Author’s response to reviews

Title: Studying the impoverishing effects of procuring medicines: a national study

Authors:
Mohammadreza Amiresmaili (mohammadreza.amiresmaili@gmail.com)
Zahra Emrani (z.emrani71@gmail.com)

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Author’s response to reviews:

Dear Editor,

I am writing in response to the reviewer’s comments on the manuscript. First of all I am grateful for all valuable comments made by respected reviewer. We tried to answer all issues made by reviewer. Additionally, in order to resolve the typos and grammatical errors we read the manuscript carefully and highlighted the changes.

It's worth mentioning we are ready to make any other comments necessary.

Best

Zahra Emrani

Corresponding author
Editor comments:

1. Please respond to the reviewer comments below. Apologies that this review was not sent to you alongside the original review; the review was submitted late.

2. Copy edit

Your manuscript needs to be copyedited. We recommend you use a professional language editing service. For authors who wish to have the language in their manuscript edited by a native-English speaker with scientific expertise, BioMed Central has a new in house editing service. The new editing tool can provide both scientific and language editing: http://authorservices.springernature.com/

Please note that use of a professional language service is not a guarantee of acceptance for publication.

Thank you for this recommendation. We have sent this manuscript to a fluent English language editor. We also read the manuscript carefully in order to resolve the typos and grammatical errors again for this revision.

3. Please submit your tables as a larger size as they are difficult to read.

Thank you for this comment. We provided tables in larger size.

Reviewer comments:

GENERAL COMMENTS: This study estimates the potential for the cost of prescription drugs to move Iranian households below the poverty threshold. Using a national survey, the authors subtract annual costs of different prescription medications from household income and determine the proportion that are pushed below poverty, according to a few alternative thresholds. They also use regression modelling to find household characteristics that are associated with risk of being pushed below the poverty threshold. The authors have been responsive to prior peer review. I have the following suggestions for improvement:

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1 Line 24. I do not believe this study is able to “quantify impoverishing effects of medicine on Iranian households” as stated in the abstract. Rather, this study simply estimates the potential for prescription medications to impoverish households. The difference is that we do not know whether these households were actually impoverished by prescription medicine. Instead, we know their income levels and we know how much they would have to pay if the purchased prescription medications. Thus, it is an estimate of potential, not a quantification of actual.

Thank you for this comment. We replaced it.

2 Line 31. I believe the authors used logistic regression, not just regression, which is typically considered linear regression. Please provide more details about the specific regression model used. Thank you for this comment. You are right. The applied test is logistic regression.

We inserted "logistic" as mentioned in 19th comment.

3 Line 36. It is not enough to say that these results will be useful to policymakers without specifying how they will be useful. What could policymakers do with such information? Thank you for this comment. We added some explanations in the abstract (conclusion) section.

4 Line 44. Please clarify “lead to publish”. Led whom to publish? The sentence is awkward without an object.

Thanks for the comment, we corrected the sentence by adding the object.

5 Line 47. Please consider saying “the causes of poverty” rather than “the poverty causes”. Thank you for this comment. We changed it.

6 Line 58. I do not believe that this is the simplest indicator of fairness, but I also don’t think the superlative is necessary. Consider saying “The number of households faced with catastrophic healthcare costs is a measure of fairness…” instead. Thank you for this comment. We changed it.

7 Line 87. Please add the direct article: “The Iranian health system…” Thank you for this comment. We added "the".
8 Line 87-89. This sentence needs to be rearranged. Consider saying: “There are both governmental and largely employer-based independent insurance organizations in the health care financing system [23, 24].” Thank you for this comment. We changed it.

9 Line 89-96. These phrases separated by colons are very, very hard to follow and very awkward. Thanks for the comment, we rephrased it and tried to make it clear.

10 Line 93. Consider adding the definite article: “for members of the military…” Thank you for this comment. We added "the".

11 Line 96. Consider saying “companies” instead of “broadcast“. Thank you for this comment. We tried to rewrite it in better words.

12 Line 98. The fact that premiums are high is of no consequence here. Consider saying “funded through premiums [25].” Thank you for this comment. We changed it.

13 Line 100. Please say “fair” instead of “fairly”. Also please add the definite article and say “of the Iranian health system…” Thank you for this comment. We applied the require changes.

14 Line 107. Please remove “method”. Thank you for this comment. We changed it.

15 Line 134. Please remove “A” and say “Particular attention…” Thank you for this comment. We changed it.

16 Line 136. Please say “In other words…” Thank you for this comment. We changed it.

17 Line 138. Please say “paying” instead of “pay” Thank you for this comment. We changed it.
18 Line 139. Please say “subtracted” instead of “deduced”. Thank you for this comment. We changed it.

19 Line 221. Please describe your statistical model here. You used one variable, but in what model? The results look like a logistic regression model because results are odds ratios. If that is the model, you need to say so. Thank you for this comment. We changed it.

20 Line 222. Your results are odds ratios, which makes this sentence incorrect. An odds ratio of 3.4 does NOT mean that there is a 3.4 times greater risk (or that households fall below poverty 3.4 more). It means that they have 3.4 times greater odds of falling below poverty. This is a very important distinction and needs to be corrected here. Thank you for this comment. We changed it.

21 Line 223. Similarly, it is incorrect to say that illiterate-headed households have four times the risk of falling below poverty. You can only say they have four times the ODDS of falling below poverty, which is not the same thing as risk. This is an important distinction and needs to be corrected here. Thank you for this comment. We changed it.

22 Line 247. Consider changing “was” to “were” since 12.3% of the population is plural. Thank you for this comment. We changed it.

23 Line 267. “Less populated” is probably not technically incorrect, but it sounds odd. Consider saying smaller households, or smaller-sized households. Thank you for this comment. We changed it.