ABSTRACT

Schistosomiasis is endemic in Kenya along the Coast, Lower Eastern, and the Lake Victoria Basin. Its prevalence ranges from 5% to 100% and is highest along the shores of Lake Victoria, with those most at risk aged between 5–14 years. To control this menace and eventually eliminate it, praziquantel distribution using mass drug administration (MDA) strategy was for the first time done in the year 2011 in targeted areas in western Kenya, with low compliance levels registered in most schools with high prevalence along the shores of Lake Victoria. Low MDA coverage would eventually act as the focal points for transmission and re-infection hence the need to evaluate the reasons that influenced MDA compliance. A cross-sectional study was carried out to primarily investigate factors that influenced compliance on a first time MDA exercise amongst school going children in areas with ≥25% prevalence of schistosomiasis along the shores of Lake Victoria in Kenya. The study covered primary school health teachers and pupils, whose schools took part in the MDA exercise. Fisher’s method was used to get a sample size of 411 pupils from a study population of 12,113. Systematic sampling technique was used to sample the pupils from the sample frame. Seventy five health teachers were also purposively recruited in the study. Both qualitative and quantitative approaches were used in data collection. Pre-tested interviewer-administered questionnaires were used to collect quantitative data from the pupils. Eight group discussions were used to collect qualitative data from the health teachers. Quantitative data were summarized and analyzed using descriptive inferential statistics. This involved the use of bivariate techniques; Fisher’s exact or Pearson’s chi-square test to test for correlation between the independent and dependent variables. The variables that were significant were subjected to logistic regression to assess for the independent predictors of non-compliance. Qualitative data were summarized and analyzed using ATLAS t.i. qualitative data analysis software. Knowledge on the MDA programme and disease were the strongest predictors of non-compliance, with the odds of being MDA non–compliant being significantly increased for those pupils who didn’t know the reasons for swallowing the drug (AOR = 22.665, 95% CI = 5.187 – 99.040, p ≤ 0.001), as well as for those who had never heard of schistosomiasis (AOR = 12.345, 95% CI = 3.729 – 40.871, p ≤ 0.001) respectively. Quantitatively, most of the science health teachers were more knowledgeable and aware of schistosomiasis, than their other counterparts. Majority of the health teachers perceived community members (parents) lacked confidence on the role they played, as “drug distributors”. Up to 7.8% of the non-compliant population did not know any of the perceived benefits associated with the MDA exercise, though, the health teachers perceived as a benefit the improvement in the school attendance and the pupils health in general. Finally, the study noted that some of the other community-specific factors associated with MDA non-compliance, included: fear of adverse side effects, fear of the size and dosage of the drug, fear of meeting referral treatment costs by both the parent and the school administration and lack of team work amongst teachers in carrying out MDAs. Therefore, to improve on MDA compliance, there is need to involve the various stakeholders, (school, community and pupils) at various levels, in: training health teachers, drug distributor selection, Pre-MDA sensitization and the final MDA execution. These findings helped determine factors that influence compliance on a first time MDA exercise in areas endemic for schistosomiasis.