Factors associated with adherence to community-directed treatment with Ivermectin for Onchocerciasis control among adults in Pader District, Northern Uganda

Oyet William Sam

Akello Anne Ruth

Dr. Marc Sam Opollo

2023

Background: Onchocerciasis is caused by a filarial nematode, Onchocerca volvulus, and transmitted by a female black fly of the genus Simulium. Ivermectin Mass Drug administration (IVM MDA) is the primary strategy for controlling Onchocerciasis in the endemic countries including Uganda. Pader district commenced annual IVM MDA implementation in 2008 and semi-annual in 2012. From 2008 to 2022, no study has been conducted on the factors associated with adherence to Ivermectin treatment. The objective of this study was to determine the factors associated with adherence to Ivermectin treatment for Onchocerciasis control among adults in Pader district.

Methodology: A cross-sectional study design that targeted 384 adults who received ivermectin mass drug administration in Pader, between July 2022 and October 2022 was conducted in Pader District. Data was analyzed in STATA version 17. Logistic regression was used to determine the factors associated with adherence to Ivermectin treatment. The factors that show significant association at bivariate analysis were further subjected to multivariate analysis (logistic regression)

Results: The study found out that there was a high level of adherence (67.6%) to Ivermectin treatment in Pader district, with waiting time (AOR=44.1, CI:9.42-206.1), community involvement (AOR=7.19, CI: 1.37-37.8), received health education (AOR=0.09; CI: 0.02-0.35), and CCDs trained (AOR=0.16, CI: 00.02-0.94) showed significant association with ivermectin treatment adherence among respondents.

Conclusions: The community involvement, wasting time, health education received and training CCDs showed good adherence to Ivermectin treatment in Pader district.

Keywords: *Adherence, community-directed treatment, Ivermectin, Onchocerciasis control, adults, Pader District, Northern Uganda*