

Water demand and Schistosomiasis among the Gumau people of Bauchi State, Nigeria, Transactions of the Royal Society of Tropical Medicine and Hygiene (ENGLAND)

A helminthological study of stool and urine samples from 1037 people from 4 rural communities in Gumau District of Bauchi State, Nigeria, was carried out using formol-ether concentration and direct centrifugation methods respectively. 39.0% of persons examined were infected. Ova of *Ascaris lumbricoides*, *Schistosoma haematobium* and *S. mansoni* were the most common.

Trichuris trichiura, hookworm, tape-worm and *Strongyloides stercoralis* were also encountered. 17.9% and 10.8% of examined persons had *S. haematobium* and *S. mansoni* infections respectively. A significant relationship was found between water demand index (number of persons per well) and infection with *S. haematobium* ($r = 0.95$) and *S. mansoni* ($r = 0.88$) ($P < 0.01$).

Such a relationship was not found with other helminth infections. A significant association was also found between distance from a river and prevalence of *S. haematobium* ($r = 0.94$) and *S. mansoni* ($r = 0.95$) ($P < 0.01$), but not with the other helminth infections. These findings suggest that the water demand index may be an important factor in the epidemiology of schistosome infections in rural communities.

Partners: World Health Organisation

Source: Water demand and schistosomiasis among the Gumau people of Bauchi State, Nigeria – ScienceDirect