The epidemiology of schistosomiasis in Egypt: Qena governorate


Abstract:

Qena is the southernmost governorate of Egypt included in the Epidemiology 1, 2, 3 national study. A probability sample selected 17,822 individuals from 2,950 households in 34 ezbas and 10 villages from a total rural target population of 1,731,252 (based on the most recent 1986 census of the population by the Egyptian Central Agency for Public Mobilization And Statistics). Parasitologic examination of urine and stool were made for Schistosoma haematobium and S. mansoni, respectively, and physical and ultrasound examinations were made on a 20% subsample. The overall estimated prevalence of S. haematobium was 4.8 +/- 0.7% (+/-SE) and geometric mean egg count (GMEC) was 7.0 ova per 10 ml of urine. Considerable variation in prevalence was observed between the villages and ezbas, ranging from 0.0% to 20%, with the smaller ezbas having a slightly higher overall prevalence. The age- and sex-specific patterns of S. haematobium showed typical peak prevalence in early adolescence, with males having a higher prevalence than females. A history of hematuria was associated with current infection (odds ratio = 3.6, 95% confidence interval = 2.32-5.63). Hepatomegaly and splenomegaly determined by physical examination present in 7.9% and 3.0%, respectively. Ultrasonography-determined hepatomegaly of the left liver lobe was found in 10.1%. Ultrasonography-detected hepatomegaly in both the left and right lobes increased in prevalence from approximately 5% in children to 15-20% in adults. The prevalence of ultrasonography-detected splenomegaly increased slightly with age. Grade III periportal fibrosis was detected in only 2 individuals in the sample. Bladder wall lesions and obstructive uropathy were also very infrequent. Other associations with these measures are given. Most villages and ezbas had an S. mansoni prevalence of less than 1%. The exception was Nag'a El-Sheikh Hamad, where the prevalence was 10.3 +/- 0.5% (GMEC = 57.4 +/- 2.6). Two other communities also had a prevalence >1% (Ezbet Sarhan and Kom Heitin).

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