



THE REPUBLIC OF UGANDA

## UGANDA MALARIA SURVEILLANCE PROJECT

Mulago Hospital Complex, P.O.Box 7475, Kampala, Tel. 041-530692, Fax 041-540524;  
website [umsp.muucsf.org](http://umsp.muucsf.org)

### UMSP out-patient sentinel site malaria surveillance report April 2011

#### Introduction

Uganda Malaria Surveillance Project (UMSP) manages 6 out-patient sentinel sites located around the country with varying malaria transmission intensity. Based on historical entomological and epidemiological data these sites include two with relatively low transmission intensity (Kamwezi and Kihihi), two sites with medium transmission intensity (Walukuba and Kasambya) and two sites with high transmission intensity (Nagongera and Aduku).

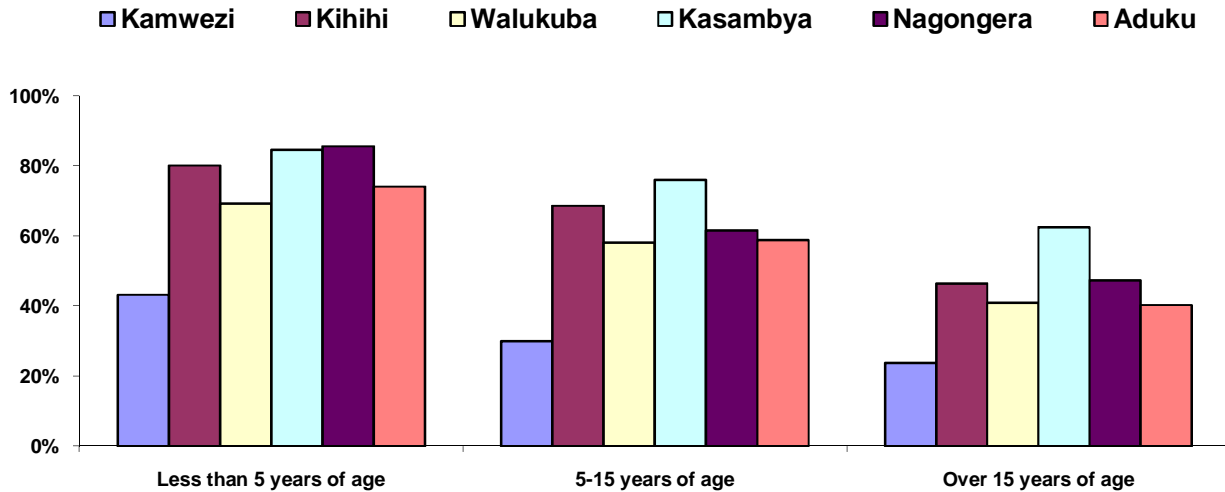
The sentinel sites collect high quality malaria data, which is analyzed to produce monthly reports. These monthly reports aim to give an overview of the malaria situation in the different parts of the country where the sentinel sites are located. UMSP also maintains a website [umsp.muucsf.org](http://umsp.muucsf.org) that can be accessed for more information.

#### Data summary

District	Site	Total number of patients seen		Malaria suspected		Patients sent to the laboratory		Laboratory confirmed malaria	
		Total	< 5 years	Total	< 5 years	Total	< 5 years	Total	< 5 years
Kabale	Kamwezi	1,520	365	453	158	427	147	73	16
Kanungu	Kihihi	1,290	353	775	283	775	283	183	66
Jinja	Walukuba	2,913	682	1,491	473	1,444	458	458	157
Mubende	Kasambya	1,114	236	774	200	740	194	236	81
Tororo	Nagongera	1,688	511	1,027	438	938	396	246	175
Apac	Aduku	1,514	294	748	218	734	212	127	52

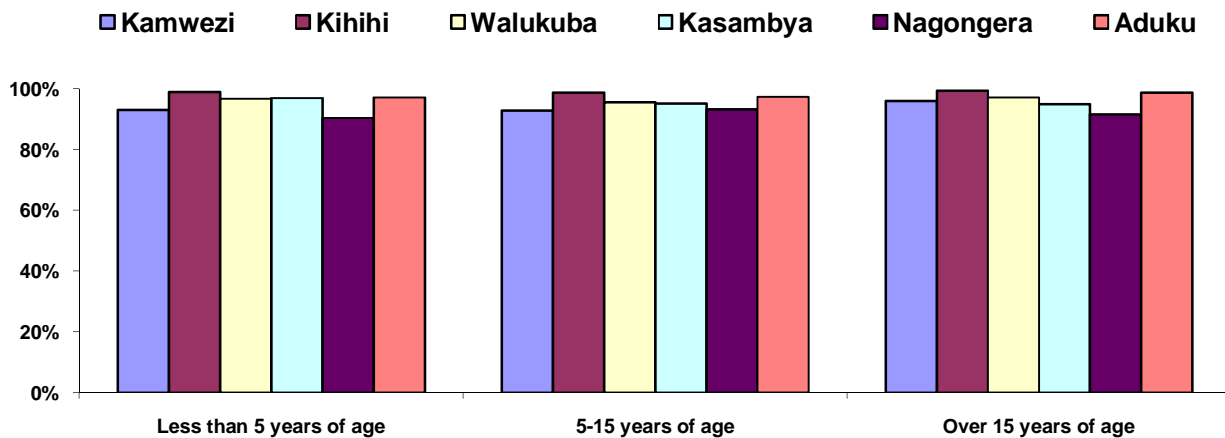
The total number of OPD clinic attendances ranged from 2913 patients in Walukuba to 1114 in Kasambya with children under 5 years constituting between 19% in Aduku to 30% in Nagongera. The proportion of patients with suspected malaria ranged from 30% in Kamwezi to 69% in Kasambya and of these, more than 90% were referred for a confirmatory test with Walukuba recording the highest number of positive cases for malaria parasites while Kamwezi had the lowest numbers.

**Proportion of total patients seen suspected of having malaria**



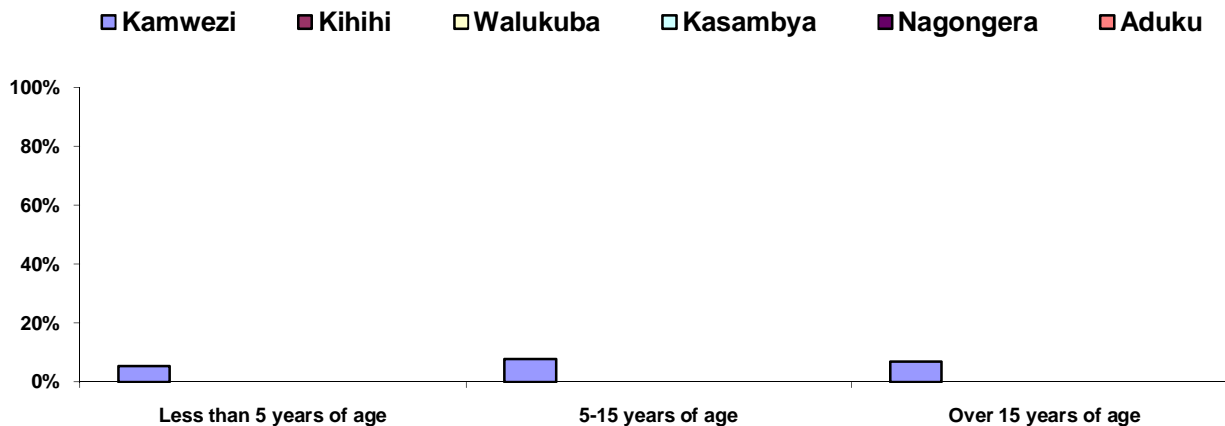
At all sites, children under 5 years contributed the biggest proportions of patients suspected of having malaria and this decreased with increasing age. Among all age groups, the proportion of patients suspected of having malaria was lowest in Kamwezi, however, the sites with the highest proportions per age-group varied from Nagongera in the under 5 age-group to Kasambya in both the 5-15 and over 15 year age-group.

**Proportion of patients with suspected malaria for whom a lab test was done**



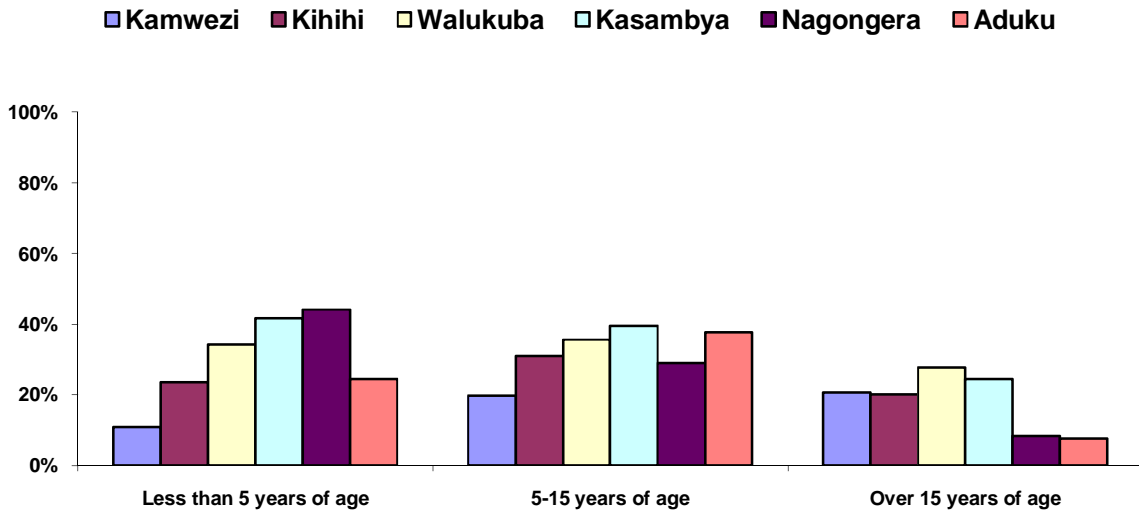
Over 90% were sent to the laboratory for a confirmatory test irrespective of age.

**Proportion of laboratory tests done that were RDTs**



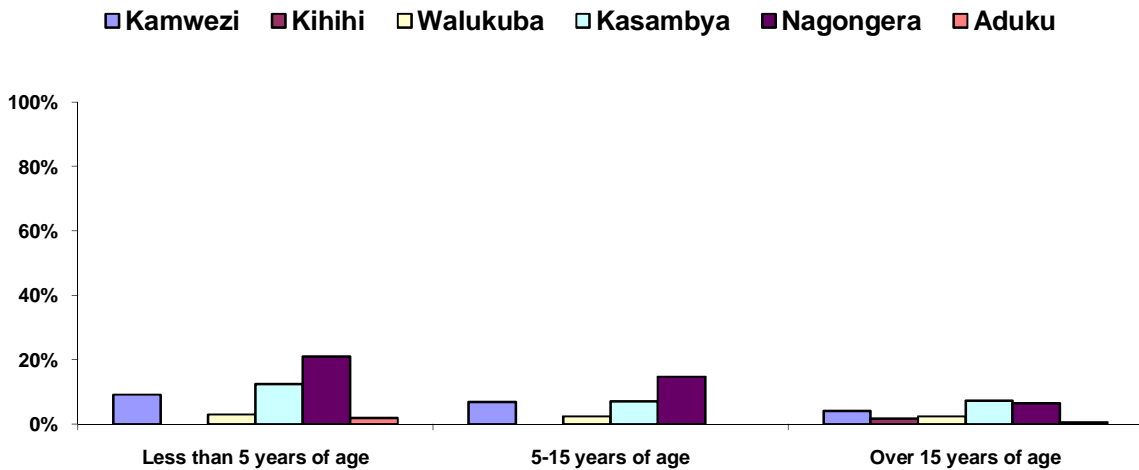
Kamwezi is the only site that used RDTs to test for malarial parasites. The data showed that less than 8% tests performed were RDTs with no preferential use in any age group.

**Proportion of laboratory tests done that were positive**



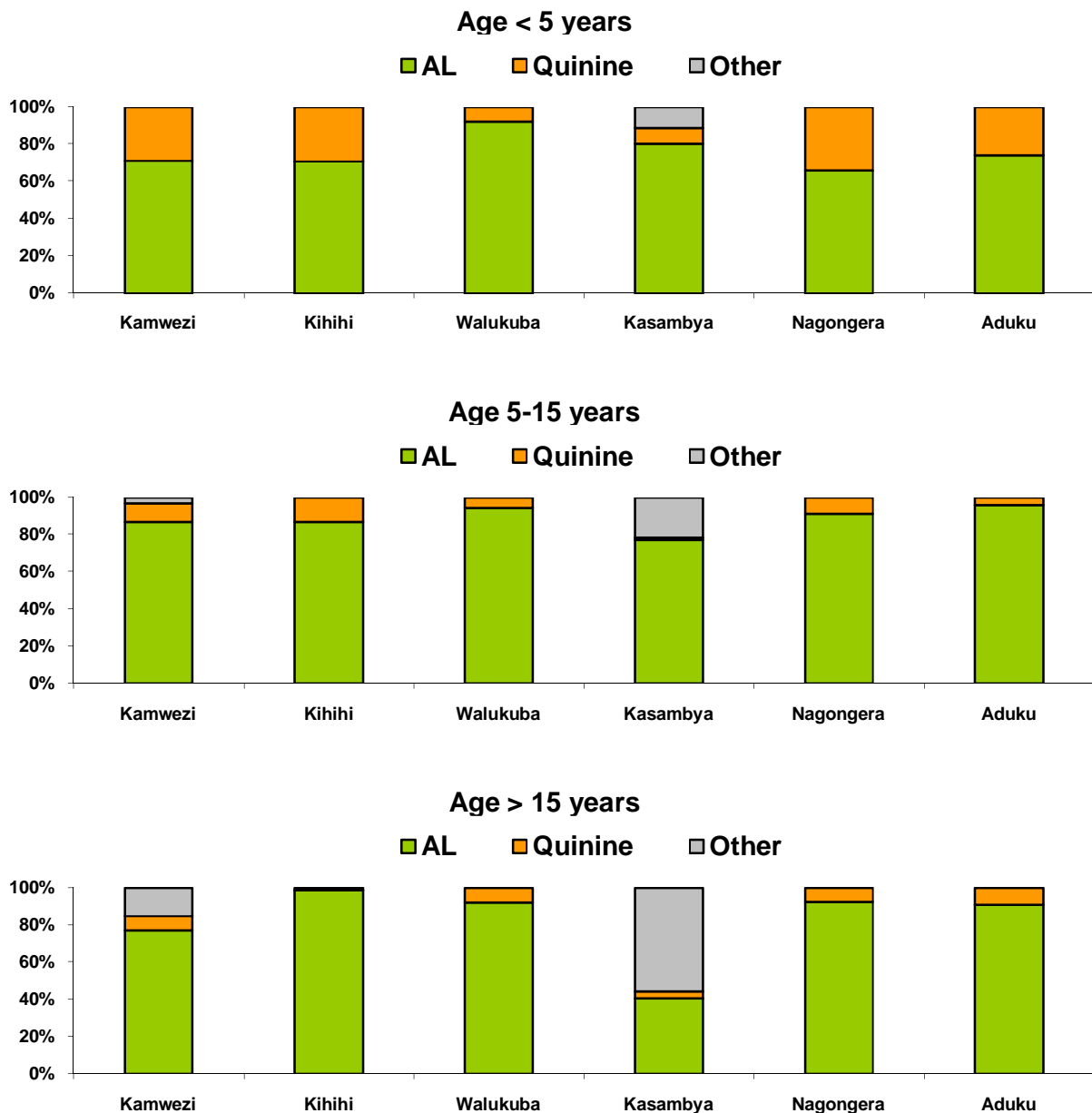
The slide positivity rate was higher among the under 5 and 5-15 years age-groups when compared to those over 15 years for all sites except in Kamwezi, where the reverse was true. It ranged from 11% in Kamwezi to 44% in Nagongera among the under 5 years, from 20% in Kamwezi to 40% in Kasambya among the 5-15 year age-group and from 7% in Aduku to 28% in Walukuba. Aduku also reported a relative low SPR of 25% among the under 5 years.

**Proportion of patients with a negative lab test result who were prescribed antimalarials**



The proportion of patients with a negative malaria parasite laboratory test result who were prescribed an antimalarial was generally less than 20% in most sites except in Nagongera (21%). Overall, this practice was slightly more common among the under 5 years, however it gradually decreased with increasing age.

## Antimalarial drug treatment practices among those prescribed antimalarials



Artemether-lumefantrine (AL) was the most commonly prescribed antimalarial for all sites except in Kasambya and only among the over 15 year age-group, where artemethernaphthoquine was predominantly prescribed. Quinine still remains the second most prescribed drug especially in Nagongera and Kamwezi mostly among the under 5 years. Kamwezi, Kihihi, Kasambya and Walukuba had adequate AL of all pre-packs throughout the month while Aduku reported stock outs of all AL pre-packs throughout the month. Nagongera lacked the yellow and brown AL pre-packs throughout the month. Simialrly, Kasambya did not have brown AL throughout the month.

## Appendix: Definitions

Indicator	Definition	
Proportion of total patients seen suspected of having malaria	Numerator:	Number of patients referred to the lab or given a clinical diagnosis of malaria
	Denominator:	Total number of patients seen
Proportion of patients with suspected malaria for whom a lab test was done	Numerator:	Number of laboratory tests performed
	Denominator:	Total number of patients with suspected malaria
Proportion of laboratory tests done that were RDTs	Numerator:	Number of lab tests performed that were RDTs
	Denominator:	Total number of laboratory tests performed
Proportion of laboratory tests done that were positive	Numerator:	Number of laboratory tests that were positive
	Denominator:	Total laboratory tests performed
Proportion of patients with negative lab test result who were prescribed antimalarials	Numerator:	Number of patient with a negative lab test result and were prescribed antimalarials
	Denominator:	Total number of patient with a negative lab test result