



**PREVALENCE OF MALARIA, AND KNOWLEDGE,
ATTITUDE AND PRACTICES ABOUT MALARIA
AMONG ATTENDEES TO THE MEDICAL CENTRE,
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INTRODUCTION

- **WHAT IS MALARIA?**
- **Mosquito borne Infectious disease of humans and other animals.**
- **Caused by the parasitic protozoa of the genus *Plasmodium*. Transmitted from human to human through the bite of an infected female adult *Anopheles* mosquito.**
- **Largely distributed throughout the warmer regions of the world.**
- **Holo endemic in Nigeria.**
- **More than 2 billion people are at risk worldwide.**
- **Over 200 million cases each year.**
- **Over 600,000 deaths each year.**
- **Kills a vast number of children each year in Africa.**
- **In Africa, a child dies every 30 seconds from malaria. Translates to a massive 2,880 children per day! (WHO, 2012)**

PREVENTION

- Prevention may be more cost effective than treatment in the long run.
- Initial costs required may be out of reach of many of the world's poorest people.
- The presence of malaria in an area requires the combination of high human population density, high *Anopheles* mosquito population density and high rates of transmission from humans to mosquitoes and from mosquitoes to human.
- Prevention could therefore be through
- Medication (Intermittent preventive therapy IPT for Pregnant Women)
- Weekly Preventive Medication
- Mosquito Elimination (vector control) (Adult and Larvae)
- Decrease availability of open water for breeding, add substances to decrease development
- Prevention of mosquito bites (repellents, insecticide treated mosquito nets, Indoor residual spraying).
- ACTs (Artemisinin Combination Therapy) for treatment due to drug resistance syndrome

OBJECTIVES

- **To determine the prevalence of malaria among attendees to MOUUAU Medical Centre.**
- **Determine the knowledge, attitude and practices of the respondents regarding malaria.**

MATERIALS AND METHODS

- **Study Area – Umudike in Ikwuano L.G.A, Abia State, Nigeria. (7⁰34'E and 5⁰26'N)**
- **Tropical Climate, Rain forest vegetation.**
- **Population-mainly students, civil servants, farmers and petty traders.**
- **Data Collection: - Permission was given by the authorities of the Medical Centre before work commenced.**
- **Patients were about to study. Only those who consented individuals were included in the study.**
- **Questionnaires to obtain socio-demographic information, (gender, age, occupation), residence, Knowledge, Attitude and Practices about malaria were administered to respondents.**
- **Veinous blood samples were aseptically collected from males and females of different ages using disposable sterile syringes.**
- **Thick and thin blood smears were made from the blood samples in grease free slides. Field Stains A and B were used to stain the thick blood films while the thin blood films were stained with Leishman stain.**
- **Slides were examined for parasites under the microscope.**

RESULTS

Malaria was the most common illness reported among the respondents (52.28%).

PERCENTAGE OF RESPONDENTS (%)

■ Malaria ■ Skin rashes ■ Cough ■ Cholera ■ Measles ■ Diarrhea

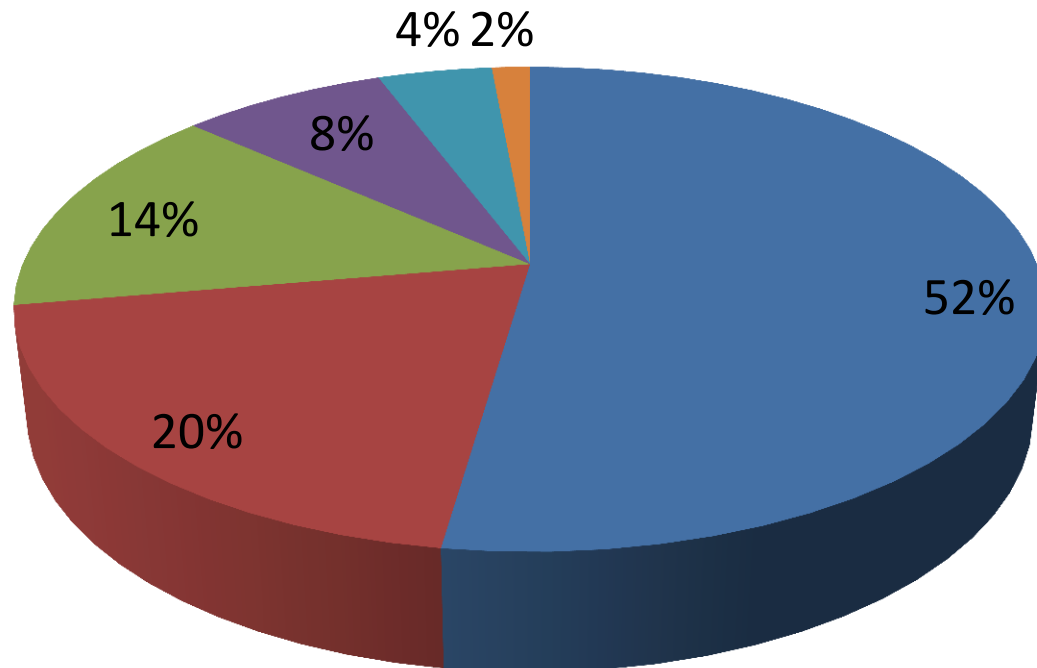


FIG 1. MOST COMMON ILLNESS REPORTED

1. 94(26.86%) were infected.

2. More males (28.06%) than females were infected

TABLE 1

GENDER	NUMBER EXAMINED	NUMBER INFECTED	PERCENTAGE OF INFECTION (%)
Males	139	39	28.06
Females	211	55	26.07
Total	350	94	26.86

Age group 61-70 years had highest rate of infection (83.33%).

TABLE 2

AGE GROUP YEARS	NUMBER EXAMINED	NUMBER INFECTED	PERCENTAGE OF INFECTION (%)
0-10	0	0	0.00
11-20	132	24	18.18
21-30	120	24	20.0
31-40	40	14	35.0
41-50	31	18	58.06
51-60	21	9	42.86
61-70	6	5	83.33

KAP

- **Many (95.71%) had heard of malaria.**
- **341 (97.43%) had suffered from malaria before.**
- **Fever was the highest symptoms reported (31.43%).**
- **Others included vomiting (15.71%), headache (11.43%), body pains (11.43%)**

TABLE 3

KNOWLEDGE	NUMBER OF RESPONDENTS	PERCENTAGE OF RESPONDENTS (%)
Have you heard of malaria	Yes (335)	95.71
Have you suffered from malaria before	Yes (341)	97.43
SIGNS/SYMPTOMS REPORTED		
Headache	40	11.43
Fever	110	31.43
Nausea	20	5.71
Vomiting	55	15.71
Convulsion	15	4.28
Chills	5	1.43
Body pains	40	11.43
Dizziness	39	11.14
Fatigue	26	7.43

CAUSES OF MALARIA REPORTED INCLUDED

- **Mosquito bites (68.57%)**
- **Contaminated Food (12.86%)**
- **Palm Oil (11.43%) (case of Ignorance).**

CAUSES REPORTED	NUMBER OF RESPONDENTS	PERCENTAGE OF RESPONDENTS
Mosquito bites	240	68.57
Contaminated food and water	45	12.86
Palm oil	40	11.43
Bad weather	15	4.28
Dirty habits	10	2.86

TREATMENT MEASURES REPORTED

- **Visit to the hospital (77.1%) was the most common treatment measure reported.**
- **Others – Visit to the Chemist**
- **Use of Herbs**

PREVENTION/CONTROL

- **Use of Malaria Drugs (80.0%)**
- **Insecticide (14.3%)**
- **Mosquito Net (5.7%)**

DISCUSSION

- The 26.8(0%) infection rate in the studied population differed from reports of Ukpai and Ajoku (2001) (80.25%) Owusu – Agyei et al (2009) (58.0%) Umeanaeto *et al*; (2006) (46.0%) and Graves *et al*; (2009) (4.1%).
- Climate factors, high temperature, rainfall, humidity which favour vector breeding could have contributed to the transmission of infection.
- Location and Environment could also be a contributory factor to infection as the respondents came from different communities around the University to seek for Medical Attention.

- **Attempts at vector control would probably have differed leading to vector – human contact and infection at different levels.**
- **More males being infected than the females agrees with the work of Ukpai and Ajoku, (2001), but differed from Umeanaeto *et al*; (2006) work.**
- **Occupation could be a contributory factor here as males work as night guards (security).**
- **They relax outside in the evenings with friends over bottles of drinks, stock fish dish, thus being exposed to bites of mosquitoes.**

DISCUSSION CONTD

- **Age Related Infection**
- **61 – 70yrs being the highest infected group differed from other findings.**
- **Could be because of the few number that came to the clinic.**
- **Many in this age group are usually taken away by children to other hospitals where they reside or a private home doctor is arranged.**
- **Symptoms/Signs reported were similar to these reported in other works.**

- **Fever though stands out. This is the most severe aspect because if not controlled could affect other workings of the system as Enzymes could be denatured.**
- **Possible Causes**
- **Mosquito bites were the most mentioned. Though they could not really say what was in the bite that lead to the infection.**
- **Some others pointed the infection to palm oil and contaminated food.**
- **Health Education becomes very imperative with the communities on (cause, symptoms, prevention and control) of malaria.**

CONCLUSION/RECOMMENDATION

- **Vector density and human population density are vital to transmission of malaria.**
- **Proper Vector control should be implemented, (Environment) kept clean.**
- **Health Facilities should be provided in the communities.**

ACKNOWLEDGEMENTS

- **GOD – For His love, mercy and strength.**
- **Ikwuegbu Lynda and Ubiaru Prince; my students.**
- **All the respondents.**
- **Lab Staff of the Medical Centre MOUAU**

**THANK YOU
FOR YOUR
TIME**