

ABSTRACT

EXAMINING FACTORS THAT INFLUENCE MALARIA PREVENTION AND CONTROL PRACTICES AMONG PREGNANT WOMEN RESIDING IN SLUM AREAS IN SOUTHERN GHANA

Mavis Dako-Gyeke and Humphrey M. Kofie

Introduction and Background: Many countries in tropical and subtropical regions throughout the world have and continue to report high prevalence of malaria infection. Even though the disease can be prevented or treated, malaria remains a major cause of morbidity and mortality in many parts of sub-Saharan Africa due to the fact that it has considerable health problems for children less than five years of age and pregnant women (Adefioye, Adeyeba, Hassan & Oyeniran, 2007; Dicko et al., 2005; Owusu-Agyei et al., 2009; World Health Organization, WHO, 2001). In a high- malaria transmission zone like Ghana, malaria in pregnancy and related morbidity are common (Hommerich et al., 2007). The disease is responsible for one out of every four maternal deaths in Africa as pregnant women are four times likely to get sick of malaria and twice to die from it (WHO). In addition, malaria infection during pregnancy presents substantial risks for the mother and unborn child; it is a principal cause of peri-natal mortality, low birth weight and maternal anemia (Adefioye et al; Ghana Health Service, 2005; WHO, 2007).

In order to reduce the prevalence of malaria infection, several national and international arrangements have been put in place, including the signing of the Abuja Declaration in 2000 on Roll Back Malaria (RBM), which aimed at reducing the malaria burden by 2010. In response to the Roll Back Malaria program, Ghana set up the National Malaria Control Program (NMCP) with the aim of increasing access to malaria treatment and promoting the use of insecticide-treated nets (ITNs), especially among pregnant women and children under five years old.

Nonetheless, extant research findings indicate that in a malaria endemic area like Ghana, malaria infection during pregnancy remains high. Additionally, although a plethora of research on malaria has been conducted in Ghana, not many have identified factors that influence malaria prevention and control practices among pregnant women. This study therefore sought to examine factors that influence malaria prevention and control practices among pregnant women residing in two slum areas in Southern Ghana. This is important because the consequences of malaria during pregnancy are severe as it affects both the mother and the unborn child.

Objective: Examine the relationship between malaria prevention and control practices among pregnant women and their (a) religious beliefs, (b) socio-cultural norms and (c) economic status.

Design: The descriptive survey design was employed.

Methodology: A total of 120 pregnant women who accessed antenatal care at a maternal health facility were randomly selected without prior knowledge of their clinical and family history.

A structured questionnaire was used to gather data for the study. The questionnaire included questions concerning demographic information (age, education, religion, employment, ethnicity and number of children); malaria infection during pregnancy, malaria treatment and cost, religious factors and socio-cultural norms. The data was analyzed using descriptive, chi-square and correlation statistics. The hypotheses were tested at 0.05 significance level.

Results: The majority (57.4%) of pregnant women in one slum area reported they had been infected with malaria during their pregnancy. In the other slum area, 42% of the pregnant women had also been infected with malaria during pregnancy. There was no statistically significant relationship between religious views of the pregnant women and their malaria prevention and control practices (chi square value was 0.282 with a *p*-value of 0.527). There was a statistically

significant relationship between income earning status and malaria prevention and control practices of the pregnant women included in this study (chi-square value was 53.943 and p value was 0.000; correlation value was 0.629 with associated p -value of 0.00). Additionally, socio-cultural norms (including type of dwelling, education and treatment seeking behavior) had a statistically significant relationship with malaria prevention and control practices of the study participants (chi-square and p - values were 35.223 and 0.019 respectively). However, no statistically significant relationship was found between ethnicity, which was one of the socio-cultural factors and the malaria prevention and control practices of pregnant women who participated in this study (chi-square value of 35.621 and significance level of 0.221).

Conclusions and Implications: Certainly, the findings of this study point to the fact that malaria prevalence cannot be explained from only a medical point of view but socio-cultural dimensions should also be considered. In this regard, malaria prevention and control programs that fail to incorporate socio-cultural issues may not achieve their goals because human behavior and other social factors directly or indirectly influence the breeding of mosquitoes. As people's beliefs and cultural practices have a tremendous influence on how they seek treatment and respond to change in their environments, intervention programs should address the needs of different people. For example, pregnant women residing in slum areas may have more challenges preventing malaria infection due to overcrowding, lack of water, poor toilet facilities, and lack of appropriate drainage systems.

Overcrowding in slum communities impinge on the use of malaria prevention and control measures, such as mosquito nets and repellents due to the difficulty of hanging the nets and the migration of mosquitoes from repellent sprayed places to non-repellent areas. It is therefore important that people residing in various communities are included in the design and

implementation of anti-malaria campaigns. This allows them to participate fully and also ensure the sustainability of these programs. Since the principal goal of malaria prevention and control programs is to reduce the prevalence of the disease, as well as its economic and social costs, government and non-governmental interventions should be sensitive to the financial needs and the socio-cultural practices of the poor, especially those residing in slum areas in Ghana.

Address correspondence to: Dr. Mavis Dako-Gyeke Email: mavisdako@yahoo.com

Author Affiliations:

Department of Social Work, University of Ghana (Dr. Mavis Dako-Gyeke)

Department of Social Work, University of Ghana (Humphrey M. Kofie)