Epidemiology: Malaria in Northern Region, Ghana

The Northern Region of Ghana is a remote, sparsely populated savannah area with limited medical and other infrastructure. Malaria is the main reason for seeking health care and for pediatric hospital admissions.

Epidemiology of malaria

The project aims at assessing the epidemiology of malaria in the region to build a base for subsequent association and intervention studies. Several surveys on the prevalence, incidence, and manifestation of malaria have been conducted in the regional capital Tamale and the surrounding districts. In the Northern Region, malaria is hyperendemic and occurs perennially with only little seasonal variation. In the city of Tamale, children experience approximately three clinical episodes of malaria per year. In the surrounding rural areas, malaria shows pronounced heterogeneity. Chloroquine, first-line antimalarial drug until 2004 and still widely used, suffers a treatment failure rate of >50%. Severe anaemia is the predominant manifestation of severe malaria in this region; cerebral malaria is comparatively rare. The case fatality rate of severe malaria in Tamale is in the range of 11%.