

# The Akhonya Dental Project: a new charity aiming to provide oral health education and preventative care in Kenya

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FEATURE

Kenya is a country plagued by HIV and lacking in adequate healthcare resources, and despite dental caries remaining the most common disease in the world, there is estimated to be only one dentist per 100,000 population in Kenya. Evidence suggests that many Kenyans are unaware of the causes of dental disease and half of the population are unaware of measures that can be taken to prevent dental disease. Oral health education is a clearly vital for improving the health of the Kenyan population. The Akhonya Dental Project is a new charity which aims to provide oral health education, prevention and treatment for AIDS orphans in rural Kenya. This article describes the ethos of the charity and long-term aim to increase oral health awareness in the region.

Kenya has the best developed economy in eastern Africa with relatively advanced agricultural and industrial sectors and substantial foreign exchange earnings from agricultural exports and tourism. However, Kenya has low income and was ranked 147th out of 182 countries in terms of life expectancy, literacy levels and standard of living.<sup>1</sup> The World Health Organization (WHO) estimate that 22.8% of the population are living in poverty (<\$1 per day to live on).<sup>2</sup>

Dental care for many rural communities in Kenya is non-existent as transport difficulties and cost make care inaccessible. The WHO estimates there is approximately one dentist per 100,000 population,<sup>2</sup> with the majority of dentists living and practising in urban areas which are inhabited by only 20% of the population. Oral health education is also deficient; a 2006 rural community-based study of 141 adults presenting for a dental check up found that 43% did not know any causes of dental diseases, 50% did not know any preventive measures for dental diseases and only 0.8% mentioned the use of fluoridated toothpaste as a preventive measure for dental caries.<sup>3</sup>

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**Fig. 1** The resource centre at the Akhonya Trust Children's Home which will contain the dental unit

The widespread accessibility and use of fluoride in the Western world has had a significant impact on dental health and has been proven to be the most effective preventive public health measure against caries. However, the cost of fluoride toothpaste is incredibly high in countries such as Kenya, preventing its widespread use. For example, in the UK for the poorest 30% of the population only 0.037 days of household expenditure is needed to purchase the annual average dosage of

the lowest cost toothpaste, compared to 10.75 days in Kenya.<sup>4</sup>

There is therefore substantial evidence to suggest that rural communities in Kenya would benefit greatly from oral health-care and education. The Akhonya Dental Project aims to fulfil some of this role by providing this education and preventative care to a community in Emantunde, near Mumias, in Western Kenya. The Akhonya Dental Project will form a new distinct branch of the well-established charity the

Akhonya Trust, which currently works to improve the quality of life of vulnerable children, families affected by HIV/AIDS and to provide support within their communities with emphasis on community-driven solutions rather than 'handouts'. HIV affects 6.125% of the adult population in Kenya and accounts for around 15,000 deaths per year.<sup>2</sup>

The Akhonya Trust is currently supporting three main projects:

- The Akhonya Trust Children's Home (Fig. 1), providing education and care to 130 orphans of HIV/AIDS (Fig. 2): an eight-acre site containing two dormitories, a home for disabled children and a water well. The Trust offer resources for the community such as animals and a one-acre plot of land nearby which provides food and horticultural skills for the children at the home; a centre and workshop which teach marketable skills such as carpentry, metalwork, and knitting; and a library to give a secure space where the children can study
- SAIPEH – HIV/AIDS awareness education and the provision of guardianship and education for orphans
- Corrective surgery and assistance for special needs children.

Currently the children at the home do not receive any dental care and few even own a toothbrush. The Akhonya Dental Project aims to set up a dental unit at the site of the home where preventative care and simple examinations and treatments can be provided every six months by pairs of volunteers. To support the idea of ownership and involvement, local carers at the home will be taught both how to provide oral care and health education for the children



**Fig. 2** AIDS orphans who will receive dental care at the Akhonya Trust home

and how to run the dental unit to allow long-term consistent care from different volunteers. Once the unit is established it will act as a base for outreach into the local community to allow further assessment of the needs of the community.

Funding for the initial set-up of the Akhonya Dental Project will come from fundraising events and donations. Following the success of a summer festival in August 2009, further similar events are planned and the author is currently training to run the Edinburgh Marathon in 2010. However, further support is required and any advice, donations or equipment would be greatly appreciated. Equipment required includes:

- Toothpaste/toothbrushes
- Examination mirrors and probes
- Hand excavators, flat plastics, spatulas
- Forceps and elevators

- Autoclave for sterilisation
- Local anaesthetic equipment
- Glass ionomer cement
- Fluoride varnish
- Gloves, masks, aprons, goggles.

One hundred percent of money raised goes to the Akhonya Dental Project.

*For more information about the Akhonya Trust, please see the website at [www.akhonyatrust.org](http://www.akhonyatrust.org). For support and donations please contact Sophy Barber at [sophy.barber@googlemail.com](mailto:sophy.barber@googlemail.com).*

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