Reviewer's report

Title: Older HIV-infected individuals present late and have a higher mortality: a UK cohort study

Version: 2 Date: 15 January 2013

Reviewer: Ruth Smith

Reviewer's report:

The manuscript presents factors associated with late presentation and mortality in a large cohort of patients attending for care within the UK. This is an interesting paper which highlights again the importance of prompt diagnosis and HIV among populations aged 50 years and over.

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

Overall, this is a strong and interesting paper; however I do not feel the discussion supports the strong results and needs further work. Comments below:

1. Although I understand why highlighting the proportion of individuals aged 50 years and over with HIV is important I am unsure why this is your opening sentence to the discussion and conclusion.

2. The comparison with the Finnish study is interesting particularly regarding the time frame with late and prompt diagnosis; however I found the text hard to follow.

3. I felt the discussion jumps around, the 2nd paragraph regarding factors associated with mortality seems to get lost between how trends in early diagnosis are increasing among the whole cohort (paragraph 1) and the improvement in trends among those <50 (paragraph 3).

4. The sentence ‘Furthermore, the exact age of HIV infection in this ageing individuals is not known, so they could have grown old with HIV rather than acquired it for the first time after the age of 50 years.’ needs context, what does this have to do with presenting late? It seems lost within the paragraph.

5. Maybe say more regarding ‘Nearly all the Africans in our study acquired HIV infection through heterosexual intercourse, which could be due to sexual relations within or outside of the UK.’ They already know their status (infected abroad) and so are less likely to come forward until they are sick. Data regarding time between arrival within the UK and first diagnosis within the UK.

6. I felt that the two sentences ‘According to the 2011 HPA report, 50% of individuals diagnosed with HIV in the UK in 2010 had CD4 cell counts <350/mm3 [1].’
Despite late HIV diagnosis, some studies have shown a delay between HIV diagnosis and entry into care, further increasing the risk of opportunistic diseases [39]. 'were interesting points but didn't feel like they had been linked into the discussion.

7. This sentence needs to be broken down as it is far too long making it difficult to follow. ‘We did not separate the effect of mortality arising as a result of general ageing of the population from that associated with the additional effect of HIV infection on mortality but our study showed that even in individuals within the same age group, those presenting with lower CD4 cell count have a higher short-term mortality and this is more likely to be attributable to the effect of HIV itself rather than to co-morbidities or the effect of ageing of the cohort.’

- Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. There is data within the abstract ‘86% were male' which I'm unable to find within the paper.

2. Use consistent terminology, throughout you refer to homosexual men and within the discussion refer to men who have sex with men.

- Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

1. Is it early diagnosis or prompt?

Level of interest: An article of importance in its field

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

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests