

How does patient-provider communication around malaria rapid diagnostic testing affect patient perceptions of treatment?

A qualitative study in western Uganda.

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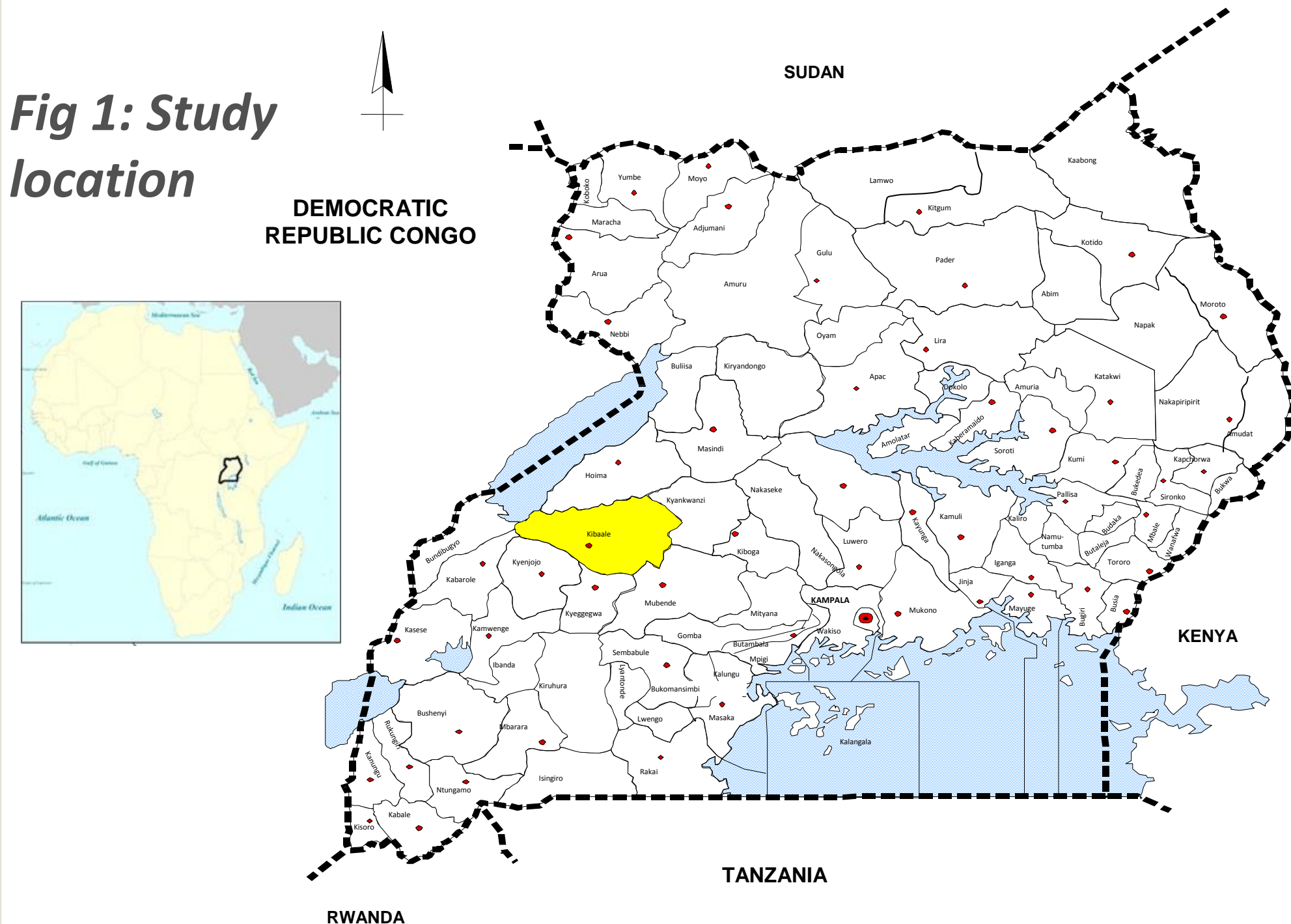
Introduction

Routine use of malaria rapid diagnostic tests (RDTs) in the management of patients with fever represents a new approach in contexts with minimal exposure to diagnostic technologies. Successful scale-up of RDT use requires that patients accept testing and treatment based on RDT results and providers treat according to test results. Patient reactions are important as perceived patient pressure or expectations have shown to influence therapeutic decision making. We investigated how patient-provider communication around testing affects patient perceptions of treatment following RDT use.

Methods

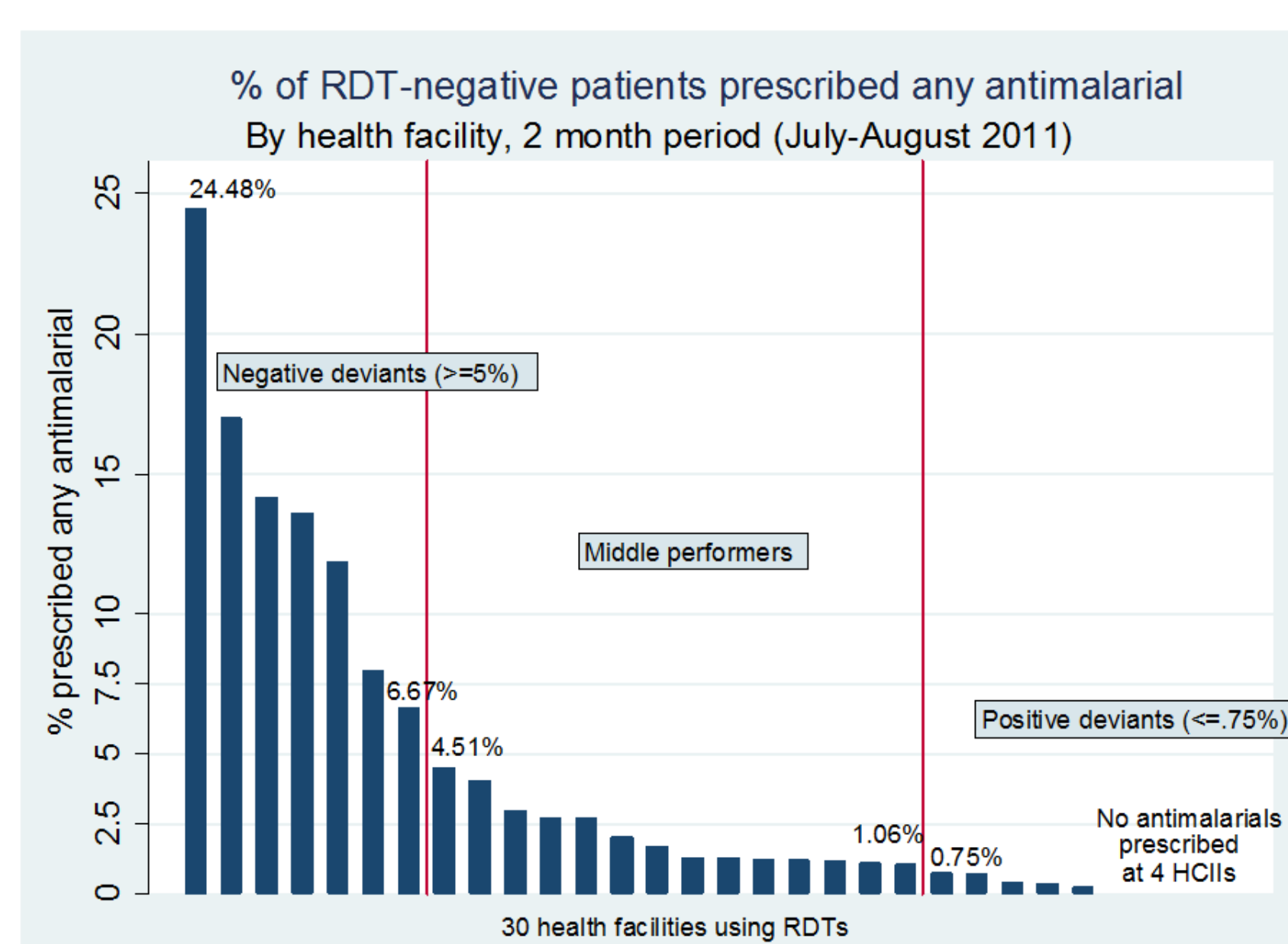
A qualitative study was conducted in a remote, rural district in western Uganda (Kibaale, Fig 1), ten months after RDT introduction.

Fig 1: Study location



Health facilities were purposively sampled according to their overall prescribing performance, based on prescriptions audited for a two-month period, six to seven months following RDT introduction (Fig 2).

Fig 2: Sampling approach



55 patients presenting with fever were observed during routine outpatient visits at 12 low-level health facilities. Observation focus was on communication practices around test purpose, results, diagnosis and treatment. All observed patients or caregivers were immediately followed up with in-depth interview. Analysis followed the 'framework' approach. Content analysis of observation data also used a summative approach.

Results and Discussion

Fig 3: Observed communication during testing and care process

Test purpose

- Pattern of minimal communication from outset of visit
- Majority of patients were not informed what being tested for (no mention of malaria or fever). Providers often vaguely mentioned just 'testing' or 'checking blood' without specification
- In some cases, there was no communication with the patient prior to testing (RDT used as a screening tool rather than a confirmatory diagnostic)
- Providers rarely communicated the rationale for testing or what the test results would mean, potentially leading to patient misunderstandings about implications of testing



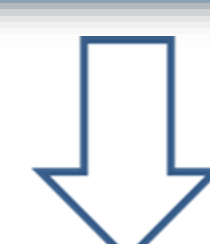
Test result

- About two-thirds informed of test result; a higher proportion of those who tested negative were informed than those who tested positive
- Communication about results ranged in specificity. Many stated something along the lines of a "negative result, which means do not have fever (amuswija)". Just a few specified that the result meant the patient did not have 'malaria caused by mosquitoes'
- Absence of communication about results appeared related to organisation of service delivery: results often given by dispensing clinician, rather than prescriber



Diagnosis

- Limited diagnostic information was communicated to patients. In many cases, drugs were simply dispensed
- Among patients who tested negative, three levels of diagnostic information were observed:
 - About half told they did not have malaria and given a minimal or unspecific explanation about another possible cause of illness ('must be cough causing the fever')
 - Nearly a third were told they did not have malaria but were not given any alternative explanation for their illness (told what they don't have, but not what they have)
 - The remainder were not told anything about their test results
- A few RDT-positive patients were also not informed of their malaria diagnosis



Treatment

- Patients generally informed how to take the drugs, although less often informed what the drugs were, or why those drugs were indicated for their condition
- Providers rarely mentioned actions to be taken in case the patient did not improve

Of all observed patients, 38 tested negative and 17 tested positive. There was little difference in practice across health worker cadre at this low-level health facility level.

Communication around rapid diagnostic testing

Across both RDT-positive and negative patients, providers failed to consistently communicate the meaning of test results or inform the patient of a diagnosis. Fig 3 describes observed communication regarding key aspects of the testing and care process.



Patient perceptions of testing and treatment

Patient acceptance of testing was high. Many patients appreciated the importance of 'testing before treating' and that providers would 'treat what they know' rather than 'guessing'. However, many patients used broad or vague terms ('diseases', 'illnesses') to describe their thoughts about testing, sometimes implying that the test would identify all febrile illnesses or differentiate between two or more types of illness. (The test 'will get what is in my body', 'I will know the exact disease affecting me', 'I will know if it's malaria or HIV'.) Vague or limited explanations of testing appeared to contribute to these perceptions: there was a clear overlap between those patients who reported that the test purpose was not explained to them and those who reported vague ideas about the importance or purpose of testing.

Although patients valued testing, they expressed frustration regarding the lack of communication on outcomes and reported a desire for more information. Among patients who tested negative, patient dissatisfaction with treatment appeared to be driven primarily by the absence of an alternative diagnosis and perceptions of not receiving adequate treatment. These perceptions were influenced by patient expectations (desired treatment or expectation of receiving antimalarials), patient understanding of treatment purpose, the quantity of drugs prescribed, and the availability of prescribed drugs at the health facility.

"If the health worker tells me that I don't have malaria without telling me what could be the possible cause of the fever, then I don't think that I have benefited from this visit."

[Female adult seen by Nursing Assistant, HCIII]

Conclusions

Inadequate communication regarding test results and diagnosis influenced patient perceptions of treatment following testing. Patients have a right to health information and may be more likely to accept and adhere to treatment when they understand their diagnosis and treatment rationale. Findings emphasize the need to address communication practices in RDT training and supporting interventions.

Acknowledgements

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