



THE REPUBLIC OF UGANDA

UGANDA MALARIA SURVEILLANCE PROJECT

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UMSP sentinel site malaria surveillance report December 2009

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	Patients < 5 years of age (number and proportion) ¹	Malaria suspected (number and proportion) ¹	Patients sent to the laboratory (number and proportion) ²	Laboratory confirmed malaria (number and proportion) ³
Kabale	Kamwezi	4753	912(19%)	3638(77%)	3555(98%)	2198(62%)
Kanungu	Kihihi	2356	747(32%)	1938 (82%)	1891(98%)	1002(53%)
Jinja	Walukuba	2854	658(23%)	1490 (52%)	1218(82%)	461(38%)
Mubende	Kasambya	821	291(35%)	702 (86%)	696(99%)	350(50%)
Tororo	Nagongera	1895	702(37%)	1210 (64%)	1109(92%)	571(51%)
Aduku	Aduku	1349	438 (32%)	817 (61%)	782(96%)	417(53%)

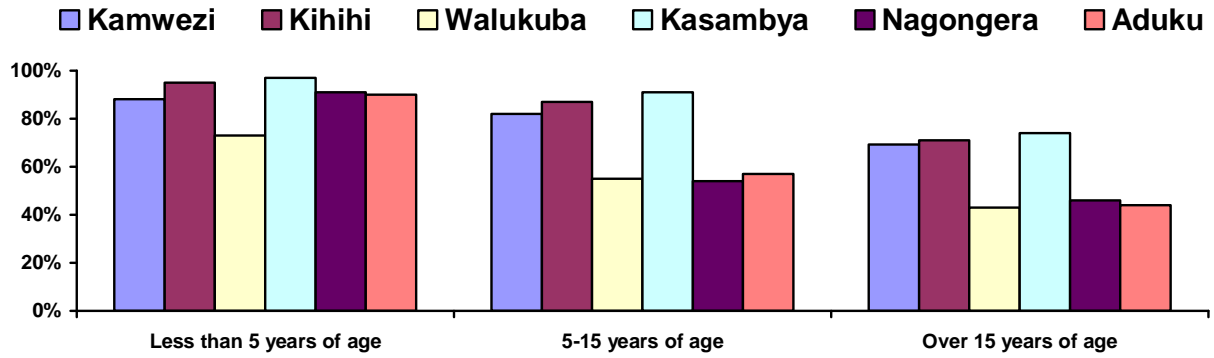
¹ Denominator used to calculate proportion is total number of patients seen

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

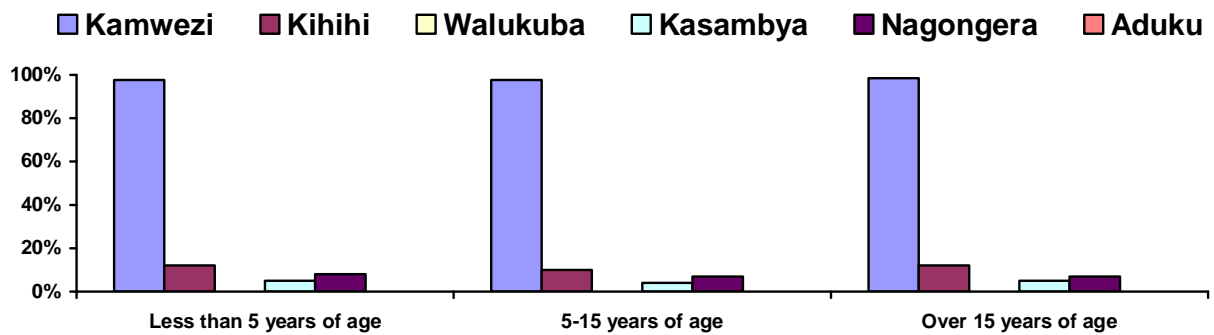
The number of patients seen decreased at all sentinel sites, except for Kamwezi, where, in contrast, the OPD attendance doubled from 2261 in November to 4753 this month. Similarly, at Kamwezi the proportion of patients suspected of malaria increased from 46% in November to 77% this month, while at other sites, it remained stable. Compared to November, the proportion of laboratory confirmed malaria cases this month increased by 10% in Kamwezi and Mubende, and decreased by 7% in Aduku.

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



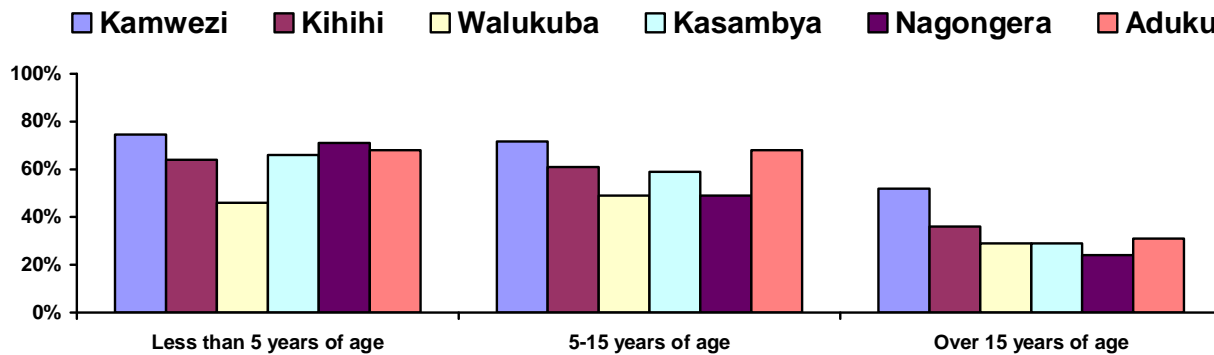
Suspected malaria cases are defined as all patients referred for a malaria laboratory test plus all patients not referred for a malaria laboratory test but given a clinical diagnosis of malaria. The proportion of patients suspected of having malaria decreased with increasing age at all the sites. In Kamwezi, the proportion of suspected malaria cases were higher in this month compared to previous months for all age groups.

Proportion of laboratory tests done that were RDTs



More than 95% of the laboratory tests performed at Kamwezi were RDTs. This is considerably higher than RDT use in previous months and is likely to be due to the upsurge of suspected malaria cases seen this month.

Proportion of laboratory tests done that were positive

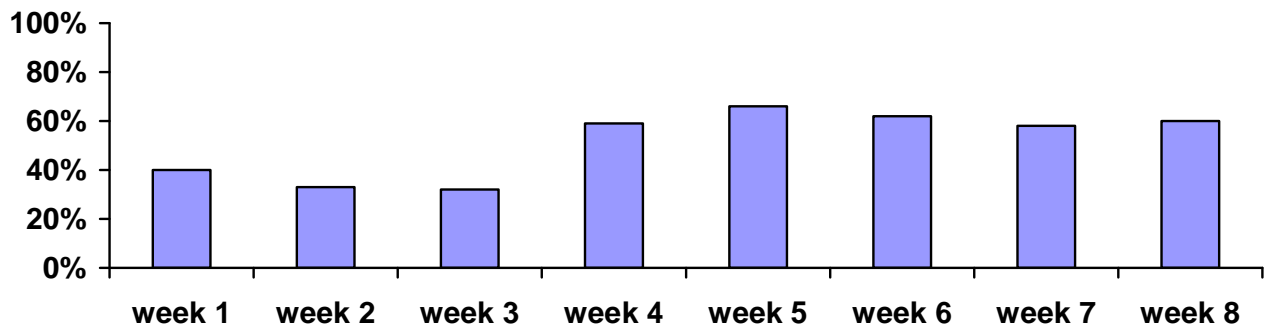


This month Kamwezi had the highest proportion of patients who tested positive for malaria parasites. This shows a continuation of the malaria epidemic that started last month. Kihiji is also experiencing an increase in the slide positivity rate (SPR) to levels comparable to Aduku which located in very high transmission areas for all age groups.

Weekly malaria data from Kamwezi (November – December 2009)

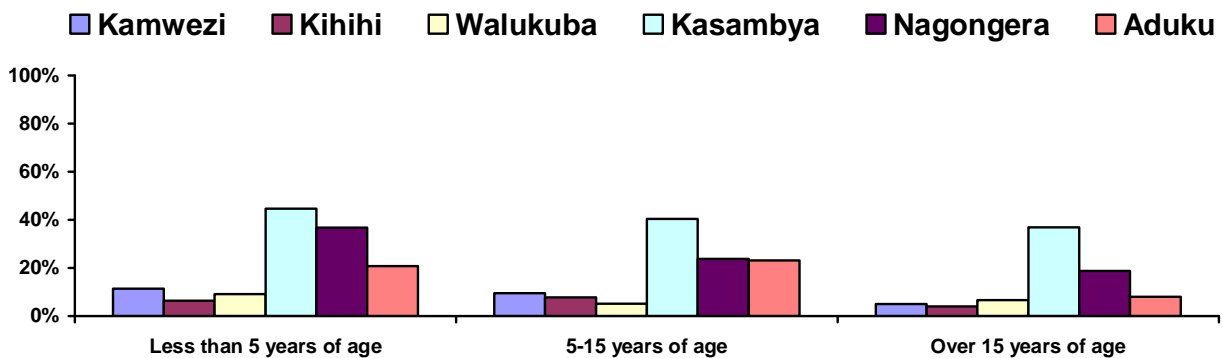
	Week 1 2-8 th	Week 2 9 – 15 th	Week 3 16-22 nd	Week 4 23-29 th	Week 5 30-6 th	Week 6 7-13 th	Week 7 14-20 th	Week 8 21-27 th
Number of patients with suspected malaria	63	104	162	570	641	913	813	458
Number referred for laboratory testing	40	95	155	542	581	890	794	439
Laboratory-confirmed malaria (number and SPR)	16 (40%)	31 (33%)	50 (32%)	319 (59%)	383 (66%)	556 (62%)	463 (58%)	263 (60%)

Weekly trends in SPR in Kamwezi for November – December 2009



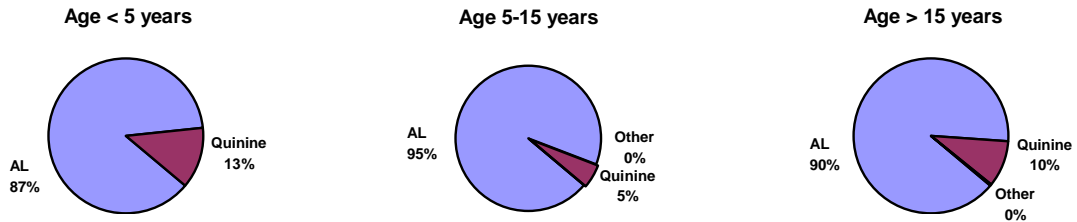
The Kamwezi epidemic continued through December although it may have peaked in the first half of the month.

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

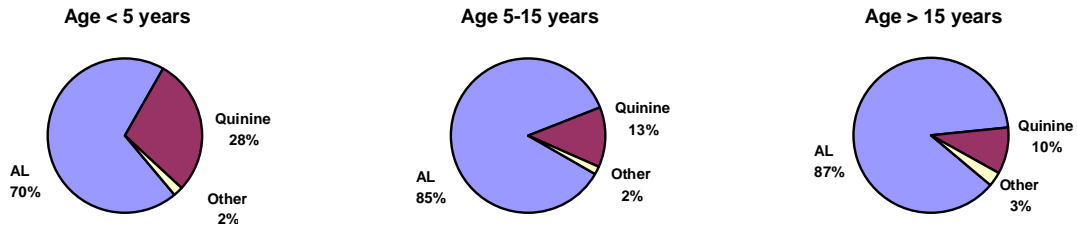


Antimalarial drug treatment practices among those prescribed antimalarials

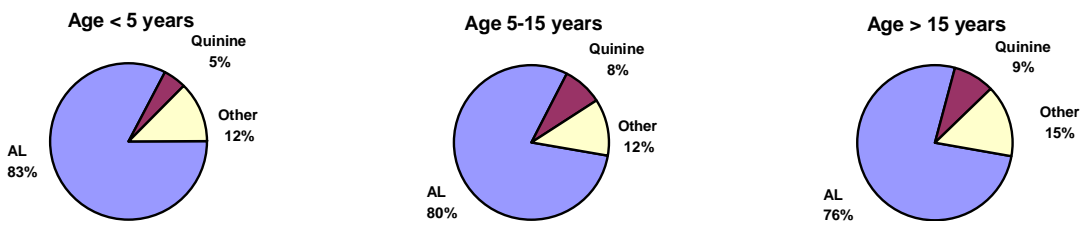
Kamwezi



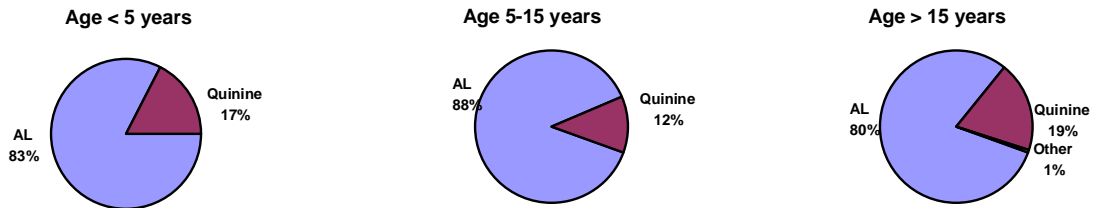
Kihihi



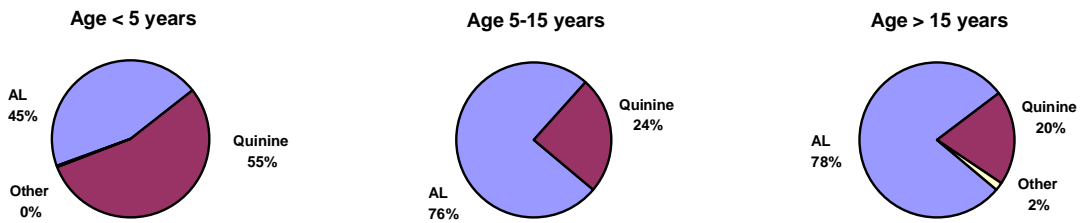
Walukuba



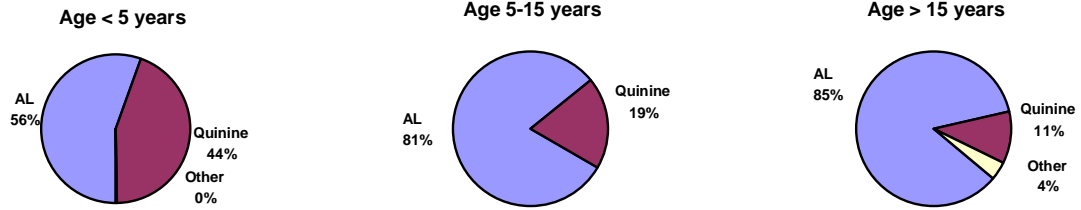
Kasambya



Nagongera



Aduku



Artemether-lumfantrine (AL) or quinine made up almost all the antimalarials prescribed at all the sites. Treatment with quinine is most common at the two highest transmission sites (Nagongera and Aduku), especially in children under 5 years where quinine made up over 40% of the antimalarials prescribed. There was a high proportion of cases treated with AL in Kamwezi despite the increased number of cases seen.

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

