





UGANDA MALARIA SURVEILLANCE PROJECT

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UMSP sentinel site malaria surveillance report September 2010

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. Data is presented for both out- patient and in-patient sentinel sites. 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 (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 | 1606 | 218 | 590 | 115 | 532 | 96 | 153 | 38 |
| | | | 14% | 37% | 53% | 90% | 83% | 29% | 40% |
| Kanungu | Kihihi | 1261 | 284 | 756 | 232 | 754 | 232 | 173 | 68 |
| | | | 23% | 60% | 82% | 100% | 100% | 23% | 29% |
| Jinja | Walukuba | 3176 | 584 | 1,627 | 439 | 1,597 | 432 | 693 | 212 |
| | | | 19% | 51% | 75% | 98% | 98% | 43% | 49% |
| Mubende | Kasambya | 862 | 184 | 571 | 144 | 531 | 134 | 114 | 49 |
| | | | 21% | 66% | 78% | 93% | 93% | 21% | 37% |
| Tororo | Nagongera | 1872 | 524 | 1,311 | 478 | 1,266 | 460 | 352 | 224 |
| | | | 28% | 70% | 91% | 97% | 96% | 28% | 49% |
| Aduku | Aduku | 1504 | 312 | 829 | 263 | 532 | 263 | 351 | 157 |
| | | | 21% | 55% | 84% | 90% | 100% | 42% | 60% |

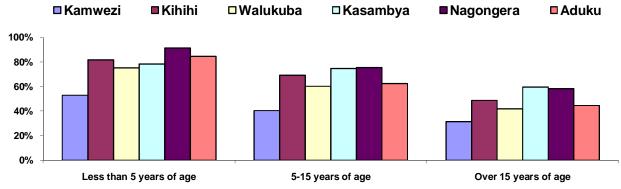
¹Denominator used to calculate proportion is total number of patients seen

Compared to the previous month, the OPD attendance in September decreased at all sites except Walukuba resulting in a combined decrease from 12,541 to 10,281. The age distribution of clinic attendants was similar in the 2 months. Similar to OPD attendance, there was a decrease in malaria seen at all sites with an overall decline of total cases from 3,035 to 1,836 and a decline in the SPR at all sites except Walukuba.

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

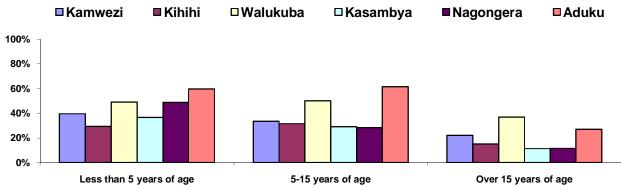
³ Denominator used to calculate proportion is the number of patients with laboratory test done

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



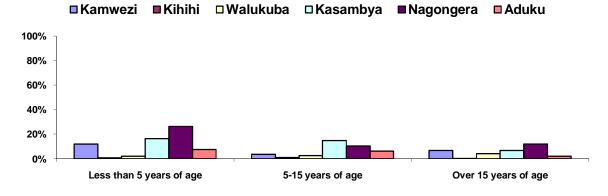
Among children less than 5 years of age, the proportion of patients suspected of malaria ranged from 53% (Kamwezi) to 91% (Nagongera), from 40% (Kamwezi) to 75% (Nagongera) among children 5-15 years and from 31% (Kamwezi) to 60% (Kasambya) among those aged 15 years and above. This represents an overall decrease in the total number of patients with suspected malaria from 7,888 in August to 5,684 this month at all sites combined.

Proportion of laboratory tests done that were positive (SPR)



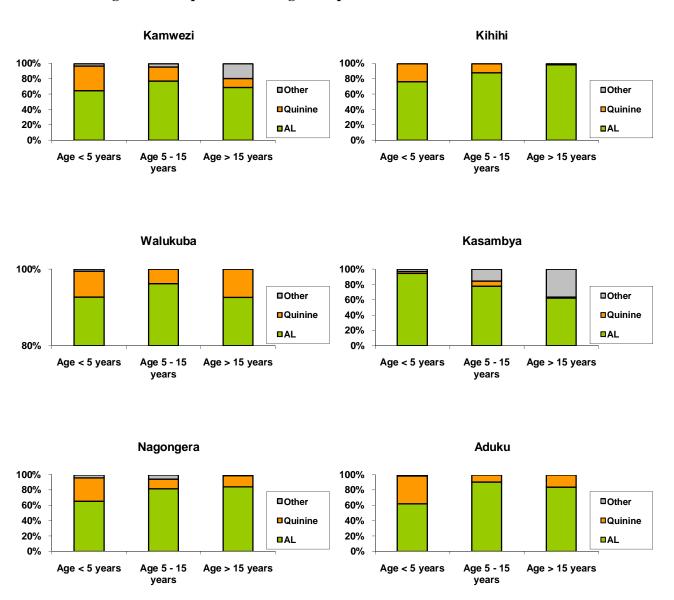
In general the SPR decreased with age at all sites. Among children under 5 years of age, the overall SPR ranged from 29% (Kihihi) to 60% (Aduku). While in those aged 5-15 years it ranged from 29% (Nagonger) to 61% (Aduku) and in those over 15 years old it ranged from 11% (Kasambya) to 37% (Walukuba).

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



Prescription of antimalarial drugs to patients with negative laboratory results was commonest at Nagongera where 27% the children under 5 who tested negative to malarial parasites were prescribed antimalarials.

Antimalarial drug treatment practices among those prescribed antimalarials



In this month, AL was predominantly prescribed among all age groups at all the sites. All AL pre-packs were available at Kihihi, Nagongera and Kasambya throughout the month while Kamwezi, Aduku and Walukuba experienced shortages of some but not all AL pre-packs.

Appendix: Definitions

| Indicator | Definition | | | |
|--|--------------|--|--|--|
| Number of suspected malaria cases | Numerator: | Number of patients referred for a malaria laboratory test plus all patients not referred for a malaria laboratory test but given a clinical diagnosis of malaria | | |
| Proportion of total patients | Numerator: | Number of patients suspected of malaria | | |
| seen suspected of having malaria | Denominator: | Total number of patients seen | | |
| Proportion of laboratory tests done that were RDTs | Numerator: | Number of lab tests performed that were Rapid Diagnostic Tests (RDTs) | | |
| | Denominator: | Total number of laboratory tests performed | | |
| Proportion of laboratory tests | Numerator: | Number of laboratory tests that were positive | | |
| done that were positive (SPR) | Denominator: | Total laboratory tests performed | | |
| Proportion of patients with negative lab test result who | Numerator: | Number of patient who tested negative for malaria parasites prescribed an antimalarial | | |
| were prescribed antimalarials | Denominator: | Total number of patients who tested negative for malaria parasites | | |