

The Order of St Lazarus Commandery of Wales

Kenya Telemedicine Project

Update December 2019

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The Order of St Lazarus Commandery of Wales has been most generous to the Samburu Trust in Kenya over the last year to help treat both acute and chronic medical problems. The Trust is very grateful for this donation, which has made an immediate difference to Samburu health and wellbeing.



We have established a strong telemedicine link as a result of previous donations from the Commandery, which has resulted in a virtual clinic run through a mobile phone application. This autumn I also visited the area with my family and we were able to deliver supplies and help see some patients.

In this update I will describe the surgical eye camp that was just finishing when we arrived in Kenya, only possible as a direct result of the generosity of the Order of St Lazarus Commandery of Wales.

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The main aim of the surgical camp was to prevent blindness from trachoma. This is a chronic infectious eye disease with 150 million people affected worldwide, 5.5 million are at risk of blindness because of the disease. It is spread by flies, direct contact and shared bedding. Unfortunately, trachoma is a particular problem for the Samburu people of Kenya because of their nomadic pastoralist lifestyle.



Figure 1: Trachoma is spread through flies, direct contact and shared bedding

The disease starts in childhood with bouts of severe conjunctivitis when the eyes are very red and swollen. With repeated infection the undersurface of the eyelid becomes scarred and drags the eyelashes inwards, scratching on the surface of the eye until vision is lost.



Figure 2: A child with active trachoma conjunctivitis



Figure 3: Typical scarring under the eyelid caused by trachoma



Figure 4: The scarring pulls the eyelashes inwards scratching the cornea until vision is lost.

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Once the disease gets to this stage only surgery will prevent blindness. We use the WHO recommended procedure called the bilamellar tarsal rotation. Under local anaesthetic, the eyelid is split, everted and held in place with sutures. Dressings are applied which are removed after a day. The sutures are removed after a week.



Figure 5: The eyelid is split during the surgery



Figure 6: Sutures are placed to hold the eyelid in a new position



Figure 7: Sometimes both eyes are operated on, as long as the patient has a guide to bring them back the next day for dressing removal.



Figure 8: Typical appearance the day after surgery where both upper and lower eyelids have been repositioned.

These operations were carried out in a specially designed surgical tent, which has an outer shaded area for looking after patients before and after surgery, then an inner surgical area which is kept as clean as possible. Only the surgeon and his assistant are allowed in this area.



Figure 9: The surgical tent which can be erected anywhere.

On this surgical camp, 178 eyelids were operated on successfully. There was one post-operative infection treated with antibiotics and one patient needed to be re-sutured after one stitch came out. We will attempt to locate the patients in a year to make sure that the operation continues to be successful as we know that the inturned eyelashes sometimes recur.

When we first started these surgical camps in 2003, we took a team of 10 people out from the UK. The team now comprises all local people who we have trained, with one surgeon from the nearest city who is paid for his services and has also been trained by us. As you can imagine, this brings the financial and environmental cost down considerably making the project sustainable in the long term.



Figure 10: Samburu ladies waiting to have their dressing removed. The red eyepatches were suggested by one of our Samburu trachoma monitors to make the white eye dressings look less scary to their children.

2019 has been a busy year working with the Samburu tribe in our rural clinic in northern Kenya. There have been moments of joy when patients have done well and equally times of immense sadness when the harsh reality of living without any immediate healthcare becomes all too apparent.

The combination of hard-working staff on the ground and virtual support from the telemedicine clinic has proved to be powerful; we are now able to conduct live consultations between specialists in the UK and patients in Kenya.

Thank you once again from the Samburu people to The Order of St Lazarus Commandery of Wales for their continued generous support of this project.

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