Reviewer’s report

Title: Malaria Rapid Diagnostic Tests in fever case management: a study of the experience with their use at lower level health centres in Uganda

Version: 3 Date: 12 October 2010

Reviewer: Richard Ndyomugyenyi

Reviewer’s report:

Malaria Rapid Diagnostic Tests in fever case management: a study of the experience with their use at lower level health centres in Uganda

Authors: Asiimwe Caroline et al.

This is an interesting article, but it has some major limitations which the authors need to address/discuss. The following are my comments on the manuscript.

Major comments

1. This study would have been informative if the authors conducted focus group discussions in addition to exit interviews with health facility attendees to get a wider community perceptions and perceptive on acceptability of RDT use by community members. For instance, caretakers of children who did not want their children pricked for the test might have gone to the health facility, and such perceptions of those people can only be got from focus group discussions. Therefore, the conclusion that RDTs use is acceptably by health attendees without putting into consideration the views of those people who did not attend the health facility should be interpreted with caution and such a finding should not be generalized to the entire community. The authors should discuss this as a limitation of the study.

2. Under community sensitization on page 10, the study was introduced to local political leaders to garner their support and get them inform their communities. This was not a proper approach of community sensitization. Why was community sensitization not done with community members through village meetings? This is important because when community members are well sensitized and appreciate that not all fever is due to malaria; they accept the results and do not seek for further treatment elsewhere. Is there any evidence that the political leaders informed the community members? Was there a follow-up with community members to ascertain whether the political leaders gave the right information to the community members? What information was given to political leaders to pass over to community members?

3. Evaluation of feasibility and acceptability of RDT by health workers and attendees on page 10 was done shortly after introducing RDT (2 months). The authors should realize that it was too short a time to assess acceptability because it may change over time with experience of the intervention, and it
would have been interesting to document this. Acceptability could improve over time, but it could also drop. The authors should have quantified acceptability over time to allow measurement of any change in acceptability. They should have measured acceptability much later on once the intervention had fully bedded down, more people had experienced it, and the community had longer to reflect on their experiences with RDTs.

4. The study was done in different malaria epidemiological settings: hypo, meso and hyper-endemic. The question is what was the rationale for conducting the study in different malaria epidemiological settings if the authors do not present data on health workers and health centre attendees acceptability of RDTs among the different epidemiological malaria settings? The acceptability of RDTs results by health workers might differ by malaria epidemiological settings. For instance, in areas of high malaria transmission, where more than 85% of fevers are due to malaria, the health worker may not believe that a negative RDT test is truly negative and goes ahead to give anti-malarial treatment despite the negative test. However, in an area of low transmission where only about 10% of fevers are due to malaria, a health worker is more likely to believe in the test than a health worker in an area of high transmission. Data on acceptability of RDT by malaria epidemiological settings should be presented in this article.

5. The data presented in this article was corrected through in-depth interviews with health workers and health centre attendees, which makes it possible to quantify the results. There are some good quotations which could be quantified. For instance, a quotation by a health worker on page 18 under integration of RDTs into routine work, “How did you expect us to do RDTs without clocks and gloves” and another one on page 19, the community now has confidence in us and the services we offer because of RDTs” How many health workers mentioned these statements?. There are some generalizations in the discussion which are made from few individual statements. For instance, the statement which reads: We noted that religious conviction was regarded as a facilitator amongst health workers. This was mentioned by only one health worker and it might not be right to use such a statement from one individual to generalize for the entire community.

Minor comments

1. Under Methods; sub-section on RDT selection and deployment on page 9, ICT pf was used. What was the sensitivity and specificity of the test? Was the sensitivity communicated to the health workers? Health workers might ignore RDT results if they perceive that its sensitivity is low.

2. The sentence on page 8 that reads: Study HCs are level II and III centres which provide basic health services such as out- patient and antenatal care. Health centres II in Uganda do not provide antenatal care. The statement as it is written is incorrect.

3. On page 13, the authors mention quality assurance by recording temperature but they do not present temperature recordings anywhere during the study
period.

4. A high proportion of health attendees were not satisfied with RDT results, especially when the results were negative. It would have been interesting to know whether these patients sought treatment from elsewhere i.e. from private clinics and what treatment they were given and whether such treatment made them stratified.

5. Figure 3: How does the picture show that people are seeking for RDT test? At any health facility in Uganda, one would find many patients waiting for health services, with or without RDTs being offered to patients. Therefore, the authors presenting this picture that health centre attendees were waiting for RDT might not be correct. The readers of this article could view it as a stage managed photograph.