Reviewer's report

Title: Longer hospital stay is associated with higher rates of tuberculosis-related morbidity and mortality within 12 months after discharge in a referral hospital in Sub-Saharan Africa

Version: 2
Date: 27 March 2014
Reviewer: Shaheen Mehtar

Reviewer's report:

The English and spelling needs attention. The sentences are long and complicated, leaving the reader confused and therefore the sentences have to read several times to glean the meaning.

The authors say medical wards (methods 1.1), - how many medical wards? or how many beds? Only the admissions were mentioned- clarity is required.

1.2- authors mention three tier TB-IPC yet only talk about two; there is no mention of the ventilation system in place in the text but is casually mentioned in Fig 2 as two fans being present. This has a significant impact on dispersal of aerosols and some attempt to measure the airflows or movement of air would have been useful.

There is no assessment regarding the period between suspected or proven TB and treatment being started while in hospital- the duration of exposure would have been helpful.

1.2.2-N95 respirators instead of masks

2. Second sentence. I do not understand what the authors are trying to say- clarity required

ATT- no explanation given

The method the data was collected on follow up depends on 100% entry into the TB register which is known not to be always complete. Some of the information was therefore not available. No effort was made to contact the patient yet the acquisition of TB was assumed to be from the hospitalisation irrespective of the interval.

In the results there were 34 cases of pneumonia yet only 20 were accounted for, what happened to the other 14?

There was no indication on follow up when were the patients found to have TB. Was there an infectivity curve? Was it randomly acquired from the community? How do the authors know it was from the healthcare facility without doing epidemiological molecular studies? The data is not coherent and appears flawed. The data is associated with lying next to someone with TB but not how long it took to become infected. Also, there is no mention of supershedders or whether HIV pos patients with TB were presented a higher risk of producing TB bacilli.
The authors need to go back and review some of the findings. Then a clearer explanation for what possibly happened should be revisited.

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

**Quality of written English:** Needs some language corrections before being published

**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 interests’