Educational and Occupational Maternal Attitude towards Prevention of Malaria Fever in Children of Jos-South, Plateau State

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Abstract: This research work analyzed the educational and occupational attitudes of women towards malaria prevention in children in Jos South Local Government Area. The aim is to identify the socio-economic factors with intervention merits that can be used to promote effective malaria prevention practices among the women in the LGA and Plateau State in general. A questionnaire was administered to the respondents on issues like the possession of mosquito nets, usage of mosquito treated nets, in order to assess their knowledge and prevention practices. It also collected information on the background characteristics of the respondents in four districts of Jos South: Du, Gyel, Kuru and Vwang. Association between prevention practices and background characteristics were presented in figures. The study found that women who are highly educated demonstrate strong positive attitudes towards malaria prevention and occupation relate in malaria prevention practices of women in Jos South Local Government Area with a hypothetical test of Chi-square: $x^2 = P > 0.05$ (95% confidence level). Against this background the studies recommended improve investment in the education of women and public enlightenment to promote positive attitudes toward malaria prevention practices in the study area.

Key words: Educational, Occupational, Malaria, Maternal

I. Introduction

Malaria disease is a parasitic disease has become a matter of concern due to its influence on man and his activities. The survival of man is directly related to malaria fever as one of the most deadly disease especially in children less than five (5) years. Malaria keeps countries as well as households in poverty. According to the United Nation, this earmarked 2015 as the year to end death from Malaria. It is estimated that over 300,000 Nigerians, mostly children, die yearly from malaria. Minister of Health Professor Onyebuchi Chukwu is seeking \$270 million to eradicate the disease¹ (Nation Newspaper 2010).

According to World Health organization² (World Malaria Report, 2011) Ninety percent (90%) of malaria deaths occur in sub-Saharan Africa, where the most severe form of the disease prevails. That deaths and disability (both short and long term) from malaria have enormous social and economic cost. The disease kills more children less than five (5) year in sub-Saharan Africa than any other single disease, and it is a major cause of complications, including death, in pregnant women. Malaria is the most important of the parasitic diseases of humans, with 107 countries and territories having areas at risk of transmission containing close to 50 percent of the world's population³ (Hay and others 2004; WHO 2005). More than 3 billion people live in malarious areas and the disease causes between 1 million and 3 million deaths each year⁴ (Breman, Alilio, and Mills 2004; Snow and others 2003). Recent estimates of the global falciparum malaria morbidity burden have increased the number to 515 million cases, with Africa suffering the vast majority of this toll⁵ (Snow and others 2005).

The climate indirectly makes disease in tropical regions more severe by reducing agricultural productions, which increases the risk of malnutrition. In a more direct way, hot weather and humid forest favour growth of mosquitoes that transmit malaria, yellow fever, and other diseases. As a result of negative influence of malaria on children which is both preventable and treatable women has adopted various ways of preventing and treating the disease. Such as the usage of mosquito treated nets (MNT) drugs and many other ways. Malaria is a major Public Health Problem in Nigeria, being one of the five causes of out-patient visits and mortality, especially in children underless than five years of age according to the National Health Policy of Nigeria⁶ (Federal Ministry of Health, 1992). However, most of the early treatments of malaria in most developing countries occur through self-medication with anti-malaria drugs from patient medicine sellers without laboratory diagnoses.

The goal of the Roll Back Malaria is to halve malaria burden through interventions that are adapted to local needs. The African summit on Roll Back Malaria was held April 2000; forty-four of the 50 malaria affected countries in Africa were represented at the summit in Abuja and many other partners (II). The report

revealed that African Leaders committed themselves to halving malaria mortality in Africa by 2010 through implementation of strategies and activities agreed upon at the Abuja summit. They promised to ensure that, by 2005 at least 60% of those suffering from malaria have promote access to affordable and appropriate treatment within 24 hours of the onset of symptoms.⁸

The application of and usage of insecticide – treated nets and ownership indicates efforts by families/households to control and prevent the effects of malaria disease; according to Nigeria Demographic and Health Survey⁷ (2008). Families were questioned on the ownership of mosquito nets. The survey depicted that 17 percent of households in Nigeria own a mosquito net (treated or untreated), and 8 percent of households own more than one mosquito net, sixteen percent of households own at least one ever-treated net, and 7 percent own more than one ever-treated mosquito net.

Over the years, malaria has been ravaging the people of Jos South, and there seems to be no real cure for it, because malaria parasite has developed resistance to drugs.¹⁰ People of various socio-economic and demographic statuses have adopted different ways of preventing the disease. Some people prefer to go to pharmacists for prescription; some apply fumigants in the rooms and quarters for prevention. The researcher inferred on the challenges of prevention by women; the influence of educational status and occupation on the prevention by women. The study sought to know the extent to which prevention is influenced by the two variables: education and occupation.

II. Hypothesis

1. Materials and Methods

The present study was administered in Jos-South L.G.A of Plateau State, North central of Nigeria. Its headquarters is in the town of Bukuru 9⁰48¹N, 8⁰52¹E. It has an area of 510km² and a population of 311392 at the 2006 census (NPC, 2006). The local government is divided into four districts of Du. Gyel, Vwang and Kuru. It has an upland area with undulating hills, mountains outcrops, forest reserves, swimming ponds, rivers, settlement, and fertile agricultural land for dry and rainy season farming. The major ethnic group in the local government is Berom, beside other minor settlers in the major town (Bukuru) the Igbo, Yoruba, Ngas, Irigwe, Hausas and Goemai among others.

The sources of data were basically observation, primary and secondary. Primary data were generated from the fieldwork within the four districts from the sampled population of maternal respondents in the area. Well-structured questionnaire/interviews were administered to thirty (30) maternal respondents in each district in the study area (Du, Gyel, Vwang and Kuru) in a random sampling technique where each district a village selected. Based on the above, 120 questionnaires were administered and retrieved back fully completed.

In the first part of the analysis, simple descriptive data are presented with respect to questions on sociodemographic information, educational status and occupational factors of maternal prevention of malaria on children, respectively. Which were presented using lines graphed while; the second part of the analysis utilizes Chi-square test (SPSS) to attain the relationship between two levels.

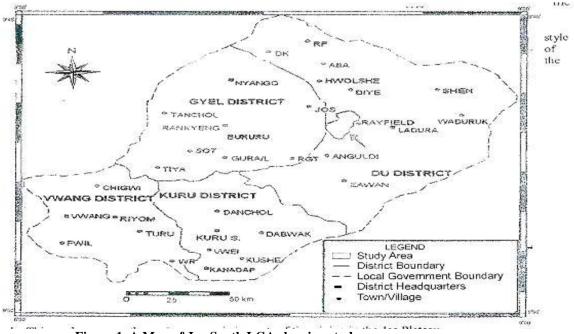


Figure 1. A Map of Jos-South LGA showing study area

III. Results and Discussion

The socio-demographic characteristic of the respondents according to table 1: reveals that 14.7% of the population has incomplete basic education, Respondents with religious education accounted for 4.6%, respondents with various vocational trades (18.3%), while people with secondary school certificates accounted for 20.2% and lastly respondents with tertiary education constituted 42.2% of the population. Unemployed constituted 25.7%, those working for government 27.7%, those in the private sectors have a total of 14.7%, a total of 30.3 are not engaged in government or private sectors and 3.7% did not respond to the question. Aging of the respondents shows that those below 21 years constituted 3.7%, 21-30 years accounted for 36.7% of the population, 31-40 years (37.6%) and 41 and above scored were 7.3% and a total of 12.8% of the respondents were Christians, (83.5%) and Muslim accounted for 15.6% of the population. The socio demographic data reflex an average living standard community in Plateau State, Nigeria and captures a middle age working class group of the population.

	cy and Percentage distribution of Respon	· · · ·		
Characteristics Of Sampled Respondents		Frequency	Percent	
Education	Incomplete basic education	16	14.7	
	Religious education	5	4.6	
	Vocational Trade	20	18.3	
	Secondary school certificate	22	20.2	
	Tertiary education	46	42.2	
	Total	109	100.0	
Occupation	Unemployed	28	25.7	
	Civil Servants	28	30.7	
	Private	16	29.4	
	NGO	33	14.7	
	Total	109	100.0	
Age	Below 21	4	3.7	
	21-30	40	36.7	
	31-40	41	37.6	
	41 Above	8	7.3	
	no response	14	12.8	
	Total	109	100.0	
Religion	Christian	91	84.3	
	Islam	17	15.7	
	Total	108	100.0	

Field Research work, 2013



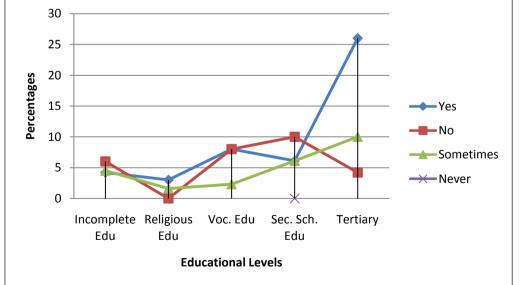


Figure-2. Percentage distributions of sample respondents by education and usage of insecticides

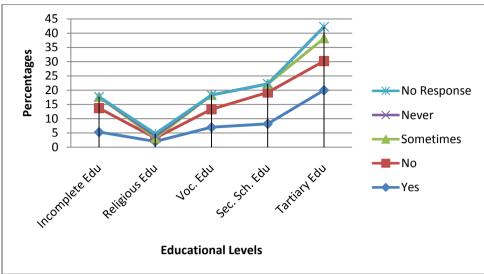


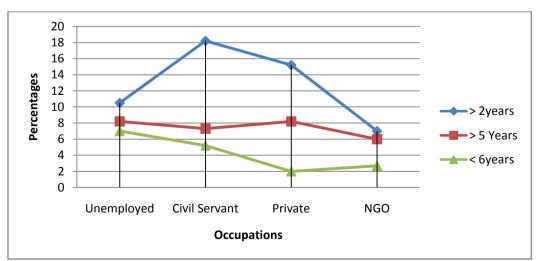
Figure-3. Percentage distribution of sample respondents by education and application of insecticides in drainages

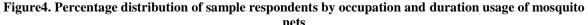
Figure -1 indicates tertiary has the highest percentage (30%) of the respondents accepting using mosquito nets for about two years. Eight point two percent (8.2%) have been using mosquito nets for about five years and only four percent (4%) for about six years. Majority of respondents have being using mosquito treated net for about two years while a few uses it above six years. The graph shows a higher positive attitude from respondents with tertiary education, while those with incomplete basic and religious education have less to negative attitudes towards using mosquito nets.

Figure 2 demonstrates forty-seven percent (47%) for all set of respondents accepting the usage of insecticides in their rooms before sleeping, eighteen point five (24.5) percent responded negatively. Twenty-four point five (24.5%) percent said, they sometimes apply insecticides, one percent (1%) said no to the application of insecticides for all set of respondents. This implies that women have positive attitudes towards the usage of insecticides to prevent and control malaria infection. Application and sanitization of drainage to prevent breeding of mosquitoes as shown in figure 3. Indicate that about forty point seven percent (40.7%) were actually take care of their drainages, thirty-two point seven percent (32.7%) responded negatively while fifteen percent (15%) sometime applied insecticides on their drainages to prevent mosquitoes breeding and only twelve percent(12%) of respondents never responded.

Occupational Status and Maternal Prevention of malaria

Occupational status are set of respondents that most have acquire any form of education and are engage directly or indirectly as active labour force (working class). These women have involved in maternal prevention of malaria on their children as seen on figures below;





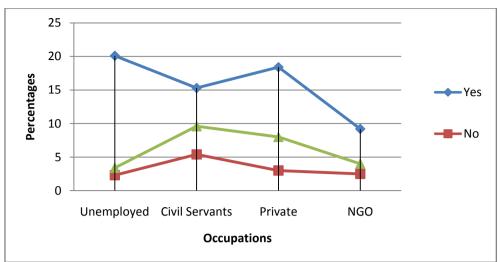


Figure-5. Percentage distributions of sample respondents by occupation and usage of insecticides

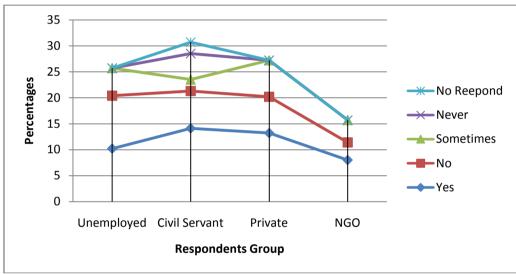


Figure-6. Percentage distribution of sample respondents by occupation and application of insecticides in drainages

Figure-4. shows that about fifty point nine percent (50.9%) of the sampled for occupational status have used mosquito treated net for two years, twenty-nine point seven percent (29.7%) had used for about five years while only, sixteen point nine percent (16.9%) had uses mosquito treated net above six years for all set of respondents. However, civil servants had the highest percent with about thirty point seven percent (30.7%) of respondents and fifteen point seven percent (15.7%) of respondents from Non-Governmental Organization had lowest participation. This shows a remarkable duration of usage of mosquito treated net as in educational status.

There is a knowledge and involvement in maternal prevention of malaria on children. Figure5. Concerned with usage of mosquito treated net on respondents' wards/children to prevent malaria attack, not just have net without using it. The graph shows that highest percentage went for a positive responds to the usage of mosquito treated net on their children with sixty-three percent (63%) while only twelve point six percent (12.6%) were of negative opinion to its usage. Twenty-five percent (25%) were on opine of irregularity (sometimes) not often. Figure6. A strategy of eradicating the breeding of mosquitoes from drainage before causing effect on children was considered among occupational status and it was seen that highest percentage of forty-five point eight (45.8%) were affirmative to actual using insecticide to sprayer on drainage within their immediate environs, for all categories of occupation status, twenty-four point eight (24.8%) of all respondents were at negative opinion while twenty-one point four (21.4%) were inconsistence in usage of insecticide on their drainage. However, civil servants had the highest responses with thirty-one point five (31.5%) while Nongovernmental organization (NGO) were lowest with about nineteen point four (19.4%). It shows an average involvement of maternal prevention of malaria among under age children in Jos-south with an equitable relationship between educational and occupational status.

IV. Conclusion

Malaria has been a long part of human history as a deadly disease and numerous measure has been taken to effectively reduce or eradicate its tread. This is study was undertaken to ascertain the effectiveness of insecticide treated net as a measure to combat malaria among underage children through assessment of maternal attitudes of educated and occupational women, respectively. This has clearly shown that responses of all categories have actually improved in the control of malaria fever among children, although challenges of heat, rashes and discomforted sleeping under the net spring-up. Generally, study discovered poor performance of respondents toward drainage cleaning/ insecticide spraying on drainage (waterways). The study litigate government to provide free mosquitoes nets that are environmental friendly to communities, encourages enlightenment campaigns on the benefit of its usage.

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