

## Review report

**BSMMUJ-17.3 – 72448**

Reliability and validity of the Bangla version of the knee injury and osteoarthritis outcome scores

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| REVIEW COMMENTS   | AUTHOR RESPONSE  |  |
|---|--|--|
| <p style="color: blue;">[Note: Please write the responses to each point here mentioning line number(s). You must change the manuscript as per your response.]</p>   |  |  |
| <b>A. Technical review</b>  |  |  |
| <b>ROUND 1</b>  |  |  |
| Reviewer's name: <b>Mohammad Ziaul Haider</b>   |  |  |
| ORCID: <b>0000-0002-0055-0171</b>   |  |  |
| Date assigned: <b>31-May-24</b>   |  |  |
| Date submitted: <b>4-Jun-24</b>   |  |  |
| Do you have any conflict of interest with the author/s? <b>No</b>   |  |  |
| Do you wish to be disclosed to the author? <b>Yes</b>   |  |  |
| Comments sent to author (Date: <b>2-Jul-24</b> )  | Date: <b>13-Jul-24</b>   |  |
| 1. How could you confirm it (B-KOOS) is essential for the assessment and management of Knee OA? Line no 56  | The entire paragraph has been rephrased in lines 56-58.                  |  |
| 2. It is better to mention findings of the study rather than the aims of the study. Line no 68  | Changed the abbreviation into Knee osteoarthritis (KOA) in line 69.      |  |
| 3. Were there any diagnostic criteria for diagnosis of Knee OA that was followed by orthopedic surgeon of physiatrists? Line no 132   | The statement has been rephrased in line 133.                            |  |
| 4. Individuals who were illiterate or had other conditions that could impact their knee symptoms and function, such as rheumatoid arthritis, were excluded from this study.<br>The sentence is not clear in line 133-134. | The sentence has been revised in lines 133-134.                          |  |
| 5. Who were the members of the expert committee? Line no 145  | The expert committee is replaced and rephrased on page 6, lines 146-150. |  |
| 6. In the pre-final stage, the patients with OA knee well accepted the Bangla KOOS.<br>The above statement is not clear in lines 170-171.   | The statement is rephrased in line 172.                                  |  |
| Reviewer's recommendation: <b>Revisions required</b>  |  |  |
| Reviewer's name: <b>B</b>   |  |  |
| ORCID: -  |  |  |
| Date assigned: <b>31-May-24</b>   |  |  |
| Date submitted: <b>11-Jul-24</b>  |  |  |
| Do you have any conflict of interest with the author/s? <b>No</b>   |  |  |
| Do you wish to be disclosed to the author? <b>No</b>  |  |  |
|   | Score  | [Note: Please response if the score is below 6]  |
| How would you rate the originality and depth of the manuscript?   | 4  | We revised the findings of the manuscript and tried to explain to reflect the originality of the work.                     |
| Is the manuscript written in a scholarly manner?  | 5  | The manuscript has been revised as advised, followed the STROBE checklist and formatted based on the journal's guidelines. |

| REVIEW COMMENTS  |   | AUTHOR RESPONSE   |
|--|---|---|
|  |   | [Note: Please write the responses to each point here mentioning line number(s). You must change the manuscript as per your response.]   |
| Does the manuscript have the potential to make a valuable contribution to the world of knowledge?  | 6 | -   |
| How would you rate the originality and depth of the manuscript?  | 2 | We described the ethical issues in detail in the methods section which may reflect the standard practice now.   |
| Overview of the manuscripts:<br>There are several recognized methods of translation and cross-cultural adaptation of self-report questionnaires, e.g., those recommended by Beaton et al. (2000), the World Health Organization (WHO), and Mapi Research Institute (a research organization in Lyons, France). I didn't find stages of recommendation of Beaton et al. (2000) in this study, e.g., forward translation, synthesis of the Bangla version, back translation, etc. If this study was an adaptation of the "Indian Bangla version of KOOS" to the Bangladeshi Bangla. I think it should be clearly mentioned in the title.               |   | We appreciate your indispensable recommendations. In our study we have followed Beaton et al. (2000) forward-backward method. We have followed all the stages. After the synthesis of our Two forward translations, we compared our Bangla-synthesized version with the Indian-translated version to minimize cultural disparities between Bangladeshi and Indian Bangla and then made a final Bangla-synthesized version which we did the backward translation into English. Then followed the subsequent stages. As we have used the Indian version as raw data and followed all the stages of Beaton et al. (2000) in our study, that's why we didn't mention the adaptation of the "Indian Bangla version of KOOS to the Bangladeshi Bangla". (Page 6, line 146-150)  |
| 1. The DOI link of reference 10 is incorrect (Page 4, line 114), the link you provided ( <a href="http://dx.doi.org/10.13140/RG.2.2.34259.80168">http://dx.doi.org/10.13140/RG.2.2.34259.80168</a> ) is the link of your adapted Bangladeshi Bangla version of the questionnaire. Moreover, this reference [Karvannan H, Chakravarty RD, Arun G Maiya, Naomi Simick (2013) Bengali Knee injury and Osteoarthritis Outcome Score (KOOS)] doesn't contain any journal name, volume and page no. I didn't find any readable article/abstract searching this reference. It is very important to know that how the "Indian Bangla version" was developed. |   | The authors of the Indian version followed the following methods:<br>Cross-cultural adaptation was taken up by administering the following phases. Phase I (Translation phase) constituted translating the questionnaire into Bengali language (target language) by two independent translators (T1 & T2). One of the translators (T1) is an informed translator and the other (T2) is uninformed about the procedure. Phase II (Synthesis phase) constituted blending of T1 & T2 translation outputs into T12 by resolving the discrepancies between the translators. Phase III (Retrospective Translation) involved the backward translation of T12 into the English language by two independent translators RT1 & RT2. Phase IV constituted expert committee review under the guidance of methodologists, developers and translators to produce the pre-final version of the questionnaire. Pretesting (Phase V) & Submission and appraisal (Phase VI) are in progress amongst subjects treated with total knee replacement following knee osteoarthritis. They didn't publish the article that's why it does not contain a DOI number. We have provided a link in the "reference no 10" through which the PDF version of the article is available in the ResearchGate. Moreover, 2 of the authors are co-authoring our current study. |
| 2. IRB of which hospital? (Page 5, line 123)   |   | IRB clearance has been taken from Sher-E-Bangla Medical College, Barishal, Bangladesh. (Page 5, line-124)   |
| 3. You mentioned that the study was conducted in "local hospitals in Dhaka", what are those hospitals? (Page 5, line 129)  |   | It was conducted at the Physical Medicine and Rehabilitation Department of BSMMU & Kurmitola General Hospital, Dhaka, Sher-E-Bangla Medical College Hospital, Barishal and at the Department of Orthopedic Surgery, Cumilla Medical College, Cumilla, Bangladesh. (Page 5, line 133-133)  |

| REVIEW COMMENTS   | AUTHOR RESPONSE<br>[Note: Please write the responses to each point here mentioning line number(s). You must change the manuscript as per your response.]  |
|---|---|
| 4. One orthopaedic surgeon and two physiatrists diagnosed knee OA: Was it a single-centered study? Which diagnostic criteria were used for the diagnosis of knee OA? (Page 5, line 131)   | It was a multi-centred study namely Bangabandhu Sheikh Mujib Medical University, Kurmitola General Hospital, Dhaka, Cumilla Medical College, Cumilla and Sher-E-Bangla Medical College, Barishal.<br>ACR classification criteria for diagnosing Osteoarthritis Knee was used to diagnose the Knee OA cases. |
| 5. Table 1 presents the demographics of the participants, including age, height, weight, body mass index... This should be in the result section. Moreover, this table (demographics) is not necessary for the purpose of this manuscript, you can remove this. (Page 5, line 136)    | Your mentioned table (demographics) has been removed from the manuscript.   |
| 6. Please provide the reference for the Indian Bangla version of KOOS. (Page 6, line 144)   | They didn't publish the article that's why it does not contain a DOI number. We have provided a link in the "reference no 10" through which the PDF version of the article is available in the ResearchGate.  |
| 7. At the end of the result section, you can put the web link to the final Bangla version of the questionnaire so that researchers can easily find what you developed.  | In response to your comments, we have provided a web link to the final Bangla version of the Questionnaire. It is now available in the following link:<br><a href="http://dx.doi.org/10.13140/RG.2.2.34259.80168">http://dx.doi.org/10.13140/RG.2.2.34259.80168</a>   |
| 8. Spelling corrections: please add a colon after "Methods" in the abstract.  | We corrected & added a colon after "Methods" in the abstract.   |
| Reviewer's recommendation: <b>Resubmit</b>  |   |
| Executive Editor's name: <b>M Mostafa Zaman</b><br>ORCID: <b>0000-0002-1736-1342</b>  |   |
| 1. Correlation between two quantitative variables (as presented in two tables) is not enough to show their agreement. Drop these two tables. Please use the Bland-Altman Plot for these two analyses.   | We value your discerning opinion. We have made changes according to your suggestion on Page-19-21, lines 434-440.   |
| Executive Editor's decision: <b>Revision required</b>   |   |
| <b>ROUND 2</b>  |   |
| Reviewer's name: <b>Mohammad Ziaul Haider</b><br>ORCID: <b>0000-0002-0055-0171</b><br>Date assigned: <b>3-Aug-24</b><br>Date submitted: <b>10-Aug-24</b><br>Do you have any conflict of interest with the author/s? <b>No</b><br>Do you wish to be disclosed to the author? <b>No</b> |   |
| Comments sent to author (Date: <b>13-Aug-24</b> )   | Date: <b>15-Aug-24</b>  |
| 1. Please put the web link to the final Bangla version of the questionnaire at the end of the method or result section.   | Web link was added at the end of the method in line 183.  |
| Reviewer's recommendation: <b>Accept</b>  |   |
| Executive Editor's name: <b>M Mostafa Zaman</b><br>ORCID: <b>0000-0002-1736-1342</b>  |   |
| 1. Submit the Bangla questionnaire as a supplementary document.   | Added & Uploaded a PDF version of Bangla questionnaire as a supplementary document.   |

| REVIEW COMMENTS   | AUTHOR RESPONSE<br>[Note: Please write the responses to each point here mentioning line number(s). You must change the manuscript as per your response.] |
|---|--|
| 2. Methods: Add the Bland-Altman method for agreement in the statistical analysis section elaborately.  | Added Bland-Altman method for agreement in the statistical analysis section elaborately in lines 166-176.  |
| 3. Results: Provide figure numbers consecutively to describe them (Figures 1, 2, and 3) rather than labelling them as Plot-1, MAP-1, and MAP-2. | Figure numbers have been provided in lines 194 & 444 (Figure 1), 216 & 448 (Figure 2) and 230 & 450 (Figure 3).  |
| 4. Discussion: Avoid repeating results. Reduce the numbers in the first paragraph.  | The discussion has been revised in lines 246-253.  |
| Executive Editor's decision: <b>Revision required</b>   |  |

|   |                        |
|---|------------------------|
| <b>B. Editorial decision</b>                            | Date: <b>17-Aug-24</b> |
| Final editorial decision: <b>Conditional acceptance</b> |                        |

| Editorial Clarification  |   |
|--|---|
| Executive Editor's name: <b>M Mostafa Zaman</b>  |   |
| ORCID: <b>0000-0002-1736-1342</b>  |   |
| Comments sent to author (Date: <b>31-Aug-24</b> )  | Date: <b>31-Aug-24</b>  |
| <p>Overview</p> <p>The journal office done language editing and removed redundancy. Need clarification of the following points.</p>                                  | -   |
| 1. Please align the abstract with the revised text in the results section for the correlation coefficients (r). Any r below 0.4 is weak, regardless of the P values. | The abstract has been aligned with the revised text in the results section. |
| 2. Check the order of the references cited specially from 17 to 22.  | References have been revised accordingly.                                   |