Using choice modelling to identify popular and affordable alternative interventions for schistosomiasis in Uganda

Keila Meginnis [1,2,3]; Nick Hanley[2]; Lazaaro Mujumbusi[4]; Lucy Pickering[4]; Poppy H.L. Lamberton[2, 3]

[1] Stirling Management School, University of Stirling
[2] Institute of Biodiversity Animal Health & Comparative Medicine, University of Glasgow
[3] Wellcome Centre for Integrative Parasitology, University of Glasgow
[4] Institute of Health & Wellbeing, University of Glasgow

Schistosomiasis is caused by a vector-borne parasite, commonly found in low- and middle-income countries, with over 240 million people infected globally. People become infected by direct contact with contaminated water, through activities such as bathing and fishing. Water becomes contaminated when human waste is not adequately contained. The main control strategy recommended by the World Health Organization (WHO) is mass drug administration with praziquantel. However coverage remains low in many endemic areas, and hotspots exist where MDA alone is not reducing transmission. Additional interventions are needed to reach the ambitious WHO 2030 goals for schistosomiasis. We elicit community preferences towards alternative water access, sanitation and hygiene (WASH) interventions that would reduce individuals' risk of contracting, or transmitting, *Schistosoma mansoni*. We administered a discrete choice experiment to understand community preferences for improved WASH interventions. We compared interventions that target behaviours that put oneself at higher risk versus behaviours that mainly put others at risk. We used two payment vehicles to quantify what individuals are willing to give up in time and/or labour. Key findings indicate that new sources of potable water and fines on open defection are the highest valued interventions. A large portion of our sample ignored the payment vehicles, which is key for policy analysis.