Attitude Of Mothers To The Use Of Insecticide Treated Nets (ITNS) In Idemili South Local Government Area.

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Abstract
The study investigated the attitude of mothers to the use of insecticide treated nets (ITNs) in Idemili South Local Government Area, Anambra State. The population comprises of 524 mothers of child bearing age who registered for antenatal and others coming for child immunization in Primary Health Centres (PHCs) and Health Pouts (HPs) in the area. Two hundred and five mothers were randomly sampled for the study. Researcher-made, questionnaire titled "Attitude of mothers to the use of ITNs (insecticide treated nets) questionnaire was used for data collection. Two 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 Idemili 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 among which are the primary health centres should employ the services of counselors to educate women on propriety of ITNs.

Key words: *Attitude, Mothers, Insecticide, Tested Nets.*

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. (Das, et al. 2022). Reyburn *(2023)* stated 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. Achee, et al. (2019) 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, 2021) with Nigeria's health system rated in the bottom five in the world (Smith, 2017). 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. Acheel, et al. (2019) noted that the emergence of organizations such as the Global Fund to fight AIDS. Tuberculosis and malaria and bill are 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 2019 (Bishop and Green, 2023).

Current strategies to combat malaria are two-fold getting people to sleep under insecticide treated nets (ITNs) 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 (2022) 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 strategy to combat malaria. Cohen (2019) 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 Sayamnah 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 use ITNs. The findings suggest the need for accessibility to ITNs as well as government support.

In another study, Conteh (2023) aimed to provide a better understanding of

1. how much households in the Cambia spend on malaria prevention
2. how household expenditure fluctuate throughout the year
3. why household 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 ITNs compared to other preventive measures. It is apparent that ITNs are not effectively used in the Gambia. Guyatt (2024) studied the use of intermittent presumptive treatment and ITNs by pregnant women in four Remyan districts in Kenya and found that 5 percent of pregnant women used ITNs; 6 women used an untreated bed net during pregnancy half of which rare 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 preventive measure against malaria by pregnant women.

In another research study, Rowland (2022) compared 96 eases of malaria from *2* clinics with 613 'controls' who visited the clinics with other illness. The study found that owing an ITN leads to 46 percent 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. Evidence from the various collection centers indicates that access is open and a great many have benefited in Idemili South L.G.A. Anambra State. It is however doubtful whether access to nets has been matched with the use in Idemili South were malaria accounts for 95 to 98 percent of infants and under five in Idemili South L.G.A. (LEEDs, 2016).

Purpose of the Study

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

1. Attitude of Pregnant mothers to the use of ITNs in Idemili South L.G.A.
2. Attitude of mothers with use of ITNs on children under five in Idemili South L.G.A

Research Questions

1. What are the attitudes of pregnant mothers to the use of ITNs in Idemili South L.G.A?
2. What are the attitudes of mothers to the use of ITNs for the children under five in Idemili 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 others coming for child immunization at the 25 Primary Health Centres (PHCS and Health Pouts (HPS) in the area. A simple random sampling technique was used to select 205 mothers living within Idemili South L.G.A. the researcher used 25 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 Strongly	=	SD	-	2
Disagree	=	D	-	1

Validation of instrument was done by two specialists in Health Education and Measurement and Evaluation. The instrument was tested on 205 mothers selected from Idemili South 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 workers serving in the PHCs and HPs to administer the questionnaire. Out of 205 copies distributed, 201 were returned. Mean(x) was used in answering the questions. Overall mean score of 2.50 was deemed positive while any score below that was regarded as negative.

Results

Table 1:

Attitude of pregnant mothers to the use of ITNs in Idemili South L.G.A.

S/N	Items	Mean x
1.	Insecticide treated nets protect pregnant women against mosquito bite.	3.51
2.	Insecticide treated nets protect women against malaria.	3.02
3.	Insecticide treated nets saves cost of treatment of malarial infection	2.92
4.	Insecticide treated nets cause sleepless to pregnant women	2.51
5.	Insecticide treated nets cause suffocation to pregnant women	2.01
6.	Insecticide 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 insecticide treated nets for pregnant women.	2.05
9.	Insecticide treated nets provide warmth for the pregnant women	1.43
10.	I do not consider insecticide treated nets at all	1.07
	Overall mean(x)	**22.28**
	Grand mean (x)	**2.23**

Table 1 revealed that mothers had an overall mean score of 22.28 and the grand mean of 2.23 in attitude to the use of insecticide treated net for pregnant women in Idemili South L.G.A. The mean score indicates a negative response attitude.

Table 2

Attitude of mothers to the use of ITNs is for children under five years.

S/N	Items	Mean X
1.	Insecticide treated nets protect children against mosquito bite.	2.59
2.	Insecticide treated nets protect children against malaria.	2.07
3.	Insecticide treated nets saves cost of treatment of malarial infection`	2.04
4.	Insecticide treated nets make children sleepless	2.08
5.	Insecticide treated nets suffocation children	1.97
6.	Insecticide treated nets save the 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 insecticide treated nets for children	1.53
9.	Insecticide treated nets provide warmth for children	1.92
10.	I am yet to consider using the insecticide treated nets for my children	1.43
	Overall mean($\hat{X}$)	**19.75**
	Grand mean (X)	**1.98**

Table 2 showed that mothers had overall mean score 19.75 and grand mean of 1.98. The score indicates a negative attitude to the use of insecticide treated nets for children under five years.

Discussion

The study revealed that mothers had negative attitude towards the use of insecticide treated nets (ITNs) for children under five years. The study also revealed that they had negative attitude towards the use of ITNs for both pregnant and children under five years. The findings contradicted Cohen, Smith, Cotter, Ward, Yamey & Sabot (2019) study in which accessibility to ITNs predicted the usage. The findings also corroborated the study by Conteh (2023) that households in the Gambia referred other forms of malaria prevention to the use of nets. Though ITNs are distributed free, it is apparent that they are net 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 use insecticide treated nets (ITNs). It also suggests apathy to preventive health hence, the alarming rate of malaria- induced child mortality (Williams & Jones, 2021). The use of nets should be encouraged urgently to meet the deadline agreed by the international community.

Conclusion

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 Idemili South have negative attitude to the use of ITNs for children under the age of five and pregnant women. By implication, the ITNs are not utilized for both women and children under the age of five years.

Recommendations

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 ITNs through the use of local media like criers.
2. The primary health centres should employ the services of counsellors to educate women on propriety of ITNs.
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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