ATTITUDE OF MOTHERS TO THE USE OF INSECTICIDE TREATED NETS (ITNs) IN ORUMBA SOUTH L.G.A.

BY

OKEREKE, CHINYERE .I. (Mrs.)
Department of Physical and Health Education
School of Sciences, Federal College of Education (Technical), Umunze.

Abstract

Then study investigated the attitude of mothers to the use of insecticide treated nets (ITNs) Orumba South Local Government Area, Anambra State. The population comprises the 524 mothers of child bearing age who registered for antenatal and/or others coming for child immunization in Primary Health Centres (PHCs) and Health Posts (HPs) in the area. Two hundred and five mothers were randomly sampled for the study. A researcher-made questionnaire titled "Attitude of mothers to the use of ITNs (AMUI) questionnaire was used for data collection. Three research questions were formulated to guide the study. Mean scores were used to answer the research questions. The findings revealed among others that mothers in Orumba South had negative attitude to the use of insecticide treated nets (ITNs). Based on the findings some recommendations were made to improve mother's attitude to the use of ITNs.

Introduction

The Millennium Development Goal Six (MDG-6) is targeted at halting and reversing the spread of Hormone-Immune Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) and the incidence of malaria and other major diseases. Malaria is mainly a tropical disease. All ages are susceptible in endemic areas like Nigeria, but young children below five years of age are at highest risk of developing the disease and its complications like anemia, cerebral malaria etc. (Mbah,2000). Reyburn (2004) states that up to half of all admissions to hospitals in sub-Saharan Africa are reported to be due to malaria. It can progress very quickly to severe illness and death. The problem is further compounded by drug resistant malaria. Anderson (2009) reports that by the late 1990s, chloroquine-Arica's cheap malaria drug of choice for decades was failing to help half of Tanzanian children with malaria.

The implication is that each year at least 300 million cases of malaria resulting more than a million deaths worldwide, Ninety percent of these deaths are in sub-Saharan Africa and most are children under five years old (Williams and Jones, 2004) with Nigeria's health system rated in the bottom five in the world (DFID,2005). It is apparent that some external supports are imperative in combating the problems.

Indeed, malaria prevention and treatment are now firmly on the international public health and global poverty agenda. There has been a considerable increase in funds over the years to combat malaria. Anderson (2009) noted that the emergence of organizations such as the Global Fund to fight

AIDS. Tuberculosis and malaria and bill and Melinda Gates Foundation boosted funding for combating these diseases.

The organizations work in two ways. Some pay for existing drugs, vaccines or insecticide treated bed nets. Others pay for research into new medicines for research into new medicines. Malaria No More (MNM) a coalition of governments, multilateral agencies, NAOS, celebrities and companies, catalyzed by the Gates Foundation donated $3bn to reduce deaths from malaria to near zero by 2015. From over one million a year as at 2009 (Bishop and Green, 2009).

Current strategies to combat malaria are two-fold getting people to sleep under insecticide treated nets (ITN s) and increasing access to fast and effective treatment of malaria cases. The success of these strategies depends on the individual and households protecting or treating themselves in particular ways. Prevention according to the popular saying is better than cure. Hence, Rowland (200fl.) contends that in recent times programmes have focused on persuading people to use ITNs. Several researches however, have shown the various dimensions in access, use and constraints to ITNs as a strategy to combat malaria. Ahorlu (2006) studied factors which influence people's decision to buy and use bed nets in two rural communities of Obosomase (in the forest zone) and Galo-sota (in the coastal Savannah zone) of Ghana. The findings showed that in Galo-sota, 98 percent of people compared to only four percent in Obosomase slept under untreated bed nets; less than three percent of people in both communities used ITNs. The findings suggest the need for accessibility to ITNs as well as government support.

In another study, Conteh (2006) aimed to provide a better understanding of

1. how much households in the Gambia spend on malaria prevention
2. how household expenditure fluctuate throughout the year
3. Why house hold spends what they do.

Interview was conducted on 1700 households about their expenditure on malaria prevention over a two-week period. Interviews were staggered over 12 months. Expenditure was compared across several forms of prevention including bed nets, treating and repairing bed nets, aerosols, coils, in door spraying, smoke and other prevention strategies such as drinking herbs and clearing the outside of homes.

Significant findings include: households spend an average of US $ 0.83 on malaria prevention fortnightly; mosquito coils, indoor sprays and aerosols represent 81 percent of total fortnightly health-related expenditure; total expenditure on nets constitutes ten percent of total fortnightly expenditure. The study concludes that the inability to afford an ITN is in some cases due to lack of financial resources and in others may relate to the low value people place on ITN s compared to other preventive measures. It is apparent that ITNs are not effectively used in the Gambia. Guyatt (2004) studied the use of intermittent presumptive treatment and ITN s by pregnant women in four Remyan districts in

Kenya and found that 5 percent of pregnant women used ITNs; a further 8 percent of women used an untreated bed net during pregnancy half of which were bought from a shop or market (80 percent) and only a percent of commercially- bought net were treated with insecticide; 27 percent of pregnant women in cities used bed nets compared with only 11 percent of rural women. The findings equally suggest gross under utilization of ITNs as privative measure against measure against malaria by pregnant women.

In another research study, Rowland (2004) compared 96 cases of malaria from 2 clinics with 613 'controls' who visited the clinics with other illness. The study found that owning an ITN leads to a 46 percent in cut in the chance of getting malaria. Combination of ITNs and repellent soap 'mosbar' reduces chances by 69 percent.

Statistics on Nigerian case study is scarce, however, the ITNs are distributed free in Nigeria to women and children at primary health centers (PHCs) Antenatal centers (ANC) and immunization Offices. The long lasting insecticidal nets (LLNs) are made to last for 3-4 years if properly used. Free distribution of LLNs is supported by the Federal Ministry of Health, Nigeria Department for International Development (DFID), UK and support to National Malaria Programme (SUNMAP). Evidence from the various collection centers indicates that access is open and a great many have benefited in Orumba South L.G.A Anambra State. It is however doubtful whether access to nets has been matched with use in Orumba South were malaria accounts for 95 to 98 percent of infant and under (LEEDs, 2006)

Purpose of the study

The purpose of this study was to investigate the attitude of mothers to the use of insecticide treated nets (ITN s) to prevent malaria in Orumba South L. G .A, Anambra State, Specifically, the study investigated:

1. Attitude of mothers with use of ITN s on children under five in Orumba South L.G.A
2. Attitude of mothers to the use of ITNs for pregnant women in Orumba South L.G.A.
3. Attitude of mothers to the use of ITNs for Unpregnant women in Orumba South L.G.A.

Research Question

1. What is the attitude of mothers to the use of ITN s for the children under five in Orumba South L.G.A?
2. What is the attitude of mothers to the use of ITNs for the pregnant women in Orumba south L.G.A?
3. What is the attitude of mothers to the use of ITNs for the un-pregnant women in Orumba south L.G.A?

Methods

A descriptive survey design was used for the study. The population comprised 524 mothers of child bearing age who registered for antenatal and/or others coming for child immunization at the 25 PHCS and HPs in the area. A simple random sampling technique was used to select 205 mothers living within Orumba south L.G.A the researcher used seven PHCs and three HPs.

The instrument used for this study was a structured questionnaire titled "Attitude of Mothers to the use of ITNs (AMUI) designed by the researcher. The questionnaire was structured along the four point format. Each response category was given corresponding weighted scores (interval data)

Strongly Agree	=	SA	-	4
Agree	=	A	-	3
Disagree	=	D	-	2
Strongly Disagree	=	SD	-	1

The responses ranged from 1 to 4 points, values were however reversed for negative statements validation of instrument was done by two specialists in Health Education and Measurement an Evaluation. The instrument was tested on 205 mothers selected from Orumba North Local Government Area. A test of internal consistency was done using split - half procedure which yielded reliability co-efficient of 0.82 with the spearman formula.

Researcher employed the assistance of nurses and health works serving in the PHCs and HPs to administer the questionnaire. Out of205 copies distributed, 201 were returned. Mean(x) was used in answering the questions. Overall mean score of 25.0 was deemed positive while any score below that was regarded as negative.

Results

Table 1

Attitude of others to the use of ITNs for children under five years

S/N	ITEMS	$\bar{X}$
1	Insecticides treated nets protect pregnant women against mosquito	3.51
2	Insecticides treated nets protect women against malaria	3.02
3	Insecticides treated nets saves cost of treatment of malaria infection	2.92
4	Insecticides treated nets cause sleepless to pregnant women	2.51

5	Insecticides treated nets cause suffocation to pregnant women	2.01
6	Insecticides treated nets save the unborn child	1.98
7	I prefer the use of aerosols, coil and spray to insecticide treated nets for pregnant women	1.78
8	I prefer preventive drugs to insecticides treated nets for pregnant women	2.05
9	Insecticides treated nets provide warmth for the pregnant women	1.43
10	I do not consider insecticides treated nets at all	1.07
	Overall mean ($\bar{X}$)	22.28
	Grand mean($\bar{X}$)	2.23

Table 2 revealed that mothers had an overall mean score of 21.53 of grand mean of 2.16 in attitude to the use of insecticide treated net for pregnant women in Orumba South. The score indicates a negative attitude.

Table 3

Attitude of mothers to the use of ITNs for un-pregnant women

S/N	ITEMS	$\bar{X}$
1	Insecticides treated nets protect children women against mosquito bites	2.59
2	Insecticides treated nets protect children women against mosquito attack	2.07
3	Insecticides treated nets saves cost of treatment of malaria infection	2.04
4	Insecticides treated nets make children sleepless	2.08
5	Insecticides treated nets suffocate children	1.97
6	Insecticides treated nets can save life of children	2.13
7	I prefer the use of aerosols, coil and spray to insecticide treated nets for children	1.99
8	I prefer preventive drugs to insecticides treated nets for children	1.53
9	Insecticides treated nets provide warmth for my children	1.92
10	I am yet to consider insecticides treated nets for my children	1.43

		Overall mean ($\bar{X}$)	19.75
		Grand mean($\bar{X}$)	1.98

Table 3 showed that mothers had overall mean score 22.28 of grand mean of 2.23. the score indicates a negative attitude to the use of insecticide treated nets for un-pregnant mothers.

Discussion

The study revealed that mothers had negative attitude towards the use of insecticide treated nets (INTs) for children under five years. The study also revealed that they had negative attitude towards the use of ITN s for both pregnant and unpregnant women. The findings contradicted Ahorlu (2006) study in which accessibility to ITNs predicted the usage. The findings also corroborated the study by Conteh (2006) that households in the Gambia preferred other forms of malaria prevention to the use of nets. Though ITNs are distributed free, it is apparent that they are not effectively utilized for children and pregnant mothers who are the main targets. From the findings, it may be deduce that there is the danger of not meeting up the Millennium Development Goals as they concern combating malaria due to the poor attitude of mothers to the use insecticide treated nets (ITNs). It also suggests apathy to preventive health hence, the alarming rate of malaria- induced child mortality (Williams & Jones, 2004). The use of nets should be encouraged urgently to meet the deadline agreed by the international community.

Conclusion and Recommendations

In this paper, attempts have been made to investigate the attitude of mothers towards the use of insecticide treated nets (ITNs). The findings showed that mothers in Orumba south have negative attitude to the use of ITNs for children under the age of five, pregnant and un-pregnant women. By implication, the ITNs are not utilized for both women and children under the age of five years. Based on the findings, the following recommendations were made to increase the positive attitude of mothers to the use of ITNs.

1. The Ministry of Health and other agencies responsible for public health should intensify efforts to discriminate information on the need for ITN s through the use of local media like criers.
2. The primary health centres should employ the services of counselors to educate women on propriety of ITN s.
3. Finally, there is the need for periodic assessment of the impact of ITNs on the local people as well as determining whether these ITNs are put to proper use.

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