Author's response to reviews

Title: Measuring access to medicines: a review of quantitative methods used in household surveys

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Author's response to reviews: see over
Reviewer's report
Title: Measuring access to medicines: a review of quantitative methods used in household surveys
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Reviewer: Barbara Mintzes

Reviewer's report:
Most of the issues that I have raised have been dealt with well. The study report is much clearer and more readable. However, 3 key issues remain unaddressed. I am aware that to address these issues would have required re-opening the study itself, a step I believe was needed for a review of quantitative methods used in household surveys on medicines access.

1) lack of clarity about inclusion / exclusion criteria (the path from 9000 to 9 articles);
The paragraph explaining how did we get from 9000 to 9 studies was included as the first paragraph of the results as suggested by the reviewer (below). We hope that this problem is now solved definitely.

Results
Using mainly the keyword medicine use [words] / drug utilization [any field], more than 9000 titles and/or abstracts were retrieved until July, 2008. After reading titles/abstracts, nearly 8750 papers were excluded because data collection was not home based. The papers were mostly about demand, medicine availability, in the public/private sector, medicine pricing/expenditure in the public/private sector, medicine prescription studies, health insurance coverage (based on secondary data), co-payments impact or qualitative studies. From the remaining papers, around 180 were excluded because did not evaluate access or were review papers. In about 70 papers we could not identify by the abstract if the approach was the desired (home-based data collection about access), and in those cases full texts were read and even if medicine access was not the main outcome the study could be included.

The references of selected studies were checked to find other articles that could be included in the review. Besides, author searches were carried out using relevant names in the field. When more than one study was originated from the same data collection, only one study was included in the review.

After manual search, impaired by the lack of specific keywords to evaluate medicine access, nine studies were included in this review [1, 11-18].

2) When reviewing quantitative methods used in household surveys, the need to include discussion not only of a subset of key elements of methodology, but also issues such as sampling frames and methods, instrument design etc (as listed in my previous comments). If you are calling for standardized methods, the implication is that these methods should be sufficiently rigorous to measure access systematically, and reasonably accurately. You have addressed some aspects of methodology very well, but I could not understand the decision to ignore others. Shifting from the word 'evaluates' to 'describes' is an inadequate strategy.

We are aware that subjects selection for a study, as well as the response rate, affects the study precision and the likelihood to generalize results. But this flaw affects epidemiological studies in general; it is not a specific problem of studies about access. The study evaluates methodological problems that could result from measurement issues; therefore, we did not evaluate sampling techniques to because they are not influencing the way measurements are made.
However, we understand that an appropriate sampling strategy is one of the methodological aspects that can distinguish good from poor methodologies. To explain this concept, we included a sentence in the first paragraph of the discussion that reads:
“...Although our intention was not to evaluate or to suggest new sampling methods to measure medicine access, adequate sampling techniques and high response rates are fundamental methodological aspects to assure precision and validity in any quantitative study”.

3) If you are calling for an international standardization of methods, it is inappropriate to virtually ignore the standardized methods used in a 71 country study. It would have been appropriate to critique the approach used, if it was inadequate, and to explain why you are calling for something different.

The study carried out in 71 countries was a global assessment on the performance of health systems among WHO members and used a single protocol. It was not a standardization of the method to evaluate access. The methodology of this study was not ignored; it was included in the review, represented by the Brazilian study, one of the member countries to have used such methods. As the 71 studies have used the same methodology, from a methodological perspective it represents a single study. Therefore, we understood that the right choice would be to include only one paper based on such methodology.

Minor suggestion:
If you do not believe the 85% cut-off point for response rate accurately reflects a 'low' versus a 'high' response rate, you should not use it as a cut-off. Taking off the words 'low' but reporting on numbers below and above implies it is a cut-off. We believe that this issue is explained in item #2.

Level of interest: An article of limited interest

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.