

DETERMINANTS OF NONADHERENCE TO COMMUNITY-DIRECTED IVERMECTIN TREATMENT FOR ONCHOCERCIASIS CONTROL IN MANNA DISTRICT OF JIMMA ZONE, OROMIYA REGION, SOUTHWEST ETHIOPIA

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Background and Aims: Though a few empirical studies from endemic regions identified some determinants of nonadherence to ivermectin treatment for onchocerciasis control, no attempt was made in Ethiopia in general and Mana district in particular. The present study assessed the demographic, host behaviours, social and service related factors of why some people adhere and others not in Mana district of Jimma zone, southwest Ethiopia.

Methods: Community based unmatched case-control study was conducted. 552 (185 cases and 367 controls) eligible individuals who were registered to take ivermectin annually from 2004-2008 in 7 randomly selected Kebeles out of 25 and chosen based on lottery method through multistage sampling technique constituted the study population. Data were collected using a pre-tested structured questionnaire and interview guide, entered into a computer, edited and analysed using SPSS version 16.0. Stepwise logistic regression model was used to calculate the Odds ratios and 95% confidence interval for the different risk factors.

Results: Out of 552 sampled individuals, 536 participated in the study giving a response rate of 97.1%. Therapeutic coverage and individual adherence rate were found to be 78.2% and 59.7%, respectively. In the bivariate analysis, except the socio-demographic variables ($P > 0.05$), ten of the host behaviours, social and service related variables were statistically significant associations with nonadherence. However, only six factors such as unsatisfactory knowledge of disease signs and symptoms, lack of participation in distributor selection ($P < 0.05$), and lower perceived risk of acquiring the disease, believing height not to be the best dose determination, perceiving distributor performance as poor or very poor, and family not being supportive toward taking ivermectin, were the only significant variables on multivariate analyses (< 0.001).

Conclusions: As some host behaviour, social and service related factors influenced individual nonadherence, appropriate intervention programs targeting health education, community participation and empowerment should be designed.

References:

TL Lakwo DB Gasarasi (2006). Non-adherence to community directed treatment with ivermectin for onchocerciasis control in Rungwe district, Southwest Tanzania East African Medical Journal; 83(6)

William R. Brieger, Joseph C. Okeibunor, Adenike O. Abiose, Richard Ndyomugenyi, William Kisoka, Samuel Wanji, Elizabeth Elhassan, Uche V. Amazigo (2007). Feasibility of measuring compliance to annual ivermectin treatment in the African programme for onchocerciasis control Tropical medicine & International health ; 12 (2), 260-268.

Oyibo WA & Fagbenro-beyiku AF (1998). Evaluation of community compliance with annual ivermectin treatment of onchocerciasis in Patigi, Nigeria. East African medical Journal; 75,237-242