (Ibid, 2015).

According to WHO (2019), over three quarters of malaria infection in Nigeria are caused by P. falciparum followed by P.malariae and then P.Ovale Infectious due to P.vivax are practically absent in Africa. The endemicity of malaria among school children can be determined by the percentages of parasite rate which is the proportion of a population in which malaria parasites are found. Age specific parasite rate is the prevalence of parasitaemia by age and this can rise rapidly to 100% at the period of three to four years in areas where malaria is intensely endemic and where treatment facilities are few. And the sporozoite rate that is the percentage of mosquitoes found infected and capable of transmitting malaria.

Malaria remains one of the most important causes of school children morbidity and mortality in Africa, despite the availability of effective interventions on malaria prevention (Enato, Okhamafe and Okpere, 2017). Nigeria and its rural communities seem to be one of the malaria endemic regions of the world where school children are affected by the malaria infection with great health and economic implications (Nigeria Malaria fact sheet, United State Embassy, 2012).

The school has an important role in reaching children and educating them about health and malaria. With health education the schools can teach children about malaria prevention and treatment and encourage the children to spread the knowledge to their families and the community. They also have the ability to reach

large parts of the community and increase the knowledge of malaria, which can result in a demand for affordable and appropriate treatment, thus improving the health care services (WHO 2017).

Statement of the Problem

Malaria is the biggest cause of mortality and other socioeconomic consequences among school children in Nigeria, owing to morbidity and its academic, social, economic, and health consequences (World Health Organization, 2017). Malaria continues to have a severe influence on health and livelihood across the world, even though it is preventable and treated (World Health Organization and Global Malaria Programme, 2015). Malaria affects around 216 million people worldwide each year (WHO, 2017). Malaria claimed the lives of around 445,000 people in 2016, with 91.0% of deaths occurring in Sub-Saharan Africa (WHO, 2017).

Ideally school children prone to malaria due to their nutritional status and lower immune system. Academic consequences of malaria in school children cannot be overemphasized either. This includes absenteeism, poor academic performance and dropouts, poor cognitive development, anaemia etc.

However, observations by WHO (2017), have shown that most school children are exposed to mosquito bites and find it difficult to sleep under insecticide treated nets when provided. Some mothers of school children allow empty receptacles around their surroundings and stay in environment surrounded by bushes and stagnant water that allow breeding of mosquitoes, despite improved method of malaria control. These attitudes of mothers of school children make the researcher to be curious and poised to carry out this study.

Despite improved malaria prevention interventions provided bu governmental and non-governmental organizations, the prevalence of malaria in relation to its transmission among school children continues to be high as portrayed by available statistics from health facilities in Nigeria (World Malaria Report, 2020). Hence, this study seeks to examine impact of malaria on the school performance of children 5-10 five years in Ogoja Local Government Area, Cross River State.

General Objective

The general objective of this study is to examine impact of malaria on the school performance of children 5-10 years in Ogoja Local Government Area, Cross River State.

Specific Objectives

The specific objectives of the study are:

1. To ascertain the knowledge of malaria among school children 5-10 years in Ogoja LGA, Cross River State.
2. To find out how malaria-related school absence affects the educational performance of children 5-10 years in Ogoja LGA, Cross River State.
3. To determine how school children serve as health change agent to malaria prevention in Ogoja LGA, Cross River State.

Significance of the Study

Findings of this study if well disseminated will provide background information to the mothers and teachers of children 5-10years on malaria prevention. Similarly, this study through its findings would create the necessary awareness on the utilization of health care facilities by mothers of school children, thereby enabling the provision of educating programmes on the importance of regular use of treated insecticide nets, clearing of bushes, and dislodging stagnant water for the prevention of malaria. The findings will equally compel health workers in the rural communities to step up efforts in the area of education, seminars,

workshops in the rural areas including the study area with a view to raising the level of knowledge of people regarding malaria and its prevention practices. In addition, this study would also be very useful to government ministries and agencies. For example, Federal Ministry of Health, State Ministry of Health Local Government Health Authority, Ministry of Education, non-governmental organization as well as sundry stakeholders in packaging effective and result oriented intervention/polices on malaria prevention among school children. It will also contribute to the existing literature and also for research studies.

Research Questions

The following research questions guided the study:

1. What is the level of knowledge of malaria among school children 5-10 years in Ogoja LGA, Cross River State?
2. How does malaria-related school absence affect the educational performance of children 5-10 years in Ogoja LGA, Cross River State?
3. How do children 5-10 years serve as health change agent to malaria prevention in Ogoja LGA, Cross River State?

METHODOLOGY

A descriptive cross sectional research design was used for this study. This study was carried out in Ogoja Local Government Area, Cross River State. Ogoja LGA is located in the Northern Senatorial District of Cross River. Its headquarters is Ogoja town in the northeast of the Local Government Area. Ogoja Local Government Area, is bounded by Yala to the West, Bekwara to the North, Obudu to the Northeast, Boki in the South East and Ikom in the South. It is one of the oldest province even before Nigeria's independence. It was among the Eastern protectorate during the precolonial era. Before the creation of the current 18 local government areas in Cross River State, Ogoja harboured many Local Government Areas namely; Yala, Bekwara and Boki. There are 10 wards in the Local Government. The wards are EKAJUK I, EKAJUK II, MBUBE EAST I, MBUBE EAST II, MBUBE WEST I, MBUBE WEST II, NKUM IBOR, NKUM IREDE, URBAN I and URBAN II. It consists of many tribal units, including Ishibori (this village has different clans such as Umuria, Ikaptang, Ikajor, Ishinyema, Ikariku, Imeraorm) and Igoli as the central town. Mbube being one of the major tribes, comprises different villages, including: Odajie, Ekumtak, Idum, Ojerim, Egbe, Nkim, Ogberia and Ogberia Ochoro, Oboso, Benkpe, Edide, Bansan, Aragban etc. Their major source of livelihood is subsistence agriculture, basically farming of cassava, yams, palm oil, palm wine etc. Ekajuk, is one of the major clan in Ogoja Local Government Area. Divided into Ward I and Ward II, and includes major communitiessuch as Nwang, Ekpogrinya, Esham, Egbong, Nnang, Ewinimba and Bansara (which are collection of group of villages).

The population for this study consisted of primary school students from the primary schools selected from each of the 10 wards in Ogoja Local Government Area, Cross River State. Below are the ten (10) wards and selected primary schools;

S/No	Names of Wards	Name of selected primary schools	No of school chidren 5-10 years
1	EKAJUK I	Mater dei International school	31
2	EKAJUK II	St. micahel Primary School	20
3	MBUBE EAST I	Ben Carson Nursery and primary school	15
4	MBUBE EAST II	Adonai International Nursery, Primary/secondary school	42
5	MBUBE WEST I	St Joseph Primary School Bansan	13

6	MBUBE WEST II	Saint Benedict Primary School	16
7	NKUM IBOR	Saint Theresa Primary School	9
8	NKUM IREDE	Divine Grace Academy	8
9	URBAN I	All saints school	10
10	URBAN II	Amazing school	10
TOTAL			**174**

Sample and Sampling Technique

Since the total population of school chidren 5-10 years in the selected Primary schools, being one hundred and seventyfour (174) is a definite number, Yaro Yamme formula was used to determine the sample size for the study.

Yaro Yamme formula

$$n = \frac{N}{1 + N (e)2}$$

Where N = total population from previous study

n = sample size

e = 0.05

$$n = \frac{174}{1+ 174 (0.05)2}$$

$$n = \frac{174}{1 + 174 \times 0.0025}$$

$$n = \frac{174}{1 + 0.435}$$

$$n = \frac{174}{1.435} = 121.2$$

One hundred and thirty (130) respondents was used to take care of respondents that might not return the questionnaire on time or even fail to return it.

Method of Data Collection

The data was collected with the aid of well-structured questionnaire and with the aid of research assistant. The contents of the questionnaire were explained to the respondents to enable them respond appropriately and it was retrieved immediately after completion.

Method of Data Analysis

All the data collected were entered into a designed analysis sheet, then coded ,clean and analysis using a computer software package called Statistical Package for Social Sciences (SPSS) version 25. Frequency counts tables and percentages (%) was used for presentation of data.

Ethical Consideration

Letter of permission for collection of data was collected from the Department of Primary Health Care Tutors Course; University of Nigeria Teaching Hospital Ituku Ozalla Enugu State and was given to the principal of each of the selected primary schools for their consideration in order to allow for data collection.

The respondents were assured of anonymity, to be able to respond to the questions with some degree of openness. Right and confidentiality was also be reassured, personal data was maintained and respondents were not be to participate. A good rapport was also ensured and maintained with respondents in order to facilitate their willingness and readiness to participate in the research work.

RESULT

SECTION A- Socio-Demographic Data

Variables		Frequency	Percent
Age (years)	5-6	9	7.1
	7-8	41	32.5
	9-10	74	58.7
Sex	Male	38	30.2
	Female	86	68.3
Religion	Christianity	92	73.0
	Muslim	11	8.7
	Traditional	0	0.0
Class	Primary 1	0	0.0
	Primary 2	0	0.0
	Primary 3	9	9.0
	Primary 4	0	0.0
	Primary 5	50	39.7
	Primary 6	65	51.6

The table above revealed that, out of the 124 respondents 9(7.1%) were between the age of 5-6 years; 41(32.5%) were between the age of 7-8 years, while 74(58.7%) were between the age 9-10 years This indicated that majority of the respondents 74(58.7%) were between the age of 9-10 years. About 38(30.2%) of the respondents were male, while 86(68.3%) were female. This indicated that majority of the respondents 86(68.3%) were female. Majority of the respondents 92(73.0%) were Christians, 11(8.7%) were Islam, 21(7.1%) were divorced, while 12(16.7%) were widowed. This indicated that majority of the respondents 92(73.0%) were Christians.

About 9(9.0%) of the respondents were in primary 3, 50(39.7%) were in primary 5, while 65(51.6%) of respondents in primary 6. This indicated that majority 65(51.6%) of respondents were in primary 6.

SECTION B - Level of Knowledge of Malaria among School Children 5-10 Years

SN	Variables	Yes		No	
		F	%	F	%
5	Malaria is caused by Plasmodiun Spp., a parasite that is spread from one person to another through a bite from an infected female Anopheles mosquito	86	68.3	38	30.2
6	In children malaria could be uncomplicated or complicated/severe	79	62.7	45	35.7

	(cerebral)				
7	Chills, headache, fever, abdominal pain are common symptoms of malaria in children	85	67.5	39	31.0
8	Malaria is caused by drinking dirty water	26	20.6	98	77.8
9	Malaria is caused by having contact with malaria patients	38	30.2	86	68.3
10	Malaria can be prevented through proper use of mosquito nets, cutting of bushes and avoiding accumulation of stagnant waters within home and school environment	86	68.3	38	30.2

The table above revealed that greater number of respondents 86(68.3%) affirmed that malaria is caused by Plasmodiun Spp., a parasite that is spread from one person to another through a bite from an infected female Anopheles mosquito, while only 38(30.2%) refuted that. Larger number 79(62.7%) affirmed that in children, malaria could be uncomplicated or complicated/severe (cerebral), while only 45(35.7%) refuted that. 85(67.5%) of the respondents affirmed that Chills, headache, fever, abdominal pain are common symptoms of malaria in children, while 39(31.0%) refuted that. 26(20.6%) of the respondents affirmed that malaria is caused by drinking dirty water, while 98(77.8%) refuted that. 38(30.2%) of the respondents affirmed that malaria is caused by having contact with malaria patients, while 86(68.3%) refuted that. 86(68.3%) of the respondents affirmed that malaria can be prevented through proper use of mosquito nets, cutting of bushes and avoiding accumulation of stagnant waters within home and school environment, while 38(30.2%) refuted that.

SECTION C- How malaria-related school absence affects the educational performance of children 5-10 years

S/N	Variables	Yes		No	
		F	%	F	%
11	Malaria causes absenteeism among school children	80	63.5	44	34.9
12	Malaria causes poor academic performance among school children	86	68.3	38	30.2
13	Malaria causes dropouts among school children	81	64.3	43	34.1
14	Complicated malaria affect the brain and its functions causing cognitive impairment and poor memory retention	80	63.5	44	34.9
15	Cognitive impairment resulting from severe malaria can have a negative impact on overall school performance of school children	88	69.8	36	28.6
16	Cognitive impairment affects the brain, ability to think, concentrate, solve problems and remember among school children	83	65.9	41	32.5
17	Neurological changes due to cerebral malaria affecting children's hearing, sight, weakness of some body parts and causing behavioural problems, affects children school performance	86	68.3	38	30.2
18	Children who had suffered more than several attacks of malaria had poorer results in several areas than those who had fewer malaria attacks or those who never had malaria	89	70.6	35	27.8

The table above revealed that greater number of respondents 80(63.5%) affirmed that malaria causes absenteeism among school children, while only 44(34.9%) refuted that. Majority of the respondents 86(68.3%) affirmed that malaria causes poor academic performance among school children, while only

38(30.2%) refuted that. 81(64.3%) of the respondents affirmed that malaria causes dropouts among school children, while 43(34.1%) refuted that. 80(63.5%) of the respondents affirmed that complicated malaria affects the brain and its functions causing cognitive impairment and poor memory retention, while 44(34.9%) refuted that. 88(69.8%) of the respondents affirmed that cognitive impairment resulting from severe malaria can have a negative impact on overall school performance of school children, while 36(28.6%) refuted that. 83(65.9%) of the respondents affirmed that cognitive impairment affects the brain, ability to think, concentrate, solve problems and remember among school children, while 41(32.5%) refuted that. 86(68.3%) of the respondents affirmed that neurological changes due to cerebral malaria affecting children's hearing, sight, weakness of some body parts and causing behavioural problems, affects children school performance, while 38(30.2%) refuted that. 89 (70.6%) of the respondents affirmed that children who had suffered more than several attacks of malaria had poorer results in several areas than those who had fewer malaria attacks or those who never had malaria, while 35(27.8%) refuted that.

SECTION D- School Children 5-10 Years as health change agents for malaria prevention

S/N	Variables	Categories of Respondents							
		A		SA		D		SD	
		N	%	N	%	N	%	N	%
19	School children have the ability to work as health change agents and be a part of combating malaria	27	21.4	54	42.9	9	7.1	34	27.0
20	The knowledge about preventive measures such as the use of insecticide-treated mosquito nets and how to reduce the environmental risks learnt at school can be communicated to the families and communities by school children	11	8.7	75	59.5	19	15.1	19	15.1
21	Recognition of the signs and symptoms and when to seek medical care thought at school can be communicated to the families by school children	0	0.0	66	52.4	20	15.9	0	0.0
22	Health education offered to school children about malaria is an effective way to improve the health of young people and also a way to improve the health of the society	10	7.9	77	61.1	16	12.7	21	16.7

From the table above it was showed that 27(21.4%) and 54(42.9%) of the respondents agreed and strongly agreed that school children have the ability to work as health change agents and be a part of combating malaria, while 9(7.1%) and 34(27.0%) disagreed and strongly disagreed respectively that school children have the ability to work as health change agents and be a part of combating malaria; 11(8.7%) and 750(59.5%) agreed and strongly agreed that the knowledge about preventive measures such as the use of insecticide-treated mosquito nets and how to reduce the environmental risks learnt at school can be communicated to the families and communities by school children, while 19(15.1%) and 19(15.1%) disagreed and strongly disagreed respectively that the knowledge about preventive measures such as the use of insecticide-treated mosquito nets and how to reduce the environmental risks learnt at school can be communicated to the families and communities by school children; 0(0.0%) and 66(52.4%) agreed and strongly agreed that recognition of the signs and symptoms and when to seek medical care thought at school can be communicated to the families by school children, while 20(15.9%) and 0(0.0%) disagreed and

strongly disagreed respectively that recognition of the signs and symptoms and when to seek medical care thought at school can be communicated to the families by school children; 10(7.9%) and 77(61.1%) agreed and strongly agreed that health education offered to school children about malaria is an effective way to improve the health of young people and also a way to improve the health of the society, while 16(12.7%) and 21(16.7%) disagreed and strongly disagreed respectively that health education offered to school children about malaria is an effective way to improve the health of young people and also a way to improve the health of the society.

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Discussion of Findings

Section A: Demographic Data

This finding indicated that majority of the respondents 74(58.7%) were between the age 9-10 years, this wasn't in agreement with the findings of Mbanugo and Ejim (2000), who reported that were between 0 -1 year olds, also had low prevalence for plasmodium infection. Majority of the respondents 86(68.3%) were female, majority of the respondents 92(73.0%) were Christians, while majority of the respondents 65(51.6%) of respondents were in primary 6. This revealed that age, gender, religion and level of education affects respondent's impact of malaria on the school performance of children 5-10 years in Ogoja Local Government Area, Cross River State.

Section B: Knowledge of Malaria among School Children 5-10 Years in Ogoja LGA, Cross River State

The findings of the study showed that there is good knowledge of malaria among school children 5-10 years, as greater number of respondents 86(68.3%) affirmed that malaria is caused by Plasmodiun Spp., a parasite that is spread from one person to another through a bite from an infected female Anopheles mosquito. This was in agreement with the finding of study conducted in Nigeria by Eko, Osonwa and Offiong (2013), where a high percentage (85%) knew that malaria is caused and transmitted from one person to another through a mosquito bite.

Section C: How Malaria-Related School Absence Affects the Educational Performance of Children 5-10 Years In Ogoja LGA, Cross River State

The findings of the study showed that there are serious effects of malaria-related school absence on the educational performance of children 5-10 years, as 80(63.5%) affirmed that malaria causes absenteeism among school children. As high as 83(65.9%) of the respondents affirmed that cognitive impairment affects the brain, ability to think, concentrate, solve problems, remember and overall performance of school children. This was in agreement with the findings of a study conducted in Nigeria by Erinoso & Bamgboye (2018) which showed that malaria caused an average loss of three school days per episode. It is also supported by carried by Trape et al. 2013 Colbourne (2015) where evidence suggests that between 0.001 and 0.021 days are lost from school due to malaria per child per annum, accounting for between 2% and 8% of all episodes of absenteeism. Also it is in agreement with another study out by Fernando et al. (2010) in Uganda where he evaluated 23 children with cerebral malaria and it revealed that malaria had caused the children cognitive and neurological impairment. This led to hearing and speech impairments, blindness, weakness in parts of the body and behavioural problems. All these disorders have an impact on children's chances to attend school and their ability to learn and thus preventing their development.

Section D: How School Children Serve As Health Change Agent to Malaria Prevention in Ogoja LGA, Cross River State

The findings of this study showed that school children 5-10 years serve as health change agents for malaria prevention, as greater number 27(21.4%) and 54(42.9%) of the respondents agreed and strongly agreed that school children have the ability to work as health change agents and be a part of combating malaria. This was in agreement with the study carried out by Ayi, (2010) in Ghana, where malaria prevalence is high, schools and local health and education authorities cooperated in order to involve children in reducing the malaria prevalence. First, the teachers were taught about malaria and its prevention, treatment and symptoms as well as different teaching methods. Then, teachers designed health education activities concerning malaria for schoolchildren. The children learned about malaria transmission and prevention and they were also involved in educating the society. Interviews and parasite-based diagnostic testing was made before and after the intervention to study the impact of school based malaria education. The result was that the knowledge about malaria improved in the whole community, both for children and adults. Treating bed nets with insecticides increased among the adults from 20 to 50 percent. The most positive outcome of the implemented project was that malaria prevalence in the schools decreased from 30 to 10 percent. The study showed the importance of school based malaria education and to engage children as health change agents to improve the health in the society.

Implication of the Study to Primary Health Care Service

This study is an eye opener to the Primary Health Care Tutors on impact of malaria on the school performance of children 5-10 years in Ogoja Local Government Area, Cross River State, as being aware of impact of malaria on the school performance of school children, will enable them to be in better position to engage in awareness campaign on preventive practices geared towards protection of school children from malaria infection, thereby curtailing the effects of malaria on school performance of children 5-10 years.

Summary

This study was carried out to examine examine impact of malaria on the school performance of children 5-10 years in Ogoja Local Government Area, Cross River State. For the purpose of giving a strong base to the study, relevant literature were consulted based on conceptual framework, theoretical framework, conceptual review, empirical review and appraisal of literature reviewed. There (3) research questions were formulated for the purpose of the study. The population for the study comprised of children (5-10 years) in Ogoja Local Government Area, Cross River State. Yaro Yamme sampling technique was used in drawing the respondents from the population. A self-structured questionnaire was used as instrument and descriptive statistics of frequency counts tables and percentages and chart were used for analysis. A total of one hundred and thirty (130) respondents were used for the study, while one hundred and twenty-four (124) questionnaires was properly filled, returned and analyzed.

Conclusion

Based on the findings of this study, it was concluded that there is good knowledge of malaria among school children 5-10 years, as greater number of respondents 86(68.3%) affirmed that malaria is caused by Plasmodiun Spp., a parasite that is spread from one person to another through a bite from an infected female Anopheles mosquito. There are serious effects of malaria-related school absence on the educational performance of children 5-10 years, as 80(63.5%) affirmed that malaria causes absenteeism among school children and as high as 83(65.9%) of the respondents affirmed that cognitive impairment affects the brain, ability to think, concentrate, solve problems, remember and overall performance of school children. School children 5-10 years serve as health change agents for malaria prevention, as greater number 27(21.4%) and

54(42.9%) of the respondents agreed and strongly agreed that school children have the ability to work as health change agents and be a part of combating malaria.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Government and non-governmental agencies should not relent in the effort of creating malaria awareness campaign that focuses on eradication of impact of malaria on the school performance of children 5-10 years.
2. Public health workers should continue the sensitization campaign/programmers at the community and ward level on the impact of malaria on the school performance of children 5-10 years.
3. Media houses should promote malaria preventive messages for school children, which will make them to adopt malaria prevention practices
4. Government and non-governmental organizations should continue to provide and promote free distribution of insecticide treated bed net and also ensure and enforce that the nets are not being sold especially to mothers of school children in the community as this will easily aid their choice of malaria preventive practices.
5. In schools, malaria knowledge should be spread at a regular basis by health personnel to improve the knowledge base of the target population.
6. Malaria is an important cause of school absenteeism; preventive efforts should significantly improve school attendance. Thus, health workers should continually carry out school health education programs directed at malaria prevention among school children.

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