

Such research has high priority for showing programme ways to use scarce resources effectively for the long term control of trachoma in their communities.

## References

1 West SK, Munoz B, Turner V, Mmbaga BBO, Taylor HR. The epidemiology of trachoma in central Tanzania. *Int J Epidemiol* 1991; **20** : 1088-92

2 Malaty R, Zaki S, Said ME, et al. Extraocular infections in children in areas with endemic trachoma. *J Infect Dis* 1981; **143** : 853

3 Bailey RL, Arullendran P, Whittle HC, Mabey DC. Randomized controlled trial of single-dose azithromycin in treatment of trachoma. *Lancet* 1993; **342** : 453-6

4 Tabbara KF, Abu-El-Asrar A, Al-Omar O, Choudhury AH, Al-Faisal Z. Single dose azithromycin in the treatment of trachoma. A randomized controlled study. *Ophthalmology* 1996; **103** : 842-6

5 Foulds G, Shepard RM, Johnson RB. The pharmacokinetics of azithromycin in human serum and tissues. *J Antimicrob Chemother* 1990; **25** : Suppl A: 73-82

6 Tabbara KF, Al-Kharashi SA, Al-Mansouri SM, et al. Ocular levels of azithromycin. *Arch Ophthalmol* 1998; **116** : 1625-8

7 Schachter J, West SK, Mabey DH et al. Azithromycin in control of trachoma. *Lancet* 1999; **354** : 630-5

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## Report

# Distribution of Azithromycin by Community Health Volunteers in Ghana

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In June and July of this year, an operational study to test the feasibility of using community health volunteers (CHVs) to distribute azithromycin was undertaken in the Daboya subdistrict of Ghana's Northern Region. The objectives of the study were as follows:

- To test the ability and accuracy of community health volunteers (CHVs) in diagnosing active trachoma.
- To test the ability of CHVs to give the correct dose of azithromycin by weight to children and adults.
- To test the ability of CHVs to keep records of tablets received and distributed.
- To test the ability of CHVs to warn patients about possible adverse reactions, recognise them when they occur and take appropriate action if required.



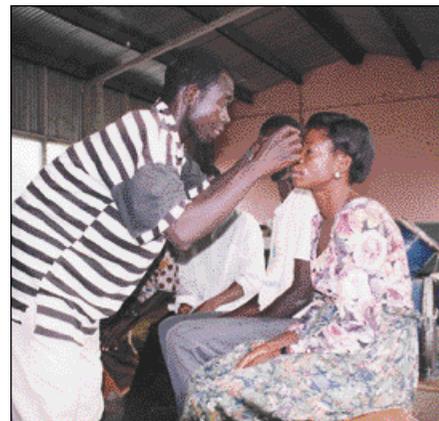
*Peer review formed part of the training programme*

*Photo: Anthony Solomon*

- To test the feasibility of using azithromycin tablets in pre-school children.
- To document the response of each household to all occupants being offered azithromycin.
- To examine the relationship between height and weight in individuals requiring azithromycin for trachoma control.

The six volunteers, who have previously been involved in the Guinea Worm and Onchocerciasis Control Programmes as well as the distribution of ocular tetracycline for trachoma control, were given four days of revision on trachoma, and training in the use of azithromycin. Education sessions included theory, practical sessions teaching eye examination skills and the techniques for weighing and measuring, dose calculation and drug preparation. The CHVs then examined a total of 675 individuals in ninety households in local villages, looking for evidence of trachoma. They were accompanied by supervisors who independently examined all subjects, and intervened in treatment only when mistakes were about to be made. Azithromycin (a single dose of approximately 20mg/kg) was given to all individuals in any household in which there was at least one case of active trachoma.

The volunteers performed creditably. The decision to treat or not treat each household was correct on more than four out of every five occasions. The dosing reliability and drug management skills of CHVs were generally good. Community response was very positive, refusal of examination or treatment rare, and adverse reactions infrequent.



*Practising eyelid eversion: Godwin Yidana examining Sadia Inusah*

*Photo: Anthony Solomon*

Both 250mg tablets and suspension 200mg/5mL were available. Nearly all those 4 years of age and older were able to take tablets. Height and weight data was recorded for all individuals in treatable households, and the correlation between the two suggests that height could be used instead of weight for dose determination for those people able to take tablets. Given the practical difficulties involved with using weighing scales in remote settings, this finding could be of great potential benefit. Unfortunately, using height or length to predict dose for children requiring suspension was less reliable.

The major problems encountered in the study were weighing procedures, the use of azithromycin suspension, and volunteers' record keeping.

At the conclusion of the study, both volunteers and supervisors felt that a longer training period would have been of benefit. It is suggested that future education efforts would place more emphasis on the diagnosis of TF and TI at the expense of time spent learning about TS and CO. Additionally, more teaching time should be devoted to drug side-effects and record keeping skills.

A paper is in preparation.

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