



THE REPUBLIC OF UGANDA

UGANDA MALARIA SURVEILLANCE PROJECT

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

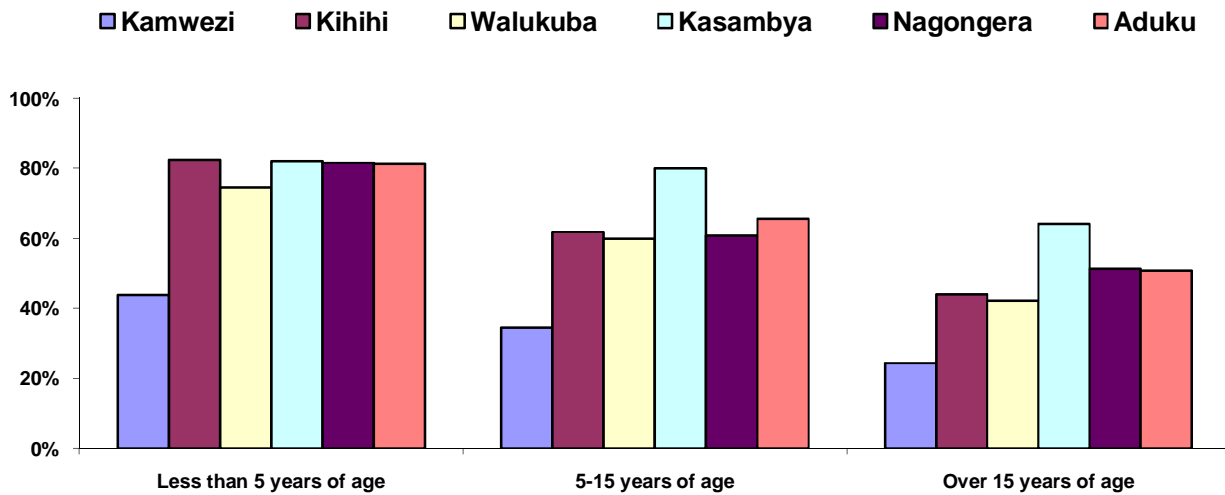
The sentinel sites collect high quality malaria data, which is analyzed to produce monthly reports. These reports aim to give an overview of the malaria situation in the different parts of the country where the sentinel sites are located. UMSP also maintains a website umsp.muucsf.org that can be accessed 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	1443	231	426	101	396	91	65	7
Kanungu	Kihihi	1395	323	788	266	788	266	134	59
Jinja	Walukuba	2952	580	1528	432	1507	429	542	181
Mubende	Kasambya	1229	262	866	215	830	206	296	84
Tororo	Nagongera	1632	416	987	339	912	320	222	129
Apac	Aduku	1886	309	1,102	251	1102	251	227	59

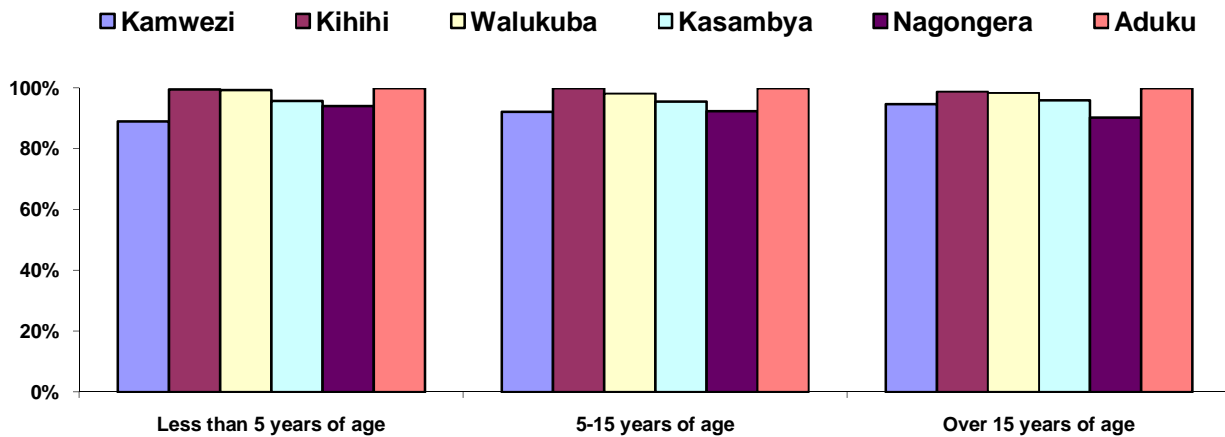
Overall, the total number of OPD clinic attendance ranged from 2952 in Walukuba to 1229 in Kasambya with children under 5 years constituting between 16% to 25% of all the attendees. The number of attendees suspected of having malaria ranged from 1528 in Walukuba to 426 in Kamwezi. Nearly 90% of all the cases suspected of having malaria were referred for a confirmatory test with Kasambya and Walukuba recording the highest proportions with a positive test for malaria at 36% while Kamwezi recorded the least at 4%.

Proportion of total patients seen suspected of having malaria



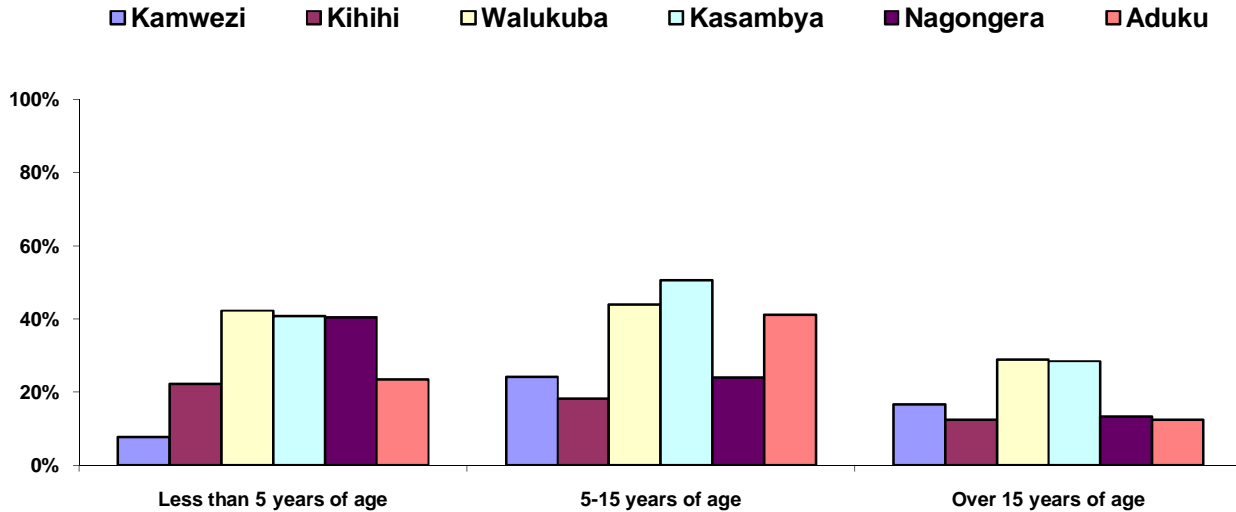
In all the six sites, the proportion of individuals with suspected malaria decreased with increasing age. Children under 5 years contributed the biggest proportion, reaching to over 80% in sites like Kihiki, while those above 15 years were less likely to have been suspected of having malaria. The proportion of attendees suspected of having malaria ranged from 44% (Kamwezi) to 82% (Kihiki) among the children under 5 years, from 34% (Kamwezi) to 80% (Kasambya) among the children 5 – 15 years and from 24% (Kamwezi) to 64% (Kasambya) among those 15 years and older.

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



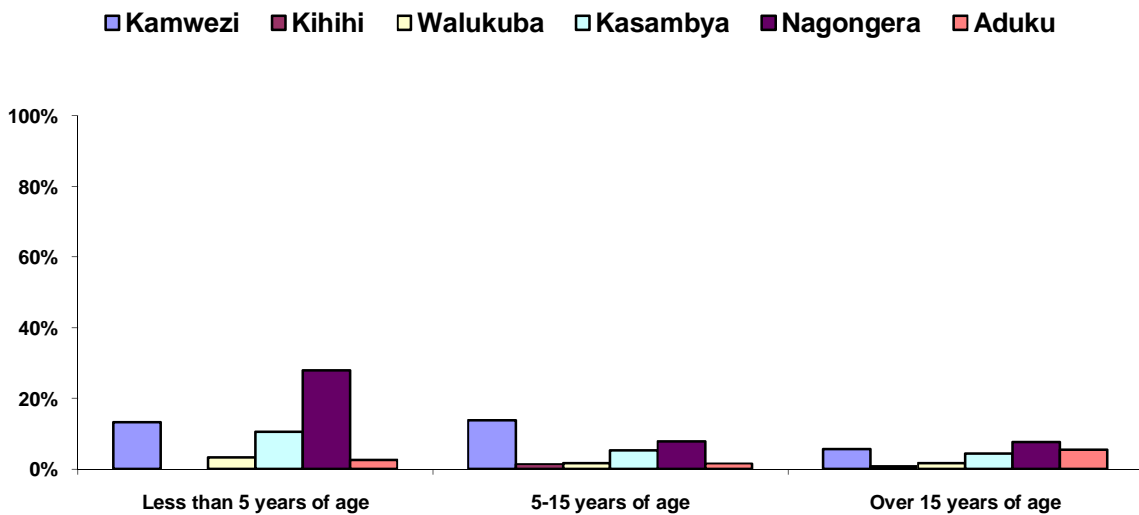
All six sites used blood smears only as the malaria confirmatory test. Among those with suspected malaria, at least 89% were sent to the laboratory for a confirmatory test irrespective of age. Some sites like Aduku had all such cases sent to the laboratory while Kamwezi had the lowest proportion of patients sent to the laboratory recorded (89%) among those under 5 years.

Proportion of laboratory tests done that were positive



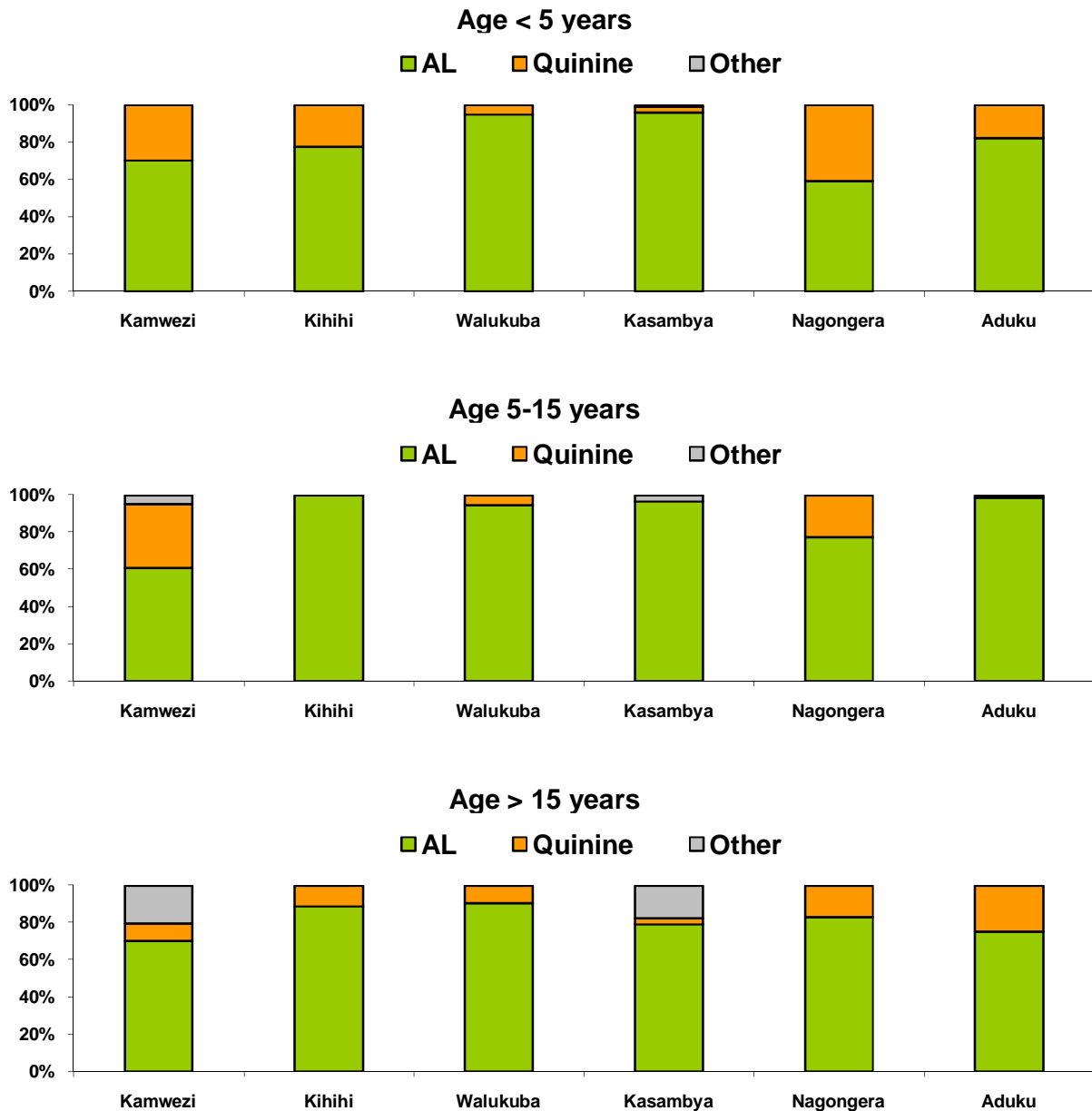
Overall, the slide positivity rate ranged from 8% in Kamwezi to 42% in Walukuba among the under 5 years, from 18% in Kihihi to 51% in Kasambya among the 5 – 15 years and from 13% in Aduku and Kihihi to 29% in Walukuba among the over 15 years. The SPR was greatest among the 5 – 15 years in most sites except Kihihi and Nagongera both of which recorded their highest rates among those under 5 years. These results are comparable to the previous months' except at Walukuba where SPR decreased significantly among all 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 generally less than 10% in most sites except Nagongera and Kamwezi that recorded overall greater proportions on all age-groups, especially among the under 5 and those between 5 – 15 years. Kihihi recorded the lowest proportions in all age-groups, with none among those under 5 years.

Antimalarial drug treatment practices among those prescribed antimalarials



Artemether-lumefantrine (AL) was still the most commonly prescribed antimalarial at all the six sites in all age groups. Quinine remains the second most prescribed drug especially in Nagongera and Kamwezi, where over 30% of those under 5 years and over 20 % among those between 5 – 15 years received quinine. Kasambya, Kihihi, Kamwezi and Walukuba reported AL (all pre -packs) availability throughout the month, while Nagongera only registered the availability of AL green. Aduku reported some doses of AL green at the start, but were not adequate for the whole 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