



THE REPUBLIC OF UGANDA

UGANDA MALARIA SURVEILLANCE PROJECT

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UMSP out-patient sentinel site malaria surveillance report January 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).

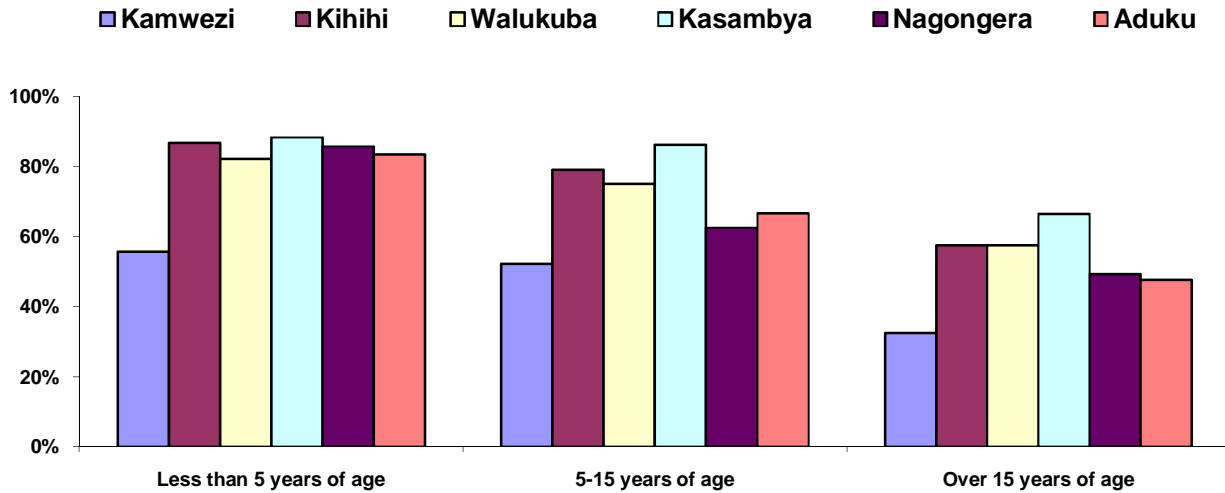
The sentinel sites collect high quality malaria data, which is analyzed to produce monthly reports. These monthly reports aim to give an overview of the malaria situation in the different parts of the country where the sentinel sites are located. UMSP also maintains a website umsp.muucsf.org that can 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	1488	232	600	129	557	116	149	30
Kanungu	Kihihi	2131	553	1492	480	1492	480	456	186
Jinja	Walukuba	3495	729	2327	599	2290	588	1053	308
Mubende	Kasambya	1203	256	897	226	846	210	291	104
Tororo	Nagongera	1663	534	1046	458	986	443	328	223
Apac	Aduku	1740	327	990	273	987	272	259	91

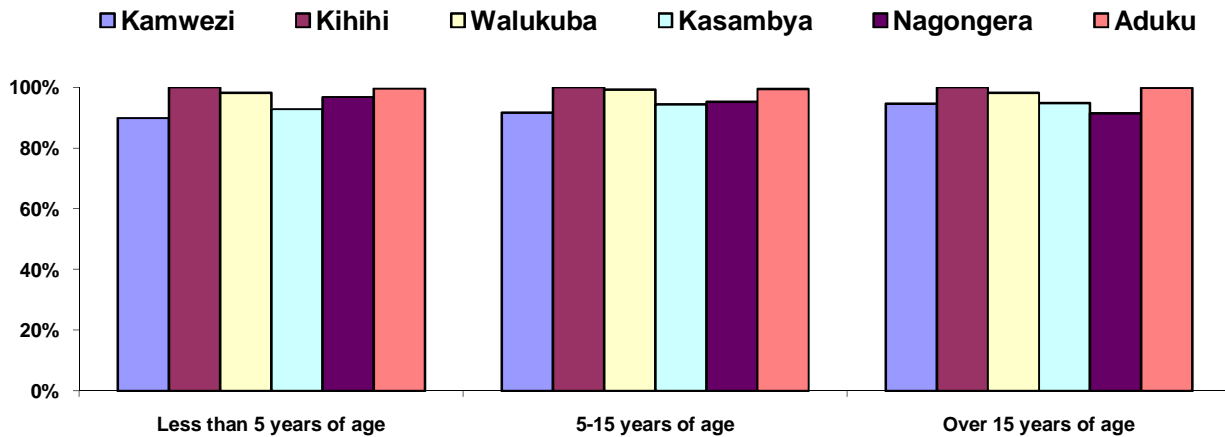
The total OPD clinic attendance ranged from 1203 in Kasambya to 3495 in Walukuba with children under 5 years constituting 16% to 32% of attendees. When compared to December 2010, Kasambya recorded a significant reduction in OPD attendance from 2112 to 1203 while Aduku recorded an increase from 1104 to 1740 patients this month. OPD attendance at the other sites was comparable for the two months. The total number of cases suspected of malaria ranged from 600 in Kamwezi to 2327 in Walukuba. Between 93% and 99% of cases suspected malaria cases were referred for a laboratory test. This month, Kamwezi recorded the fewest number of confirmed malaria cases (149) as well as the lowest SPR (27%) while Walukuba recorded the highest number of confirmed malaria cases (1053) and the highest SPR (46%)

Proportion of total patients seen suspected of having malaria



The proportion of attendants with suspected malaria was generally highest among children less than 5 years of age and lowest in those over 15 years of age. Over 80% of children under 5 years were suspected of having malaria at all sites with the exception of Kamwezi (56%). Among the 5 – 15 year olds, the proportion suspected of malaria ranged from 52% (Kamwezi) to 86% (Kasambya), while among the over 15 year olds, the proportion ranged from 32% (Kamwezi) to 66% (Kasambya).

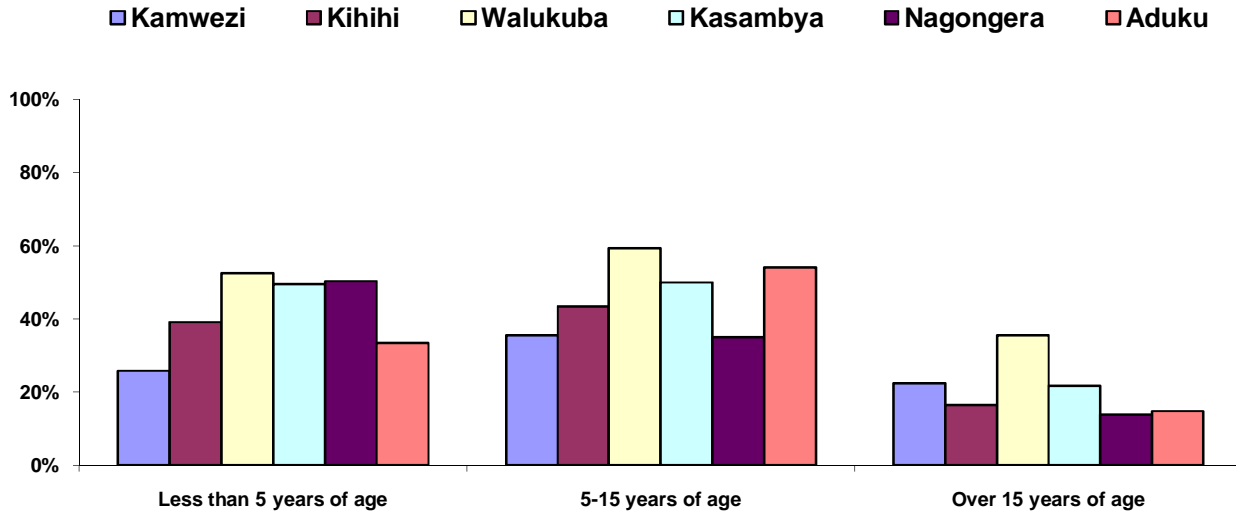
Proportion of patients with suspected malaria for whom a lab test was done



At all sites, at least 90% of patients with suspected malaria within all age groups had a confirmatory laboratory test done. In Kihiki, all such cases in all age groups had a laboratory done while Kamwezi recorded the lowest proportions among the under 5s (90%) and the 5 -15 age group (92%) and Nagongera among those over 15 years (92%).

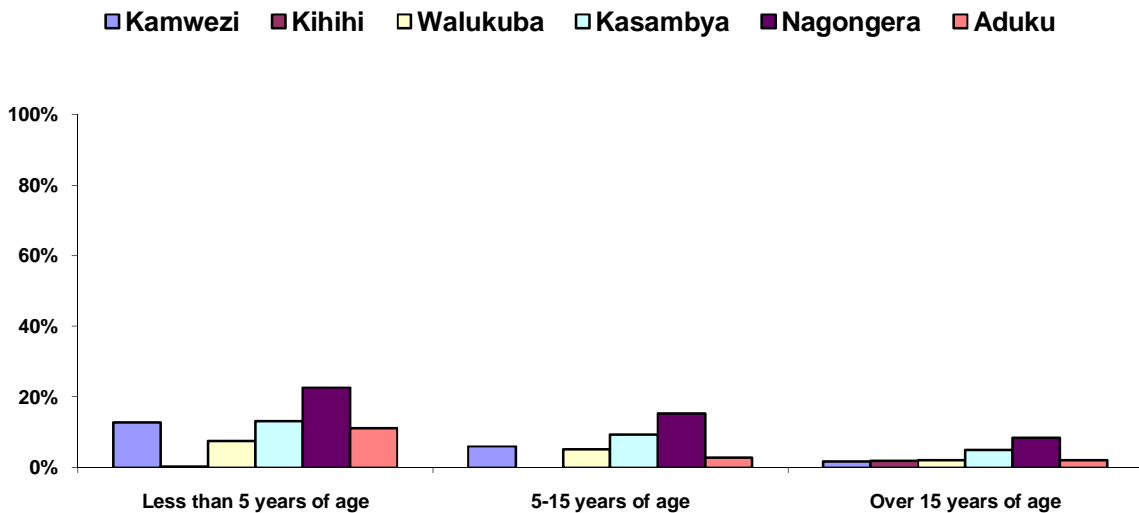
All six sites used blood smears only as the malaria confirmatory test.

Proportion of laboratory tests done that were positive



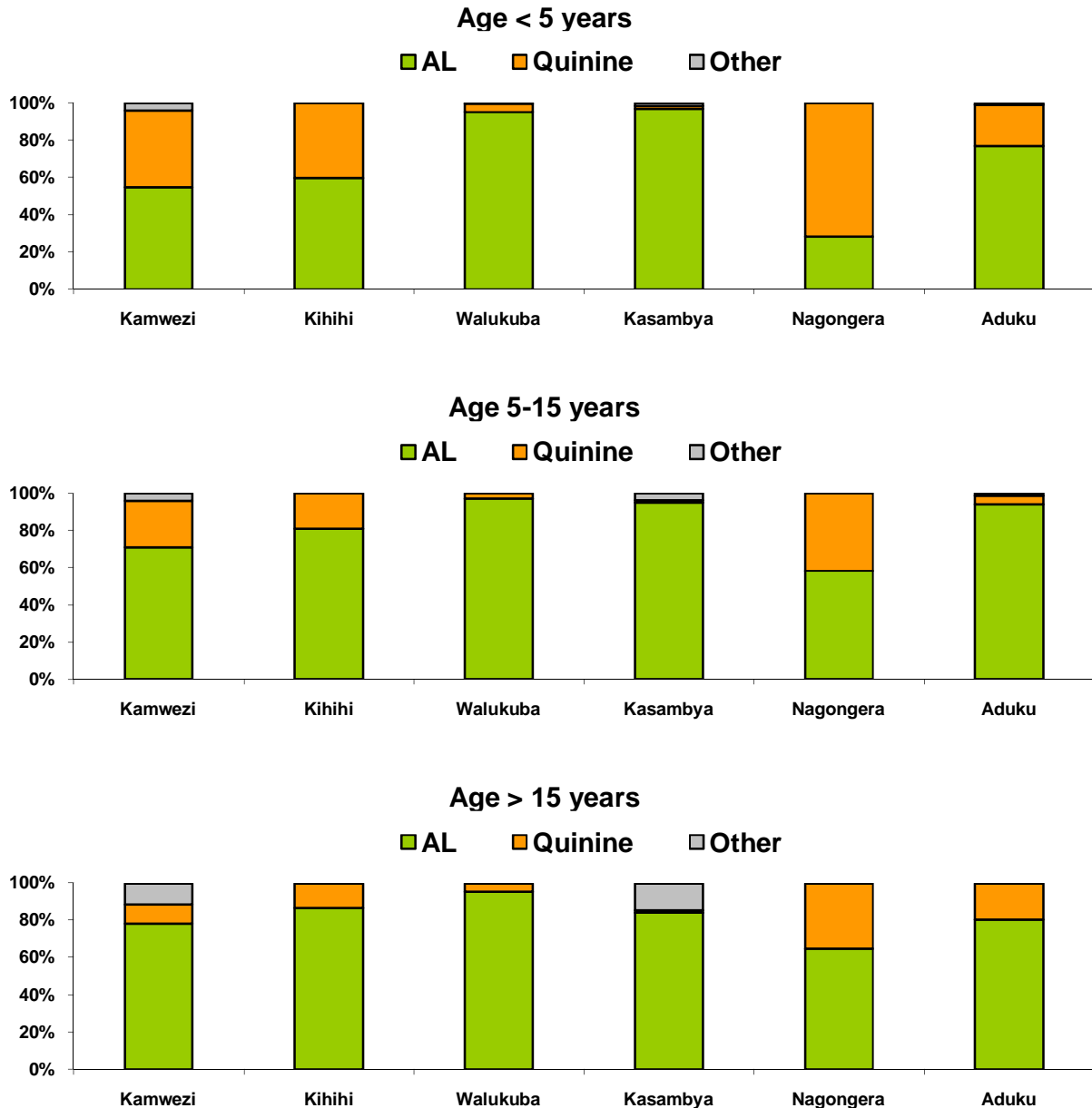
The slide positivity rate ranged from 22% in Kamwezi to 50% in Walukuba among the under 5s, from 35% in Nagongera to 59% in Walukuba among the 5-15 year age-group and from 14% in Nagongera to 36% in Walukuba among those over 15 years of age. These rates are similar to those of the previous months at all sites except Aduku which recorded a decrease in SPR for all three age groups.

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 highest at Nagongera for all age groups with the highest such prescription among under-5s (23%).

Antimalarial drug treatment practices among those prescribed antimalarials



Artemether-lumefantrine (AL) was the most commonly prescribed antimalarial at five of the six sites in all age groups. However in Nagongera, 62% of all patients with confirmed malaria were prescribed quinine; 72% of under-5s, 42% of 5-15 year olds and 35% of those aged over 15 years. In Kamwezi and Kihihi, quinine prescription was also relatively high among under-5s (42% and 40%, respectively) and those aged 5-15 years (25% and 19%, respectively). 19% of adults in Aduku were also prescribed quinine. AL stock outs at Nagongera during the first two weeks of the month may partially explain the high quinine use at this site. Aduku also reported that AL stocks were not adequate for the whole month while all other sites reported adequate AL stock 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