Author’s response to reviews

Title: Knowledge of cervical cancer and HPV vaccine in Bangladeshi women: a population based, cross-sectional study

Authors:

Jessica Islam (islamjy@live.unc.edu)
Fatema Khatun (kfatema@icddrb.org)
Anadil Alam (anadil@icddrb.org)
Farhana Sultana (f.sultana2@student.unimelb.edu.au)
Afsana Bhuiyan (afsana.bhuiyan@icddrb.org)
Nazmul Alam (nazmul@icddrb.org)
Laura Reichenbach (laura.reichenbach@gmail.com)
Lena Marions (lena.marions@ki.se)
Mustafizur Rahman (mustafizur@icddrb.org)
Quamrun Nahar (quamrun@icddrb.org)

Version: 2 Date: 19 Sep 2017

Author’s response to reviews:

September 19th, 2017

To: The Editor

BMC Women's Health

Re: BMWH-D-16-00145

Manuscript Title: Knowledge of cervical cancer and HPV vaccine in Bangladeshi women: a population based cross-sectional study.
Thank you for your continued interest in our paper and the opportunity to address the reviewer comments and your comments in our manuscript. We have addressed these comments and included tracked changes in the manuscript.

We thank the reviewers for their constructive comments and recognizing that this study provides valuable baseline information for the development of future interventions in Bangladesh. We have responded to each reviewer as follows:

Editor Comments:

1. Please ensure that all abbreviations used are listed in the List of abbreviations.

The list has been updated to reflect all acronyms and abbreviations used.

2. Please include a "Declarations" heading after the List of abbreviations.

This has been included in the page # 16.

3. You stated in your response to reviewers that you included a completed STROBE checklist. However, this does not appear in our submission system. Please include it as an additional file when uploading your revision.

Thank you for bringing this to our attention. This has been re-uploaded to the “Additional file” section.

Reviewer 1:

Echo L. Warner (Reviewer 1): Thank you for the opportunity to re-review this important manuscript. The authors have thoroughly revised the manuscript and have adequately addressed my prior concerns. I would like to raise some additional considerations for the authors in regard to their revised multivariable analyses:
1. Please provide justification for the variable selection for the multivariable model in the statistical analysis section of the Methods. Were variables selected for the multivariable model based on the outcomes of univariate analyses, extant literature, or some kind of forward or backward selection for model building?

Thank you for your question. The following text was included in the manuscript (page 7, line 191-194) to address this inquiry: “Variables of interest to include in the multivariable model were initially identified using the existing literature (23, 24). Next, these variables were assessed using univariate analyses. Any factor that provided a univariate p-value <0.05 for either the rural or urban model was included in the final multivariable regression models.”

2. It is possible for collinearity to exist between some of the variables included in the model. How did the authors assess the potential for collinearity?

We assessed for the potential of collinearity by calculating the variance inflation factor or VIF using Stata. As a rule of thumb, a variable whose VIF values is greater than 10 may merit further investigation. However, for our model, we found that none of the variables had a VIF value greater than 10. In fact, the largest VIF value was 5.93.

We have included the following sentence on page 7, line 196: “Collinearity was assessed using the variance inflation factor (VIF) to ensure a strong linear relationship among independent variables included in the model was not present.”

3. The discussion section would be strengthened by incorporating the multivariable findings. Based on the multivariable findings, the authors may consider providing some guidance in regard to high-priority groups to target with future research and educational interventions (e.g., younger women, urban women who do not use condoms and who are low income).

We have included the following to page 13, lines 354 – 357 to address this comment: “Such educational interventions can be targeted to groups who were identified to be less likely to have heard of cervical cancer based on multivariable analyses. These groups include: younger women in urban and rural areas, women with either no or low education in urban areas and rural areas, urban women with low income, and urban women who do not use condoms.”

We believe we have addressed all the comments from the Reviewers and Editor.

Thank you for your supportive and constructive comments.

Kind regards

23. Chan ZC, Chan TS, Ng KK, Wong ML. A systematic review of literature about women's knowledge and attitudes toward human papillomavirus (HPV) vaccination. Public health nursing