



THE REPUBLIC OF UGANDA

UGANDA MALARIA SURVEILLANCE PROJECT

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

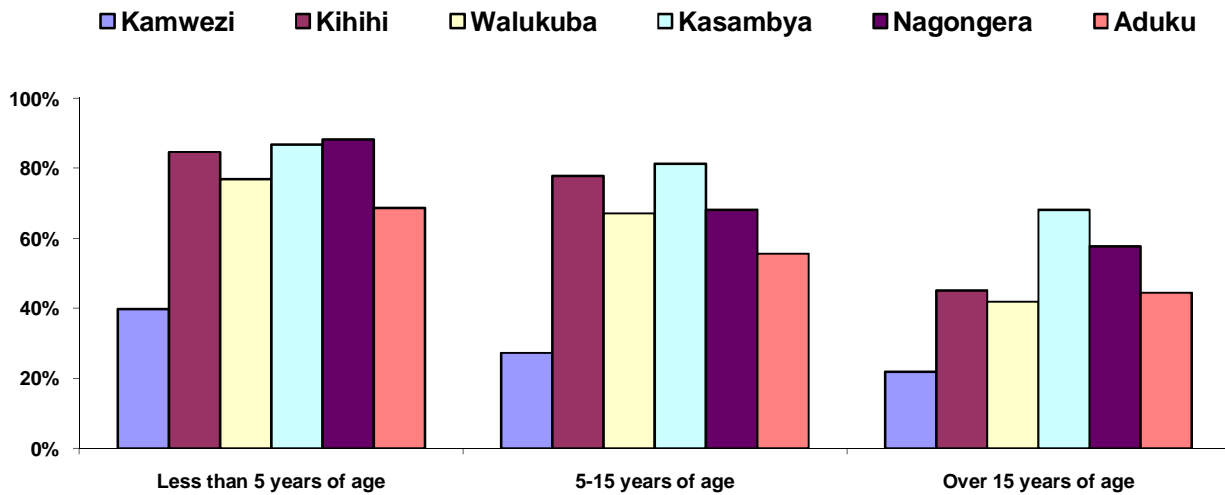
The sentinel sites collect high quality malaria data, which is analyzed to produce monthly reports. These monthly reports aim to give an overview of the malaria situation in the different parts of the country where the sentinel sites are located. UMSP also maintains a website umsp.muucsf.org that can 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	1506	208	387	83	338	70	75	13
Kanungu	Kihihi	1451	351	888	297	888	297	217	93
Jinja	Walukuba	2770	506	1462	389	1420	379	694	204
Mubende	Kasambya	1210	242	897	210	884	209	267	90
Tororo	Nagongera	1584	526	1101	470	1039	444	325	204
Apac	Aduku	1325	269	677	185	652	177	103	35

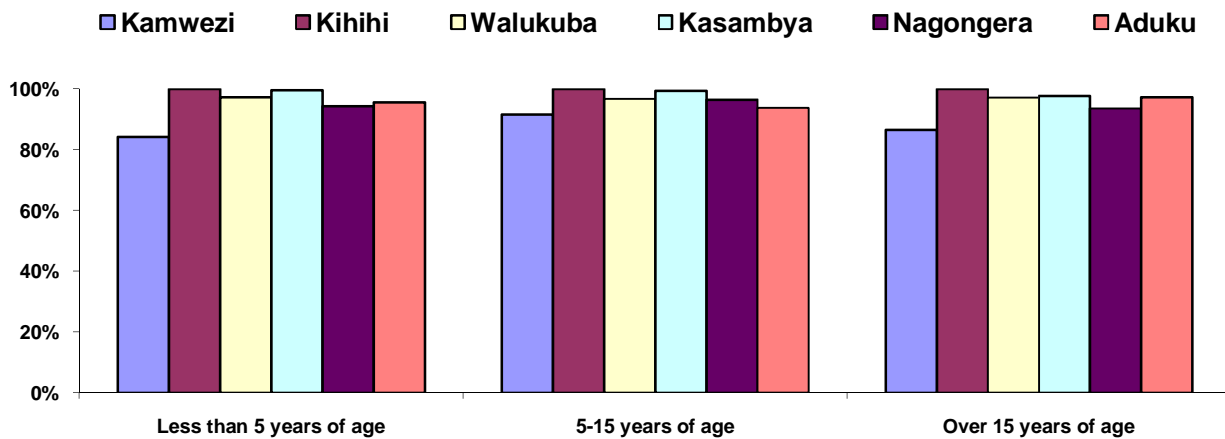
The total OPD attendance ranged from 1210 in Kasambya to 2770 in Walukuba. Compared to January 2011, OPD attendance reduced from 3465 to 2770 in Walukuba and from 1325 to 1740 in Aduku and was stable at all other sites. This month the total number of cases suspected of malaria ranged from 387 in Kamwezi to 1462 in Walukuba. Children under five constituted between 21% (Kamwezi) and 43% (Nagongera) of the patients with suspected malaria seen at the sites this month. Over 90% of suspected malaria cases were referred for a laboratory test at all sites except Kamwezi. The total number of laboratory confirmed malaria cases was lower this month (1681) compared to January (2536) and ranged from 75 in Kamwezi to 694 in Walukuba.

Proportion of total patients seen suspected of having malaria



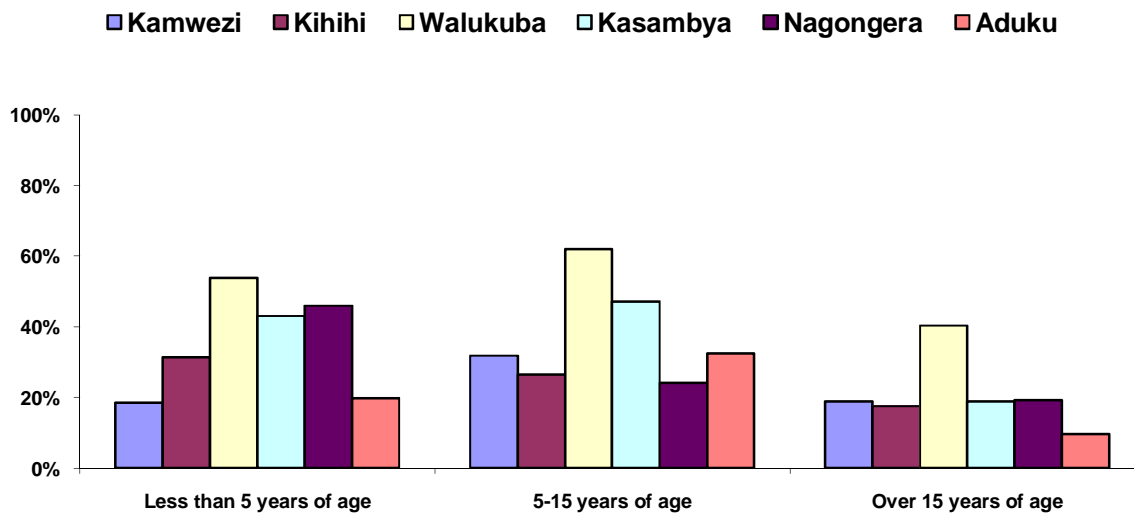
At all sites, the proportion of patients suspected of having malaria decreased with increasing age. Within all age groups, the proportion of patients with suspected malaria was substantially lower in Kamwezi, the lowest transmission sites, than the other 5 sites. The proportion of those with suspected malaria among under-5s in Kamwezi ranged from 40% (Kamwezi) to 89% (Nagongera) while among those aged 5-15 it ranged from 27% (Kamwezi) to 81% (Kasambya) and among the over 15 year olds, the proportion ranged from 22% (Kamwezi) to 68% (Kasambya).

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



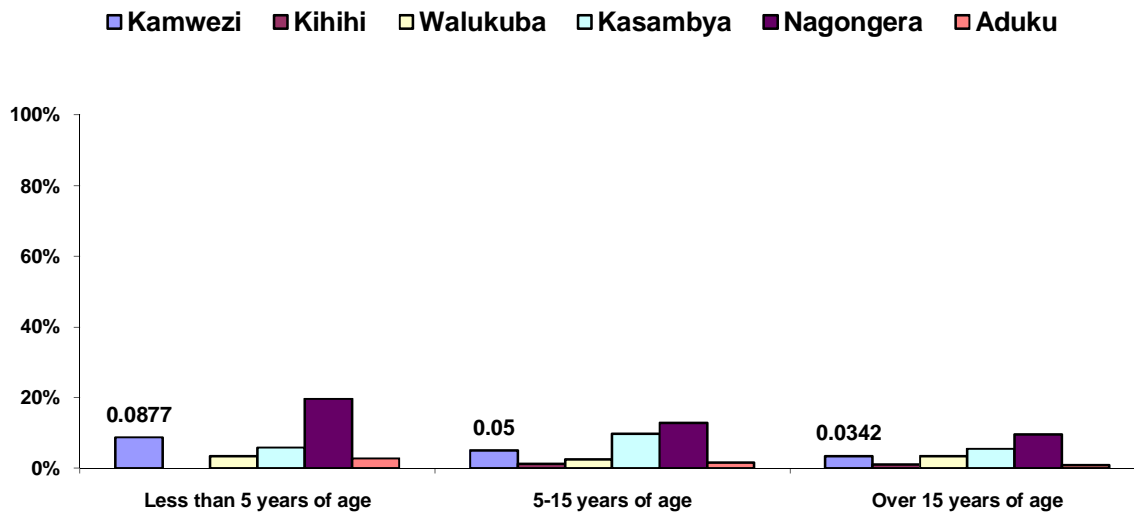
At 5 of the 6 sites, over 90% of under-5s with suspected malaria had a confirmatory test done (94%, Nagongera – 100%, Kihihi). In Kamwezi 84% of were referred for a blood smear within this age group. Among those aged 5- 15 years old, 92% (Kamwezi) to 100% (Kihihi) of suspected malaria cases were referred for lab confirmation while among adults, laboratory referral ranged from 86% (Kamwezi) to 100% (Kihihi). Malaria confirmatory tests were done using microscopy at all sites, however 2% of tests (n=19) in Nagongera were done using RDTs.

Proportion of laboratory tests done that were positive



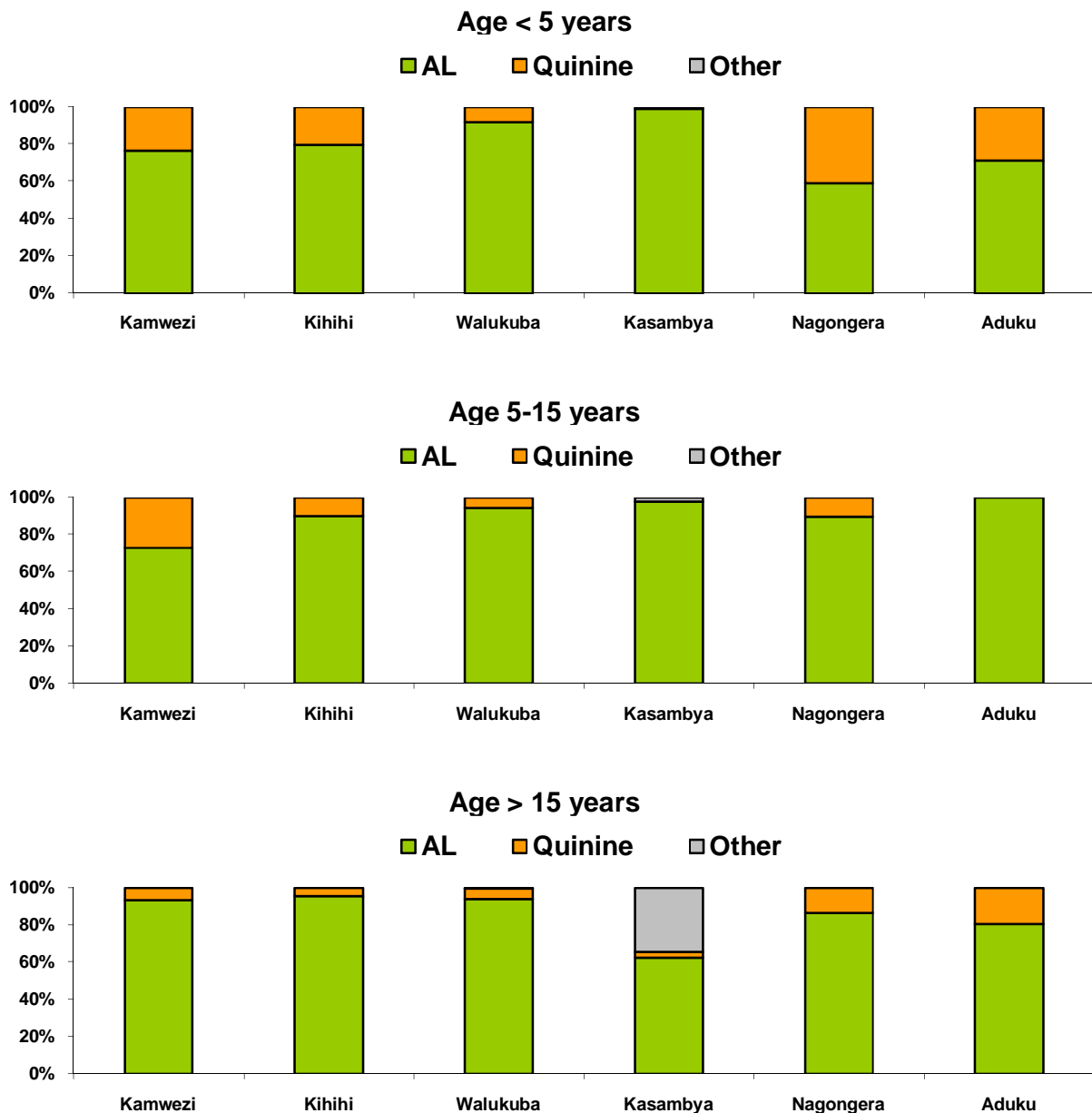
The slide positivity rate ranged from 19% in Kamwezi to 54% in Walukuba among the under 5s, from 24% in Nagongera to 62% in Walukuba among the 5-15 year age-group and from 10% in Aduku to 40% in Walukuba among those over 15 years of age.

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



The practice of prescription of antimalarials to patients with negative lab tests was relatively uncommon in Kihiki, Aduku and Walukuba regardless of age groups. In Nagongera 20% of children under 5, 13% of 5-15 year olds and 10% of those over 15 with negative lab tests were treated with antimalarials. In Kasambya over 5% of patients with negative smears in all age groups were also treated with antimalarials while in Kamwezi 9% of under-5s were similarly treated but this practice was less common in the older age groups.

Antimalarial drug treatment practices among those prescribed antimalarials



Artemether-lumefantrine (AL) was the most commonly prescribed antimalarial at all sites in all age groups. However in Nagongera, 41% of under-5s with malaria were prescribed quinine while in Kasambya artemethernapthoquine was prescribed to 34% of the over 15 years. Kamwezi, Kihihi 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 AL pack throughout the month and brown in the latter part of the month while Kasambya did not have blue AL for the first half of 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