

# **A SPATIO-TEMPORAL STUDY OF SCHISTOSOMIASIS IN DANGME-EAST DISTRICT OF GHANA**

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## **ABSTRACT**

Many African countries are continually being riddled with communicable and in recent times non communicable diseases. The rural communities of these countries can be said to be tilted towards infectious diseases. Schistosomiasis, like many other communicable diseases, imposes a great set back on many developing countries' efforts at sustainable development since in some situations schistosomiasis may affect people's ability to work and/or limit their productivity.

Poverty, ignorance about the risk of the disease, unsanitary conditions coupled with inadequacy of public health facilities is generally accepted to exacerbate the health problem.

It is globally recognized that orthodox medicine has failed to put an end to many infectious diseases in the world. This spatio-temporal study of schistosomiasis in the Dangme-East district in Ghana attempts to provide the vent for critical thinking for a more comprehensive and appropriate means for controlling the schistosomiasis menace in the district, as well as serve as a springboard for a concerted national and international shift in paradigm. The study transcends academics to critically examine the status quo through spatio-temporal analyses that are more social and human development concerned.

A three-pronged approach was deployed in the investigation of schistosomiasis study in the Dangme-East district. Firstly was to develop a comprehensive community database detailing locations of settlements, water bodies and water facilities, sanitation facilities, economic centre(s) including farms.

This involved the use of KAP (knowledge, attitude, and practices) study-based approach which comprised seeking of information from sampled communities about their knowledge and attitude to the schistosomiasis disease and how they manage the disease.

The third was the identification and adequate documentation of the behaviour of fresh water contact sites in parallel with incidence records of the infection in the district from 2004 to 2008. These datasets were mobilized into a comprehensive geodatabase for the disease mapping and analysis.

Water contact behaviour analyses have provided ample information for the parasite development. Trend analysis was also performed for the schistosomiasis infection and intensity over the period of five years, paying close attention to gender characteristics.

Even though out-patient records from Dangme East district hospital and Ada health centre showed a decline in schistosomiasis cases, favourable conditions for breeding and development of schistosomiasis infections at sampled water contact sites are responsible for the persistence of the schistosomiasis disease in the district especially in Big Ada and Ada Foah.

Productivity in the district is threatened as most recorded infections are between the ages of 20 years and 40 years.

It has been discovered that majority of the people of the Dangme-East District are rendered highly susceptible to the disease and infection in the course of their normal routine livelihood explorations which include fishing, farming and domestic chores.

The report concluded by offering recommendation for planning including the urgent need to educate the district with proper knowledge and messages that is needed for behavioural changes by the Ghana Health Service, since people are not reporting for treatment or requesting to be tested for schistosomiasis.

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