

**PREVALENCE, INTENSITY AND ENVIRONMENTAL RISK FACTORS OF
SCHISTOSOMIASIS: A CASE STUDY OF BUSIRO COUNTY, MPIGI DISTRICT -**

UGANDA

BY

EDRIDAH MUHEKI TUKAHEBWA (BSC. BOT/ZOO) MAK.

A DISSERTATION SUBMITTED IN PARTIAL FU

LFILLMENT OF THE REQUIREMENTS OF THE AWARD OF DOCTOR OF

PHILOSOPHY OF MAKERERE UNIVERSITY

JANUARY 2001

Abstract

This study was carried out to establish the magnitude of schistosomiasis and its related environment risk factors in communities close to the shores of Lake Victoria in Busiro County, Mpigi District. Quantitative and qualitative surveys were done and random sampling was used to select responses. Questionnaires were administered and the rate of schistosomiasis infection as well as other intestinal helminths examined using the Kato Katz thick smear technique. Environmental factors were also observed. Bacteriological water quality was assessed using faecal coliforms as indicators of faecal contamination. Snails were sampled and screened for presence of schistosomiasis pathogens. The data was analyzed using Epi Info, version 6.04 computer program for DOS.

The overall prevalence and geometric mean egg count of schistosomiasis were 51% and 110 eggs per gram faeces (epg) respectively. Schistosomiasis was prevalent in this study area. Busiro County borders a known source of the disease (Lake Victoria) on which the people depend for their socio-economic needs. Therefore, the communities are prone to schistosomiasis transmission

factors such as snail vectors, water contaminated with faecal material where they swim, bathe, fish and wade. Infection rate was higher in males and fishermen than females because of their prolonged exposure in the infected water while fishing. The 15-19 year age group had the highest prevalence of 83.3% (10/12) while the 20-24 year age group had the highest intensity (266 epg) as compared to other age groups probably because of some immunological and physiological factors.

The other intestinal helminths identified were hookworms, *Ascaris lumbricoides*, *Trichuris trichiura* and *Hymenolepis nana*.

The recommended intervention measures to combat schistosomiasis are treatment of the vulnerable group of people like school-age children and fishermen, public health education and maintenance of proper sanitation.