

Kigen G, Rotich J, Karimurio J, Rono H. Collateral benefits arising from mass administration of azithromycin in the control of active trachoma in resource limited settings. *Pan Afr Med J.* 2014;19:256

Abstract

Introduction: The benefits of the use of antibiotics in the mass treatment for active trachoma and other diseases have been documented, but the secondary effects arising from such a programme have not been fully elucidated. The purpose of this study was to investigate the potential secondary benefits arising from the use of azithromycin in mass treatment of active trachoma in an economically challenged Kenyan nomadic community.

Methods: Health information reports for January 2005 to December 2010 were reviewed to determine the annual trends of infectious diseases in two districts, Narok and Transmara. The year 2007 was considered as the baseline for mass drug administration (MDA). Odds ratios (OR) were used to describe the association.

Results: The mass distribution coverage in Narok was 83% in 2008, 74% in 2009 and 63% in 2010. The odds for malaria (OR = 1.13; 95% CI 1.12-1.14), diarrhoeal diseases (OR = 1.04; 95% CI 1.01-1.06), urinary tract infections (UTIs) (OR = 1.21; 95% CI 1.17-1.26), intestinal worms (OR, 4.98; 95% CI 4.68-5.3), and respiratory diseases other than pneumonia (OR, 1.15; 95% CI 1.13-1.16) were higher after three rounds of mass treatment, indicating a better outcome. Before the intervention, there was a reducing trend in the odds for respiratory diseases. In Transmara (control), there was an increase in odds for malaria, respiratory infections, UTIs and intestinal worms. The odds for diarrhoeal diseases, skin diseases and pneumonia decreased throughout the study period.

Conclusion: Mass distribution of azithromycin may have contributed to the decrease in the prevalence of the respiratory infections in Narok District.