

PRIMARY EYECARE EDUCATION IN THE DEVELOPING COUNTRIES OF AFRICA

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Eye care personnel and facilities are uniformly scarce in the developing countries of Africa. War and famine affected areas need relief aid eye care with short-term solutions to the most common and severe problems provided as soon as possible. More stable areas require development of a sustainable system.

Self reliance and self determination are important to the people of Africa, as they are to people in general, so the "ownership" of eye care is critical to the long-term viability of any solutions. Africa, with a few exceptions, is also extremely poor; so eye care projects also need to be highly efficient to be economically sustainable.

Eye Care in East Africa:

Tanzania

Tanzania shows the difficulties and possibilities of self-determined eye care on the African continent. The population is 35 million, the people are poor, with per capita income at US\$610, they are highly religious people and there is peace.

Tanzania is mainly agricultural (90% rural) with only 50% finishing primary school, and 3% high school. Average life expectancy is 52 years.

Poverty and lack of urbanisation affect the development of eyecare education and service delivery. Only the urban elite populations have any opportunity to attain tertiary qualifications, and they do not settle in rural areas after graduation. 90% of the population lives and requires eye care in rural areas.

Eyecare Personnel In Tanzania

- 20 Ophthalmologists
- 120 Optometrists
- 50 assistant medical officers in ophthalmology (AMO-Os), some of whom do cataract surgery, and
- 130 ophthalmic nurses (who work with ophthalmologists and/or AMO-Os).

Optometrists are by far the largest group with a potential to work independently towards the goals of Vision 2020. However, they are currently inadequately trained to do so.

KCMC Hospital

KCMC Hospital in conjunction with Tumaini University, both situated in northern Tanzania, provide the only optometry course in eastern Africa. The course is of 3 years duration

Topics of study include:

- refraction and dispensing
- Spectacle making and dispensing forms the majority of the course.

Basic science teaching, clinical problem-solving, ocular pathology, contact lenses, low vision and paediatric teaching are all minimal; there is no diagnostic or therapeutic drug teaching.

KCMC Hospital has an actively evolving Ophthalmology Department that recognises the need for primary eye care, and that Ophthalmology is unable to provide it widely enough.

Due to the high costs to the Government of producing Ophthalmologists, ophthalmology is searching for partners to provide integrated primary and secondary eye care.

Solutions to Eye Care Problems in East Africa:

Tanzania - The Eye Care Development Model

Services should be delivered by local people speaking local languages, and be accessible to the rural population in terms of distance and affordability.

KCMC, Tumbaini University and ICEE are working together to develop eye care in Tanzania. The following strategies are being used to facilitate the development of primary eye care education:

- Modularisation of education, with multiple entry and exit points;
- Designing the modular system to be hierarchical and selective at each stage, and
- Amalgamating and coordinating the education programs of different eye care professions in every way possible.

Modular education with multiple entry and exit points allows a single system to produce Community Eye Care Workers, Dispensing Opticians, Refractionists, Optometrists and Optometric Doctors. Each of these cadres of primary eye care workers are useful in developing countries.

In addition to facilitating the organization and restructure of local primary eye care education, ICEE is involved in the development of educational resources at KCMC/ Tumbaini University. The Tanzanian institutions require continued international input for both organization and resource mobilisation.

Summary:

International optometry and NGOs like ICEE have a vital role in supporting both eye care relief and long-term eye care delivery system development in the developing countries of Africa. Eye care relief requires short courses in primary eye care, including refraction, for personnel working in unstable communities (who are most at-risk of preventable blindness). Eye care development requires improved eye care education, more institutions providing eye care education, and work with governments to have each cadre of eye care worker correctly recognised for their skills and qualifications. These roles will require long-term financial, intellectual and professional support.