

A review on socio economic and behavioral aspects of malaria and its control among children under 5 years of age in Africa.

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Abstract

Over 40 % of the world's population is in malaria infested areas. Malaria not only causes ill health and death but also hampers development due to the fact that lots of resources are spent combating the disease. Severe malaria impairs children's learning and cognitive ability by as much as 60%, consequently affecting the performance primary and secondary education programs. Human behavior much of which is influenced by social, cultural, economic, and political factors is clearly related to health, including the risk for infectious diseases like malaria. Whether it is intentional or not, human behavior affects health-promoting and disease-preventing activities, in some instances increasing risk and in others reducing it. Beyond human behavior as such, prevalent socio-economic factors including political and economic parameters also contribute to shaping how humans act, and therefore must be seen, in and of themselves, as epidemiological predictors of health and disease patterns.

Keywords: Socio economic, Malaria, Children, Under 5 years, Age, Africa.

Introduction

Over 40 % of the world's population is in malaria infested areas. Malaria not only causes ill health and death but also hampers development due to the fact that lots of resources are spent combating the disease. For instance, expenditure on treatment and prevention is very high and there is loss of household incomes through absenteeism from work [1].

An estimated one million people in Africa die from malaria each year and most of these are children under 5 years old [2]. In Uganda, malaria remains the biggest cause of death for children under five and one of the most important threats to new born babies. These deaths occur primarily among the poorest people because they do not have access to the drugs and protective measures necessary for prevention or cure. The fact that malaria kills an African child every 30 seconds proclaims distinctly the need for more attention on the health of children [3, 4].

Malaria is one of the leading causes of ill health and deaths, with approximately 16 million cases and over 10,500 deaths reported in 2013 [5]. It remains one of the most important diseases in Uganda in terms of morbidity and mortality [6].

A single episode of malaria costs a family on average 9 US dollars, or 3% of annual income [7].

Further, severe malaria impairs children's learning and cognitive ability by as much as 60%, consequently affecting

the performance primary and secondary education programs [8].

Various malaria control practices availed to children under 5 years of age

It is important for public health and social scientists working on malaria control efforts to recognize the differences between past and present strategies. Prior to 1970, malaria eradication programs were based on indoor residual spraying. Initial successes in the eradication efforts in Southern Europe, in India and other endemic areas that used indoor spraying of DDT resulted in near elimination. However, massive use of these pesticides with insufficient attention to agricultural consequences and economic development efforts has now resulted in major increases in insecticide resistance in Anopheles mosquitoes [9].

Apart from physiological resistance, differences in behavioral traits between and even within vector species emerged. These variations include outdoor feeding (exophagy) and resting (exophily) and the development of behavioral resistance to the residual insecticides, such as avoidance of treated surfaces, all of which prevented adequate contact between mosquito and toxin. The alternative was to reduce vector densities so as to stop transmission and treatment of all malaria cases so that the Anopheles control could then be relaxed, thereby producing anophelism without malaria [10].

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Social economic and behavioral aspects involved in malaria control among children

Human behavior much of which is influenced by social, cultural, economic, and political factors is clearly related to health, including the risk for infectious diseases like malaria. Whether it is intentional or not, human behavior affects health-promoting and disease-preventing activities, in some instances increasing risk and in others reducing it. Human groups have often unwillingly facilitated the spread of infectious diseases through culturally coded patterns of behavior or through changes in the crucial relationship among infectious disease agents, their human and animal hosts, and the environments in which the host-agent interaction takes place [11].

Beyond human behavior as such, prevalent socio-economic factors including political and economic parameters also contribute to shaping how humans act, and therefore must be seen, in and of themselves, as epidemiological predictors of health and disease patterns [12,13]. As mentioned above, too often behavioral and socio-economic involvement has come too late and been too peripheral. Of course, this does not mean that any and all social science involvement in malaria control has been or will be sufficient or productive [14].

The research carried out has not been of uniformly high quality, but it is widely agreed that inattention to the socio-economic factors was a major reason for the failure of earlier malaria control efforts (Rosen, 2015). Communities were not invested enough to hold on to preventive programs, and governments felt they lacked resources to go on providing the means to attack mosquito-breeding sites [15].

To access the patterns between socio-economic, behavioral factors and malaria control practices

Though there is evidence that malaria is a disease that primarily affects poorer countries, the evidence regarding the distribution of malaria incidence between poor and less poor population groups is mixed and often contradictory. Most studies that use material assets as a proxy for SES have failed to establish a positive relationship between asset ownership and reduced incidence of febrile episodes (as a proxy for malaria) at the household level.

Evidence of malaria incidence by occupation is also mixed, though stronger than that obtained from using asset-based indicators. Migration of laborers' in agricultural work as well as unemployment has been shown to be risk factors for malaria infection.

Conclusion

Recommendations

The government should carry out sensitization of communities about the need for malaria control measures of their children. This will increase awareness about the existing malaria control measures. There is also a need for strict laws against communities and people who don't observe malaria control measures among children.

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