Author's response to reviews

Title: Healthcare Seeking Behaviour among Self-help Group Households in Rural Bihar and Uttar Pradesh, India

Authors:

Wameq Raza (wameq.r@gmail.com)
Ellen van de Poel (vandepoel@bmg.eur.nl)
Pradeep Panda (pradeep@mia.org.in)
David Dror (david@mia.org.in)
Arjun Bedi (bedi@iss.nl)

Version: 2
Date: 14 October 2015

Author's response to reviews:

Response to Referee 1
Thank you for your comments. Our responses to your comments are provided below.

1. Discretionary revision: SHGs typically reach the poor, but not the poorest, which has implications for patterns of health care use as well as interventions, such as CBHI. Reply: In the introduction we mention that SHG households are typically poorer and less educated than the general population and do not refer to such households as the poorest. See page 4, lines 35-37.

Response to Referee 2
Thank you for your comments. Our responses to your comments are provided below.

1. In the methods, the survey number is 21,366. Are all the surveys valid? Is the survey done by the way of one-by-one? Do the investigated people agree to accept the survey?
Reply: We have valid responses for 21,366 individuals. The survey covered 3,686 households and included 21,366 individuals. One individual from each household (either the female SHG member or the household head) was interviewed. Information on the rest of the household members was obtained from the respondent. Please see page 5, lines 51-55. Informed consent was obtained before interviews were conducted. Please see ethics statements on page 5, footnote 8.

2. Are the survey places two India’s poorest states or three sites (Pratapgarh, Kanpur Dehat and Vaishali)? What is the relationship?
Reply: The surveys were conducted in three sites or three districts which lie in two states. Pratapgarh and Kanpur Dehat are two districts located in the same state - Uttar Pradesh, while Vaishali district is located in Bihar state. This is
mentioned on page 5, lines 48 and 49.

3. Are the patients choosing the providers just considering the two aspects (the costs and time)? Maybe some others are the more important influencing factors.
Reply: We model the probability of seeking healthcare and the probability of choice of provider as a function of household demographic structure, health status, education, consumption, employment and cost of care, and time taken to reach providers (see Tables 3, 4, 5). Other unobserved factors such as reputation/quality of the provider are likely to play a role in determining such choices. However, we do not have such information. This has been acknowledged on page 14, lines 252-254.

4. In the discussion, it is better to compare the results of yours with some other related researchers, so that the study will be more meaningful.
Reply: The discussion compares our results with those reported by other researchers. In particular, we compare our results to those reported in references [18], [20], [21] and [22].

5. In the tables, the units of relevant variables are not very clear, such as the units of the data in table 1 and 2. And the methods expressed in tables are not very clear.
Reply: Most the variables in Tables 1 and 2 are binary variables as indicated by (1/0). The figures in the tables are simply means or proportions (we do not use any methods here) of the variables as indicated in the table. For instance, in Table 1 (first row) 19 percent of the households are female headed and so on. Similarly in Table 2 (first row) 52 percent of the respondents reported gastrointestinal symptoms.

Minor Essential Revisions:
1. I consider that the last paragraph in the background part is not needed.
Reply: This is perhaps a matter of taste. We have retained the paragraph as it provides information to the reader on the manner in which the paper is organized.

Response to Referee 3
Thank you for your comments. Our responses to your comments are provided below.

Minor revisions
1. Page 7, line 85-87: Have you performed a sensitivity analysis by considering different age cut-off point for chronic conditions? Do the econometric inferences vary significantly if age cut-off point is shifted?
Reply: The reason to use the cut-off at age 12 for chronic conditions is that data on self-assessed health (SAH) was gathered only for those who were 12 and older. Rather than using different cut-offs we estimated the probability of seeking care for chronic conditions (Table 3) without imposing the 12 year cut-off but
dropped the SAH variable. Estimates did not differ appreciably from those that are reported in the text.

2. Page 7, line 85-87: Also, do you consider possible random-effects given the clustered nature of data.

Reply: We did consider this but did not make any adjustments. The three districts where the CBHI schemes were to be placed were purposively selected (see footnote 6). Moreover, within these districts all eligible SHG households were selected. To emphasise, the sample is a census of SHG households and is not a random sample. Hence, there does not seem to be any reason to allow for random-effects. We mention on page 5, line 53 that all SHG households were surveyed.

3. Page 7, line 92-94: The selection bias is somewhat addressed in case of outpatient care regressions however, have you considered this issue while analysing the inpatient care data?

Reply: In the case of inpatient care the data indicate whether an individual used inpatient care or not. We are not able to distinguish between those who needed care and did not seek care and those who needed care and sought care. Hence, we only estimate the probability of seeking inpatient care (Table 3).

4. Page 7, Line 103: A brief description about possible limitations of the imputation method for costs and time is desirable.

Reply: We have added a footnote on the limitation of this approach (see footnote 13) and also mention it as a limitation in the conclusion. However, motivated by your comments we examined different specifications to impute costs and time and the revised version of the paper now relies on a different specification. In particular, the imputation now includes village fixed effects. Refining the imputations also leads to a change in some of the estimates. This is discussed in the text and below.

5. Page 10, Line 173: “Cost consideration”... It will useful to describe the range and nature of cost as well as time required before presenting the econometric results. This can also be a part of discussion as cost is not found to be a major factor determining care seeking. Also, do you consider the total costs or include some information regarding cost components (drugs, diagnostics, and consultations).

Reply: As mentioned in footnote 12, the study considers direct costs of care that relate to consultation fees, medicines, lab and imaging tests. A discussion of the costs across providers and the time taken to reach different providers is provided in section 3d, page 11, and lines 179-192. Also, please see Supplementary Table 3. This discussion appears before discussing the econometric results.

6. Proximity is emerging as criteria for care not because of quality or cost of provider but may be just because the households want to find help at the earliest or find a person who can suggest something.

Reply: We agree with this interpretation, especially for acute illnesses. The
econometric estimates yield the conclusion that for acute illnesses proximity is an important consideration. The most proximate providers are NDAP (Supplementary Table 3) and they are used most frequently (Figure 1) and the main reason to use them is proximity (see Figure 3). For chronic illnesses, the story differs. The econometric estimates yield the conclusion that costs are an important consideration. The most widely used provider is a qualified private practitioner (Figure 1) and the main reason for using them is that they are considered the best source of care (see Figure 3). A discussion along these lines now appears in section 4.

7. It is interesting to note that cost of care does not influence decision. Is it that the cost considered is more or less comparable across providers and there are no differences in "real" sense?

Reply: The estimates show that there are wide differences in cost of care across providers (see Supplementary Table 3 and section 3d). Motivated by your comments we re-estimated and re-calculated our cost imputations. Please see responses to point 4 and point 6.

8. Page 10, Line 254-6: "The key implication from this study is that since proximity is such an important factor influencing healthcare-seeking behaviour, CBHI schemes should consider reimbursement for transportation costs and/or reimbursement of foregone earnings as part of the insurance package." This may be a suggestion for the CBHI schemes but it does not appear to the key implication from the study. As you have noted, costs do not matter and without understanding the reason we cannot consider that subsidising travel costs can be helpful.

Reply: We have toned down this argument although we still argue that proximity is important especially for acute illnesses and that CBHI schemes should consider reimbursement for transportation and foregone earnings. At the same time we also highlight the importance of costs in determining choice of chronic care. Please see responses to point 4 and 6 above.

9. In general, the discussion is weak and needs expansion and attention on a few issues that are raised above including limitations of methodology as well as conceptual issues regarding significance and role of the variables such as cost, proximity and providers. The discussion does not shed enough light on interesting issues that emerge from the data analysis.

Reply: The discussion has been revised. We acknowledge the limitations of the methodology, especially the imputation of the time and cost variables and the generalizability of the estimates. We compare our findings with those reported by other authors. We discuss why the estimates differ for acute and chronic illnesses. Please see the revised discussion in section 4.

Discretionary revisions

1. Page 3, line 2: "Notwithstanding progress in health outcomes"...This statement is somewhat ambiguous as several health indicators are found worsening for India. For instance, life expectancy is increasing but so is the burden of chronic
non-communicable diseases. Perhaps, this statement may be avoided or rephrased with more clarity.
Reply: We have removed this part of the statement.

2. Page 3, line 4: The RSBY was launched in 2008 so may be the date itself can be mentioned as the term “recently” provides a subjective view.
Reply: We have removed “recently” from the sentence and have replaced it with the year.

3. Are pregnancy and childbirth related outpatient and inpatient care included in the analysis? Generally, these are not included. Also, what about accidents and injuries? Are there any gender differences in care seeking behaviour? Reply: Pregnancy and childbirth related outpatient and inpatient care not included in the analysis. Accidents and injuries are included in acute illnesses. The regression specifications that we estimate control for gender. See tables 3, 4 and 5. As discussed on page 10, lines 160 to 163 there are gender differences in the probability of seeking care.