



THE REPUBLIC OF UGANDA

UGANDA MALARIA SURVEILLANCE PROJECT

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UMSP sentinel site malaria surveillance report June 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	4566	826 (18%)	3,141 (69%)	656 (79%)	2,344 (75%)	481 (73%)	1,276 (54%)	292 (61%)
Kanungu	Kihihi	2214	607 (27%)	1,595 (72%)	532 (88%)	1,556 (98%)	515 (97%)	632 (41%)	285 (55%)
Jinja	Walukuba	3520	613 (18%)	1,959 (56%)	446 (73%)	1,901 (97%)	436 (98%)	877 (46%)	249 (57%)
Mubende	Kasambya	1255	325 (26%)	1,080 (86%)	307 (94%)	1,044 (97%)	301 (98%)	372 (36%)	161 (53%)
Tororo	Nagongera	2307	688 (30%)	1,702 (74%)	625 (91%)	1,636 (96%)	606 (97%)	659 (40%)	360 (59%)
Aduku	Aduku	1840	521 (28%)	1,039 (56%)	429 (82%)	995 (96%)	419 (98%)	516 (52%)	303 (72%)

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

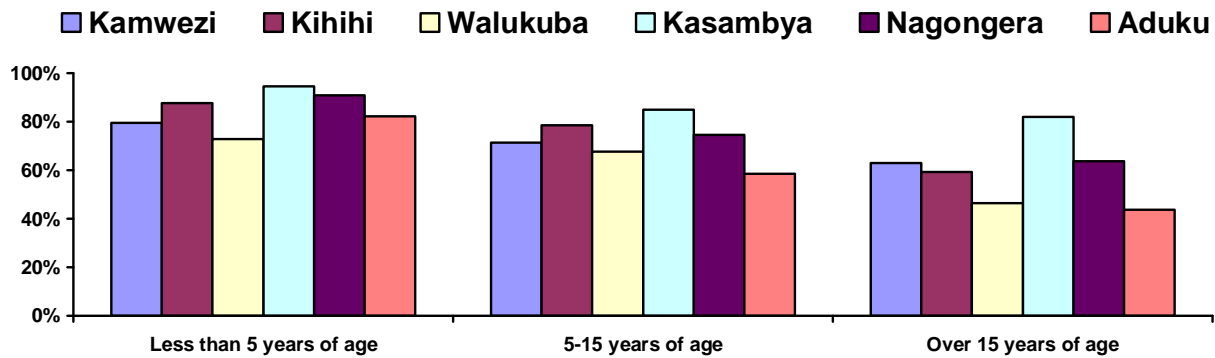
² Denominator used to calculate proportion is the number with malaria suspected

³ Denominator used to calculate proportion is the number of patients with laboratory test done

Compared to last month, total OPD attendance this month increased by 40% at Kamwezi, decreased by 27% at Kasambya and remained relatively stable at the other sites. The increase in OPD attendance at Kamwezi was accompanied by a 14% increase in the proportion of suspected malaria cases and a 6% increase in the proportion of lab confirmed malaria cases. The proportion of confirmed cases also increased at Walukuba

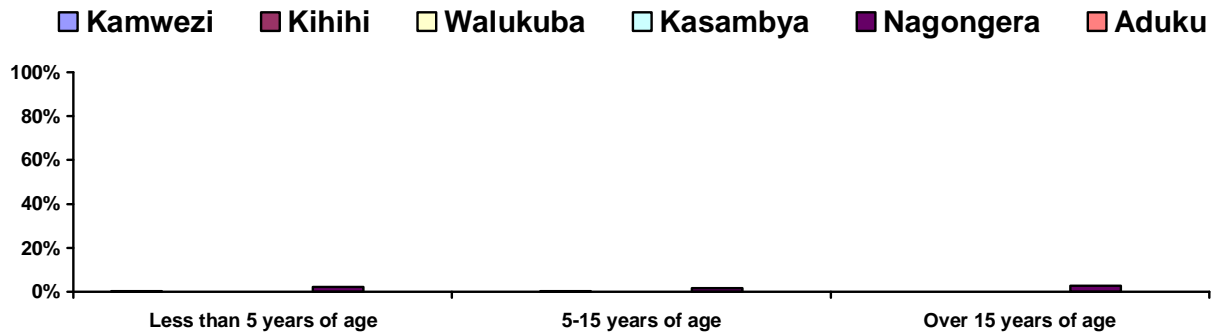
from 40% (May 10) to 46% (Jun 10) while remaining relatively stable at Aduku (51%), Kihihi (41%) and Kasambya (36%) and decreasing at Nagongera from 49% (May 10) to 40% (Jun 10).

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



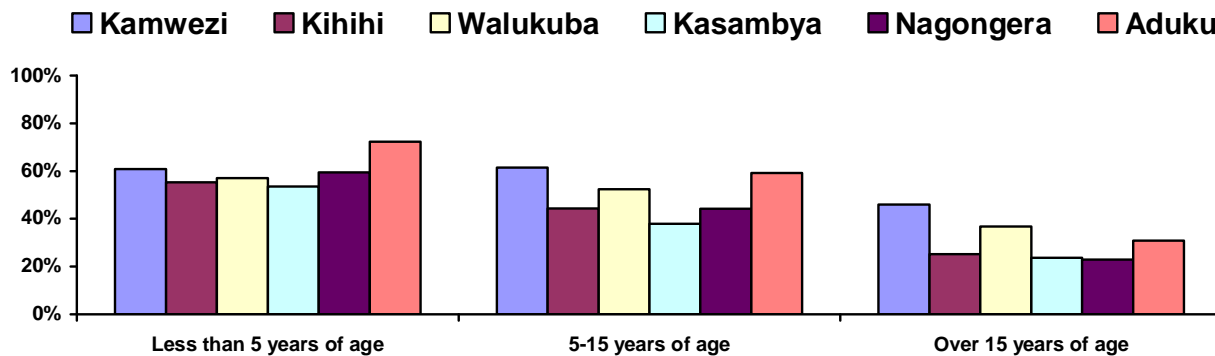
Suspected malaria cases are defined as all patients referred for a malaria laboratory test plus all patients not referred for a malaria laboratory test but given a clinical diagnosis of malaria. At all sites, the proportion suspected of malaria increases as age increases.

Proportion of laboratory tests done that were RDTs



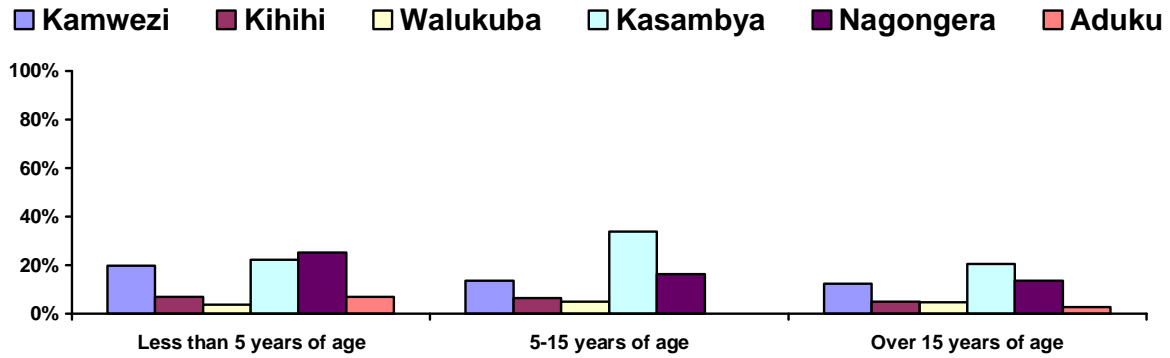
There is very little use of the RDTs at the sites as they are out of stock country-wide.

Proportion of laboratory tests done that were positive



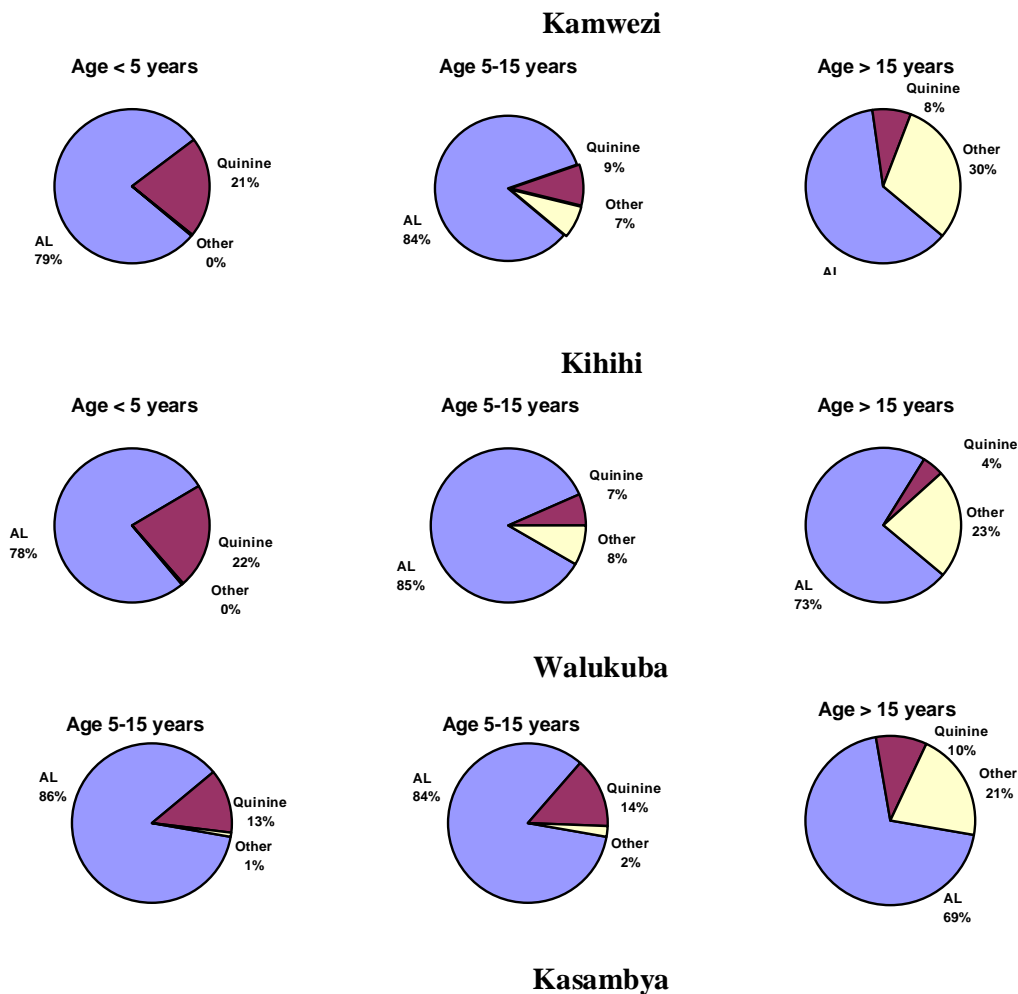
Among under 5s, the slide positivity rate ranged from 53% (Kasambya) to 72% (Aduku), showing that at all sites more than half of the children under 5 who were tested for malaria parasites tested positive. Among patients 5–15 year, the SPR ranged from 38%(Kasambya) to 62% (Kamwezi), while among the patients greater than 15 years, the SPR ranged from 23% (Nagongera) to 46% (Kamwezi). Compared to last month, SPRs increased by over 5% at Kamwezi among the under 5s and the over 15 yr olds, at Walukuba among the under 5s and the over 15 yr olds and at Aduku among the under 5s. In contrast, decreases in SPR of greater than 5% were seen at Kasambya among 5-15 yr olds, at Nagongera among the under 5s and the over 15 yr olds and at Aduku among 5-15 yr olds.

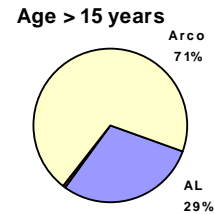
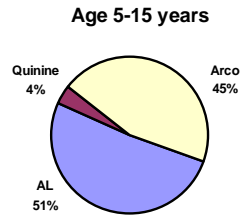
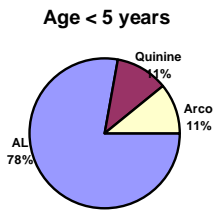
Proportion of patients with negative lab test result who were prescribed antimalarials



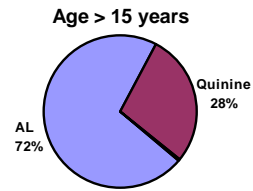
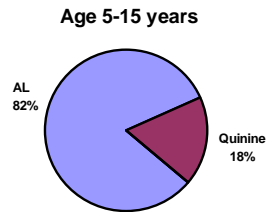
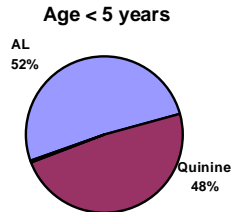
The practice of treating patients with a confirmed negative malaria test was least common at Aduku (4% lab-confirmed negative cases treated with an antimalarial) and most common at Kasambya (24% lab-confirmed negative cases treated). The proportion of patients with negative results prescribed an antimalarial has remained similar to May 10 results.

Antimalarial drug treatment practices among those prescribed antimalarials

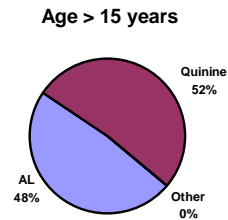
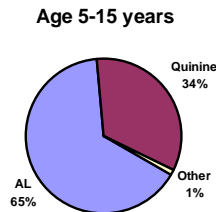
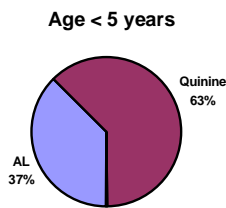




Nagongera

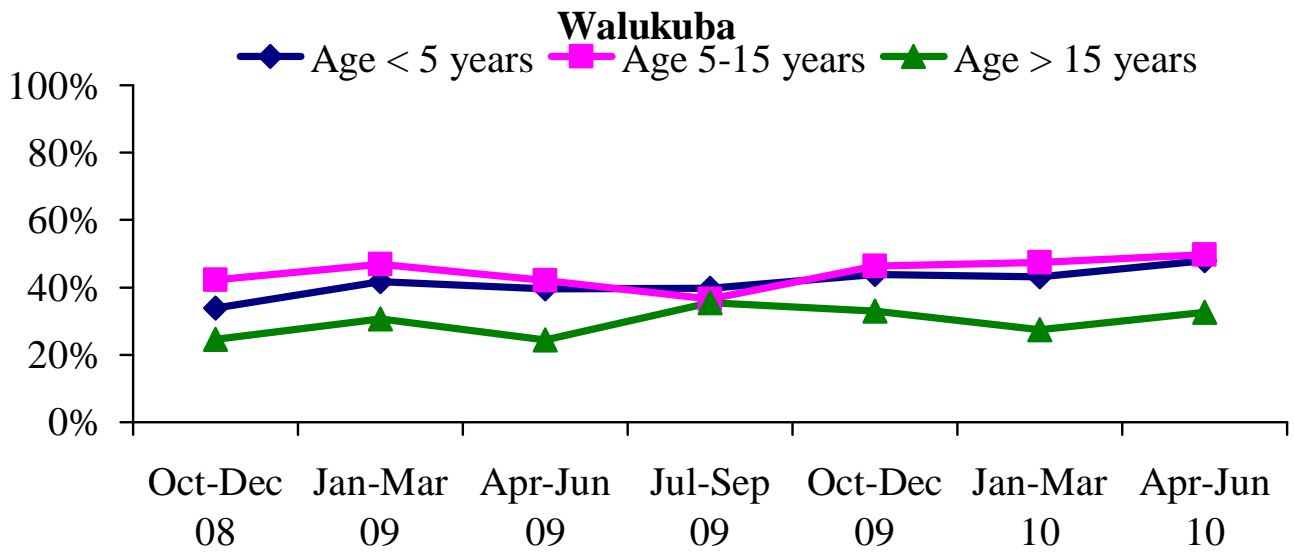
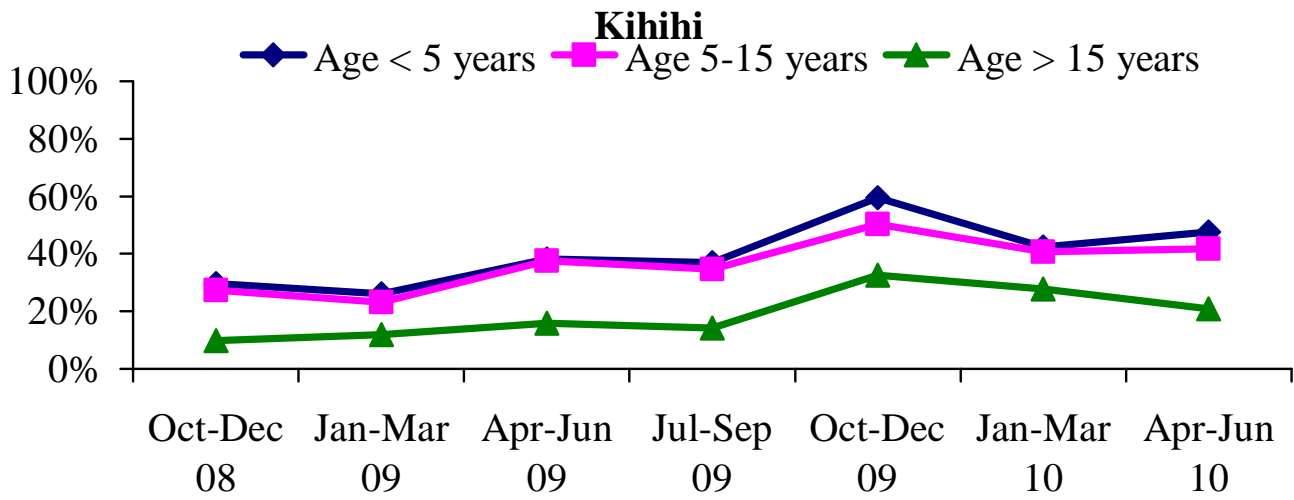
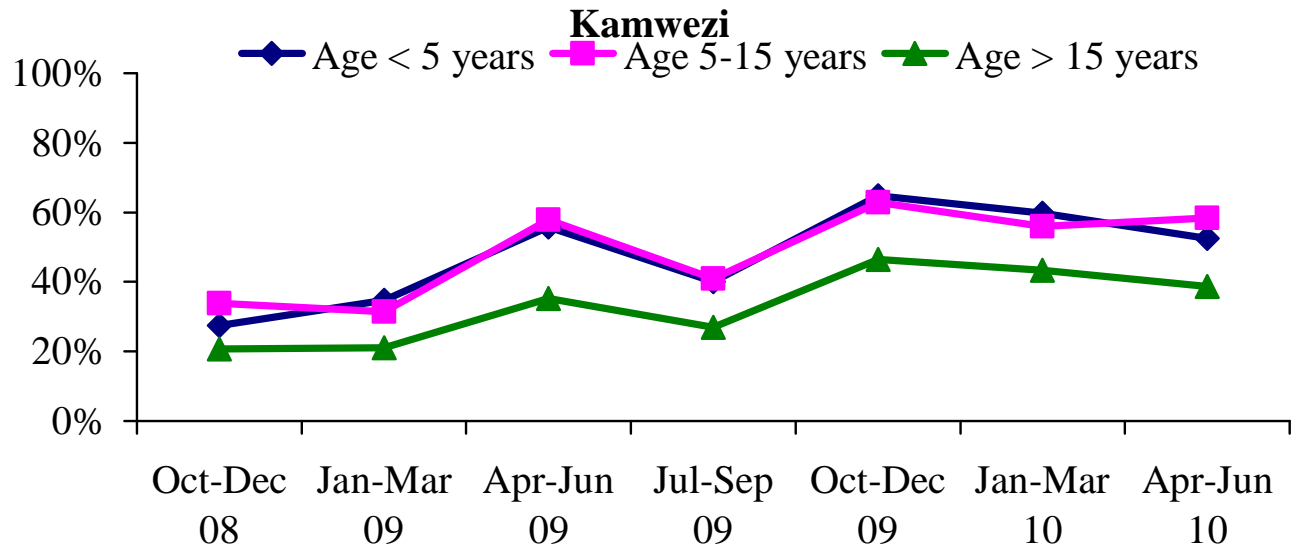


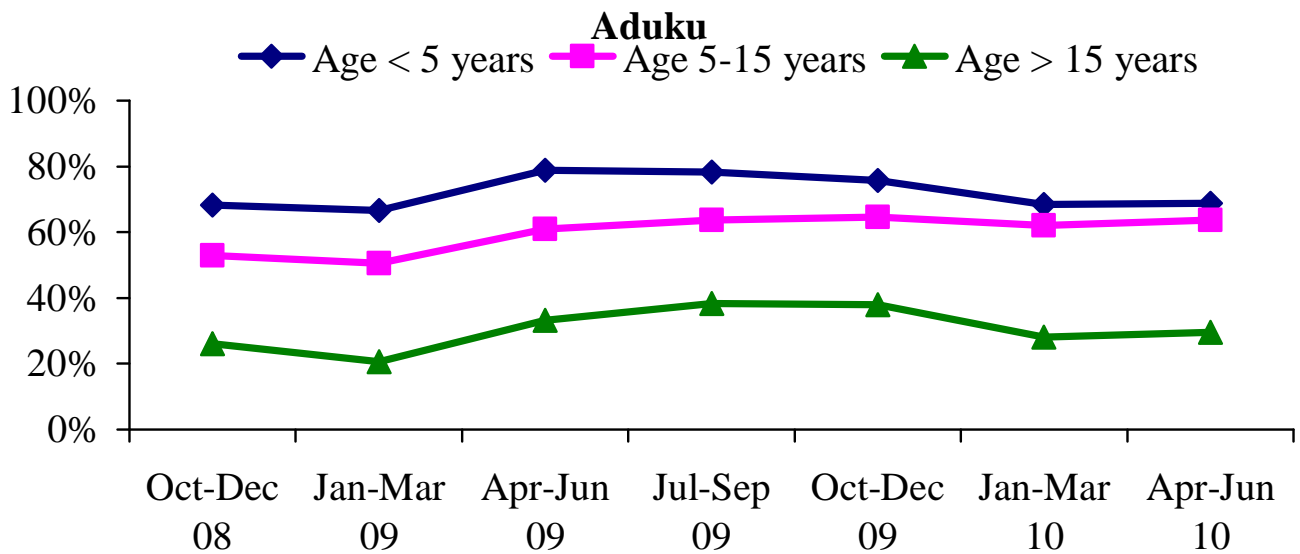
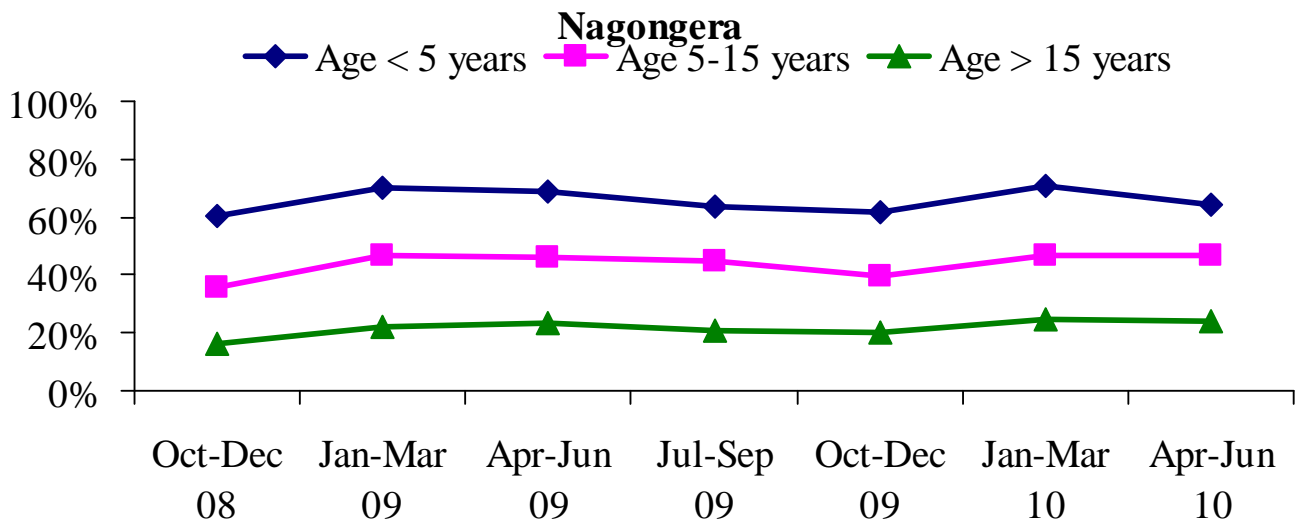
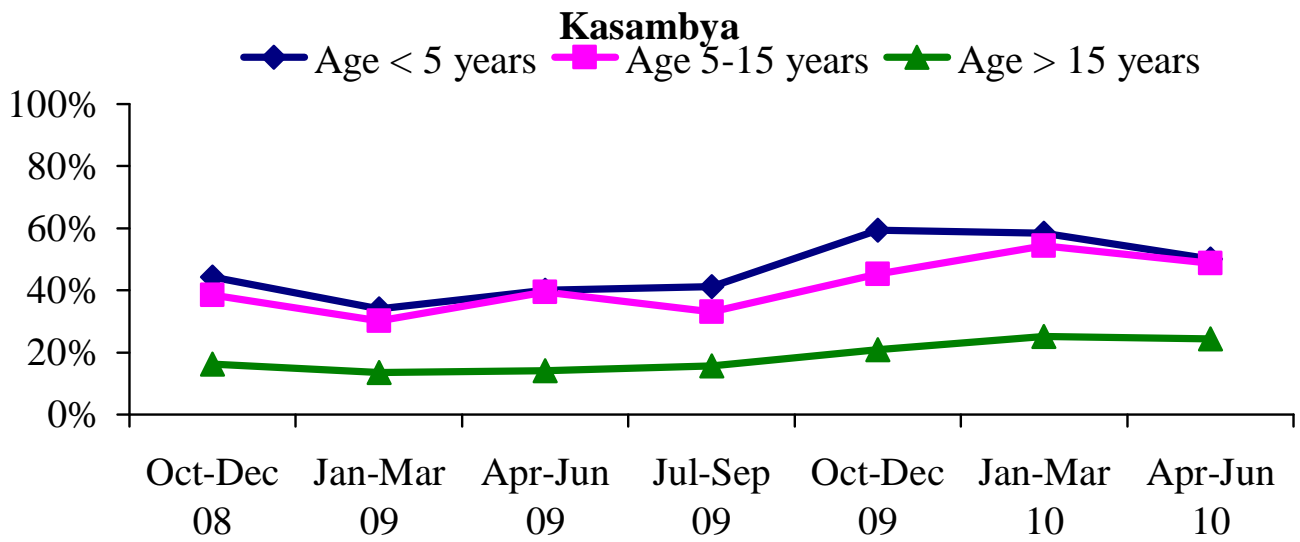
Aduku



At all sites artemether-lumafantrine was predominantly prescribed among all age groups except at Kasambya where artesunate-naphthoquine was predominantly prescribed among patients greater than 15 years and at Aduku quinine was mostly prescribed among the under 5s and the greater than 15 years. Among the other antimalarials, Kamwezi prescribed artesunate-naphthoquine and duoctexcin, while Kihikihi prescribed CQ + SP in some few patients.

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





SPR (proportion of blood smears read as positive) standardized for age

