Understanding perceptions of schistosomiasis and its control among highly endemic lakeshore communities in Mayuge, Uganda

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Background

Schistosomiasis is a neglected tropical disease and a serious global-health problem with over 230 million people requiring treatment, of which the majority live in Africa. In Uganda, over 4 million people are infected. Extensive parasitological data exist on infection prevalence, intensities and the impact of repeated praziquantel mass drug administration (MDA). However, how perceptions of schistosomiasis shape prevention and treatment practices and their implications for control measures are much less well understood.

Methods

Rapid ethnographic appraisals were performed for six weeks in each of three *Schistosoma mansoni* high endemicity communities on the shores of Lake Victoria, Mayuge District, Uganda. Data were collected between September 2017 and April 2018. Data were collected through structured observations, transect walks, and participant observation, and sixty in-depth interviews and 19 focus group discussions with purposively recruited participants. Data were analyzed thematically using iterative categorization, looking at five key areas: perceptions of 1) the symptoms of schistosomiasis; 2) the treatment of schistosomiasis; 3) how schistosomiasis is contracted; 4) how schistosomiasis is transmitted onwards and responsibilities associated with this; and 5) how people can prevent infection and/or onward transmission.

Results

Observations revealed open defecation is a common practice in all communities, low latrine coverage compared to the population, and all communities largely depend on lake water and contact it on a daily basis. Perceptions that a swollen stomach was a sign/symptom of '*ekidada'* (caused by witchcraft) resulted in some people rejecting free praziquantel in favour of herbal treatment from traditional healers at a fee. Others rejected praziquantel because of its perceived side effects. People who perceived that schistosomiasis is caught from drinking unboiled lake water did not seek to minimize skin contact with infected water sources. Community members had varied perceptions about how one can catch and transmit schistosomiasis and these perceptions affect prevention and treatment practices. Open defecation and urinating in the lake were considered the main route of transmission, all communities attributed blame for transmission to the fishermen which was acknowledged by some fishermen. And, lastly, schistosomiasis was considered hard to prevent due to lack of access to safe water.

Conclusion

Despite over 15 years of MDA and associated education, common misconceptions surrounding schistosomiasis exist. Perceptions people have about schistosomiasis profoundly shape not only prevention but also treatment practices, greatly reducing intervention uptake. Therefore, we

advocate for a contextualized health education programme, alongside MDA, implementation of improved access to safe-water and sanitation and continued research.