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Full Length Research Paper

Artisans and traders' knowledge, attitude and practices of malaria in selected areas of Lagos, Nigeria

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A cross sectional survey on the knowledge, attitude and practices (KAP) of malaria among 50 artisans (all males) and 50 traders (78% female) was carried out in five selected areas of Lagos, Nigeria. Pretested, structured questionnaires were administered to both groups. The artisans were mainly primarily educated while the traders had mainly secondary education and this impact on the KAP. KAP was insufficient among artisans than traders as only 2(4%) of the artisans knew the cause of malaria. However, 26(52%) of traders of which 2(4%) had tertiary education and 24(48%) with secondary education knew the cause of malaria P<0.05). Weakness (30%) was the most recognized symptom among artisans but loss of appetite (32%) was the most recognized among traders (P<0.05). Twenty (40%) from both groups reported that they had malaria once yearly. Self medication was carried out by half of the population, 25(50%) artisan and 24(48%) traders (P>0.05).Twenty –four (48%) of artisans and 45(90%) of traders use local herbs as home remedies (P>0.05). Thirty -two (64%) of artisans and 35(70%) of traders claimed they had never been admitted for malaria (P<0.05). Insecticide sprays and Clean environment had the greatest say among methods of preventing malaria for artisan 16(32%) and traders (27(54%) respectively (P<0.05). The use of insecticide treated nets (ITNS) was unpopular among the two groups as none of the artisans and only 3(6%) of traders use ITNS (P>0.05).Radio and television were the best methods in which both groups get information on malaria. The study reveals a significant link between low education and low KAP of malaria. The study also highlights a critical need for targeting health messages appropriately towards poorly educated people.

Keywords: KAP, Malaria, Artisans, Traders, ITNS, Lagos.

INTRODUCTION

Malaria meaning "bad air' is one of the oldest and re-emerging disease in the world today (Decampo, 2002). The disease is transmitted by female *Anopheles* mosquitoes which carry infective sporozoite stage of *Plasmodium* parasite in their salivary glands. Malaria is holoendemic in Nigeria where it is a public health problem causing 50% of outpatient and 40% of admission (Okwa et al., 2009; Salako, 2001).

Knowledge, attitude and practices (KAP) are essential for control programmes. Without a rational concept of the nature of a disease, it is impossible to visualize a management procedure. A sound local understanding of malaria, preventive measures and health seeking behavior is crucial for the control of malaria (Esse et al., 2008). Taking preventive measures is related to ones knowledge of a disease (Dike et al., 2006).

Jombo et al (2010) stated that the continued prevalence of malaria in Africa is largely due to sociocultural factors which are often at variance with standard control measures. Previous studies have identified a need for improving malaria control measures

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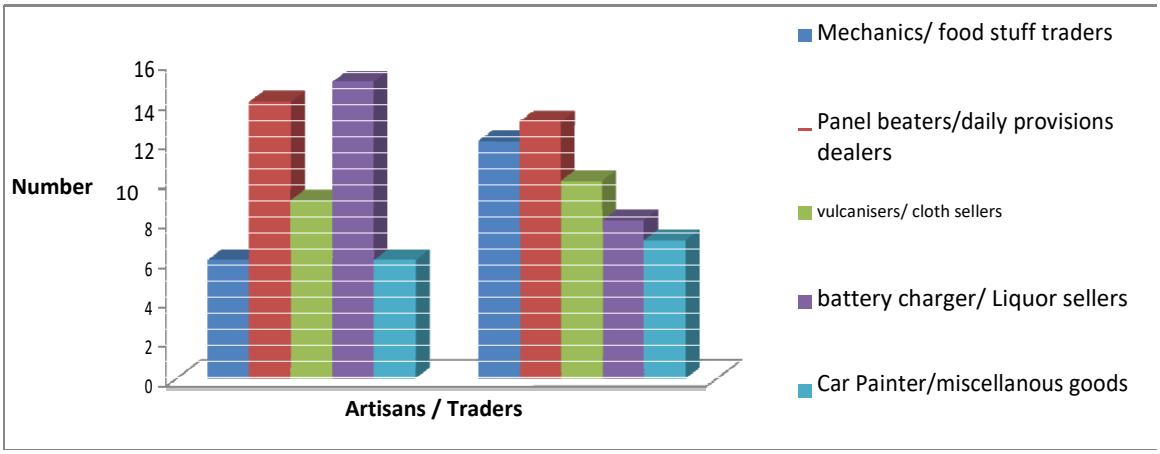

Figure 1. Areas of specializations of the artisans and traders (N= 50).

by taking into account local beliefs and practices of the common man. These studies have shown the relevance of people illnesses, recognition of symptoms, explanation of causes and treatment seeking behavior even at household level (Agyepong and Manderson, 1994, 1999; Adongo et al., 2005; Ibidapo, 2005; Esse at al., 2008). Local etiology is important and has been shown in several cases to influence treatment seeking but it's by no means the only influence. Wrong perception can cause delay in health seeking treatment (Jimoh and Jegede, 2006).

Past studies had found relationship between socio-demographic factors, exposure and the knowledge of malaria e.g Ndawala et al (2000) suggested that rurality and lack of education accounted for more exposure and incidence of Malaria. Fawole and Onadeko (2001) found a relationship between level of education, marital status and knowledge of malaria. Jombo et al (2010) reported that educational level and marriage had a positive impact on knowledge of malaria. Mazigo et al (2010) reported a significant difference between educational level and the knowledge and transmission of malaria.

The present study is aimed at determining the socio-demographic profiles of a selected population of some poorly educated people (artisans and traders) as it relates to malaria. The KAP of these two groups, treatment seeking and best method of getting health information are also the objectives of the study.

METHODS

Study area

Lagos is the former capital of Nigeria and still the commercial nerve centre. It is the smallest and most populous state. Five areas in Lagos city, Nigeria were selected for the study. They are Iba, Surulere, iyana ipaja, Ayobo and Mushin areas. These are suburban accessible areas with lack of drainages, water erosion and deep potholes. The areas were fully representative of Lagos dense population. "Iba' is the common local name for malaria among all language groups in these areas.

Experimental subjects

Fifty artisans (Vehicle skill workers) and 50 traders were chosen randomly. (Figure 1 shows the area of specialization of these vehicle artisans and traders).Ten were chosen from each of the five areas. All the artisans were male but 39(78%) of the traders were female. This indicates gender based division of labour in the economic sphere. The two groups were predominantly from the Yoruba tribe (Table 1). The two groups were chosen because they are well distributed in the community and a good representative of poorly educated people (PEP). They could also disseminate information among similar sub groups of (PEP).

Questionnaire administration

The structured questionnaire was validated, pretested and a pilot survey first carried out before the actual administration, using 5 sample traders and 5 artisans, one from each area. This allowed the questions to be adjusted and refined. The questionnaire contained the objectives of the survey and had 15 items which ascertained demographic and KAP parameters. The questionnaires were administered simultaneously to both groups for a period of fourteen days. They were filled in by the investigators in cases where the participant could not write legibly. The language of communication was Yoruba or Pidgin English. It took a maximum of ten minutes to fill each questionnaire.

Table 1. Sociodemographic parameters of artisans and traders (N=50).

Socio demographicparameters	Artisans No (%)	Traders No (%)
Age		
20-30	22 (44)	13(26)
31-40	18 (36)	22 (44)
Above 40	10(20)	15(30)
Sex		
Female	0(0)	39(78)
Male	50(100)	11(22)
Tribe		
Yoruba	38(76)	27(54)
Igbo	7(14)	13(26)
Niger delta	4(8)	7(14)
Others	1(2)	3(6)
Educational status		
None	9(18)	0(0)
Primary	21(42)	21(42)
Secondary	16(32)	27(54)
Tertiary	4(8)	2(4)
Marital status		
Single	24(48)	24(48)
Married	26(52)	23(46)

Statistical analysis

Answers were extracted from the questionnaires and Chi square X^2 was used to determine the differences in results between the two groups. $P<0.05$ was regarded as an acceptable level of significance while P> 0.05 was not significant at 5%.

RESULTS

Socio-demographic parameters

All the artisans selected were vehicle skill workers. Fifteen (30%) were battery chargers and 6(12%) were mechanics. Among the traders 13(26%) were sellers of daily provisions and 7(14%) sell miscellaneous goods (Figure 1).

The artisans were mainly aged 20-30 years (44%) while the traders were mainly 31- 40 years (44%). Significant differences existed in age strata of the two groups (DF = 2, X^2= 18.3, P<0.05). 21(42%) of artisans had primary education while 27(52%) of traders had secondary education and 2(4%) had tertiary education. The educational difference was statistically significant (DF =3, X^2=20.8, P<0.05). 26(52%) of the artisans were married while 23(46%) of traders were married

(DF=1, X^2= 0.2, P> 0.05).

There is significant gender difference as all artisans were male while 39(78%) of traders were female (DF = 1, X^2=32.84, P<0.05). Although the two groups were predominantly Yoruba tribe, the Igbo tribe was the second common tribe 7(14%) for artisans and 13(26%) for traders (DF =3, X^2=53.8, P<0.05) (Table 1).

Knowledge, attitude and practices

The knowledge of the cause of malaria was insufficient among artisans. Only 2(4%) chose mosquitoes carrying parasites while the non mosquito's causes given were very diverse and conflicting such as lack of rest, exposure to sunlight, too much alcohol and eating bad food. The Knowledge of the traders were better as 26(52%) knew the cause of malaria, 11(26%) indicted the dirty environment while only 13 (26%) gave diverse answers just like the artisans (DF= 1, X^2=21.2, P<0.05). 21(42%) of artisans claimed that they lived in a very mosquito friendly environment while 10(20%) of traders claimed the same (DF=2, X^2=31.9, P<0.05). Twenty (40%) of the artisans and traders both claimed an annual attack from malaria. Half of the population of artisans embarked on self medication and this was also true of the traders with 24(48%) preferring self medication (DF=1, X^2=0.04, P>0.05). The use of local herbs was more common with the traders 45(90%) while it was 24(48%) for the artisans. Although this is not a significant difference between the two groups (DF =1 X^2=0.84, P>0.05). 18(36%) of artisans and 15(30%) of traders had been admitted for malaria in the past,

Table 2. Knowledge, Attitude and Practices of artisans and traders (N=50).

KAP	Artisans No (%)	Traders No (%)
Cause of malaria.		
Mosquitoes carrying parasites	2(4)	26(52)
Non mosquito causes	48(96).	24(48)
Type of living environment		
Quite Mosquito friendly	21(42)	10(20)
Relatively friendly	18(36)	22(44)
Not at all	11(22)	18(36)
Frequency of malaria occurrence		
Monthly	11(22)	8(16)
Quarterly	19(38)	15(30)
Annually	20(40)	20(40)
Biannually	0(0)	7(14)
Self medication		
Yes	25(50)	24(48)
No	25(50)	26(52)
Use of local herbs		
Yes	24(48)	45(90)
No	26(52)	05(10)
Hospital admission		
Yes	18(36)	15(30)
No	32(64)	35(70)

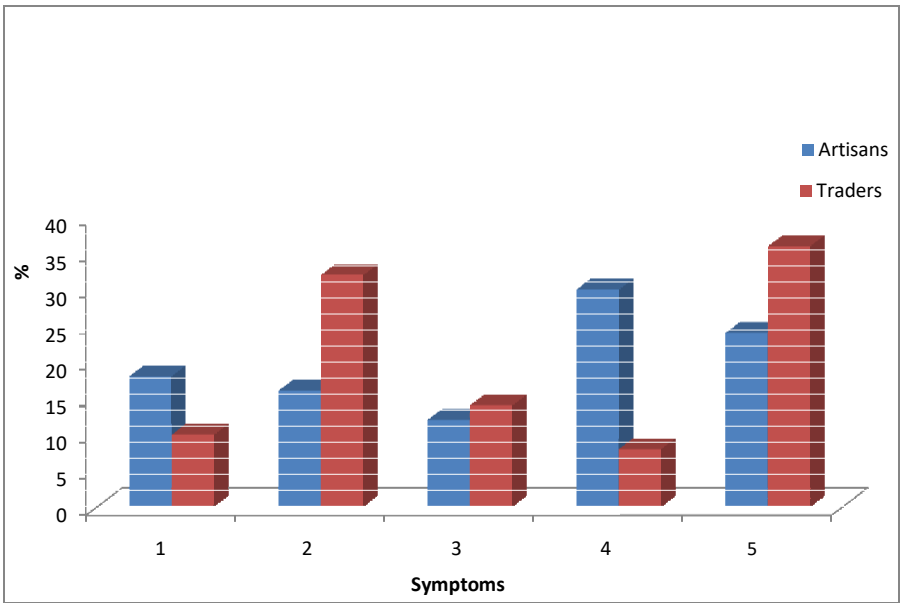

Figure 2. Percentage of recognized symptoms of malaria among artisans and traders (N=50).
1=Headache 2=loss of appetite 3= fever 4 = weakness 5= others

(DF =1, X^2=5.96, P< 0.05) (Table 2).

The symptom most recognized by the artisans was weakness 15(30%) while for the traders it was loss of appetite 16(32%). Coloured urine 8(16%) and bitter mouth 10(20%) were two other symptoms mentioned only by the traders. The other symptoms mentioned by only the artisans were stomach ache 6(12%) and joint pain 8(16%) (DF = 4, X^2= 15.5, P<0.05) (Figure 2).

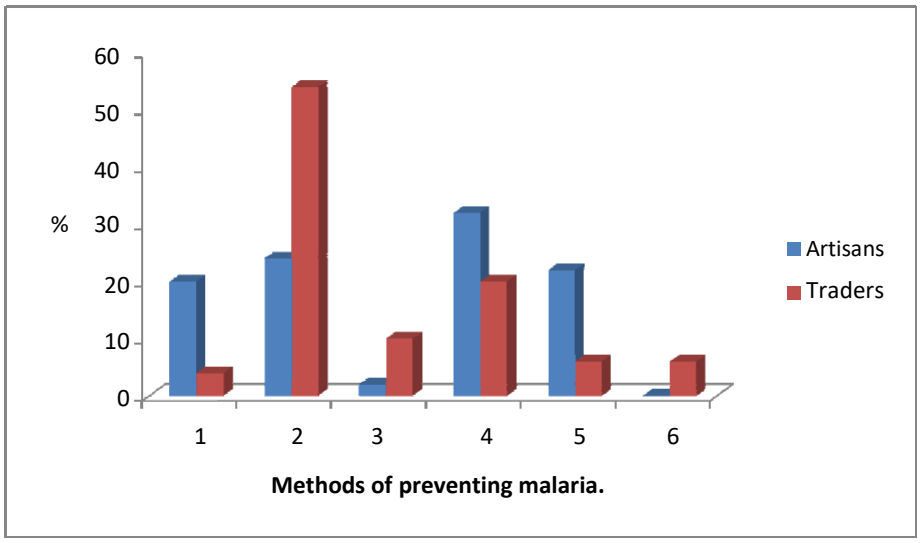

Figure 3. The methods of preventing malaria among artisans and traders (N=50).
1= Good food 2 = clean environment 3= drugs 4= insecticide sprays 5= mosquito coils 6= ITNS

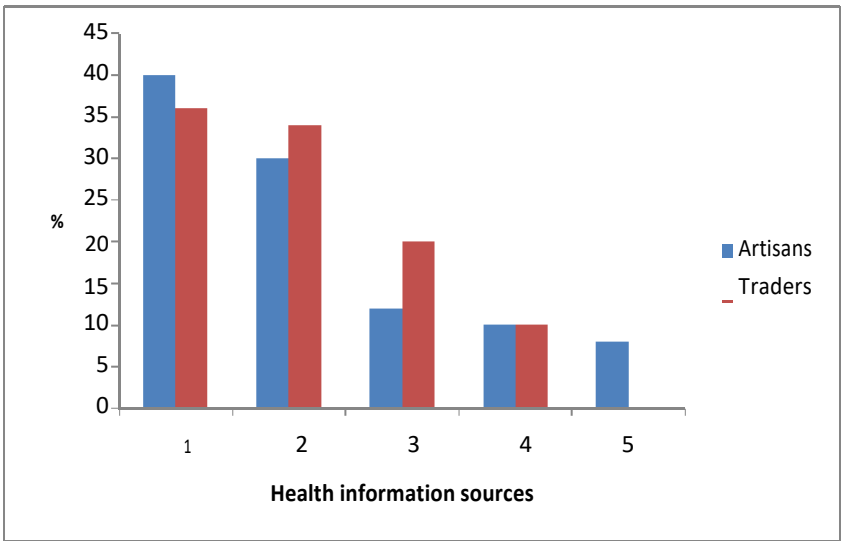

Figure 4. Sources providing information on malaria among Artisans and traders (N=50).
1= Radio 2 = Television 3= Health centre 4= Religious centre 5= Others.

Methods of preventing malaria

Among the methods of preventing malaria insecticide sprays was the most prevalent among the artisans 16(32%) while maintaining clean environment was the most prevalent among traders 27(54%). The use of insecticide treated nets was uncommon with both groups with 0% among Artisans and 6% among traders. The difference in the methods of controlling malaria between the two groups were statistically significant (Df =5, X^2=29.5, P<0.05) (Figure 3).

Sources of health information

Radio as an electronic media had the greater prevalence among the two groups (40% among artisans and 36% among Traders. This was followed closely by television (30% among artisans and 34% among traders. The difference in the source of information on healthy was therefore not statistically significant (Df =4, X^2 = 9.1, P<0.05). (Figure 4).

DISCUSSION

This present study is aimed at investigating the KAP of malaria among the lower educational status. Studies by Okwa and Ibidapo (2010) and Okwa et al (2011) was carried out in an academic setting where existing gaps in the KAP of malaria was identified among students in tertiary institutions. The KAP among artisans and traders was lower when compared to the studies carried out in the academic environment. A common explanation is that less educated people have less knowledge and flexibility.

Jombo et al (2010) reported a low knowledge of less than 20% among artisans in a study in north central Nigeria. Jimoh and Jegede (2006) in a study of market women in Ibadan, Nigeria had earlier reported that level of education influences how malaria is defined. Dike et al (2006) in his study also concluded that education has a positive impact on malaria burden.

No relationship was found between age, marital status and knowledge of malaria in this study. However, Fawole and Onadeko (2001) found a relationship between level of education, marital status and knowledge of malaria. In their study, uneducated people constituted the majority of people who visit traditional rulers or use local remedies.

The use of local herbs was especially common among traders, who are more educated and predominantly female in this study. The present result is similar to a study by Ibidapo (2005) among rural nursing mothers, 40% do not know the cause of malaria and 50% use herbal concoctions. Esse et al (2008) also reported that individual with sound knowledge of malaria also use local herbs. According to Agyepong and Manderson (1994) in a study in greater Accra Ghana, use of herbs are very popular because they are said to put fear in the malaria illness. Jimoh and Jegede (2006) in their study found that home remedy was the popular method of controlling malaria among market women in Ibadan, Nigeria. It therefore appears that women prefer using local herbs, falling in line with the result of this study as these traders were predominantly women.

In the same Ibadan study among market women, headache was the major symptom recognized and malaria etiology was attributed to causes as the sun and close contact with infected person. Headache was not however the most recognized symptom among the two groups in this study. The artisans and traders nevertheless also had some erroneous non - mosquito beliefs about malaria.

Insecticide treated nets were unpopular in this study. Doannio et al (2004) reported in a study in Cote d' voire that among rural peasants who are less educated, mosquito nets is known but expensive and also not found in the local market. There are also local beliefs hindering the use of nets. Mosquito coils and insect sprays were preferred because they are available and cheaper. Esse et al (2008) reported in another study that only few people sleep under bednets. Mazigo et al (2010) in Tanzania reported that use of bed nets were associated with high educational level. These past observations are in line with the result of this present study. The low fraction using ITNS calls for continued health education and the availability and affordability of these bed nets.

Radio was the best known means of health information in this study. So also, in a quantitative study of five states in Nigeria, health information was often received by electronic media in urban cities like Lagos and Enugu but in Rural borno, Jigawa and Kano states, health information was mainly from palace sources and health workers (FMH, 1996).Television and radio should intensity the adverts on malaria, which gives information to the common man. The study reveals a significant link between low education and low KAP of malaria. The study also highlights a critical need for targeting health messages appropriately towards poorly educated people.

REFERENCES

Adongo P, Kirkwood B, Kadall C (2005). How local community knowledge about malaria affects ITNS use in Northern Ghana*. Trop. Med .Int. Health* 10: 366-378.

Agyepong IA, Manderson L (1994). The diagnosis and management of fever at household level in the greater Accra region Ghana. *Acta tropica* 58: 317-330.

Agyepong IA, Manderson L (1999). Mosquito avoidance and bednet use in the greater Accra region Ghana. *J. BioSoc. Sci.* 31: 79-92.

Dike N, Onwujekwe O ,Ojukwu J, Ikeme A, Uzochukwu B, Shu E (2006). Influence of education and knowledge on perceptions and practices to control malaria in south east Nigeria. *Soc. Sci. Med.* 63(1):103-106.

Doannio JM, Konan YC, Amalaman K, Attiah J (2004). KAP of populations towards mosquitoes in urban and rural areas of Cote d"voire ,West Africa. *Bull. Soc.Pathol. Exot.* 97 (4): 295-301.

Docampo R (2002). Recent infectious diseases: Re-emerging parasitic diseases. Emerg.inf. Dis. 8(9):1009

Esse C, Utzinger J, Tschannen AB, Raso G, Pfeiffer C ,Granados S , Koudou BG, N'Goran EK, Cissé G, Girardin O, Tanner M, Obrist B (2008). Social and cultural aspects of malaria and its control in Cote d'ivoire . *Malaria j.* 7: 224-226

Fawole OI, Onadeko MO (2001). Knowledge and home management of malaria fever by mothers and care givers of fewer than five children. *W. Afr. J. Med.* 20:152-157.

Federal Ministry of Health (FMH) (1996). Epidemiology and control of malaria. Report on malaria situation in Nigeria. FMH unpublished document pp. 80.

Ibidapo CA (2005). Perception of the causes of malaria and treatment seeking behavior of nursing mothers in a rural community. *J rural. health* 13, 215-218.

Jimoh A, Jegede AS (2006). Perceived causes of malaria among market women in Ibadan, Nigeria*. Afr. J. for the Psychol. Study of Social Issues* 9(1): 14-25. www.udus.academia.edu.

Jombo GT, Mbaawuagu EM, Denen A, Alao OO, Peters EJ, Utsulo SJ, Okwori EE, AkosuTJ, Etukumana EA (2010). Sociocultural factors influencing the control of malaria in an endemic city in north central Nigeria. *Int. J. Bio. Med. Res*. 7090: 122-126

Mazigo HD, Obasy E, Mauka W, Manyiri P, Zinga M, Kweka EJ , Mnyone LL and Henkelbach J (2010). Knowledge, attitude and practices about malaria and its control in rural North West Tanzania. *Malaria res. and treat*. ID 794261 10 (4061): 1-9.

Ndawala J, Kalanda G, Mahy M (2000). Malawi MDHS. Data analysis. Malawi national statistics office. http://www.nso.malawi/net. pp. 222.

Okwa OO, Akinmolayan FI, Carter V, Hurd H (2009). Transmission dynamics of malaria in four selected ecological zones of Nigeria in the rainy season. *Ann .Afr. Med* 8 (1): 1-9.

Okwa OO, Ibidapo CA (2010). Malaria situation, perception of cause and treatment in a Nigerian University. *J. Med .Med. Sci*. 1(6) 213-222.

Okwa OO, Bello BA, Olundegun SA (2011). Social Aspects of Malaria among Students in Two Tertiary Institutions in Lagos, Nigeria. *Sierra Leone J. Biomed. Res.* 3(2): 97- 103.

Salako LA (2001). Treatment of childhood fevers and other illnesses in three rural Nigerian communities. *J. Trop. Pediatr*. 47:230-238.