

## **BICO projects and progress Reports for 2010**

**BICO was set up in 2008 at Lions Sight First Eye Hospital with the aim of contributing to the prevention of blindness in Malawi and Southern Africa and the achievement of global VISION2020.**

**With various supporting and funding partners, BICO implemented the following research projects and activities in 2010.**

### **1. African Health sciences Research institute (AHSI project): Funded by Canadian Institute for Health Research (CIHR) 2010-2012**

Task shifting in Eastern & Southern Africa (Kenya, Ethiopia, Tanzania & Malawi): Assessing the productivity and quality of eye care services to assist in decision making.

A shortage of skilled health workers is one constraint to better health care in sub-Saharan Africa. For many years, to cope with this shortage, African governments and other providers have practiced “task shifting,” i.e. allocating health care roles and procedures to less specialized health workers.

However, little is known about the strengths and weakness of this strategy, about the productivity and quality of services provided, or the retention and satisfaction of the personnel involved.

The main objective of this study is to critically examine the impact on eye care of task shifting to primary and mid level personnel, including productivity and attrition, and on the quality and equity of eye care services that they provide (including visual outcome and patient satisfaction) in eastern Africa.

Information generated from this project, including the role of knowledge and knowledge systems will have relevance beyond the provision of eye care. Lessons learned can be translated to the provision of other health services in Africa.

### **Activities for Malawi**

The CO PI for the entire study and the PI Malawi is Dr Khumbo Kalua, a well known public Health Ophthalmologist Researcher who is attached to the London School of hygiene and Tropical medicine for his PhD.

A full time Research Assistant is employed for daily coordination of this project which is one of the projects being coordinated under BICO from Lions Sight First Eye hospital, Blantyre, Malawi.

The targeted districts are Mulanje and Machinga Districts. After baseline survey in both Mulanje and Machinga, Mulanje will have an enhanced additional supervision among its primary eye care workers

and the results will be compared with Machinga who will not offer enhanced supervision for a period of 2 years.

The first half of year 1 of the project has gone well as described from activities below.

Dr Kalua visited KCCO in March 2010 to finalize the logistics for the project.

Briefing of the District Management teams for Both Mulanje and Machinga was completed by July 2010.

In August and September 2010 training of Ophthalmic Clinical Officers (who will offer enhanced supervision) from the two districts was done at BICO headquarters, Lions Sight First Eye Hospital.

Field work commenced on 13<sup>th</sup> September and detailed activities about the programme are discussed below.

### **Visit to Mulanje for commencement of Task Shifting Project**

#### **Baseline data collection**

It was the 13<sup>th</sup> day of the month of September, 2010 when field work for the Task Shifting Project officials commenced in Mulanje, Southern Malawi . Mulanje District has 23 health centres.

On this day, we managed to collect data from two Health Centers; Chisitu and Chonde. Chisitu is just about 14 kilometers from Mulanje district hospital and is just a few meters from the improved tarred road. We decided to use Chisitu as a sample, as such the data collected at this Health Center will not be part of the research but the data collected at Chonde Health Center will be used in the research.

We arrived at Chisitu Health Center at about 10.45 am and managed to interview two people; a nurse and patient attendant. We could not interview the Medical Assistant because the Health Centre had none. It was impressive to see a nurse at Chisitu Health Centre who graduated in the year 1978 to still be able to remember what she learnt in college about eye care. She answered well most the questions that were prepared for the interview as regards to eye care. We also interviewed the patient attendant at Chisitu Health Centre who admitted to be attending to eye patients but whose knowledge of primary eye care was not good. We left Chisitu at about 11.30 in the morning and went to Chonde Health Centre.

Chonde Health Center is about 24 kilometers from Mulanje district hospital and is connected with an improved tarred road. The health center has a catchment population of about 42,023. At Chonde health centre we interviewed 8 people. Of the eight, one was a Clinical Officer, one Medical Assistant, two Nurses and four Hospital attendants.

#### **Third visit to Mulanje: Continuation of Baseline data collection**

On the 14<sup>th</sup> of September, 2010, we went back to Mulanje to continue with the activity of interviewing health workers in the health centers. The first health that we visited on this day is Muloza. Muloza health center is near the border between Malawi and Mozambique and is located about 35 kilometers from Mulanje district hospital. This health centre has a catchment population of about 41,089. The health center has one medical assistant, one nurse and five hospital attendants. We managed to interview the medical assistant, the nurse and four attendants. From Muloza we went to Mimosa health centre where we could not find the nurse and not even the hospital attendant. We agreed that we should visit the health centre again someday.

We left Mimosa health center and drove to Lujeri Health center which is about 25 km from the district hospital. We arrived at Lujeri health center at about 1.30 pm. Lujeri health center has a catchment population of about 41000 and is in Lujeri tea estate. At Lujeri we interviewed six people; one medical assistant, one nurse and four attendants.

### **First visit to Machinga District for Task shifting baseline data collection**

As planned on the 14<sup>th</sup> of September, 2010, baseline data collection started in Machinga district. We met the District Medical Officer and briefed him about the project. After briefing the DMO, we left for Mlomba health center.

Mlomba health center is located about 30 kilometers from the district hospital is connected with a tarred road. We arrived at this health center at about 10.47 in the morning. The health has one Medical assistant and one attendant. We could not find the Medical assistant so we only interviewed the attendant. We left Mlomba health center at around 11.34 in the morning for Nsanama health center.

Nsanama health center is located about 42 kilometers from the district hospital and is connected with a tarred road. At Nsanama health center we interviewed eight people; 1 Clinical officer, six nurses and one attendant.

### **Commencement of Enhanced supervision in Mulanje**

This started in October 2010 and has been going well.

### **Other activities for AHSI research**

Questionnaires were sent to all Trachoma and cataract surgeons in Malawi and 93% of all trichiasis and 100% of cataract surgeons have responded.

## **2. Phalombe children's Eye care project**

### **Funded through Lions Club of Limbe by Lions Club of Perugia Italy; coordinated by BICO**

The program aims to screen children with cataract, refractive errors and other treatable conditions and provide glasses to school children that have visual problems and require glasses in Phalombe district.

The programme uses the key informant method and other methods to identify these children. The programme is implemented by BICO in conjunction with Lions Club of Limbe. This programme is an extension of the Childhood Blindness Project at Lions Sight First Eye Hospital that was carried out as part of the PhD research for the director of BICO (Dr Kalua).

The Phalombe children's project has been a great success.

Over 600 children in Phalombe have been screened and over 30 have received eye glasses and 10 have been diagnosed with cataract and have benefited from surgery. The Lions Club of Limbe have renovated/painted a resource centre for the blind, and donated beds, mattresses and mosquito nets all through the funding obtained from Perugia.

So far 4 screenings have been conducted.

The project is expected to wind up in March 2010.

### **3. Visit of Lecturers and Optometry students at BICO from University of Waterloo**

Two Optometry students from University of Waterloo Canada visited BICO for 8 weeks between August and October 2010 for an elective training programme in clinical and community Ophthalmology. They participated in the children's screening programmes in Phalombe District. Following their successful visit 7 more students from university of Waterloo have requested for a VISIT in 2011. Dr Kalua is an honorary lecturer for the University.

Dr Dan Hayhoe from Future VISION Ministries visited BICO in August 2010 and Dr Kalua was asked to be a board member of FVM project in Malawi.

### **4. Launching of the BICO Website**

**2010 marked a history among the activities of BICO in that a website was launched in October 2011.**

The website can be viewed at <http://www.bicomalawi.org>. This website is a rich source of information about BICO and the research projects that are undertaken by BICO. It also has links to other sites like KCCO etc.

### **5. Receive of Award of A2Z for global base knowledge research in childhood blindness**

In August 2010 BICO was notified of the award from A2Z (USAID) for the childhood blindness project in Zomba, Balaka and Machinga. The project is jointly being carried with International Eye Foundation (USA) and will be completed by July 2011. The project aims to collect data that will increase global base

knowledge from the community of why approximately than 50% of children who have been diagnosed with cataract and counseled to come to LIONS hospital for surgery do not still come despite been offered transport incentives .All children that were identified from KI screenings to have cataract and did or did not report will be tracked back in the community and their parents and community will be interviewed qualitatively.

## **6. Ongoing Childhood Blindness project in Balaka and Machinga**

The KI and HSA's trainings initiated by BICO in 2008 have continued in Balaka and Machinga, but this time supported through KCCO from SEVA Canada and LIONS International. BICO continues to give technical input to the project and update training materials for the KI.

## **8. Co-authoring of the KI manual for Africa**

Together with KCCO, BICO has co authored the Key informant Training Manual for Africa which is currently in place and ready to come out in 2011.

## **7. Situational analysis of Eye services in the South East Zone**

BICO conducted this survey in 6 districts on behalf of Lions Aid Norway –who have built an eye hospital in Zomba and are supporting eye services in two zones in Malawi (North and South east) North Zone

8. RAAB survey in South West Zone

BICO conducted on behalf of Sight Savers a RAAB survey for services in south West zone of Malawi (7 districts).The survey was coordinated by London School of Hygiene and Tropical medicine.

## **8. BICO's International meetings/visits/presentations/publications**

### **1. KCCO, Tanzania**

Gender and Eye Health workshop March 2010

AHSI/Task shifting planning Meeting March 2010

### **2. Global Elimination for Blinding Trachoma 2020 in Geneva**

April 2010

### **3. International Centre for Eye Health London, London**

May 2010, August 2010, Nov-Dec 2010

### **4. World congress of Ophthalmology, Berlin, Germany**

June 2010

**5. World Retinoblastoma meeting Kenya**

**September 2010**

**6. Results of Malawi Trachoma Prevalence survey published in “Plos One Journal”**