

## Peer Review Report

# Review Report on Women's sexual empowerment and its relationship to contraceptive use in Bangladesh: findings from a recent national survey

Original Article, Int J Public Health

Reviewer: Tefvik Bayram

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### EVALUATION

#### **Q 1** Please summarize the main findings of the study.

This study aims to assess the relationship between women's sexual empowerment and contraceptive use among married Bangladeshi women from a nationally representative sample. By using the secondary data from the Bangladesh Demographic and Health Survey (BDHS) 2017–18, the researchers have found that a unit increase in the sexual empowerment scale increases the odds of contraceptive use by 13%; and increasing age, being Muslim, having a spouse who is older by more than ten years, and living in rural areas are associated with lower odds of using contraceptives than their respective counterparts.

#### **Q 2** Please highlight the limitations and strengths.

In terms of the methods, the main strength is that the researchers have used secondary data from the Bangladesh DHS, which is nationally representative. Each of the variable the researchers have used in the study has a higher sample size. Therefore the inferred associations are reliable. The main contribution of the study to the literature is that the researchers have not used the empowerment scale as a single summary measure; they have dissected the scale and have shown the association of different measurements separately with the use of contraceptive use. The main limitation is the lack of ability to make causal relationships between the empowerment scale and the use of contraceptive use, as the study is cross-sectional. This has been discussed in the paper.

#### **Q 3** Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

##### Major comments

1. In the introduction section the paper states that "the Government of Bangladesh has the aim of increasing the contraceptive prevalence rate (CPR) from 62% to 75% by the year 2022 in order to limit population growth and further improve maternal and child health". This suggests that the use of contraceptive might not be a solely individual choice, but a choice imposed by the government (through health education, media and other policies). This goes against the very nature of empowerment, as it is it paternalist. Empowerment by default is against paternalism, because it is a bottom-up approach in which people acquire more power themselves through an enabling opportunity structure. As such, it is important to justify the 'contraceptive use' as an indicator of empowerment. This can be discussed in the 'discussion' section.
2. The methods section is (probably) the strongest section in this paper. The sample size and the methods of data collection and analysis is well explained. The main dependent and independent variables have been well defined.
3. The results have been well presented and discussed. On the other hand, there is a high focus on the 'statistical significance' rather than the actual difference between some variables. For instance the women who reported that they had some media access were more likely to use contraception than women who had no

media access (75.5% vs. 72.7%). Although this difference might be statistically significant because of high sample size, is there an actual real-life difference between 75,5% and 72,7%? This can be discussed.

#### Minor comments

1. In the ethics statement it is stated that "written informed consent to participate in this study was provided by the participants' legal guardian/next of kin". As this might be needed for the participants aged below the age of 18, why is it the case for adult participants?
2. It will be better to indicate the variables included in the logistic regression model.
3. The importance of qualitative studies can be indicated in the limitations of the study, as empowerment is a complex issue that can be entirely understood through quantitative methods.

#### PLEASE COMMENT

**Q 4** Is the title appropriate, concise, attractive?

The title is appropriate, concise, and attractive.

**Q 5** Are the keywords appropriate?

The keywords are appropriate. A keyword like 'women's empowerment' can be added.

**Q 6** Is the English language of sufficient quality?

The paper is written in a good English, and in a simple and understandable way.

**Q 7** Is the quality of the figures and tables satisfactory?

Yes.

**Q 8** Does the reference list cover the relevant literature adequately and in an unbiased manner?)

The references are up-to-date.

#### QUALITY ASSESSMENT

**Q 9** Originality



**Q 10** Rigor



**Q 11** Significance to the field



**Q 12** Interest to a general audience



**Q 13** Quality of the writing



**Q 14** Overall scientific quality of the study



#### REVISION LEVEL

**Q 15** Please make a recommendation based on your comments:

Minor revisions.