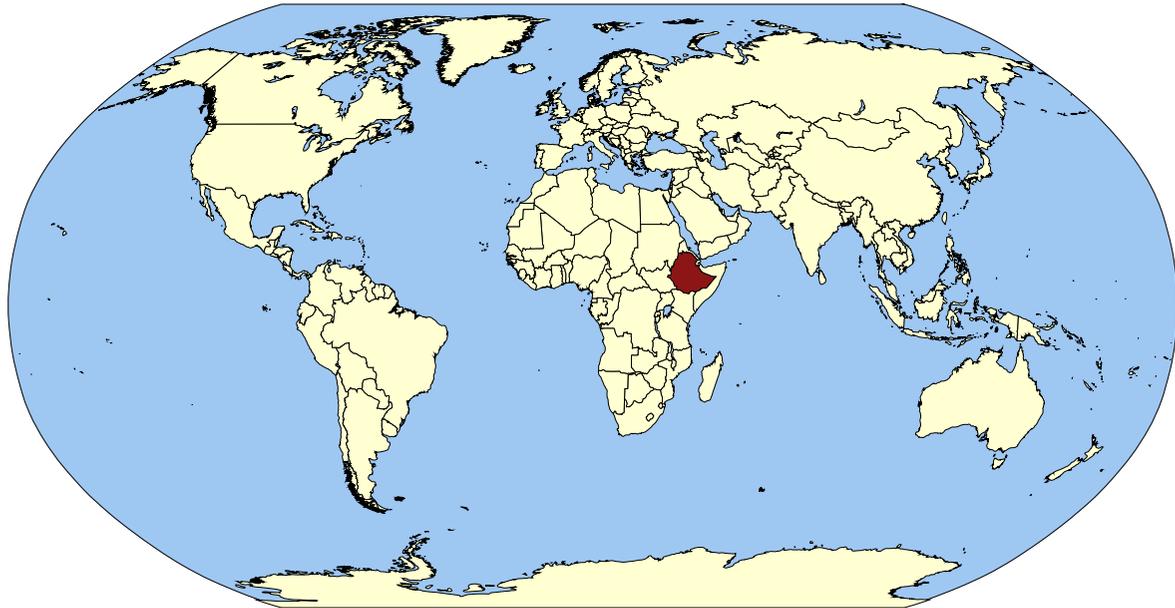


Ethiopia



The History of Schistosomiasis in Ethiopia

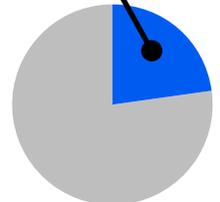
S. mansoni was first identified in Ethiopia in 1934. When it became widespread on the high plateau of the country. *S. haematobium* was identified much later and was known only in a few isolated localities [2]. The wide distribution of the disease can be interpreted from various factors, including: expansion of irrigation facilities in the 1960's used for drinking, washing and watering of nomadic herds; building of the Koka Dam on the Awash river and associated supply and drainage canals conducive to transmission; and migratory movements of pastoral nomads and agricultural workers [2]. Surveys to measure the effect of irrigation construction on schistosomiasis prevalence corroborates these assumptions. Before irrigation schemes began in the 1950's in the Awash valley, *S. mansoni* was considered absent from the region; by 1976 prevalence estimates reached 9.0% in the upper valley. Similarly, irrigation started in 1954 showed prevalence rates rose after the first diagnosed case in 1964 from 7.5% in 1968 to 20% in 1980. In 1988 the prevalence amongst children in a village on that same irrigation scheme was estimated at 81.9%. A survey in 1997 showed that following the construction of small dams in the Tigray Region, disease prevalence increased from 29.7% to 48.4% [3].

Schistosomiasis in Ethiopia [9]

< 2 million people treated in 2014

23% of the population requires preventative chemotherapy for schistosomiasis

Over 12 million children and 11 million adults need treatment for schistosomiasis every year.



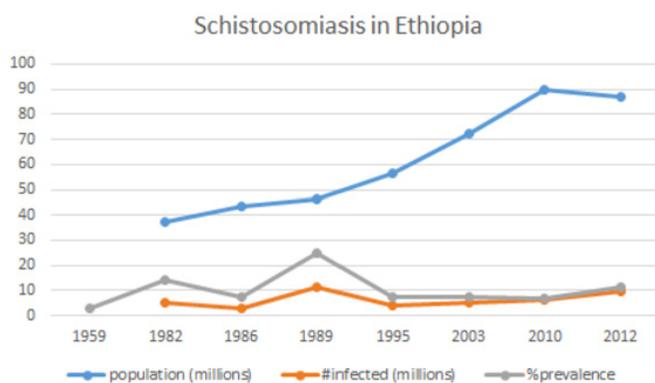
Overview of Ethiopia [10]

- » Population in 2015: 99,465,819
- » Official Language: Amharic
- » Capital: Addis Ababa
- » Federal Parliamentary Republic
- » Percentage of Population with Access to Improved Drinking Water in 2015: 57.3%
- » Percentage of Population with Access to Improved Sanitation in 2015: 28%

Prevalence of Schistosomiasis

Schistosomiasis is considered endemic across the entirety of Ethiopia, in rural and urban settings [1]. Currently, *Schistosoma haematobium*, the causative agent of the urinary form of the disease, is mainly present in the Lower Awash Valley along the border of Somalia and near the western border with South Sudan. *Schistosoma mansoni*, the fluke causing the intestinal form of the disease, is endemic in the Omo, Awash, and Blue Nile river valleys [1].

In the Omo National Park, large numbers of baboons have been found infected with *S. mansoni*, presenting the possibility that they may be a reservoir for the disease [2] In 2001 troops of olive baboons (*Papio anubis*) from Bishan Gari and Burka Dita forest reserves in the Rift Valley were found to be infected with and excreting viable eggs of *S. mansoni*, with the infection rate among baboons being 12.1% and 26.2% in Bishan Gari and Burka Dita respectively, suggesting that baboons do indeed act as a reservoir and play a role in the maintenance of local infection [4].



Current Prevalence

Currently prevalence is estimated at over 11% [7]. In 2015 the Ethiopian Federal Ministry of Health launched a national school-based deworming program to treat school-age children for schistosomiasis and intestinal worms. The goal of the program is to treat at least 80% of at-risk children by 2020 [8].

Control of Schistosomiasis

Despite relatively well-documented information on the spread of disease in Ethiopia and evidence for numerous focal control programs and studies, no national-level control programs have been carried out until recently. The most common methods for control at the local and small scale levels are treatment with praziquantel and snail control using molluscicides [5]. Diagnosis and treatment of schistosomiasis occurs mainly in hospitals; in Ethiopia, *S. mansoni* infection is the major cause of morbidity in outpatient cases in most of the country (and intestinal parasites ranks second in number of outpatient cases) [6].

References

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