Peer Review File

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Reviewer A

Congratulations for the hard work. I see that the manuscript is well done and written according STROBE and COSMIN Criteria. You did the translation, adaptation and validation of the Chinese version of PAKQ. As you added the results of PAKQ after the education, I recommend adding this value to your manuscript title.

Reply: Thank you for your recommendation and we have modified the title as advised, so as to embody the education part.

Changes in the text: page 1, Title section.

Reviewer B

1. Title: missing comma after adaptation
Reply 1: Thank you for reminding. We have modified the title and avoided making this mistake especially.

Changes in the text: page 1, Title.

2. Abstract: I would recommend using person-first language – ‘patients with asthma’ instead of asthmatic patients
Reply 2: Thank you for your kind advice and we have modified it in the manuscript as advised.

Changes in the text: Page 5, line 5,8,10.

Introduction:

3. Lines 37-38: -Incomplete sentence “For asthma treatment, the ultimate object is overall control of the disease which 38 as defined by the Global Initiative for Asthma (GINA)……?

Reply 3: We have modified the sentence.

Changes in the text: Page 6, line 42.

4. Line 39: grammar “…was showed…”

Reply 4: We have corrected the sentence.

Changes in the text: Page 6, line 43.

5. Line 44: “cognition and competencies…” Use of ‘cognition’ is inappropriate. The purpose is to assess their knowledge of the disease process, not the cognition of patient

Reply 5: We have corrected the word.

Changes in the text: Page 7, line 61.

6. Please revise the introduction. It appears choppy and does not flow well. Also there are many errors in sentence structure and grammar throughout the manuscript.

Reply 6: Thank you for your advice and we have carefully revised the introduction to make it more fluent. And we also checked the whole manuscript and tried our best to correct the errors in grammar and sentence.

Changes in the text: Page 6~7, introduction part; the whole manuscript.

Methods:

7. Was this incident diagnosis? Were the patients newly diagnosed or already receiving care? If not incident, it would be helpful to different the % of patients that were newly diagnosed v/s those living with Asthma and the duration since diagnosis because the knowledge of disease can vary depending on the time since they were living with condition.

Reply 7: Thanks for your nice advice. Most of the patients were already receiving standard care, with newly diagnosed only accounts for 5% approximately. We have assessed the relation between the disease duration and knowledge level, but there was no significant difference. We speculate the reason for this result may be the small sample size of newly diagnosed patients and knowledge level is affected by a variety of factors, including age (younger patients have higher ability to receive knowledge), education level and occupation, etc. We will expand more sample sizes in future studies to clarify this question.

8. Adult patients – which age was excluded. Clearly list inclusion and exclusion criteria

Reply 8: The inclusion criteria for age is over 18. We have modified and clearly listed the inclusion and exclusion criteria in the manuscript as advised.

Changes in the text: page 8, line 99~102.

9. Line 78- ‘study was conducted by specialists…’ how many researchers were involved. What were there roles? More details needed

Reply 9: The study was conducted at 16 centers with one or two researchers per center. The researchers were responsible for patient recruitment, clinical information

collection, guiding patients to complete the PAKQ questionnaire independently and watch the educational video. We have added more detailed information in the manuscript as advised.

Changes in the text: page 8, line 114~117.

10. Line 80 – ACT score – spell out on first use.

Reply 10: Thanks for advice. We have modified our text as advised.

Changes in the text: page 9, line 143.

11. Line 81-82: why was a period of 14 days chosen for test retest reliability. Seems too long of a period. Should have been done the same day to avoid patients looking up more information.

Reply 11: Studies of test-retest reliability to verify the stability of test tools have used varying intervals between test administrations. A very short time interval makes the carryover effects due to memory, practice, or mood more likely, whereas a longer interval increases the chances that a change in status could occur. Most investigators have chosen an interval ranging from 1 to 2 weeks rather than a shorter interval. This time frame is generally believed to be a reasonable compromise between recollection bias and unwanted clinical change. The reference for this method is *Reproducibility and responsiveness of health status measures. statistics and strategies for evaluation. Control Clin Trials 1991;12:S142–58.*

12. Line 98: how was the assistance while filling monitored. More details needed on the process for clarity

Reply 12: In fact, the researcher monitored the patient to ensure that he/she didn't receive any assistance while filling the questionnaire. Our previous description may

mislead the reader so we have modified this problem in the manuscript. Thanks for your advice.

Changes in the text: Page 9, line 150~152.

13. Video education – was this done in the clinic? Or was this something patients took home? How long was the video. Did it cover all aspects of the PAKQ constructs

Reply13: The video education was done in the clinic instead of at home. The video is about 40 minutes long and covers all aspects of the PAKQ construct. We have added the implementation details in manuscript. The video could be shared if requested.

Changes in the text: Page 9, line 145, 147~150.

Analysis: Looks adequate

Results:
14. Item analysis and factor structure: did the items fit the original factor structure? Explain the item fit statistics so the reader knows why the factors were retained as is.

Reply 14: Thanks for your advice. We have added some data and explanations of the item analysis and factor analysis in the manuscript (see page 13 line 248~267; page 19 line 432~444; Table 2).

Changes in the text: page 13, line 248~page 14, line 267; page 18, line 386~387; page 19, line 432~444; Table 2(the blue color part).

15. Basically, the introduction and purpose as well as methods do not talk about all the analyses that was performed. The intro is very dull and simplistic. Add more to the intro about diagnostic accuracy and factor analysis.

Reply 15: Thanks for your advice. We have expanded the introduction about diagnostic accuracy and factor analysis in results as advised.

Changes in the text: page 15, line 294~297; page16, line 326~330; line 334~340.

16. Same way for methods, break down the procedures separately for individual analyses. For example “For test retest reliability, data was collected from initial evaluation and ...”

Reply 16: Thank you for your kind exemplification, we have modified our text as advised.

Changes in the text: page 14, line 273~275.

17. For diagnostic accuracy, we utilized baseline data of the PAKQ to identify if the tool could accurately identify those that demonstrated poor knowledge of the disease” … and so on.

Reply 17: Thank you for your kind exemplification, we have modified our text as advised.

Changes in the text: page 16, line 326~340.

18. Discussion reads more like a repeat of results. Need to expand further and better explain the findings in the current context.

Reply 18: Thanks for advice. We have expanded discussion part as advised.

Changes in the text: Discussion part.

Supplementary reply: During the data inspection, we found that due to calculation mistakes, some presented data had some errors and were corrected. The data didn't affect our main conclusions.

Changes in the text: page 13, line 240~243.