THE REPUBLIC OF UGANDA

UGANDA MALARIA SURVEILLANCE PROJECT

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UMSP sentinel site malaria surveillance report January 2010

Introduction

Uganda Malaria Surveillance Project (UMSP) manages 6 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. Data is presented by sentinel site in the order of historical levels of transmission intensity. 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

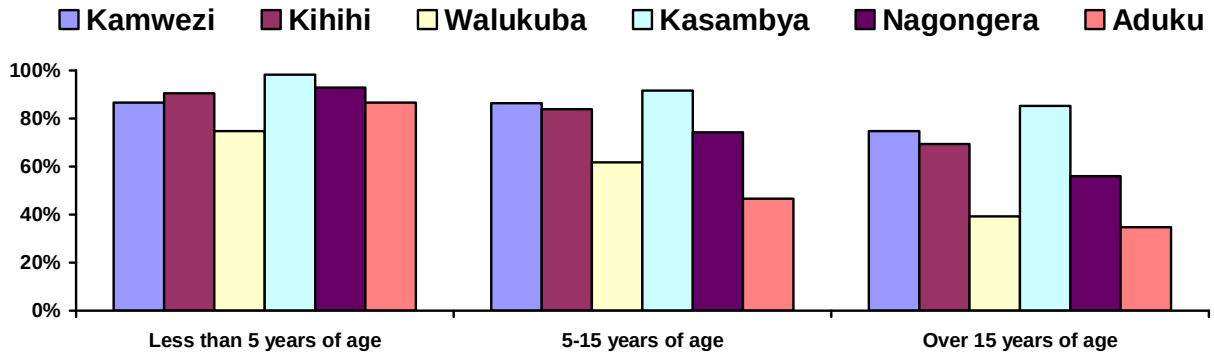
Data summary

District	Site	Total number of patients seen		Malaria suspected (number and proportion) [1]		Patients sent to the laboratory(number and proportion) [2]		Laboratory confirmed malaria (number and proportion) [3]	
		Total	< 5 years	Total	< 5 years	Total	< 5 years	Total	< 5 years
Kabale	Kamwezi	4656	813 (17%)	3,755 (81%)	704 (87%)	3,687 (98%)	689 (98%)	2,278 (62%)	494 (72%)
Kanungu	Kihihi	2243	699 (31%)	1,780 (79%)	633 (91%)	1,759 (99%)	627 (99%)	877 (50%)	363 (58%)
Jinja	Walukuba	3225	694 (22%)	1,666 (52%)	519 (75%)	1,539 (92%)	469 (90%)	572 (37%)	205 (44%)
Mubende	Kasambya	1506	576 (38%)	1,380 (92%)	566 (98%)	1,369 (99%)	557 (98%)	706 (52%)	370 (66%)
Tororo	Nagongera	1954	792 (41%)	1,439 (74%)	736 (93%)	1,319 (92%)	684 (92%)	712 (54%)	497 (73%)
Aduku	Aduku	1791	457 (26%)	886 (49%)	396 (87%)	864 (98%)	389 (98%)	452 (52%)	275 (71%)

[1] Denominator used to calculate proportion is total number of patients seen
[2] Denominator used to calculate proportion is the number with malaria suspected
[3] Denominator used to calculate proportion is the number of patients with laboratory test done

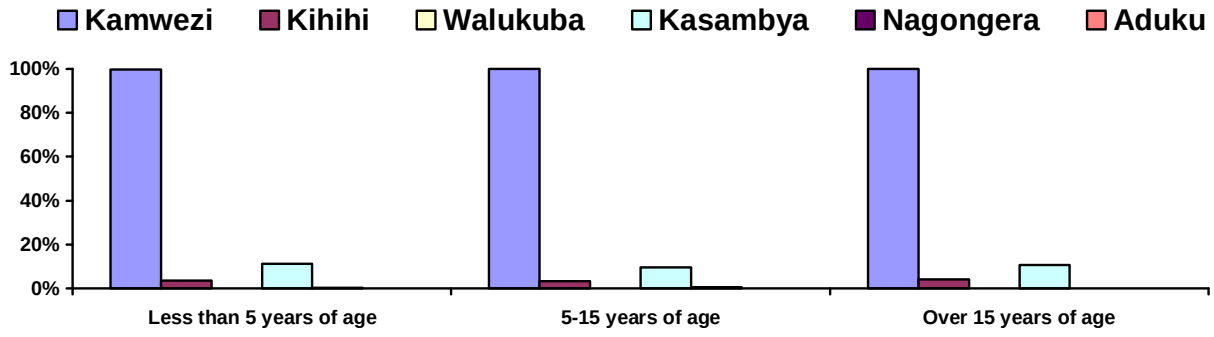
Overall total attendance at most of the sites did not change significantly, except at Kasambya where it increased from 821 in Dec 09 to 1506 to Jan 10. At all sites, more than half of the total patients seen were suspected of malaria, and over 90% of these were referred for a confirmatory laboratory test. There was a 10% increase in the absolute number of lab-confirmed malaria cases compared to December however the proportion of patients with positive results at all sites was comparable to Dec 09 results with Kamwezi continuing to report the highest SPR of 62%. Kihihi and Kasambya, also reported higher than expected SPRs of 50% and 52% respectively, however the SPR at Kihihi reduced slightly from December (53%).

Proportion of total patients seen suspected of having malaria stratified by age group



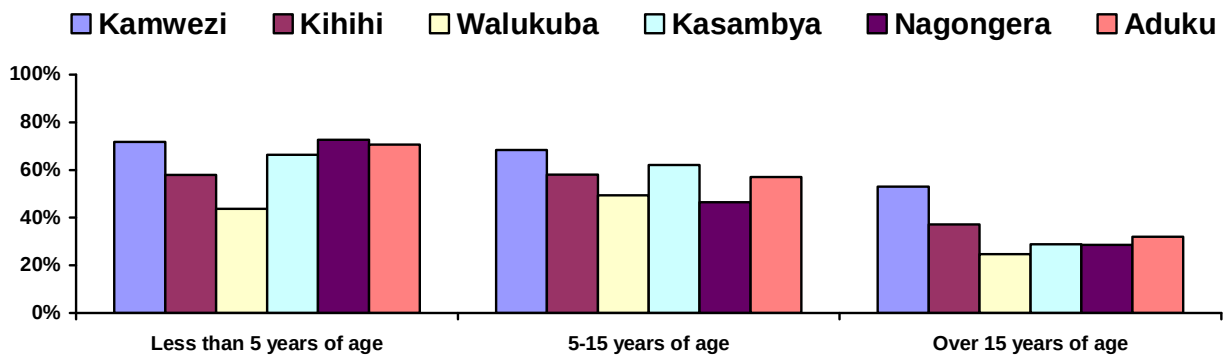
Suspected malaria cases are defined as all patients referred for a malaria laboratory test plus all patients not referred for a malaria laboratory test but given a clinical diagnosis of malaria. At Kasambya and Nagongera, in all age groups, the proportion of patients with suspected malaria increased this month compared to Dec 09.

Proportion of laboratory tests done that were RDTs



Over 97% of the laboratory tests performed at Kamwezi were RDTs.

Proportion of laboratory tests done that were positive

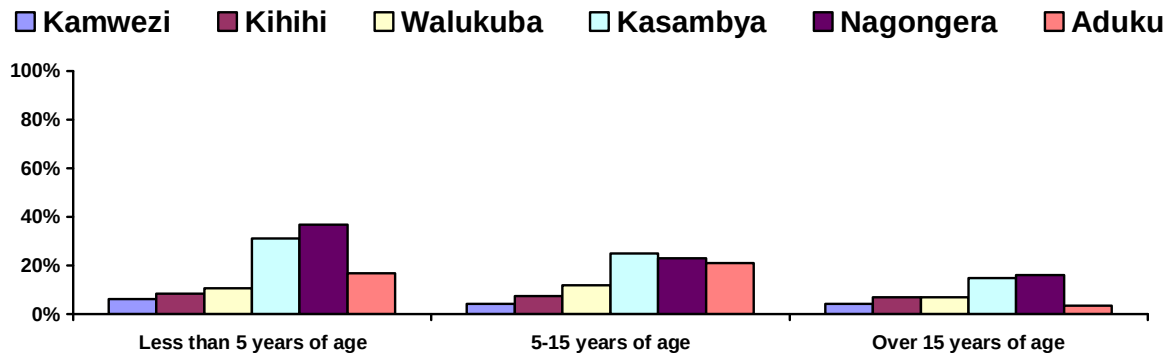


This month, Kamwezi, the lowest transmission setting, had the highest SPRs in all age groups except in under-5s where the SPR (72%) was similar to that in Aduku (71%) and Nagongera (73%) the highest transmission settings. However, at Kamwezi, the SPR reduced compared to December in under-5s from 75%, and in the 5-15 yr age group, from 72% to 68%. The SPR in the over 15 yr age group (53%) was similar to December (52%). These trends suggest that while malaria cases remain higher than expected, the Kamwezi epidemic detected in November 2009 is stable.

Kasambya has also experienced an increasing malaria burden since November 2009 particularly in the 5-15 yr old age group, and this month registered the 2nd highest SPR in this age group. The increase in cases this month compared to last (59% to 62%), is less than the increase registered in Oct-Nov (35% to 43%) and Nov – Dec (43% to 59%).

At the 4 other sites (Kihihi, Walukuba, Nagongera and Aduku), SPRs were either comparable or reduced slightly in the different age groups although Kihihi still registered the 2nd highest SPR among patients over 15 years.

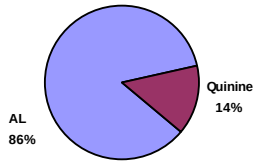
Proportion of patients with negative lab test result who were prescribed antimalarials



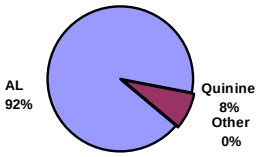
Antimalarial drug treatment practices among those prescribed antimalarials

Kamwezi

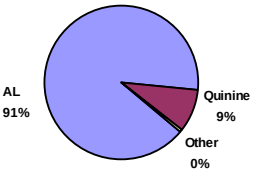
Age < 5 years



Age 5-15 years

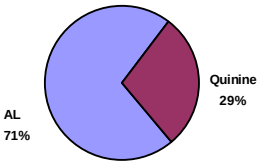


Age > 15 years

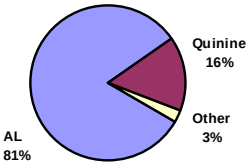


Kihihi

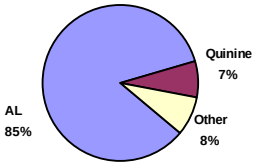
Age < 5 years



Age 5-15 years

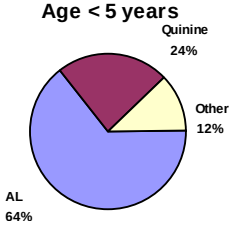


Age > 15 years

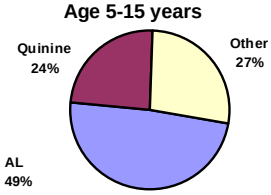


Walukuba

Age < 5 years



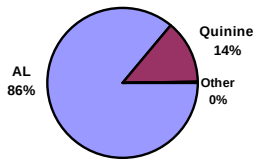
Age 5-15 years



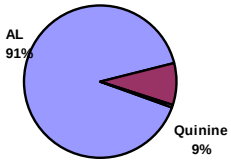
Age > 15 years

Kasambya

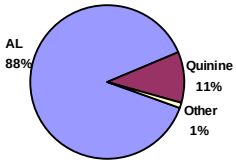
Age < 5 years



Age 5-15 years

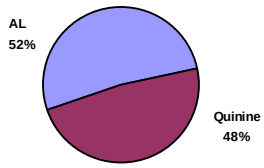


Age > 15 years

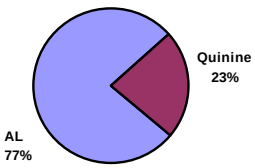


Nagongera

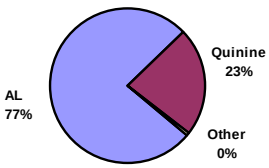
Age < 5 years



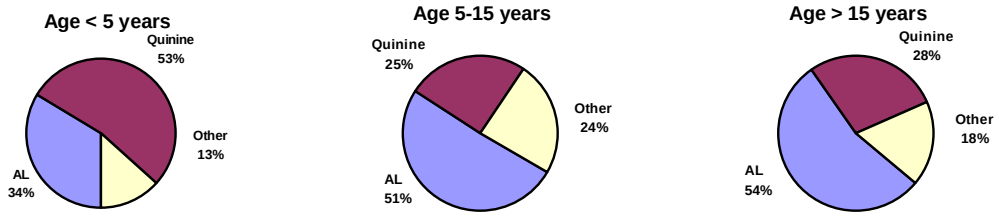
Age 5-15 years



Age > 15 years

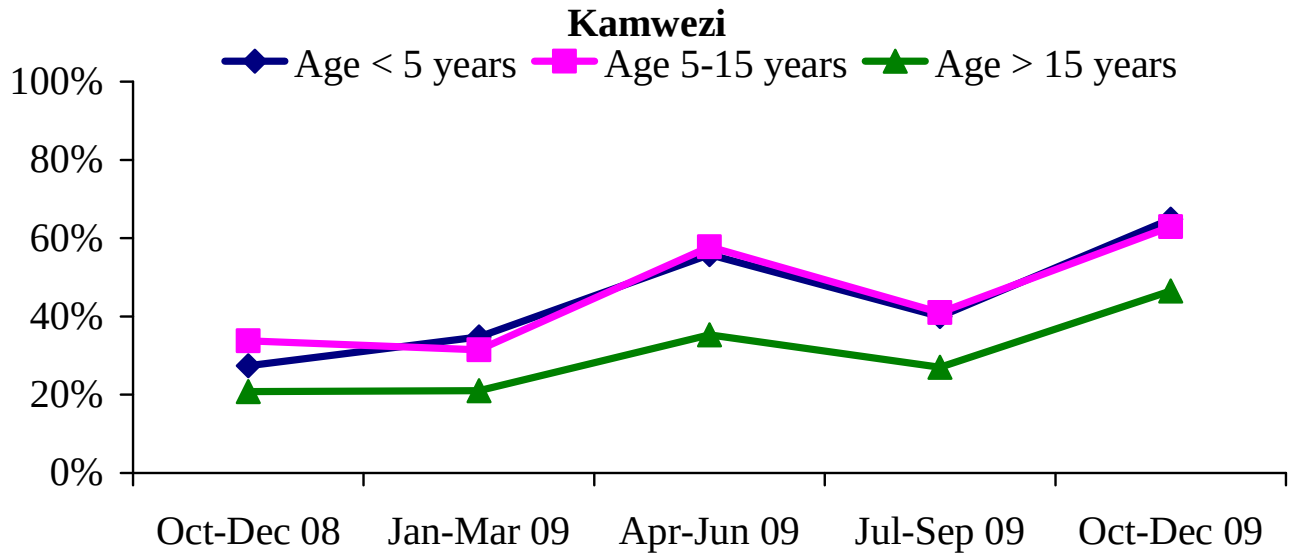


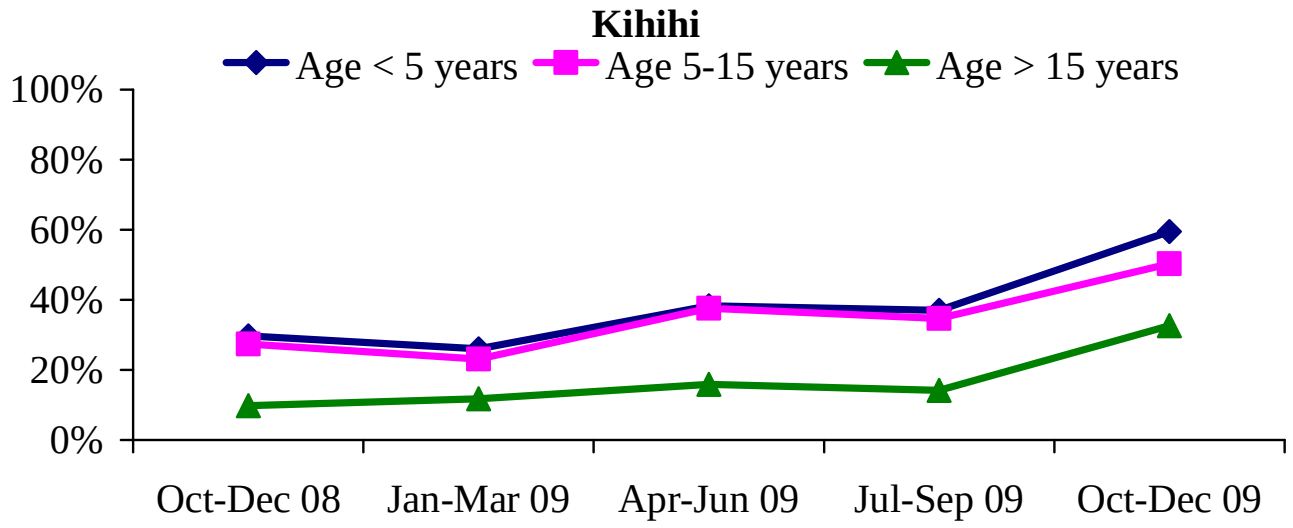
Aduku

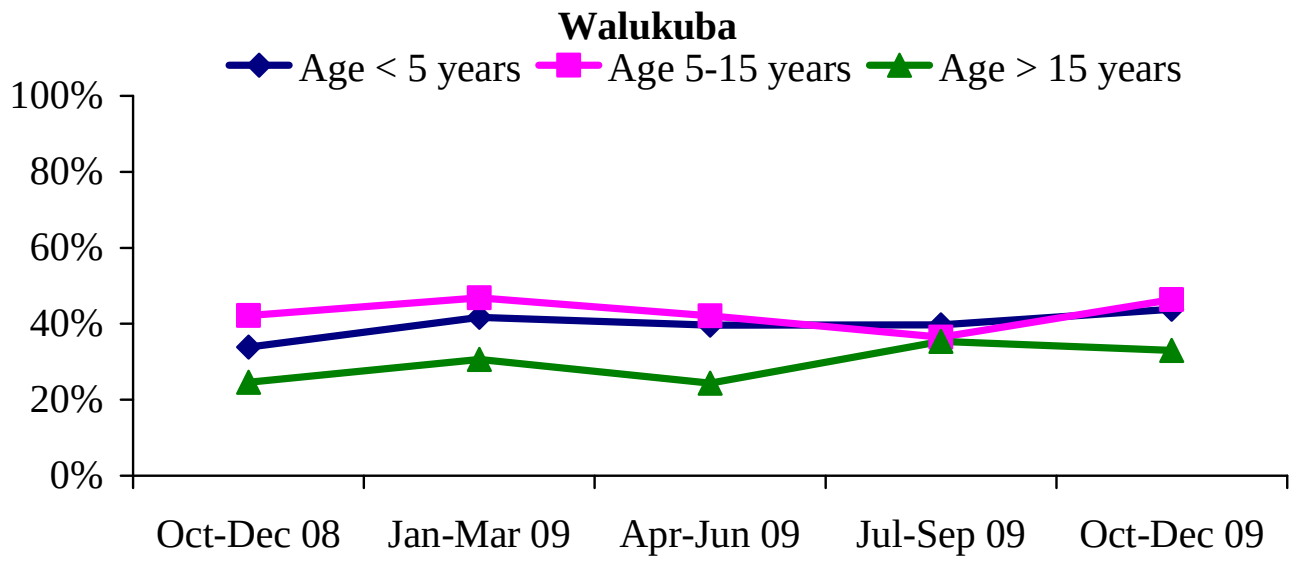


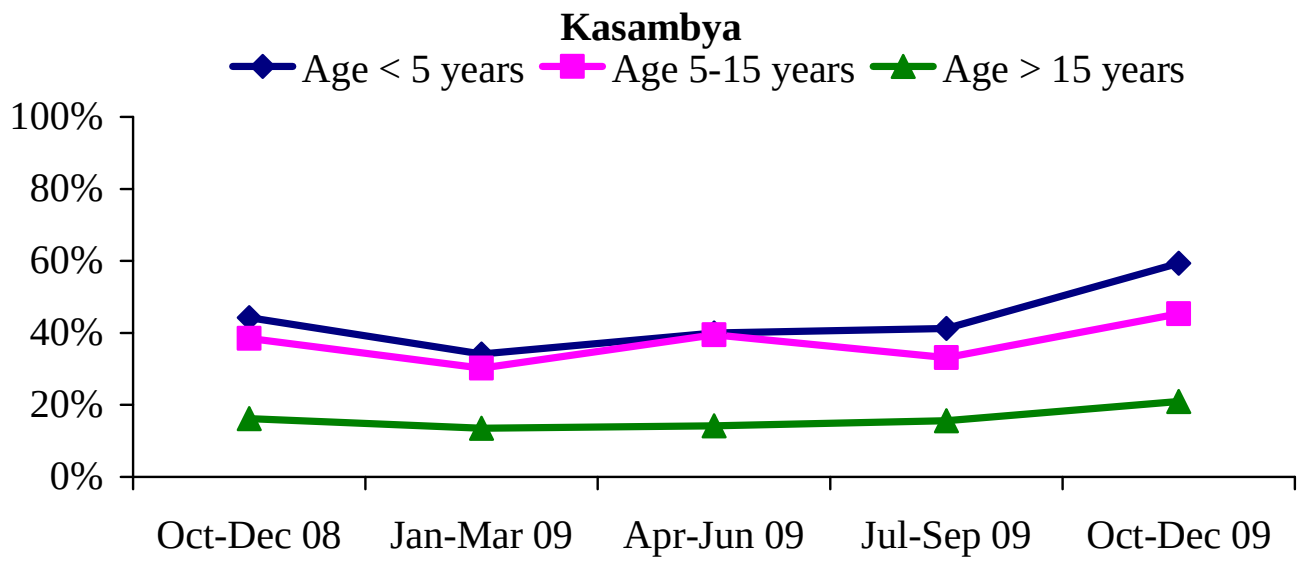
Artemether-lumfantrine (AL) or quinine made up almost all the antimalarials prescribed at all the sites except Walukuba where 52% of over 15 yr olds were mostly treated with the combination of SP and chloroquine. Treatment with quinine is most common at Walukuba and Aduku.

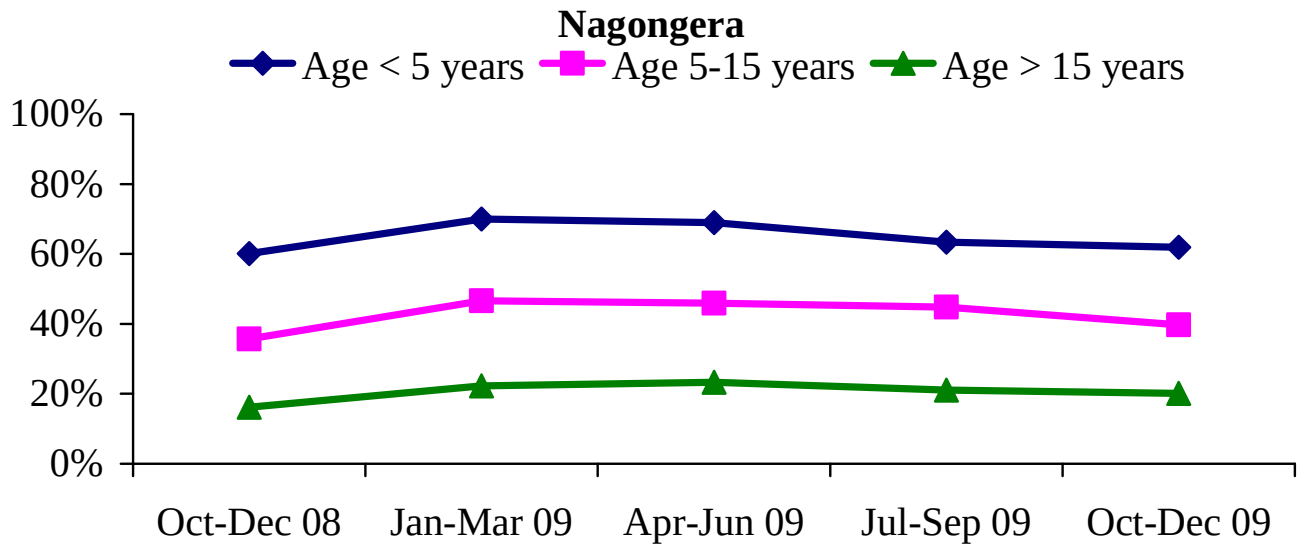
Temporal trends in the proportion of patients with a laboratory test for which the test is positive

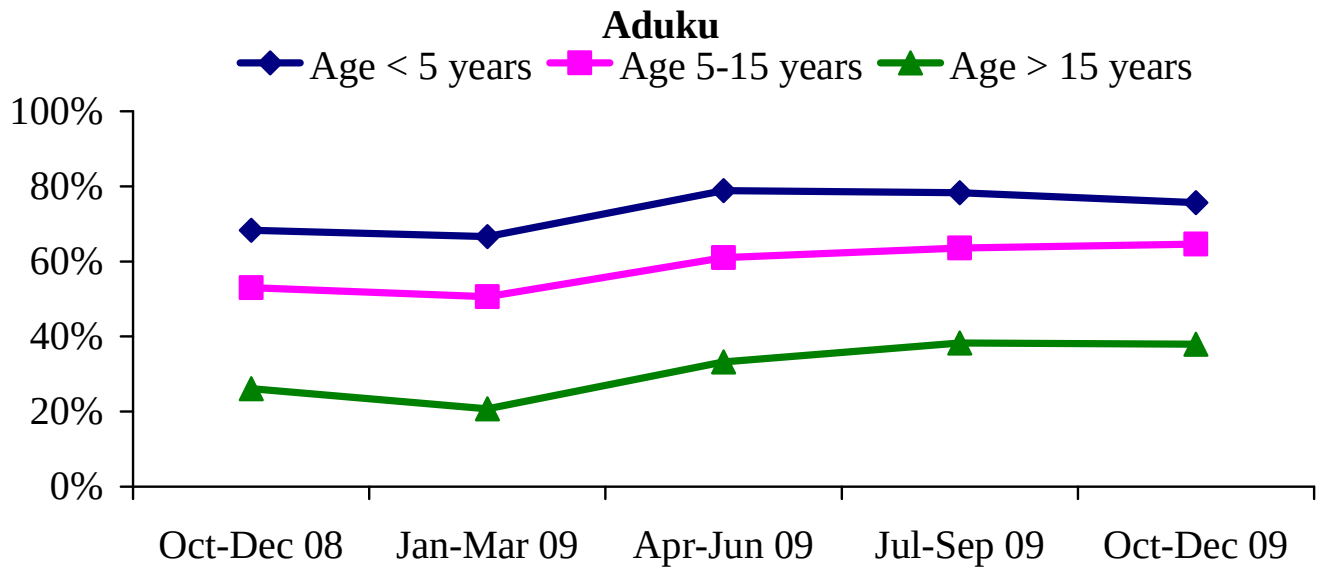







Kasambya
Age < 5 years
Age 5-15 years
Age > 15 years
100%
80%
60%
40%
20%
0%
Oct-Dec 08
Jan-Mar 09
Apr-Jun 09
Jul-Sep 09
Oct-Dec 09


Nagongera
Age < 5 years
Age 5-15 years
Age > 15 years
100%
80%
60%
40%
20%
0%
Oct-Dec 08
Jan-Mar 09
Apr-Jun 09
Jul-Sep 09
Oct-Dec 09


Aduku
Age < 5 years
Age 5-15 years
Age > 15 years
100%
80%
60%
40%
20%
0%
Oct-Dec 08
Jan-Mar 09
Apr-Jun 09
Jul-Sep 09
Oct-Dec 09