Author's response to reviews

**Title:** Characteristics of HIV Seroprevalence of Visitors to Public Health Centers Under the National HIV Surveillance System in Korea: Cross Sectional study

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**Author's response to reviews:** see over
Cover Letter

January, 29, 2009, BMC Public Health

MS: 5473337052157161 - Characteristics of HIV Seroprevalence of Visitors to Public Health Centers Under the National HIV Surveillance System in Korea: Cross Sectional study

We appreciate reviewers for reviewing our manuscript and reviewers critical comments.

We have second revised manuscript according to the reviewers request and comment and give answers after questions of reviewers.
Reviewer's report

Referee 1

Thank you for reviewing our paper and your critical comments. We give answers after your questions (blue color)

Title: Characteristics of HIV Seroprevalence of Visitors to Public Health Centers Under the National HIV Surveillance System in Korea: Cross Sectional study

Version: 2 Date: 10 December 2008

Reviewer: Onno de Zwart

Reviewer's report:

The authors have reacted to all the relevant commentaries made on the previous submitted article.

One suggestion I still have is to update some of the figures in the background section (e.g. number of people living with HIV) as some are still from 2005. This would help to bring it more in line with the current situation.

=> Answer

Thank you very much for your comments. PHCs have adopted a nationally incorporated computerized data processing system, known as the Health Care Information System, since 2000. We collected data of HIV test from the system. We developed the method to
calculate HIV seroprevalence using 2005 data of HIV test. Also, it took considerable time to confirm and manage the data in order to enhance the data quality, which made the data kind of "old" in today's point. Our study is about data collected in 2005 and we just tried to focused on the timepoint around the data collection. We are under process to submit the HIV trend study in Korea up to 2007.

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
Reviewer's report

Referee 2

Thank you for reviewing our paper and your critical comments. We give answers after your questions (blue color)

Title: Characteristics of HIV Seroprevalence of Visitors to Public Health Centers Under the National HIV Surveillance System in Korea: Cross Sectional study

Version: 2 Date: 6 January 2009

Reviewer: Sarah Dougan

Reviewer's report:

Thank you for your clarifications and changes made to the last set of comments. There are still, I think, some changes that could be made to improve the paper.

MAJOR COMPULSORY REVISIONS

1. Discussion & main message

I still think the discussion still requires more work, particularly around the arguments presented and the structure as I found it quite difficult to follow. I don't know if the structure that the BMJ proposes for discussions would be helpful in this:

http://www.bmj.com/cgi/content/full/318/7193/1224. It also wasn't clear to me what are the key findings and main message from the study.
=> Answer

Key finding: 1) The high seroprevalence in the HIV ISG was due to suspicions by doctors and voluntary test takers experiencing symptoms or risky behaviors. 2) The seroprevalence of female is lower in the STI risk group than in the General group (Discussion: lines 7-8 page 11 and lines 21-22 page 9, Conclusion: lines 1-3 page 13).

Main message:

A question on the efficiency of current mandatory test is raised because the seroprevalence of mandatory test takers was low. However, HIV ISG included voluntary test takers was high in our result. Therefore, we suggest that Korea needs to develop a method encouraging more people to take voluntary tests at PHCs, also to expand the anonymous testing centers and Voluntary Counselling and Testing Program (VCT) for general population to easily access to HIV testing. (Abstract: from page 2, line21 to page 3, line 2, Conclusions: page 13, lines 3-8)

2. Clarity around what is being measured

I had not realised until this revision of the paper, that only 19% of all HIV tests in Korea are undertaken in PHCs. This is now mentioned in the first few sentences of the discussion. I think this should be moved from there and emphasised in the introduction to the paper. The aims of the paper should also be amended in line with this, as the study will not give an
accurate measure of HIV seroprevalence among HIV testers in Korea if it only includes a fifth of the total testers.

This should be made clear in the abstract, the introduction, the discussion and the conclusion. It should also be added as a limitation in the discussion section, and what it does actually represent should also be critically discussed (e.g. is this a measure of HIV seroprevalence among susceptible and low-income individuals who haven't dropped out of the system because they know they are HIV+? If so, what does this tell us about HIV epidemiology in Korea?).

=> Answer

We had described that 19% of newly diagnosed HIV infection was detected in PHCs' HIV test in 2005 in the manuscript (original manuscript: line 19 page 7, line 19 page 9).

We followed your comments and described in a way that our study was the characteristic of HIV testers among visitors to PHCs, which was distinguished from the characteristic of the HIV-infected individuals in Korea (Abstract: page 2, lines 4-6, Background: page 5, lines 14-18, Discussion: page 9, line 17-19).

MINOR ESSENTIAL REVISIONS

1. Page 8, line 4 - this survey should be referenced.

=> Answer
We have added the reference (Page 16, lines 20-22, reference 17)

2. Page 9, lines 4-11 - you should explain what the consequences are for your estimate of HIV seroprevalence because of this.

=> Answer
The seroprevalence of female is lower in the STI risk group than in the General group, so that the change in testing policy for STI risk group need to be considered.

We have added the above content in Page 11, lines 8-9)

3. Page 10, lines 3-4 - what is the cause and implications of the reduction of the % of HIV infections being discovered in PHCs given that your study is for 2005 only and not examining trends over time? It would be helpful for readers if you could expand on this point or omit it entirely if appropriate.

=> Answer
HIV testing policy in Korea has been changed. Mandatory HIV testing was dominated until 1990’s and it gradually has been moved to the voluntary HIV testing in hospitals or clinics. In 2005, hospitals or clinics conducted 55% of HIV screening tests in Korea, and detected 75% of the newly diagnosed HIV infections.
We have deleted the proportion of year 2000 and 2004, and inserted the above contents (page 9, lines 14-17).

DISCRETIONARY REVISIONS

1. I appreciate that it is not easy to write in a second language and I can understand what is being said throughout, but certain parts of the manuscript would benefit from a native English speaker editing it if it is possible to arrange.

=> Answer
A native speaker of English had already reviewed the manuscript before the submission. Our revised manuscript has been reviewed again and corrected by a native English speaker.

2. I think it would be more helpful if the abstract conclusion contained a more definitive key finding and recommendation from the results.

=> Answer
We have included the finding from the result into Abstract and Conclusion. (Key finding: lines 7-8 page 11 and lines 1-3 page 13, Recommendation from the results: Discussion(page 11, lines 8-9 and page 9, lines 21-22) and Conclusion(page 13, lines 3-8)

3. Page 9, lines 12-19 - I thought most of the paragraph on TB was superfluous, as I assume most readers of this paper will already have some knowledge of the links between HIV and
TB. I would rather see more specific discussions about your results and hypotheses about what might be happening and/or biases in study population etc. to explain your observations.

=> Answer

The HIV seroprevalence in tuberculosis (TB) patients treated in PHCs was similar to that in the General group. Although Korea is under low HIV prevalence, and is under intermediate TB burden; the TB prevalence was estimated 12.3 per 10,000 in 2006 by WHO (30). TB is the most common opportunistic infection in AIDS patients, and AIDS is a major cause of TB or pneumocystis-associated deaths in Korea (31-32). However, HIV testing is not compulsory to TB patients in Korea, so it is difficult to find HIV prevalence among them. Fortunately, we could find HIV infections of TB patients in our study because TB patients in PHCs were recommended to take HIV tests.

According to you comment, we have purged the general contents on TB, and added the above contents in lines 16-23 page 11.

4. Conclusion, page 10 - I notice that the other reviewer commented on your recommendations for the future of mandatory testing in Korea given UNAIDS/WHO guidance and yours and others findings. While there is now more about this, you still have not made a specific recommendation about this, which may be appropriate?
A question on the efficiency of current mandatory test is raised because the seroprevalence of mandatory test takers was low. However, HIV ISG included voluntary test takers was high in our result. Therefore, we suggest that Korea needs to develop a method encouraging more people to take voluntary tests at PHCs, also to expand the anonymous testing centers and Voluntary Counselling and Testing Program (VCT) for general population to easily access to HIV testing.

We have revised in Abstract (from line 21 page 2 to line 2 page 3) and Conclusion (Page 13, lines 3-8).

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'