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)	Measuring the preference toward patient-centered communication with the Chinese-revised Patient-Practitioner Orientation Scale: A cross-sectional study among physicians and patients in clinical settings in Shanghai, China
AUTHORS	Wang, Jie; Zou, Runyu; Fu, Hua; Qian, Haihong; Yan, Yueren; Wang, Fan

VERSION 1 - REVIEW

REVIEWER	Yi Mou
	Shanghai Jiao Tong University, China
REVIEW RETURNED	03-Apr-2017

GENERAL COMMENTS	This is a timely and important inquiry on measuring the preference toward patient-centered communication in China. The study follows a standard procedure of testing the reliability and validity of an existing scale and forming a revised one. I found the results rather convincing. The manuscript is clearly-organized and well-written.
	While I enjoyed reading this paper, I hope to provide some minor suggestions to strengthen it.
	1. It would help readers more easily understand if the authors could provide the original 18-item scale and revised 11-item scale. 2. On p. 16, the results showed 57.2% of the patient respondents were anxiety-positive and 51.3% were depression-positive. I'm wondering if being depression-positive is equal to clinically depressed? If so, this ratio is way too high. If not, the authors may need to add a simple explanation to it. 3. This study is of significant implication, given the deteriorated physician-patient relationship in current Chinese society. If the authors could provide a little more discussion on that, it would make the significance of this study more salient.

REVIEWER	John Skelton Institute of Clinical Sciences University of Birmingham UK
REVIEW RETURNED	24-Apr-2017

GENERAL COMMENTS	I have responded "yes" to all the questions above, since the suggestions I make are relatively easy to adopt. So, as additional comments to the questions, and retaining the numbering above:
	There is a fundamental confusion in the field as a whole about

what "patient-centredness" means, as the authors acknowledge If it is indeed, as the authors further suggest, to do with "offer[ing] care that is concordant with the patient's values, needs and preferences", and if it does indeed require therefore that physicians "adapt....strategies to individuals", then it is difficult to see patient-centredness as an objective, measurable entity. I speculate that patients in China are at least as likely as patients elsewhere to find a brisk, confident, no-nonsense doctor to whom they can surrender all decisions very reassuring. (The fundamental conundrum here is that, in the end, when a patient says "You know best doctor....", one is left, apparently, with the idea that it can be patient-centred to be doctor-centred).

Having said that, it would be unreasonable to expect this paper to disentangle the issues here - that is not what the authors aim to do. However, both in the Introduction (eg where they acknowledge the difficulty of defining patient-centredness) and in the Discussion, I would like to see this more explicitly mentioned. With apologies for the self-referencing, I offer a discussion which may be relevant (and picks up Mead and Bowers, which the study cites) in JR Skelton. Language and Clinical Communication: this bright Babylon (2008); Pp 93 -98.

4. The study could be replicated, certainly, and I hope will be. However, the methods are not described sufficiently in the sense that we do not have access to any version of the PPOS. As the study hinges precisely on alterations in meaning across languages and cultures this is a great pity. It may be that copyright issues get in the way here, and the criticism will not I hope damage the paper's chance of being accepted, but certainly (I'm originally an applied linguist by training) I felt there was far too little information about the relationship between the three versions of the PPOS that are mentioned (the original, the translated, and the "Chinese revised" version which the authors develop and try out).

Could this be expanded?

- 7. I must stress that I am not a statistician, but found the description of the statistics clear and as far as can claim knowledge here well-motivated. However, the authors might want to scrutinise their use of the concept of "randomness". At times, the approach to recruitment sounds very like a convenience sample (which is fine).
- 8. Yes, with perhaps the point that Balint did not "introduce" patient-centredness perhaps it would be better to say something like "influential in the development of....".
- 15. The standard of English is admirable, but will certainly need editing. One particular phrase needs unpicking the point made in the "Article summary", that the the CR-PPOS was "mainly based on a statistical approach". I think I know what is meant, but this needs reworking.

A comment in addition: this paper is a serious attempt to grapple with the difficulty of applying nebulous (but important) concepts like "centredness", "caring", "sharing" etc etc across a language and cultural divide. It is to be warmly welcomed for that reason, and I hope the study can be published.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

1. It would help readers more easily understand if the authors could provide the original 18-item scale and revised 11-item scale.

Response: We appreciate the reviewer for this comment because adding the original scale as reference will definitely help with the understanding of this study. We have emailed Prof. Krupat, who is the author of the original 18-item PPOS, to ask whether we can present the original scale. The author suggested "to send them the scale for their inspection, but to point out that it is a copyrighted instrument that, technically, they do not have the right to reproduce on their own." Thus, hereby we only presented the original scale in Appendix 1 as part of this response. In the manuscript, instead, we have attached the revised 11-item scale (CR-PPOS) as the supplementary file.

2. On p. 16, the results showed 57.2% of the patient respondents were anxiety-positive and 51.3% were depression-positive. I'm wondering if being depression-positive is equal to clinically depressed? If so, this ratio is way too high. If not, the authors may need to add a simple explanation to it.

Response: We thank the reviewer as it is indeed a good point. We introduced HADS to our study because it is one of the most popular instruments that are suitable for hospital-based surveys, and its applicability has been well tested in Chinese context[1]. Depression and anxiety rates among clinical patients are distinct in various studies in China. And there were studies reporting the depression/anxiety rate of 40% or above[2,3], which were close to our findings in this study. However, it is very true that as a self-assessment scale, HADS is only valid for screening purposes; definitive diagnosis must rest on the process of clinical examination[4]. Hence, we added a statement at Line 2-3, Page 17, "Meanwhile, it should be noticed that HADS can only be used for screening purpose, thus the positive results cannot be equal to the anxiety/depression with clinical significance".

Reference

- [1] Zhenxiao Sun, Huaxue Liu, Lingying Jiao, et al. Reliability and validity of hospital anxiety and depression scale[J]. Chin J Clinicians(Electronic Edition).2017,11(2):198-201. [Article in Chinese] [2] Ying Li, Qiao Zhang, Min Wan, et al. Analysis of anxiety and depression in asthma outpatients[J]. J Third Med Univ.2011,33(19):1526. [Article in Chinese]
- [3] Man Zhao, Guo-long Yu, Tian-lun Yang. Investigate the incidence of anxiety and depression in outpatients from cardiovascular department in a general hospital[J]. Chinese Journal of Clinical Psychology.2012,20(2):184,188-189. [Article in Chinese]
- [4] R.P. Snaith. The hospital anxiety and depression scale[J]. Health Qual Life Outcomes. 2003,1:29.
- 3. This study is of significant implication, given the deteriorated physician-patient relationship in current Chinese society. If the authors could provide a little more discussion on that, it would make the significance of this study more salient.

Response: We merged the "practice implication" section into the last paragraph of discussion (line 10-24, page 21) to more explicitly illustrate the practical significant of this study in current Chinese society.

"Though we are far away from disentangling the patient-centered conundrum[5], considering the deteriorating physician-patient relationship in current Chinese society, this study still has significant practice implications. As a valid instrument, the CR-PPOS can be applied to better measure both physicians' and patients' preference toward patient-centered communication in China. On one hand, the divergence in communication preference between physicians and patients can be discovered. On the other hand, it will be possible and reasonable to link certain personal characteristics with individuals' preference toward clinical communication, and in China it is particularly true for patients

according to this study. Based on these findings, specific training can be developed and offered to physicians, guiding them how to recognize patients with different communication preferences and adopt corresponding communication strategies afterwards. In this way not only patients' expectations are better fulfilled, but also the communication efficiency is enhanced, both contributing to reduced complaints in clinical communication, and improved physician-patient relationship[6]."

Reference

- [5] Skelton J. Language and Clinical Communication: this bright Babylon. Oxford: Radcliffe Publishing 2008:93-98.
- [6] Liu X, Rohrer W, Luo A, et al. Doctor-patient communication skills training in mainland China: A systematic review of the literature. Patient Educ Couns2015;98:3-14.

Reviewer 2

1. There is a fundamental confusion in the field as a whole about what "patient-centredness" means, as the authors acknowledge. If it is indeed, as the authors further suggest, to do with "offer[ing] care that is concordant with the patient's values, needs and preferences", and if it does indeed require therefore that physicians "adapt....strategies to individuals", then it is difficult to see patient-centredness as an objective, measurable entity. I speculate that patients in China are at least as likely as patients elsewhere to find a brisk, confident, no-nonsense doctor to whom they can surrender all decisions very reassuring. (The fundamental conundrum here is that, in the end, when a patient says "You know best doctor....", one is left, apparently, with the idea that it can be patient-centred to be doctor-centred).

Having said that, it would be unreasonable to expect this paper to disentangle the issues here - that is not what the authors aim to do. However, both in the Introduction (eg where they acknowledge the difficulty of defining patient-centredness) and in the Discussion, I would like to see this more explicitly mentioned. With apologies for the self-referencing, I offer a discussion which may be relevant (and picks up Mead and Bowers, which the study cites) in JR Skelton. Language and Clinical Communication: this bright Babylon (2008); Pp 93 -98.

Response: We appreciate the reviewer's comment as well as this very valuable reference. Indeed patient-centeredness itself is sort of controversial due to the special roles of physicians and patients and the relationship between them. We have demonstrated more around this topic in introduction (paragraph 2, Page 3-4) and discussion (line 10-12, page 21).

"Patient-centeredness, however, is hard to be uniformly defined[7]. And it is not for sure that patient-centeredness can be considered as a set of gestures (a combination of setting, language, paralanguage. and so on), or a state of mind. Furthermore, it is uncertain whether it exists as a yearning inside the head of the physician or the patient, whether it is a set of things to do or things to think, or a compendium of things to say[5]."

"Though we are far away from disentangling the patient-centered conundrum[5], considering the deteriorating physician-patient relationship in current Chinese society, this study still has significant practice implications."

Reference

- [5] Skelton J. Language and Clinical Communication: this bright Babylon. Oxford: Radcliffe Publishing 2008:93-98.
- [7] Catro EM, van Regenmortel T, Vanhaecht K, et al. Patient empowerment, patient participation and patient-centeredness in hospital care: A concept analysis based on a literature review. Patient Educ Couns2016;99:1923-39.

4. The study could be replicated, certainly, and I hope will be. However, the methods are not described sufficiently in the sense that we do not have access to any version of the PPOS. As the study hinges precisely on alterations in meaning across languages and cultures this is a great pity. It may be that copyright issues get in the way here, and the criticism will not I hope damage the paper's chance of being accepted, but certainly (I'm originally an applied linguist by training) I felt there was far too little information about the relationship between the three versions of the PPOS that are mentioned (the original, the translated, and the "Chinese revised" version which the authors develop and try out).

Respond: We have emailed Prof. Krupat, the author of the original 18-item PPOS, to ask whether we can present the original scale. The author suggested "to send them the scale for their inspection, but to point out that it is a copyrighted instrument that, technically, they do not have the right to reproduce on their own." Thus, hereby we only presented the original scale in in Appendix 1 as part of this response. In the manuscript, instead, we have attached the revised 11-item scale (CR-PPOS) as supplementary file.

As for the relationship between these three versions, briefly, we established the translated scale(C-PPOS) based on the original scale, and then the Chinese-revised scale(CR-PPOS) was developed from the C-PPOS, following standardized statistical process. More details can be found in the method section of this manuscript, as followed:

- "Obtaining the permission to translate and develop PPOS in the Chinese context by the original author, scholars with academic backgrounds in medicine, public health, communication, Chinese and English languages, respectively, were invited to translate the PPOS to Chinese(Mandarin). Afterward, the bilingual PPOS versions were sent separately to another five advanced health practitioners for further suggestions and modifications. The Chinese PPOS(C-PPOS) was then back-translated into English and sent back to the original author for confirmation." (paragraph 1 under Translation and cultural adaption).
- "In this study, we assessed the psychometric properties via reliability, validity, and discriminative power tests, based on which the C-PPOS was revised to the CR-PPOS." (paragraph 1 under Psychometric properties assessment).
- 7. I must stress that I am not a statistician, but found the description of the statistics clear and as far as can claim knowledge here well-motivated. However, the authors might want to scrutinise their use of the concept of "randomness". At times, the approach to recruitment sounds very like a convenience sample (which is fine).

Response: It was indeed more likely to be convenience sampling rather than completely random, due to realistic considerations. And we mentioned this point as one limitation of this study. To be more statistically precise, we appreciate and adopt your suggestion to erase "randomly" in the description of sampling.

8. Yes, with perhaps the point that Balint did not "introduce" patient-centredness - perhaps it would be better to say something like "influential in the development of....".

Response: We agree to make the change at the beginning of introduction section: "In 1969, Balint was greatly influential in the development of patient-centeredness, which has been one of the most frequently discussed principles in medical practices over the past few decades".

15. The standard of English is admirable, but will certainly need editing. One particular phrase needs unpicking - the point made in the "Article summary", that the CR-PPOS was "mainly based on a statistical approach". I think I know what is meant, but this needs reworking.

Response: Thanks for this reminder. With the help of a native speaker, who is also a researcher in public health, we rephrased this sentence as "Caution should be used when directly comparing scores measured by the CR-PPOS and the original PPOS, as we developed the CR-PPOS from the PPOS following a standardized statistical process, without the constraint of keeping the number of items constant." In addition, the English language of this manuscript has been edited by Elsevier Language Editing Service. The language editing certificate is in the attachments.

Appendix 1

Patient-Practitioner Orientation Scale

The statements below refer to beliefs that people might have concerning doctors, patients, and medical care. Read each item and then blacken in the circle to indicate how much you agree or disagree with each: Strongly disagree, Moderately disagree, Slightly disagree, Slightly agree, Moderately agree, Strongly agree.

- 1. The doctor is the one who should decide what gets talked about during a visit.
- 2. Although health care is less personal these days, this is a small price to pay for medical advances.
- 3. The most important part of the standard medical visit is the physical exam.
- 4. It is often best for patients if they do not have a full explanation of their medical condition.
- 5. Patients should rely on their doctors' knowledge and not try to find out about their conditions on their own.
- 6. When doctors ask a lot of questions about a patient's background, they are prying too much into personal matters.
- 7. If doctors are truly good at diagnosis and treatment, the way they relate to patients is not that important.
- 8. Many patients continue asking questions even though they are not learning anything new.
- 9. Patients should be treated as if they were partners with the doctor, equal in power and status.
- 10. Patients generally want reassurance rather than information about their health.
- 11. If a doctor's primary tools are being open and warm, the doctor will not have a lot of success.
- 12. When patients disagree with their doctor, this is a sign that the doctor does not have the patient's respect and trust.
- 13. A treatment plan cannot succeed if it is in conflict with a patient's lifestyle or values.
- 14. Most patients want to get in and out of the doctor's office as quickly as possible.
- 15. The patient must always be aware that the doctor is in charge.
- 16. It is not that important to know a patient's culture and background in order to treat the person's illness.
- 17. Humor is a major ingredient in the doctor's treatment of the patient.
- 18. When patients look up medical information on their own, this usually confuses more than it helps. ©

Appendix 2

The CR-PPOS (English version)

Caring subscale

- 1. During clinical process, doctors will be suspected of prying the privacy of patients when they ask patients a lot about personal backgrounds.
- 2. If a doctor's diagnosis and treatment levels are high enough, the way of his/her communication with patients is not so important.
- 3. If a doctor spends too much honesty and enthusiasm in the doctor-patient communication, he/she wouldn't have made great achievements.
- 4. Most patients in clinics want to leave the doctors' office as soon as possible(so as to reduce the time communicating with doctors)
- 5. For doctors, knowing the patient's culture and backgrounds is not very important for treating illness.

Sharing subscale

- 6. During clinical process, doctors should be the ones who dominate the conversation.
- 7. Patients should rely on doctor's professional skills during clinical process and should not try to find out the answers to their medical conditions by themselves.
- 8. Many patients keep asking questions to doctors, although they are not necessarily getting more new information.
- 9. During the clinical process, if a patient does not agree with the opinions of a doctor, then it means that the doctor doesn't get the patient's respect and trust.
- 10. During clinical process, patients should always be aware that doctors are dominant.
- 11. It is usually not very helpful if patients search for medical information on their own-instead, they could be even more confused.

VERSION 2 – REVIEW

REVIEWER	Yi Mou
	Shanghai Jiao Tong University
REVIEW RETURNED	05-Jun-2017

GENERAL COMMENTS	The authors have revised the manuscript to my satisfaction.
GLIVERAL COMMENTS	The authors have revised the manuscript to my satisfaction.