## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

## ARTICLE DETAILS

TITLE (PROVISIONAL)	Psychometric evaluation of an interview-administered version of the
	Kessler 10-item questionnaire (K10) for measuring psychological
	distress in rural Bangladesh
AUTHORS	Uddin, Mohammed; Islam, Fakir; Al-Mahmud, Abdullah

## **VERSION 1 – REVIEW**

REVIEWER	Marcos Pascoal Pattussi
	Programa de Pós Graduação em Saúde Coletiva, Universidade do
	Vale do Rio dos Sinos, São Leopoldo, Brazil.
REVIEW RETURNED	10-Apr-2018

GENERAL COMMENTS	This is a validation study aiming to assess the psychometric properties of the Kessler 10-item questionnaire via Item Response Theory in rural Bangladesh. A modified seven item scale provided the best psychometric solution for the population studied. Authors addressed all previous comments and the manuscript is well written and organized. Data analysis is justified and reproducible. Results are relevant to the local level.
	Minor details This is a validation rather than a cohort study. Check typos in lines 48 and 82.

REVIEWER	Long Sun School of Public Health, Shandong University, China
REVIEW RETURNED	19-Apr-2018

GENERAL COMMENTS	I think this is a well-designed study, and the statistical analysis is also in a reasonable way. I have no other comments except the
	format of the tables. Please change the tables into three-line tables for publication.

## **VERSION 1 – AUTHOR RESPONSE**

Reviewer: 1

Reviewer Name: Marcos Pascoal Pattussi

Institution and Country: Programa de Pós Graduação em Saúde Coletiva, Universidade do Vale do Rio dos Sinos, São Leopoldo, Brazil.

Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below

This is a validation study aiming to assess the psychometric properties of the Kessler 10-item questionnaire via Item Response Theory in rural Bangladesh. A modified seven-item scale provided the best psychometric solution for the population studied. Authors addressed all previous comments and the manuscript is well written and organized. Data analysis is justified and reproducible. Results are relevant to the local level. Minor details

This is a validation rather than a cohort study.

Thanks for your comment. This is a cohort study. However, this is the first phase of the data collection and we are trying to validate the questionnaire first. In our survey, we have used validated questionnaire, which was valid in the developed world, and the questionnaire was not validated earlier through Rasch analysis in developing country like Bangladesh. After validated questionnaire, we will go for follow-up data collection.

Check typos in lines 48 and 82.

Change typos in line 82. However, we did not find any typos on lines 48

Reviewer: 2 Reviewer Name: Long Sun Institution and Country: School of Public Health, Shandong University, China Please state any competing interests or state 'None declared': None declared.

Please leave your comments for the authors below

I think this is a well-designed study, and the statistical analysis is also in a reasonable way. I have no other comments except the format of the tables. Please change the tables into three-line tables for publication.

Thanks for your suggestion. We have changed all the tables into three-lines table.