## Bridging the Language Barrier in Health Awareness

Awareness of diseases in African communities frequently correlates with the outward manifestation of the disease process. In ophthalmology, the leukokoria of cataract has given rise to several local terms for this cause of blindness. The second most common cause of blindness in these communities<sup>1,2</sup> unfortunately does not have any observable signs to the lay public. A person with glaucoma is frequently unaware of the disease process (progressive visual field loss) until the very last stages. Therapy to prevent blindness from glaucoma has proven effective.<sup>3</sup>

In the Akan community in Ghana, Ntim-Amponsah et al<sup>4</sup> showed that many ascribed loss of sight from glaucoma to *kooko*. Literally translated as hemorrhoids, *kooko* represents any disease considered better treated by traditional remedies.

To bridge the gap between public awareness and presentation/acceptance of therapy, health education will be key. We report a study investigating the use of a local word for glaucoma compared with the medical terminology. Ethical permission was given by the municipal ethics committee of Asante Akyem North, Ghana, and the ethics committee of the London School of Hygiene and Tropical Medicine.

**Methods** | Using an information sheet, we explained the disease to Prof Kwadwo Agyekum of the School of Linguistics in Accra, Ghana. He then created 3 Akan names for the disease in the language Twi.

1. See aninhoma, meaning destroyer of the wires of the eye.

- 2. *Hunta frayɛ*, meaning a hidden or silent blinding condition.
- 3. *Kum aninhoma*, meaning a killer of the wires of the eye.

These names were pilot tested at Agogo Hospital near Kumasi among Akan patients from both the eye clinic and the general clinic. Using the information sheet, glaucoma was explained to 50 individuals. They were then asked to select the name that best fit their understanding of the condition and would help them remember the disease. Twenty-nine (57%) chose *hunta fraye*, 11 (23%) chose *see aninhoma*, and 10 (20%) chose *kum aninhoma*.

A public health presentation was then made in 5 churches, 2 in Juansa-Dome and 3 in Nyaboo-Patrensa. Both villages are in the Asante Akyem North district of the Ashanti region in Ghana. These communities are rural and the people speak Twi, an Akan language. Prior to the presentation, a structured interview asked participants to list known causes of blindness and state what they know about glaucoma and *hunta fraye*. The health talk was then given. In Juansa-Dome, the Akan word *hunta fraye* was used as the disease name; in Nyaboo-Patrensa, the term *glaucoma* was used. Twenty-eight days after the talk, participants were contacted and the structured interview was repeated. Knowledge of glaucoma was assessed by an independent observer using an agreed-upon grading system and masked to the study group.

**Results** | The **Table** shows an extremely positive effect in awareness following the health presentation in both communities.

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	No. (%)						
	Heard of Disease		Knowledge of Disease				
Term and	Before		Before	>28 d			
Community	Presentation	>28 d	Presentation	Good	Poor		
<i>Glaucoma,</i> Nyaboo- Patrensa	15/93 (16)	85/86 (99)	0/93	34/86 (40)	20/86 (23)		
Hunta frayɛ, Juansa- Dome	0/60	49/49 (100)	0/61	30/49 (61)	10/49 (21)		

Knowledge of the disease was retained better in Juansa-Dome, where the new Twi word *hunta fraye* was used for the disease ( $\chi^2 = 6.9$ ; *P* = .03).

**Discussion** | To our knowledge, this is the first study to investigate the effect of introducing of a new term for an ophthalmic disease. Our results suggest that a health talk raises awareness regardless of the term used, but knowledge of the disease is better retained when a local term is used.

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