

Schistosoma mansoni Infection and Risk Factors among Fishermen at Lake Hawassa, Southern Ethiopia

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Abstract : Schistosomiasis/Bilharziasis is one of the neglected tropical parasitic diseases caused by different species of genus *Schistosoma*. Among the species, *S. mansoni* (causative agents of intestinal schistosomiasis) is one of the causes of severe intestinal parasitic infections with high public and medical importance in Ethiopia. There is a scarcity of information about the status of *S. mansoni* infection among the fisherman in our study area and in the country at large. Therefore, this study was designed to determine the prevalence and risk factors of *S. mansoni* infection among fishermen at Lake Hawassa, southern Ethiopia. A cross-sectional study was conducted among the fishermen from April to June 2013 in Hawassa, Southern Ethiopia. A total of 243 fishermen were included by systematic sampling from the lists of the fishermen members in the registration book of fishermen associations in the Hawassa Town. Data on socio-demographic features and risk factors were collected by using semi-structured questionnaires. Stool samples were collected and processed using Kato-Katz thick smear techniques and examined between 30- 40 minute for hookworm and after 24 hours for *S. mansoni* and other soil-transmitted helminths (STHs). The overall prevalence of *S. mansoni* among the fishermen was 29.21% (71/243), and the mean intensity of infection was 158.88 egg per gram (EPG). The prevalence of intestinal helminths including *S. mansoni* was 69.54% (169/243). Moreover, the prevalence of soil-transmitted helminths (STHs) was 40.74% (99/243), 35.80% (87/243) and 5.76% (14/243) for *A. lumbricoides*, *T. trichiura* and hookworm species, respectively. Almost similar prevalence of *S. mansoni*, 31.82%, 31.75%, 31.94% were recorded in age groups of 15-19, 20-24 and 25-29 years, respectively. Fishermen who are swimming always were 2.92 times [95% CI: 1.554, 5.502] more likely to acquire *S. mansoni* infection than other water contacting habit of the study participants. The results of the current investigation indicated the moderate endemicity of *S. mansoni* among the fishermen at Lake Hawassa, southern Ethiopia. Fishermen could be the potential risk group for *S. mansoni* infection and might be responsible for the transmission of *S. mansoni* to other segments of the communities. Since the high prevalence of STH was recorded among the fishermen, integrated prevention and control strategies from different sectors might be important to tackle the problem.

Keywords : *S. mansoni*, soil transmitted helminths, fishermen, Lake Hawassa, Ethiopia

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