Reviewer’s report

Title: Effect of a multi-faceted quality improvement intervention on inappropriate antibiotic use in children with non-bloody diarrhoea admitted to district hospitals in Kenya.

Version: 1 Date: 11 June 2011

Reviewer: Kumud K Kafle

Reviewer’s report:

Major Compulsory

1. The training of Full intervention group was for 5.5 days and partial intervention group had training for 1.5 days, what were the differences in the contents of two groups?

2. Number of groups the staff (30-34 in full intervention group and 35-40 in partial intervention group) were trained?

3. Number of recommended practice discussed during the training in each group?

4. What were the contents of face-to-face feedback?

5. The supervision was 2-3 monthly and face-to-face feedback was 6-monthly, what was the purpose of two supervisions and how the supervision data (information) used? What data (information) was collected in each supervision?

6. The result shows that there were 1,160 children with non-bloody diarrhoea not needing antibiotics, however there were co-morbid conditions needing antibiotics. What % of co-morbid conditions needed antibiotics? The figure-2 shows the list of co-morbid symptoms and signs and not the diagnosis that the children suffered from? How the use of an antibiotic was decided appropriate or inappropriate in a child with non-bloody diarrhoea and a symptom/sign?

7. If a child with non-bloody diarrhoea and a co-morbid condition was treated with an antibiotic or antibiotics, was it taken as appropriate or inappropriate if an antibiotic was not complying or adherence to the national guidelines?

Minor Essential

1. The objective of the study is not clearly defined and partly it is incorporated in the "Method". The first few sentences in the "Setting" may be taken into the "Background"

2. What does unique ID number in the "Data" mean? What does an identifier for the clinician in the "Data" mean?
3. How many data collectors were there in the study? What was the content of three weeks training to data collectors?

4. The "figures" are not labeled.

Discretionary

1. How was clinician defined in the study?

2. What could be the possible cause of a clinician admitting one child or 27 children in 24 months?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interest.