Bugarika Project Report for the Against Malaria Foundation

Background

Kids Aid Tanzania (KAT) has been supporting orphanages in Mwanza, on the south east shore of Lake Victoria since 2005. In 2009 two of its trustees were invited to meet members of the Lions Club of Ilemela, who were concerned at very high levels of malaria amongst children in a large squatter settlement located on some of the high rocky outcrops which form a feature of the town. They asked for assistance in addressing the problem. Visits were made to the settlement where we met Dr George Yamwaka, the medical officer in charge of the Bugarika dispensary, who confirmed the problem. He told us that it arose from a lack of understanding of how malaria was caused, poverty resulting in an inability to afford bed nets or to replace nets with holes in, and the hard rock on which the houses were built, leading to the damp conditions which were ideal breeding grounds for malaria-carrying mosquitoes. These arose from both rain, leading to large pools of standing water, and insufficiently deep toilets. He considered that a programme was needed to provide both malaria education and bed net distribution, as the town did not have the means to address the malaria breeding places.







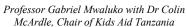
Standing water near the dispensary



Two typical toilets

KAT then met Professor Gabriel Mwaluko M.D., Ph.D., the Charter (i.e. founding) President of the Ilemela Lions Club. He is one of Tanzania's leading medical experts, a frequent contributor to World Health Organisation projects in the country, and Technical Director of TANESA, the principal NGO in the Lakes Region of Tanzania addressing the HIV/AIDS pandemic which has resulted in over 1,000,000 Tanzanian children losing their parents. He emphasized the importance of ensuring that any project be conducted in a manner consistent with the approach recommended by the Tanzania Ministry of Health and Social Welfare Malaria Programme. This included education, provision of insecticide-treated bed nets and focusing these on children under 5 years of age and expectant mothers. He agreed to undertake the role of project manager and obtained support for the project from health departments at national and local level.







Dr George Yamwaka



Some of the Ilemela Lions Club members

Obtaining the support of the local leadership

From the beginning, it was agreed that the project needed to be implemented with the active support of the local leaders in the Bugarika community, the balozi or ten-cell leaders. A balozi is the elected leader of group of households and they are the lowest level of administrative structure within the country. When the system was first set up each balozi was responsible for ten households but with population growth this no longer holds. A meeting was arranged in November, through the Pamba Ward Secretary, Mrs Rachel Lububu, to which the 53 balozi, representing 1,388 households, were invited to attend. Although some could not come, due to work commitments, 40 were present. The project was explained by members of the Lions Club and questions and discussion were invited.

The general reaction to the project was very positive, although a number of concerns were raised:

- The balozi wished to be actively involved in net distribution. They said that, in the past, external agencies often delivered services whilst ignoring them. This undermined their status. It was agreed that that the balozi would be responsible for distributing the nets from the lists they would prepare of those in need, albeit with oversight from Club members.
- They were concerned that nets would only be distributed to people with beds. They pointed out that many people slept on the floor. It was confirmed that nets would be distributed to those in need irrespective of whether they had a bed. Further, the demonstration on how the nets should be used would cover those sleeping on the floor as well as in beds.
- It was not believed that simple contact with the nets was sufficient to kill mosquitoes as indicated on the net packaging. Participants were told that the evidence was that where nets were used there was a marked reduction in the lifespan of mosquitoes who came into contact with the insecticide rather than immediate death.
- Concerns were expressed about stories that the insecticide in the nets smelt and that the nets caused rashes, itches and running eyes. The response was that there were very few instances of people being allergic to the chemicals in the nets but that it would do no harm on receiving a net to unpack it and hang it out in the air, under cover, until the user was happy to place it over the bed or sleeping space.
- One person claimed that an empty net bag had been used for storing food and that a child who had consumed the food had died. This story was not known to anyone else present at the meeting and it was suggested that in view of the number of nets previously distributed in the country and elsewhere it was probably not true.
- It was said by some of the women that sleeping under the net led to a reduction in the sexual activity and potency of their husbands. The response was that there was no reason why this should be so.
- It was also said that in compiling the names of those in need there would be reluctance on the part of some expectant mothers to give their names in case of bewitchment leading to miscarriage. It was agreed that an appropriate means of identification could be determined by any balozi facing this problem.

Esablishing the number of nets needed

The first problem facing the project was to determine the number of nets needed. The last population census was in 2002. Bugarika was then organized in 4 areas, referred to as Mtaa or streets. These were known as Bugarika A, B, C and D and located within the Pamba Ward of the Nyamagana District of Mwanza. The total population then was 8,600. In the intervening period there had been considerable growth and an administrative re-organisation of the area into Bugarika North and Bugarika South which incorporated an area, Mimani, not previously included in Bugarika. No current data on population was available from the Ward Office. Recourse was initially made to limited statistical

estimates on population growth for Tanzania, suggesting that the Bugarika population might now be at least 12,000 and indicating a need for 6,000 nets if blanket coverage was sought. However, it was then decided to carry out a mini-census of the area, including current levels of net usage, with the help of the balozi.

Their returns showed that 9,215 traditional nets were in use, more than had previously been thought, but that 75% were in a very poor condition. The number of children under the age of 5 was given as 6,018 and expectant mothers as 298. On the basis of one long-life insecticide-treated net per two children, and one per expectant mother a total of 3,300 nets appeared to be needed. The money raised enabled the purchase of 3,500 nets.

Training the trainers

Education aids were made available to the project through the Roll Back Malaria Campaign in Mwanza and a group of volunteers received training in their use as shown below.







Arrival of the nets

The nets were received in Mwanza from the manufacturers in Arusha on January 22nd and transported to the Hisani orphanage for safekeeping, the director being a member of the Lions Club.







Bugarika Education and Net Distribution

The Bugarika distribution was set for four consecutive days beginning on the 28th January. The balozi were informed on which days they should come with their distribution lists and the people who were to receive nets. These were brought from the Hisani orphanage along the unmade-up and vey potholed road which provides access to the area in front of the Bugarika dispensary where the distribution was to take place and where people had started to gather.

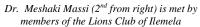






The Lions Club of Ilemela invited Dr Meshacki Massi, the Regional Medical Officer for the Lakes Region to be the guest of honour at the opening day and to formally open the programme. Before doing this, Dr Massi and Dr Colin McArdle, the Chair of Kids Aid Tanzania, who had arrived in the country with his wife on the 25th January, met reporters from three newspapers and the local TV channel to talk about the project







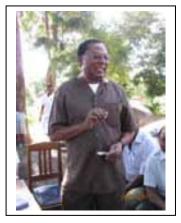
Professor Gabriel Mwaluko (left), President of the Ilemela Lions Club, with Dr Massi



A joke is shared with Dr and Mrs McArdle of Kids Aid Tanzania

They then moved outside to meet the people who had been assembled by their balozi. Opening speeches were given by Dr Massi, Professor Mwaluko and Dr. McArdle, in the later case with the help of a member of the Lions Club as interpreter as most of the people present spoke only Kiswahili. This format was followed on each of the following three days, albeit without the presence of Dr Massi.







Some formal photographs of net presentation by the above, and by members of the Lions Club of Ilemela were then taken for the press.







The presentation on the causes of malaria, how to minimise the chances of being bitten and how to use the nets followed. Over the four days, several of those who had gone through the training of trainers sessions gave different parts of the presentations......







.....using the visual aids provided by the Roll Back Malaria campaign showing the cause and effects of malaria







...... and how to use and care for the nets being provided.







This was followed by demonstrations of how to hang and tuck the nets in, whether sleeping on a bed or on a mat on the floor, and leaflets on malaria were distributed







The assembly then broke up into groups with their balozi who had prepared lists of who was to receive nets from their earlier min-census. They collected the number of nets needed and distributed them to representatives of each household under the supervision of a Lions Club member







Some of the recipients are shown below.







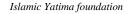
The vast majority of family members arrived on the day allotted to them for their balozi distribution. However, a small number came on the last day, having forgotten their correct day. Nets were distributed to them.

At the conclusion of the distribution Lions members collected up the lists of those who had received nets for future reference. Copies have been given to the Regional Medical Officer to ensure that there is no duplication of distribution in any future government-led project.

Orphanage Distribution

On completion of the distribution 443 nets were left over and it was agreed with the Lions Club that these should be distributed to orphanages and street children's centres in the town. These went to the Forever Angels Baby Home (80), Mount Zion (40), Upendo Daima (60), Islamic Yatima Foundation (100), Hands of Mercy (38), Watoto wa Africa (50) and Hisani (75).







Forever Angels Baby Home



Watoto wa Africa

The number of nets available was not sufficient to meet all the orphanages' needs and additional funds are now being raised to meet the shortfall.

The Regional Medical Officer

When the distribution of nets was completed, Dr Massi requested us to come to his office before we left Mwanza. We went with Professor Mwaluko. Dr Massi said that he wanted to express his thanks and gratitude to Kids Aid Tanzania and to every organization and individual in the United Kingdom who had helped raise the money to fund the project. Mwanza had one of the highest rates of malaria in the country and it was impossible to underestimate the benefits which projects like this brought to the people in places like Bugarika. If there was any chance of extending the collaboration between the Lions Club of Ilemela and its UK partners it would have his full blessing.

Reflections on the Project

The biggest difficulty in the beginning was trying to find reliable estimates of the population of Bugarika and to calculate the number of nets needed. When the project was first put forward, based on population projections from the 2001 census, it was estimated that 6,000 nets would be needed. It was also said by staff at the Bugarika dispensary that few people had them. Reasons emerged during the project's early stage to suggest that it would be wise to test this. As the mini-census progressed it became clear that there were far more nets in use in Bugarika than had been thought, although three quarters of them were not fit for purpose. It is probable that attacks by malaria-carrying mosquitoes through the many holes in these nets gave rise to the belief that the high level of malaria being experienced was because few people had them. The project has alerted the local population to the need to keep all their nets in good condition and to repair holes as soon as they occur. The physical strength of the Olyset nets provided will be more effective than traditional cotton nets in withstanding the tough conditions prevailing in the settlement's homes. Should holes not be dealt with immediately the insecticide impregnated in the net fibres will provide a second line of protection not presently present.

Overall, the project was highly successful. This can be put down to the manner in which it was conducted locally by the Lions Club of Ilemela under its President, Professor Mwaluko. Considerable care was taken to obtain the support and cooperation of the local government officials. In particular, the involvement of the balozi ensured ownership and participation by the key people in Bugarika.

The total cost of the project was £12,850. This encompassed the cost of the nets plus expenses incurred by the Lions Club in organizing and implementing the project. Given that two children typically sleep under a net, each one of the 6,500 children and 298 expectant mothers benefiting has been provided with protection from a debilitating and often fatal disease for 5-7 years for under £2.

Discussions are already underway with the Lions for a further collaborative project.

(Dr) Colin McArdle Chair of trustees Kids Aid Tanzania Reg, Charity No.1111220