World Swim Against Malaria

Post-Distribution Summary Report

Distribution of 3717 nets in Gai and Itivanzou sublocations, Kyuso District, Eastern Province, Kenya

AMREF and Akamba Aid Fund July-August 2007

Introduction

3717 'Permanet' Long-Lasting Insecticide-treated Nets (LLINs) were distributed as community-wide coverage in 18 villages of Gai sublocation and 5 villages of Itivanzou sublocation from August 18th to 25th. The nets were donated by the World Swim Against Malaria, and distributed by the African Medical Research Foundation (AMREF) and the Akamba Aid Fund (AAF).

AAF is a small UK charity that carries out community projects in the fields of food, water, healthcare and education in Mwingi and Kyuso districts, in Kenya's arid and poor Eastern Province. Here, the Akamba people survive mainly on subsistence farming. Malaria is a major cause of morbidity and mortality in Gai and Itivanzou sublocations. The Kenya Malaria Information Service classes Kyuso District as 'arid', and therefore 'epidemic prone'.

Transport of nets to distribution centre

The 3717 nets were sourced from within Kenya and stored by Vestegaard Frandsen in their warehouses in Nairobi until AAF volunteers were able to supervise their transport to Gai village by canter truck. At Gai they were securely stored at Tei Wa Yesu Family Care Centre for the few weeks' duration of the final preparation stages.

Distribution strategy: 100% coverage

In line with the latest WHO guidelines¹, we aimed for 100% coverage – a net over every sleeping space in the targeted area. Evidence is mounting that high density net coverage – providing nets to all adults as well as children and pregnant women – reduces local mosquito populations, thus protecting even those who do not sleep under a net. 23 villages were chosen in a cluster to maximise this 'community-wide' effect (see Appendix 1). Villages were chosen closest to the two distribution centres – Tei Wa Yesu Family Care Centre in Gai Central and Katakani Clinic in Katakani.

Pre-distribution activity

Lists of households, adults, children, beds and existing nets were obtained from elders of each village in July 2007. One representative was called from each household to register the family for the number of nets they required. Beds with nets in place that were in a satisfactory condition did not receive a second net. A list of 1307 households was drawn up, totalling 3658 nets. Each household was given a signed and referenced sheet stating how many nets they were to receive (see Appendix 3). The sheet also specified where and when the household representative should come to collect their household's nets.

Approval for the distribution was obtained in advance from the Kenya Division of Malaria Control, the London School of Hygiene and Tropical Medicine, the District Medical Officer for Health for Kyuso District and AMREF.

Distribution and education days

Representatives were invited to attend education and distribution days running from August 18th to 25th. People walked far, and were very happy to receive their nets. At the Gai distribution centre Gai Single Mothers' Group put on an educational play. Basic messages of net care, recognising the signs of malaria, and other ways to prevent mosquito breeding were communicated through songs, role plays and demonstrations. At Katakani distribution centre the children of Katakani Sunday School wrote and performed educational songs and poems, and local mothers put on a short play, dramatising consultations in the doctor's office. At both venues a demonstration net was hung in the centre of the room. Spiritual leaders, assistant chiefs, clinic staff and AAF employees all addressed the gathered crowds. These education sessions took place morning and afternoon for seven days, and household representatives were required to attend before collecting their nets.

Planned follow-up

Malaria morbidity will be monitored through clinical data at Tei Wa Yesu and Katakani clinics. Laboratory technologists at both clinics keep records of home addresses of patients for each malaria blood film performed, so will be able to compare the incidence of positive tests in the rainy season of Nov06-Jan07 with Nov07-Jan08: before and after introduction of nets. Whilst admittedly subject to selection bias, as there are many factors that affect a person's decision to seek medical care for a suspected case of malaria, this data should still be of value.

Home visits to a random sample of around 50 households will be carried out in November 2007. Correct hanging of nets will be checked, and household members invited to share their reactions to the distribution process, and to raise any concerns.

Challenges

- AAF applied for 3700 nets with the intention of covering all of Gai and Itivanzou sublocations. However, because population figures gained from Mwingi Hospital were inaccurate, only 18 of the 21 villages of Gai sublocation were chosen, and 5 of Itivanzou's 16. Whilst no promises had been made to any of these 14 omitted villages, it was regretted that there were not enough nets to complete the sublocations. Statistics have been gathered for the omitted 14 villages, with the hope for further distributions in the future.
- There were rumours from the north of Gai sublocation that nets would suffocate children in their sleep, and that they were possessed by evil spirits. Talks from spiritual leaders incorporated into the education days attempted to dispel these rumours.

Appendix 1: Villages receiving nets

Sublocation	Village	No. of households	No. of households	Total no. of
	_	on elder's list	receiving nets	nets given
Gai	Kiloki	46	45	161
	Marisi	63	62	176
	Kasyongo	72	66	177
	Ikunza	51	50	136
	Mutingwa	58	58	154
	Ililu	48	49	137
	Ndolongwe	63	63	202
	Thunguthu	32	32	88
	Kyandani	64	62	124
	Central	64	76	253
	Market	36	39	91
	Kalaa	48	51	129
	Kyamatonga	68	72	258
	Twimuma	55	48	157
	Mukumanzai	33	33	116
	Matooni	86	80	235
	Ngengi	70	67	185
	Katakani	41	45	127
Itivanzou	Tii	103	104	260
	Itivanzou	57	55	157
	Kathitu	46	47	112
	Kyandani	62	71	149
	Kiriguni	41	45	133
TOTAL		1307	1320	3717

Appendix 2: Thanks

AMREF AAF: UK volunteers and Kenyan staff World Swim Against Malaria Foundation Kenya Division of Malaria Control Kenya Malaria Information Service Vestegaard Frandsen Doshi Electricals Gai Single Mothers Group Katakani Sunday School Churches of Gai and Katakani Tei Wa Yesu Family Care Centre Katakani Dispensary Kyuso District Medical Officer for Health

Chris Curtis, London School of Hygiene and Tropical Medicine

Thanks to all involved in the distribution.

Appendix 3: The household recipient information sheet

Sublocation (circle) GAI ITIVANZOU				
Date visited 2007				
Household head name				
Household head signature or mark				
Nominated net collector name (if different to household head) Visitor's signature				
Akamba Aid Fund (AAF)				
Kwa Munyanyawa,				
AAF ni nguruvu kuma England ya kutetheesya andu ala matetonya nduuani ya Gai na Itivanzou. Nitunenganae neti sya umuu. Neti niyakuusuvia we na syana kumana na NDETEMA. Neti nikindu kya vata muno. Nituunengane neti sya MANA kwa kila kitanda misyini yoonthe ya Gai na Itivanzou. Vayi mbsea waile kuiva.				
Uka na valua uu kwa munengani wa neti.				
Twikwatya ukwona vau.				
Dear Friend,				
AAF is a charity from England. We work in Gai and Itivanzou. We distribute mosquito nets. A net will protect you and your children from MALARIA. A net is a very good thing to have. We would like to give you a FREE net for every bed in your house. We hope to cover EVERY bed in Gai and Itivanzou sub-locations. You do NOT need to pay any money.				
Please bring this piece of paper with you and show it to the person in charge. This is very important.				
We look forward to seeing you there.				
Please come to (<i>uka</i>)				
On (<i>mutuku</i>)				
To collect your (<i>wose neti</i>) nets.				

Appendix 4: References

1. WHO releases new guidance on insecticide-treated mosquito nets. Press release 16th August 2007 <u>http://www.who.int/mediacentre/news/releases/2007/pr43/en/</u> (Accessed 16/09/07)