

1 **The short-term impact of *Schistosoma mansoni* infection on health-related quality of life:**  
2 **implications for current elimination policies**

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15 **Abstract**

16 Background: The World Health Organization (WHO) aims to eliminate schistosomiasis as a  
17 public-health problem by 2030. However, standard morbidity measures poorly correlate to  
18 infection intensities, hindering disease monitoring and evaluation. This is exacerbated by a  
19 lack of evidence on *Schistosoma*'s impact on health-related quality of life (HRQoL), which  
20 means that comparisons of infections and interventions across health issues cannot currently  
21 be performed.

22 Methods: We conducted community-based cross-sectional surveys and parasitological  
23 examinations in moderate and high *Schistosoma mansoni*-endemic communities in Uganda.  
24 We calculated parasitic infections and used the EQ-5D-5L and EQ-5D-Y instrument to estimate  
25 and compare HRQoL utilities in these populations. We further employed Tobit and linear  
26 regression models to predict HRQoL determinants.

27 Results: Two thirds of the 560 participants were diagnosed with parasitic infection(s), with  
28 49% having *S. mansoni*. No significant negative association between HRQoL and *S. mansoni*-  
29 infection status/intensity was observed. However, severity of pain urinating ( $\beta=-$   
30 0.106;SE=0.043) and body swelling ( $\beta=-0.326$ ;SE=0.005), increasing age ( $\beta=-0.016$ ;SE=0.033),  
31 reduced socio-economic status ( $\beta=0.128$ ;SE=0.032), and being unemployed were associated  
32 with lower short-term HRQoL.

33 Conclusions: Schistosomiasis associated symptom severity and socio-economic status were  
34 better predictors of short-term HRQoL than current *S. mansoni*-infection status/intensity.  
35 This is key to disentangling the link between infection(s) and short-term health outcomes, and  
36 highlights the complexity of correlating current infection(s) with long-term morbidity.  
37 Evidence is needed on the longer term HRQoL, health and economic outcomes associated  
38 with schistosomiasis interventions in order to inform the economic case for upfront  
39 investments in schistosomiasis interventions.

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