IS RELIGIOUS AFFILIATION INFLUENCING PREVENTION AND TREATMENT OF MALARIA AMONG CHILDREN IN UGANDA?

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EXTENDED ABSTRACT:

Introduction

The malaria burden is greatest among young children under five years who have not yet developed any resistance to the disease and pregnant women who have reduced immunity. An African child dies of malaria every thirty seconds and at least one million infants and children under five in sub-Saharan Africa die each year from the mosquito-borne disease.

Malaria is the most serious disease in Uganda, accounting for more illness and deaths than any other single disease. It is highly endemic with 63% of the population exposed to high transmission levels and 25% exposed to moderate transmission levels while 12% live in areas with low or unstable malaria transmission that are epidemic prone. Although all four species of malaria parasites exist in Uganda, 90% of malaria cases are due to plasmodium falciparum which is responsible for severe malaria. Temperatures from approximately 21°-32°C and a relative humidity of at least 60%, which exist in most areas of Uganda are the most conducive for longevity of the mosquito and maintenance of malaria transmission. Northern Uganda has suffered from civil conflict and insurgency since 1986, leading to displacement of many residents from their homes to internally displaced camps exposing them to increased risk of malaria.

Objective

The paper investigates factors determining the use of Insecticide treated nets (ITNs) and treatment practices of malaria among children under five years in Uganda.

Methodology

The study used survey data previously collected in 2004 by the Ministry of Health of Uganda whose main objective was to address the key health problems that have been identified in the National Minimum Health Care Package in 11 districts. The study population comprised 2,044

caretakers in households with children below five years between May and July 2004. The study focused on the caretakers of children because the decision to take treatment and use ITNs is not made by children under five years but by the caretakers. The program selected the 11 out of about 80 Uganda districts because according to the 2000/2001 Uganda Demographic and Health Survey, the northern region, where most of the program districts are located, had some of the most unfavorable health indicators in the country. The dependent variable was health seeking behavior which comprised two components namely use of ITNs to prevent malaria and treatment of malaria among children under five years.

Results

Of the total of 2,044 caretakers of children below five years probed, slightly more than half the sample were males, 43% stayed in a distance of at least five kilometers away from the nearest health facility and slightly over 50% of the households had more than five people. Although, all the caretakers spent money on medical care, about three quarters of the caretakers (74%) spent not more than Uganda shilling 20,000 on the treatment of their children when they had fever. With regards to religion, a large proportion of the caretakers were Protestants (43%).

Although most caretakers (92%) knew that malaria was transmitted by mosquitoes, there was some proportion of caretakers (8%) who had misconceptions about the causes of malaria. Some respondents reported that malaria was caused by eating mangoes and others mentioned eating maize as the cause, the reason being that malaria is more common during the season when these crops are also abundant.

Table 1: Differentials in use of mosquito nets by respondents background characteristics

	Used nets	Did not use nets
Residence		
Urban	43.8	56.2
Rural	34.0	66.0
χ^2**=4.1369 df=1 p=0.042**		
Household size		
1- 4 people	38.0	62.0
5-9 people	34.0	66.0
At least 10 people	25.4	74.6

χ^2=5.6254 df=2 p=0.060		
Expenditure on medical care		
Less than 20,000shs	36.3	63.7
Atleast 20,000shs	30.2	69.8
χ^2=4.3536 df=1 p=0.037		
Religion		
Catholic	29.8	70.2
Protestant	33.8	66.2
Muslim	46.8	53.2
Other	38.1	61.9
χ^2=18.0924 df=3 p=0.000		

Results in table 1 indicate that religion was highly significantly associated with the use of mosquito nets and treatment. Other significant factors were place of residence and average monthly expenditure on medical care.

Furthermore, on disaggregating the data by gender, males who owned television sets in their homes were not likely to seek treatment for their sick children as shown in Table 2. Like in Table 1, Table 2 shows that religion of males was associated with treatment of malaria. In contrast, none of the variables of females were significantly associated with seeking treatment of malaria for their children.

Table 2:Treatment seeking behaviour by males in the household

	Sought treatment for their sick children	
	YES	NO
Religion		
Catholic	90.0	10.0
Protestant	87.7	12.3
Muslim	68.6	31.4
Other	83.7	16.3
χ^2=9.900, df=3, p=0.019		
Ownership of a T.V		
Yes	61.5	38.5
No	86.5	13.5
χ^2=6.1881, df=1, p=0.013		

Multivariate analysis showed that the only significant predictor of both use of ITNs to prevent malaria and seeking treatment for malaria of children was religious affiliation. The Muslim caretakers were twice more likely than the Catholics in using ITNs to prevent malaria from affecting their children. However, the reverse pattern is true in treatment seeking behaviour where Muslims were 59% less likely than Catholics to seek malaria treatment for children. Other significant predictors of use of ITNs, but not treatment seeking behaviour were expenditure on medical care and place of residence of caretakers. As expected, the urban

caretakers were 39% more likely than the rural caretakers to use ITNs. Surprisingly, caretakers living in households with at least average expenditure of Uganda shillings 20,000 on medical care were 25% less likely to use mosquito nets.

Discussion and Conclusions

It was unexpected to find that religious affiliation influences prevention and treatment of malaria among children. Religious bodies influence exposure to and treatment of malaria since the community listens and believes religious leaders more than other groups. Of the religious communities, it is not surprising that Moslems listen to their leaders more than any other religious groups, because they are more strict with their religion and tend to believe their leaders more than other groups do. On the contrary, Moslems were less likely to seek malaria treatment for their sick children. This could be attributed to their low levels of education which in turn leads to use of traditional medicines instead of the western medicines.

Not surprisingly, caretakers living in urban areas are more likely to use ITNs than the rural residents, because of being more accessed to information and sources of ITNs. However, it is not expected of richer households able to spend an average of Uganda Shillings 20,000 per month on medical care to use ITNs less than the poorer households. The result may be that richer households spend their money on other medical facilities than ITNs, while the poorer households prefer to make ITNs first priority.

It is also remarkable to note that while males' ownership of television sets and religion were associated with malaria treatment seeking behaviour, none of the females' variables were significantly related at all. The more unexpected result is that males who owned televisions were seeking treatment less than those who did not have the sets, probably because those who had TVs were not using them to listen to information related to treatment of malaria, but watching non-malaria programmes. Alternatively, those males without TVs were spending their money seeking malaria treatment instead of spending it to purchase TVs and maintain them. On the other hand, even if females owned TVs, they are too busy in the kitchens, rearing children and other household chores to watch TVs and gain from information given on malaria programmes.

Recommendations

Government should use religious leaders in scaling up the campaign to prevent and treat malaria. Malaria prevention programmes should focus more to rural areas to make them use ITNs. More research needs to be done to investigate the religious affiliation factor in predicting prevention and treatment of malaria among children.