Author’s response to reviews

Title: Evaluating Medicine Prices, Availability, and Affordability in Bangladesh Using World Health Organization and Health Action International Methodology

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All changes are made with Track Changes, and line numbers referred to in our comments reflect the new line numbers in the resubmitted text body.

Reviewer reports:


The regional breakdown did not include the 15 backup facilities, and as a result the total was 120 rather than 135. The numbers have been updated to include the backup facilities in lines 226-229, so the total is now 135 as expected.

Methods

Describe in more detail the methods used for the regression analysis and the selection of the model.
Added under Methods > Data Analysis lines 288-299.

Page 8. Line 323. The authors used MPR median values for the descriptive analysis and mean values for the inferential analysis. The inferential analysis should be conducted using median values.

The WHO/HAI Methodology, as standard, uses the median MPR when comparing across sectors. We adhere to the standard methodology, but have also added mean values to the text in lines 395-402, now reading “..mean (median) MPR of .. 71.0 (96.2).” etc.

Results

Included the full results of the regression analysis.

These are reported in table 2

Page 8. Line 339. Availability of medicines. Indicate if the differences were statistically significant.

These have now been added in lines 324, 327, 329 and 334.

Minor recommendations

Use lower case for generic names.

Amended throughout

Paul Grootendorst (Reviewer 2): This was a very well conducted and thorough analysis of data obtained from a survey of medicines prices and availability in Bangladesh. The present study is a timely update and extension of work that was conducted over 10 years ago. This kind of work is exactly what is needed to advance the objectives of the global health movement: one needs to assess financial barriers to needed health services and pharmaceuticals in resource poor jurisdictions. The present paper presents price, availability and affordability statistics obtained from careful price measurements from a variety of different sectors (the public sector providers, which the poor typically rely on) and private providers (which tend to cater to the more affluent) for different classes of medicines. I quite enjoyed reading it.

I did however have some constructive criticism to provide. The first concerns the authors' policy recommendations "Availability and affordability of NCD medicines are key concerns where the
burden of NCD is rising. ... A small number of medicines are consistently expensive across sectors in Bangladesh, suggesting the need for strategies to control prices for certain medicines."

I caution that price controls in some circumstances will lead to shortages - this would occur if providers no longer think that it is worthwhile (profitable) to supply the product.

The authors agree that price controls can come with their own challenges, however any meaningful discussion of the implementation or consequences of price control, we feel, are beyond the scope of this paper. The language has been changed to avoid explicit mention of price controls (lines 122, 549-550).

The second comment relates to the regression analyses. It would be helpful to report the total sample size and also provide a bit of explanation as to the estimator of the variance (or standard error) of the OLS parameter estimator. This was not provided and my sense is that this was the standard variance estimator which assumes iid errors. The price outcomes data might very well be heteroskedastic in which case a robust standard error estimator may be preferred.

Amended in table 2