EVALUATION OF Schistosoma haematobium AND ACCESS TO WASH FACILITIES BY SCHOOL AGE CHILDREN IN OSOGBO METROPOLIS, OSUN STATE, NIGERIA.

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Background: Schistosomiasis is the most prevalent waterborne parasitic diseases in rural communities and urban populations which depend on streams and rivers for domestic and agricultural purposes. Provision of water, sanitation and hygiene (WASH) resources has been advocated a strategy for sustainable control of soil-transmitted helminthiasis (STH). Studies on Schistosoma haematobium amongst school children in Osogbo metropolis in Osun state, Nigeria was carried out to determine the prevalence of schistosomiasis in school age children and the status of WASH resources. Method: A total of 216 (104 males and 112 females) urine was collected in a collection tube. Schistosoma haematobium infection was detected by microscopic examination of schistosome egg in the urine. A structured survey form (Questionnaire) was administered to each participants to inquiry about their demographic characteristics, sanitation and hygiene practices (WASH activity) both at home and in the school and also their knowledge about schistosomiasis using WHO standard questionnaire. The samples was centrifuged and kept in the fridge at 40C until further analysis. 50 samples were further analyzed for DNA extraction using the Genomic DNA Extraction kits by NIMR BIOTECH (Research for national Health), extracted/ eluted DNA was stored at -20oC in the freezer. The supposed DNAs obtained were subjected to Polymerase Chain Reaction (PCR) using the conventional method to detect the scistosome DNA.

Result: But none of the 50 samples pool tested was positive to any of the target DNA gel electrophoresis. This study observed no detectable DNA in the urine samples.

Conclusion: It is hence suggested that there was little risk of prevalence of schistosomiasis infection in Osogbo during this study period. However, further investigations, as well as, continual prevalence investigation are recommended.