

**Factors Influencing Compliance with Mass Treatment in the National Programme for the  
Elimination of Lymphatic Filariasis in Kenya**

**Doris Wairimu Njomo**

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## ABSTRACT

Lymphatic Filariasis (LF), a neglected tropical disease (NTD) is targeted by the WHO for elimination by the year 2020. The principal strategy of elimination is by interruption of transmission of infection through annual mass treatment using antifilarial drugs. For elimination to occur the drugs should be administered to all at risk population annually for 4-6 years with treatment coverage of at least 65%-80% in each round. In Kenya, mass treatment using diethylcarbamazine (DEC) and albendazole has been conducted thrice (2003, 2005 and 2008) in Kwale and Malindi districts. Data for the three rounds of treatment show declining compliance levels.

To determine the factors that influence community compliance with mass treatment, a retrospective cross-sectional study based on 2008 treatment round was conducted in the two districts. Treatment coverage data from the programme was used to select 2 high (80% and above) and 2 low (below 60%) coverage locations for each district. Through simple random sampling, 9 villages were selected from the four locations and systematic random sampling used to select 965 household heads who were interviewed for quantitative data. For the qualitative data, semi-structured interviews (SSIs) were conducted with 80 opinion leaders, 80 LF patients with clinical manifestations, 15 community drug distributors, 5 health workers, 4 district programme coordinators and the National Programme Manager all purposively selected. Sixteen focus group discussions (FGDs) were conducted with single-sex adult and youth male and female groups. The quantitative data were analyzed using SPSS version 15.0 and the statistical significance of differences was assessed by  $\chi^2$  test and a *P* value of  $\leq 0.05$  was considered significant. The qualitative data were analyzed manually according to the core themes of the study.

The results showed that religion influenced compliance with treatment. Compliance among Christians was higher compared to Muslims ( $P < 0.001$ ). Age, sex and marital status did not influence compliance with treatment ( $P > 0.05$ ). There was a significant difference in compliance with treatment among community members with high income levels and those with low income levels ( $P < 0.05$ ). Compliance was higher among community members who had knowledge of signs, cause of LF and those who considered themselves to be at risk of LF infection compared to those who did not ( $P < 0.001$ ). There was a significant difference in compliance with treatment among the community members who had experienced side effects and those who had not ( $P < 0.001$ ). Social support, alcohol taking and substance use were not associated with compliance. Compliance was higher among community members who received information that the drugs were given to treat and control LF than those who did not ( $P < 0.001$ ).

In conclusion, the results indicate a need for alternative methods of drug distribution to be explored in order to capture non-compliers focusing on the differentials observed above. There is need to invest more in health education and to explore alternative methods of information dissemination so as to create awareness of the treatment. Policy makers need to give priority to LF in budgetary allocations and to show commitment for consistent programme implementation.