



# UCSF

## UGANDA MALARIA SURVEILLANCE PROJECT

Mulago Hospital Complex, P.O.Box 7475, Kampala, Tel. 041-530692, Fax 041-540524; website <a href="https://www.umsp.muucsf.org">umsp.muucsf.org</a>

### UMSP out-patient sentinel site malaria surveillance report December 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).

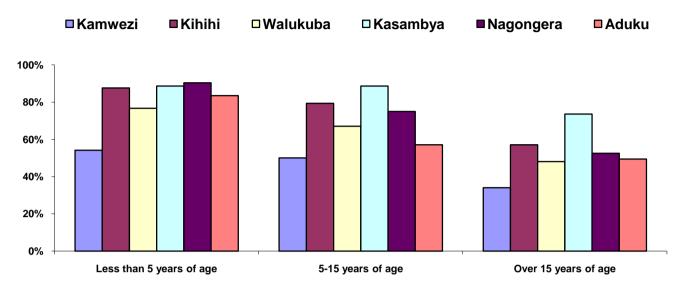
The sentinel sites collect high quality malaria data, which is analyzed to produce monthly reports. These monthly reports aim to give an overview of the malaria situation in the different parts of the country where the sentinel sites are located. UMSP also maintains a website <u>umsp.muucsf.org</u> that 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	2,072	312	855	169	841	168	325	73
Kanungu	Kihihi	1,884	379	1,304	332	1,302	330	509	155
Jinja	Walukuba	3,024	576	1,755	442	1,745	441	556	161
Mubende	Kasambya	1,919	406	1,545	360	1,517	351	542	153
Tororo	Nagongera	1,725	530	1,164	479	1,128	470	414	238
Apac	Aduku	1,459	249	823	208	822	208	254	86

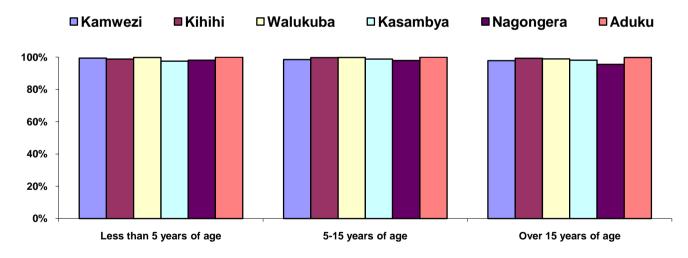
Overall, the outpatient clinic attendance at the sites ranged from 1459 (Aduku) to 3024 (Walukuba) with children under 5 constituting between 15% to 31% of this attendance. The proportion of patients suspected of having malaria was lowest at Kamwezi (41%) and highest at Kasambya (81%). Over 97% of these patients were referred for a confirmatory test resulting in a test positivity rate that ranged from 31% (Aduku) to 39% (Kihihi).

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



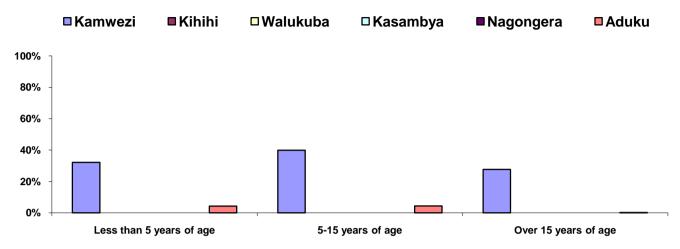
The proportion of patients suspected of malaria decreased with increasing age. Among the under 5, this proportion ranged from 54% (Kamwezi) to 90% (Nagongera), from 50% (Kamwezi) to 89% (Kasambya) among the 5-15 years and from 34% (Kamwezi) to 73% (Kasambya) in the over 15 years age group.

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



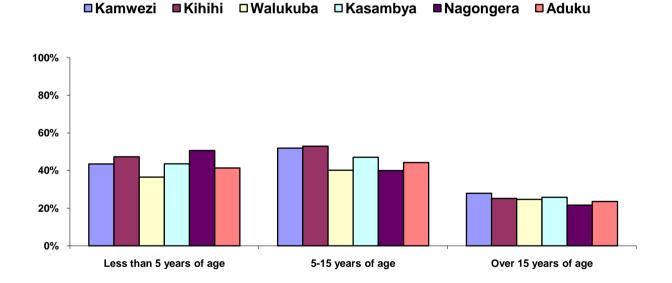
Over 96% of patients suspect of having malaria were sent to the lab for malaria diagnosis among all agegroups and at all sites.

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



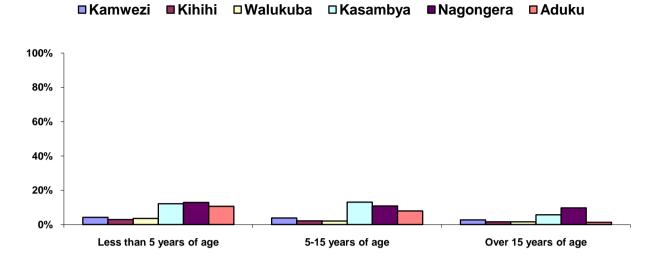
In this month, only two of the six sites, Aduku and Kamwezi, used RDTs for malaria diagnostic testing. The highest proportion of RDTs were used at Kamwezi and this ranged from 28% among those over 15 years to 40% among the 5-15 years.

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



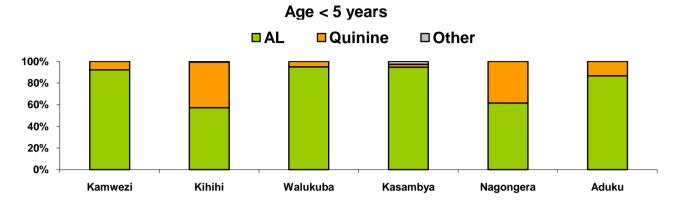
Compared to the previous month, the test positivity rate (TPR) at Kamwezi has continued to increase in all age groups from 33% (Nov 11) to 43% (Dec 11) among the under 5, from 41% (Nov 11) to 52% (Dec 11) among the 5 – 15 years and from 21% (Nov11) to 28% (Dec 11) among the over 15 years. At Kihihi, however, the TPR decreased from 68% (Nov11) to 47% (Dec 11) among the under 5, from 66% (Nov11) to 53% (Dec 11) among the 5 – 15 years and from 48% (Nov 11) to 25% (Dec 11) among the over 15 years. Similarly at Kasambya, it decreased from 62% (Nov11) to 44% (Dec 11) among the under 5, from 61% (Nov 11) to 47% (Dec 11) among the 5 – 15 years and from 50% (Nov11) to 26% (Dec 11) among the over 15 years. The TPR in Nagongera, Aduku and Walukuba were comparable to the previous month.

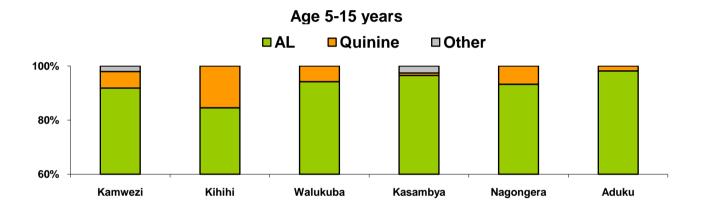
#### Proportion of patients with a negative lab test result who were prescribed antimalarials

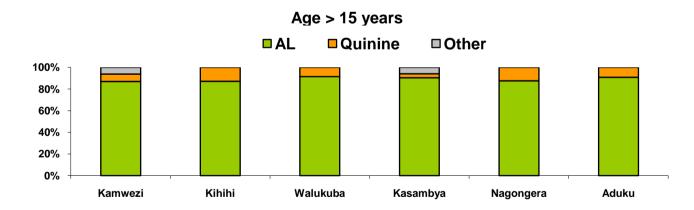


The practice of prescribing an antimalarial to a patient with negative lab test result decreased with increasing age at all sites. The highest proportion was 13% among the 5-15-years in Kasambya while Aduku recorded the lowest at 1.3%. Overall, this pattern of practice was comparable to the previous month.

#### Antimalarial drug treatment practices among those prescribed antimalarials







Artemether-lumefantrine (AL) was still the most frequently prescribed antimalarial among all age groups at all sites. Quinine is the second most prescribed antimalarial at all sites and among all age groups especially among children under 5 with this rising up to 42% in Kihihi with Nagongera at 38%. The other antimalarials prescribed included arco (artemesinin-napthoquine) and artemether injection especially in Kasambya (among all age groups) and Kamwezi (among those between 5-15 and over 15 years). All sites reported availability of all AL colored prepacks throughout the month.

#### **Appendix: Definitions**

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