

# Community-wide patterns of infection following standard treatment for schistosomiasis and soil-transmitted helminths from a 2 year study in Uganda

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National-scale schistosomiasis and soil-transmitted helminth (STH) control programmes are now operational across sub-Saharan Africa. The World Health Organization (WHO) recommends monitoring and evaluation as a component of these control programmes to estimate the impact of treatment on levels of infection, often using data collected from the target population of school-aged children (5 to 14 years of age). Nevertheless, infection occurs below and above the school-age and thus age-intensity (AI) and age-prevalence (AP) profiles developed across a wide age-range could help to provide a more accurate picture of the current infection patterns in endemic areas. Data from 7500 individuals were collected from 3 different representative prevalence and treatment history groups in Uganda: 1. "low prevalence and treated" – areas that have suppressed transmission as a result of  $\geq 6$  years of annual mass drug administration (MDA); 2. "low prevalence and untreated" – areas that are at low-prevalence endemic equilibrium; and 3. "high prevalence and treated" – areas still experiencing high levels of infection after  $\geq 6$  years of annual MDA. Results from the first year showed that the age-infection profile for *S. mansoni* followed similar patterns as found in previous studies. For the STH, the overall prevalence was low and a trend could only be seen in the AI profile for hookworm infection, where infection intensities increased with age and reached a plateau. Results from the second year showed similar trends although prevalence and intensity were either at the same level or higher in some age groups than the previous year despite having received treatment. The findings from these will be discussed as well as the conclusions from the full AI and AP analysis and implications for control programmes.