Prevalence and Epidemiology of Malaria in Nigeria: A Review

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ABSTRACT

Malaria is one of the most severe public health problem in Nigeria and in the whole world. Nigeria has the greatest number of malaria cases. Malaria is a mosquito borne infectious disease and caused by protists of genus Plasmodium. The symptoms of malaria infection are headache, vomiting, letharginess, abdominal discomfort etc. Malaria transmission can be reduced by using mosquito nets, insect repellents and by draining standing water.

Keywords: Malaria, Mosquito, Plasmodium, Nigeria

INTRODUCTION

Nigeria is the 14th largest country in Africa. It has 923,768 square kilometres of total land area. Nigeria is 7th largest country in the world in terms of population and largest in Africa. Nigeria lies in sub-Saharan Africa. The population of Nigeria is approximately 177.1 million. Nigeria is lower middle income country according to the World Bank, 2016. Malaria is one of the most important public health problem in the world. According to Malaria Report 2011 of World Health Organisation approximately 106 countries are at risk of transmission of malaria in the world. In 2010 a total of 216 million malaria cases occurred, in which 81% were reported in African Region, 13% in South East Asia, 5% in Eastern Mediterranean Region (World Malaria Report, 2011).
Prevalence and Epidemiology of Malaria in Nigeria: A Review

Malaria remained the leading cause of death in Nigeria with approximate 227,645 deaths in 1990 and 192,284 deaths recorded in 2015.

**EPIDEMIOLOGY**

Malaria is a mosquito borne disease in humans and animals (Ukaegbu et al., 2014). It is caused by parasitic protozoans of the genus *Plasmodium* with species *falciparum and vivax* and the mosquitoes which act as vector for this disease are female *Anopheles funestus, Anopheles moucheti, Anopheles gambiae, Anopheles arabiensis* (World Malaria Report, 2015; Kar et al., 2014).

In Nigeria malaria in pregnant women is a major public health concern because it is the major cause of maternal mortality. The major complications in pregnant women resulting from malaria are low birth weight in new born babies, high placental plasmodia burden, foetal complications, and sometime new born death (Erhabor et al., 2010; Jenavine et al., 2015).

**Symptoms of Malaria**

The first symptom of malaria is viral illness which leads to following symptoms:

- Abdominal discomfort
- Headache
- Joint aches
- Muscle aches
- Abdominal discomfort
- Vomiting
- Lethargy
- Anorexia

If antimalarial treatment is not given on time then it leads to severe malaria particularly in *Plasmodium falciparum* malaria. In severe malaria the parasite burden continues to increase in the body of the patient and it may develop lethal severe malaria. If it is untreated for long time then it is fatal in most of the cases. The symptoms of severe malaria usually manifests with more than one of the following:

- Hypoglycaemia
- Metabolic acidosis
- Acute pulmonary oedema
- Severe anaemia
Prevalence and Epidemiology of Malaria in Nigeria: A Review

- Coma
- Acute renal failure

Plasmodium Infection

Asymptomatic parasitaemia

Uncomplicated illness

Severe malaria

Death

**Fig 1.** Sequence of severe malaria infection

**REFERENCES**


