Reviewer's report

**Title:** Occupational exposure to blood-borne infection: survey of universal precautions knowledge and reported injuries in Kabul hospital staff

**Version:** 1 **Date:** 19 July 2009

**Reviewer:** Pedro Moro

**Reviewer's report:**

Major compulsory revisions

**Abstract:**

In the methods section of the abstract it is indicated that risk factors were investigated using logistic regression with adjusted odds ratios but that is the only place where that is indicated. No mention is made of logistic regression in the methods section.

In the results section some of the data does not coincide with the data shown in the results section of the manuscript. For example, the percentages for sharps injuries with syringe needles and suture needles is not mentioned in the Results section. It is indicated that a quarter (26.5%) of respondents were not vaccinated against hepatitis B but according to the numbers in table 1 the percentage would be 27.9% (137/491). Important information such as the percentage who recapped is not indicated as well as disposal of sharps. You may want to refer to physicians other than surgeons as non-surgeon physicians. The information in the abstract should reflect the data in the results section but the most important information should be provided.

**Methods:**

Under Questionnaire design, there is no need to describe in an entire paragraph the questionnaire that was used. The authors could have used a sentence or two such as: A questionnaire to assess the occurrence and knowledge of sharps injuries and universal practices was prepared based on previous questionnaires used by other investigators (provide references).

How were the healthcare workers selected/ at random? Or by convenience sampling?

There is no statistical analysis of the data. There are several independent variables which need to be looked for their possible contribution as predictors (risk factors) of sharps injuries. The best approach would be to use logistic regression analysis to calculate odds ratios but relative risks could also be calculated. If logistic regression analysis is not done you still have to define the statistic test to use to look for statistical significance in the calculated percentages (Chi square, t-student, etc). The authors also need to specify the practices they inquired for, such as frequency of recapping, where and how
sharps were disposed, use of gloves, etc.

Ethics
Was the manuscript reviewed by an ethics committee or IRB?

Results
There is much information that is not provided. For example, rates of vaccination against HBV in the different occupational groups and by hospital should be provided. Also the number of doses of vaccine received. There is no data shown for how used sharps were disposed (such as use of sharps boxes or puncture proof containers or regular trash container or other container). There is also no information on the number of injections given which is also important to quantify. It is indicated that practices of healthcare workers were similar but this information needs to be provided. Additional tables may be needed. Table 3 is very confusing. The number and percentage of those who responded agreeing with a statement of knowledge or practice should be provided. The table as it is does not provide any useful information. In the text you need to provide the number and percentage of those who responded certain way instead of just saying 'most of the respondents…. ' 'Or most thought.....'

Table 2 cannot be seen clearly.

I suggest the authors report sharps injuries per person-year. This is a better measure than just providing percentages of those who experienced a sharps injury. For example, you may have two hospitals where the percentage of healthcare workers experiencing sharps injuries is the same or higher than in another but if you look at sharps injuries per person-years you may identify that the one with the lower percentage of sharps injuries actually has more injuries per person-year.

The discussion needs to include the limitations of this kind of study such as recall bias from attempting to remember previous practices, influence of healthcare worker training on response to questionnaire and responses, respondents may respond based on the way they should and not how they actually behave.

Level of interest: An article whose findings are important to those with closely related research interests

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

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests