Author's response to reviews

Title: Setting up a surveillance system for sexually transmitted diseases in the general population with prospective data collection from private and public doctors in Hong Kong

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Author's response to reviews: see over
Dear Editor,

Re: BMC Public Health (MS: 1585370416386955; Title: Setting up a surveillance system for sexually transmitted diseases in the general population with prospective data collection from private and public doctors in Hong Kong)

Thank you very much for considering our manuscript. Please find below our responses to individual comments from the Reviewers.

Thank you very much.

In Response to Editor’s comments:

Further requirements:

*Abstract - Please include more information about the context of your study in the abstract.

A: The abstract has been revised.

In Response to Comments from Reviewer 1 (1297708774014568_comment 1)

1. Monitoring trends in the numbers of patients presenting with STD symptoms to different types of clinics can provide important information on trends in STI among patients who visit such clinics. Assessing these numbers at different points in time can, for example, indicate an increasing prevalence of a particular STD in the community. I think your study is important in that it gives an indication of the numbers of patients presenting with STD at different types of clinics at a particular point in time. But it would, therefore, be important to replicate the study on a regular basis to determine if the numbers are increasing or decreasing.

A: We agree with the reviewer that the value to replicate this study on a regular basis to detect trends. The purpose of this study is in fact, to set up such a surveillance system and to discuss about its feasibility.
2. While I recognize the value in documenting the number of cases being presented at these clinics, I do not believe that the data presented can be utilized to estimate territory-wide STD prevalence. There are a number of reasons for this. Most importantly, you write that "The total number of patients presenting particular STD symptoms territory-wide was estimated...." This is not a measure of prevalence (the percentage of the population affected). Your findings indicate that 0.22% of the adult Hong Kong population went to clinics with STD symptoms, they do not indicate the percentage of the adult Hong Kong population who actually have an STD (these figures would be far higher). In order to estimate prevalence, it would be necessary to test for an STD among all patients visiting general practice clinics (SHC clinics may not be appropriate for this). As you noted, your methodology does not account for asymptomatic STI which accounts for the majority of all STD cases.

A: We totally agree with the reviewer’s comment. Please be clarified that we are not trying to estimate the prevalence of STD/RTI in the general adult population. Instead, we are only estimating the prevalence of adults who present STD/RTI to private or public doctors during the study period (i.e., projected number of patients diagnosed to have STD/RTI by all public and private doctors in Hong Kong during the study period divided by the estimated adult population size). This estimate makes time trends over time more comparable, as changes in the denominator (adult population size) would be adjusted for. The title of Table 4 and some parts of the original text were not clear and changes have been made accordingly. We apologize for the confusion. We now make this distinction explicitly in the revised text.

3. If your study is replicated on an annual basis you will be able to determine if the number of people presenting is increasing or decreasing. While this too has its limitations because the number of people presenting can be affected by many different things (e.g., an STD public awareness campaign), an annual replication can alert public health authorities to the need to address emerging priorities in STD epidemiology and prevention. Thus, I think at this time, your findings provide a baseline that requires annual replication before publication is warranted. A few minor notes: It was not clear if "presenting" constituted a diagnosis (although I'm assuming it did). Some STDs can be diagnosed with visual inspection but others require lab testing/verification.

A: We are setting up this surveillance system and report baseline data for future comparisons. The limitation of this study is fully discussed. ‘Presentation’ implies diagnosis was made by the doctor.
4. It was not clear to me how, for example, how a case of Chlamydia was diagnosed. Was vaginal discharge accompanied by a test? There needs to be a greater specificity of the STDs diagnosed. Urethral/vaginal discharge is asymptom of several STD. Does genital growth in all cases mean a diagnosis of genital warts?

A: We now make it clear that the surveillance is only for symptomatic STD/RTI diagnosed by the doctors. The entries include genital ulcer, urethral/ vaginal discharge, genital growth, ectoparasite infestations, and other symptoms. Such has also been elaborated in the discussion on limitations.

5. The study of STD epidemiology is limited by the resources allocated. In many jurisdictions studies to assess the population prevalence of different STD is not possible. In the absence of prevalence studies, regular monitoring of the number of patient visits for (and hopefully confirmed diagnosis of) specific STDs can be an important tool. I think you have taken an important step toward developing such a monitoring system. With further (revised) replications peer reviewed publications are very likely.

A: Thanks for the comment.

In Response to Comments from Reviewer 2 (2866800014580509_comment 2; Reviewer: robert schilling)

1. A good effort at chipping away at the nagging problem of estimating STD prevalence, when an unknown proportion of treated/diagnosed STD cases are unreported (because they are in private clinics). The dogged efforts to obtain data from the private physicians lend credence to the study.

A: Thanks for the comment

Major Compulsory Revisions:

2. Discussion section: The paragraph beginning "It is projected..." cites several studies (of both "high risk" and general populations) that reported various STD and RTI prevalence infection rates that are 50-160 times the overall rate of .22% reported in the present study.
The final sentence in the paragraph speculates on the possible reasons for these very large differences, but the authors raise more concerns than they explain away. Why are the rates of RTIs in the general and STD/gynaecological populations in Shenzhen (23% and 32%, respectively) so out of line with the rates in HK (.22%) reported by the authors? It seems unlikely, or at least unsatisfying, that differences of these magnitudes could be due to differences in study design or diagnostic methods.

The authors need to either:
1) make their case that their methods of sampling/measuring STIs and RTIs, and estimating there from, are not comparable with (and I assume superior to) any prior studies of a similar nature (estimating STD/RTI prevalence in a general population.

OR

2) spend more effort explaining the large differences in the findings reported here and that reported elsewhere.

The authors have discussed limitations, but they need to further contemplate possible problems in the data obtained from private clinics.

A: The first study is actually based on a special population of market vendors rather than the general population. It involves urine tests and asymptomatic STD such as Chlamydia which was very prevalent. The second study was not based on a truly random sample. The test was performed in STD clinics. The sample involved high risk individuals and the sampling method was not clearly described in the text (written in Chinese).

Since we are presenting baseline data of a new surveillance system, instead of trying to estimate the prevalence of STD/RTI in the general population and compare it with other populations, and since both studies were not population-based, the comparisons made in the original text may not be appropriate and may be potentially misleading. As mentioned, the data have totally different methodologies and study populations and they did not come from surveillance studies. We would therefore like to remove the two citations from the text to avoid further confusions.

3. The process data are very limited. It is promising that those private physicians who did participate were so receptive to the study, but the low participation rates is perhaps a better indicator of the challenges to be overcome in instituting a surveillance system in the private care sector.
A: We agree with the reviewer and have acknowledged this point in the discussion about limitations of this study.

4. The study would have been stronger if there had been some effort to determine the validity/reliability of the data-reporting protocols.

A: We don’t have such data and have now mentioned this as a limitation. We have ensured complete entry and cross-checked unclear entries. The quality of entry seems good but validation was not feasible.

5. There is a disconnect between the enthusiasm shown by the authors for the feasibility of their proposed surveillance approach and the low rates of physician participation (though excellent cooperation from those who did participate). Some suggestions for overcoming these barriers should be offered.

A: Some suggestions about increasing the monetary incentive and to involve professional associations are provided in the text.

In Response to Comments from Reviewer 3 (63778554509955_comment 3)

Minor Essential Revisions

General comments: This is a very important and novel topic that could potentially have major policy implications for establishing a surveillance system of STD/RTI in Hong Kong. Several minor revisions would strengthen this manuscript.

A: Thanks to the comments.

1. In the Materials and Methods section, rational of choosing the dates of June 4 through June 18 2007 (15days) should be provided. The potential bias of choosing these days should be discussed in the limitation as well.

A: The choice of the dates was for convenience only. There might be seasonal variations and we mentioned this in the limitation.

2. It is surprising that ALL public doctors working in the 8 SHC participated in the study,
given the much lower response rates among private doctors. It is unclear what motivated all public doctors to participate, especially no information regarding the incentive to the public doctors is provided.

A: This is understandable as the study was fully supported by the Department of Health and the public STD doctors were also interested to know about the results.

3. In addition to the geographic location and gender, I would see how different participating private doctors were different from non-participating private doctors in terms of other aspects, such as size of the clinic, which are more relevant to the representativeness of the sample.

A: Such information was not included in the registry. We explained this in the text.