

## **Report on Mbeya Paediatric Outreach:**

### **A joint Mbeya Referral Hospital, CCBRT, MNH and KCCO Childhood Cataract Surgery Initiative**

**1 - 10 September 2008**



Treatment of eye problems in children is often a matter of urgency. In children with congenital cataract, the visual pathways or connections in the brain do not develop properly. Early treatment or surgery, plus proper follow-up with glasses, increases the likelihood of better vision. In eastern Africa, a leading cause of blindness in children is cataract and in Tanzania, as in most African countries, there is a large backlog of congenital and developmental cataract. To address the urgent problem of childhood cataract, the Kilimanjaro Centre for Community Ophthalmology and partners have been conducting a series of paediatric surgical camps in both the far north and the south of the country, in areas that are far from the two surgical hospitals.

To address the issue of childhood blindness in Tanzania, especially childhood cataract, KCCO and the Comprehensive Community Based Rehabilitation in Tanzania (CCBRT) started paediatric surgery outreach activities in 2007 in Mwanza on Lake Victoria; three outreach camps have been conducted in Mwanza since then. The Mwanza outreach was started after it was realized that most parents were unwilling to travel to either the CCBRT Hospital in Dar es Salaam or the Kilimanjaro Christian Medical Centre in Moshi with their children for surgery. The Mwanza outreach was very successful.

Few children in southern Tanzania receive much-needed eye surgery, and the success in Mwanza encouraged the development of an outreach program in the southern region of Mbeya. See appendix for a map of Tanzania showing the childhood cataract surgical rate region by region.

KCCO, in collaboration with CCBRT and Muhumbili National Hospital (MNH), organized a two-week childhood cataract surgery camp at Mbeya Referral Hospital. In Mbeya, in preparation for the camp, staff from KCCO and Mbeya Referral Hospital conducted a one-day training session on childhood cataract for Ministry of Health (MoH) eye health staff from the 5 southern Tanzania regions of Ruvuma, Rukwa, Mbeya, Iringa, and Tabora. This took place in February 2008. Following this, on July 14, a planning session was held in Mbeya with 25 participants from CCBRT, MNH, KCCO, and MoH workers from the identified regions. Each group was made responsible for specific parts of the programme.

It was agreed that KCCO would cover all the costs of promotion, patient food, coordination, low vision services and transport. Funding for the outreach program was provided by Seva Canada thanks to a generous donation from Ms. Nancy Mortifee, a Seva Canada board member, and the Somerset Foundation. CCBRT agreed to provide consumables such as intraocular lenses and spectacles, while MNH paid for the overtime allowances. All medical services, food, and transport for the patients were provided free of charge.



The outreach lasted 10 days from September 1-10, 2008. A total of 121 children ranging from 4 months to age 16 were screened, of which 58 needed surgical intervention (48%). Of those 58 children who had surgery, 29 children (17 girls and 12 boys) received sight-restoring cataract surgery. The other 29 surgeries included the correction of strabismus (squints), enucleation, nasal lachrymal duct probing, pupiloplasty and others.

*All children from Mbeya and the nearby regions including children from schools/annexes for the blind accessed the services.*

The clinic was particularly busy on the first and second days suggesting that the promotion was done well.

*Parents with their children waiting to be seen by the ophthalmologist.*



Having three ophthalmologists (Dr Gerald Msukwa, Dr Judith Mwende and Dr Hemed Kilima) allowed theatre and clinic work to run concurrently. Dr Mwende (MNH) is a fellowship trained ophthalmologist. Dr Msukwa, from Malawi, is in fellowship training at CCBRT at the present time.

*The surgeries started on 2 September, the second day of the outreach.*



The work went well and Monday of the following week of the outreach (8 September) there were 15 discharges. All were in good condition and it was decided that the follow up visits will be scheduled for November.



*Excited parents with their children waving happily after the cataract surgeries, which we anticipate will bring new hope to their families*

As it was the first pediatric cataract outreach conducted in Mbeya, a few problems were encountered, the main one being delay in starting theatre work caused by late starting of the clinic work. There was poor cooperation by the anesthesiologist from the referral hospital.

#### Total patients attending the outreach

Cataract				Other cases		Total screened
Bilateral	Unilateral	Traumatic	Congenital or Developmental cataract	Allergic conjunctivitis	Others	
17	14	5	26	15	75	121

#### Total operations during the outreach

Diagnosed(eyes)		Operated on		Surgery not indicated		Total operations
Cataract	Others	Cataract	Others	Cataract	Others	
44	15	43	15	1	0	58

The 43 cataract operations were done in 29 children. While it is impossible to quantify the enormous impact of restoring the sight to a blind child, one can think about it in terms of “blind years”. It should be remembered that each child is expected to live 50 years without blindness; thus, for childhood cataract, the surgical outreach program at Mbeya in September 2008 led to 1,450 years without blindness.

But there is more to be done. Most of the children came from Mbeya Region, indicating that promotion done in the other four regions were not effective. The next outreach will require much more dedicated promotion, better case detection, transport, and referral to Mbeya. Three children arrived at Mbeya Hospital after the team left. They were diagnosed with cataract and referred to CCBRT for surgery.

Region	Cataract		Other cases	
	Boys	Girls	Boys	Girls
Mbeya	7	13	52	35
Iringa	1	1	–	–
Rukwa	1	3	1	–
Ruvuma	3	-	–	–
Total	12	17	52	35



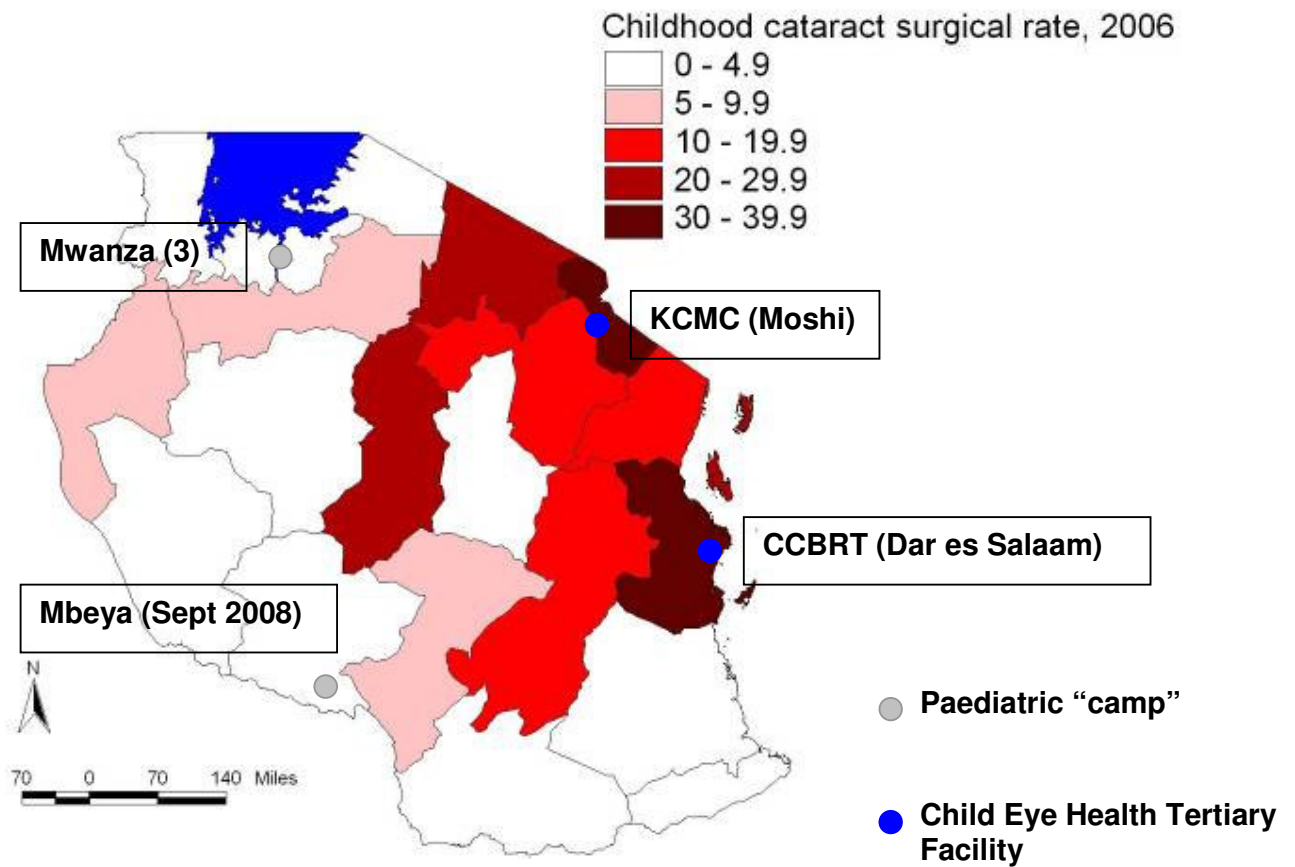
*Examples of cases attending the outreach.*

### **Recommendations arising from the outreach**

1. It is recommended that the clinical work start two days before the date set for start of surgeries to ensure that there are minimal delays in surgical services.
1. Any allowances recommended for the staff be paid in a timely fashion.
2. Regional eye coordinators in surrounding regions need to be encouraged to create a list of children and ensure that they get to Mbeya.

The commitment and hard work of the outreach team (Mbeya Referral Hospital, Mbeya Regional Hospital, CCBRT, MNH and KCCO) have led to the remarkable success of the outreach. We remain thankful to Nancy Mortifee and the Somerset Foundation for their support and to the management and staff of Mbeya Referral Hospital for their good cooperation and hospitality.

***Prepared by Fortunate Shija***

**Appendix 1: Map of Mbeya Area**

## Appendix 2: Sight restoration stories from the Mbeya Outreach Camp



CASE 1: The Changa family: Gerald, Huzuni and Sadam

The Changa family had been devastated by blindness. Three of the four children were blind. The eldest, Gerald, age 8, (*above left*) had bilateral congenital cataract. So did his younger sister, Huzuni (*above right*), age 6, whose name means “sadness”. Little Sadam (*centre*), age 3, had strabismus, also called alternate squints, in both eyes, meaning that neither of his eyes was straight or focused. In an effort to see, Sadam would move his head this way and that, trying to get a sliver of sight from his misdirected eyes.

The Changa family is poor. The mother is a subsistence farmer in a rural area of Mbeya. The strain of having three blind children in one household was too much and the parents separated, leaving the mother to care for 4 children, including a baby. On the first day of the outreach in Mbeya, a local nurse who knew the family went to their home and found the three blind children at home, alone. With the help of a teacher, she washed the children and took them to hospital, leaving a message for the mother to say that she had taken the children for care.

The mother had not heard about the outreach program. The next day she arrived at the hospital and gave her consent for surgery for all three children. She was happy that the nurse had come to find the children. “I felt I was cursed, having three blind children,” she said. All three children needed surgery on both eyes and as the surgeries were being done, their father came to the hospital and the family, now facing a much brighter future, was reunited. The two children with bilateral cataract would now be able to attend school, learn Swahili, and play with other children. Little Sadam’s surgery to correct his squint might not have a profound effect on his vision, but would dramatically change his quality of life.

## CASE 2: Ibrahim



*Ibrahi, above, in the red vest and green shirt.*

Ibrahim, age 15, had bilateral developmental cataract and was having increasing trouble at school. He was in Form 1 (Grade 8) but was struggling to see and got severe headaches trying to see the chalkboard. Each day he would come home exhausted and miserable, crying with frustration. After sight-restoration surgery on both eyes he was delighted. He's very keen on school and was relieved that he would be able to sit his exams.

## CASE 3: Maifred



*After one surgery.*

Maifred, age 3, was blind from bilateral cataract. When he came to hospital he couldn't see anything and needed to be carried and spoon-fed by his mother. But after his first surgery, he could see a bit. His character immediately changed and he reveled in his new-found independence. He refused to be spoon-fed and wanted to feed himself. In fact, he turned out to be a bit of a little rascal and would go and take food from the trays of some of the other patients who were still blind! After his second surgery, he could walk alone and run around. He didn't want any more help from his mother, who used to carry him around. He was intensely curious about everything; in all of the photos taken of him he is looking this way and that, exploring this new world of sight.



*After both surgeries.*