

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)	Nationwide Survey of Physicians' Familiarity and Awareness of Diabetes Guidelines in China: A Cross-sectional Study
AUTHORS	Jia, Liyan; Huang, Caoxin; Zhao, Neng-jiang; Lai, Bao-yong; Zhang, Zhi-hai; Li, Le; Zhan, Na; Yuan-bing, Lin; Cai, Miao-na; Wang, Shunqin; Yan, Bing; Liu, Jianping; Yang, Shu-yu

VERSION 1 – REVIEW

REVIEWER	Khan, Tamkeen American Medical Association, Improving Health Outcomes
REVIEW RETURNED	06-Jun-2023

GENERAL COMMENTS	<p>Overall this is a well written paper addressing physician awareness and adherence to diabetes guidelines in China. Few minor suggestions as follows:</p> <p>1) The references cited in the introduction seem dated (1980-2014 is still almost 9 years old), please use more recent citations and specify the time period for some of the statistics mentioned. If these are 2020 values please make this clear.</p> <p>2) I am not familiar with all 4 guidelines, mainly just the ADA standards. I think it will be helpful to the readers to understand distinguishable differences in these</p>
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REVIEWER	Pacaud, D University of Calgary, Department of Paediatrics
REVIEW RETURNED	26-Jun-2023

GENERAL COMMENTS	<p>This paper present the results of a nationwide survey of knowledge and adherence to diabetes guidelines in China. The authors surveyed 1150 primary care, secondary care and tertiary care physicians from 192 cities (30 provinces) of China. They found that specialists had more knowledge and were more likely to adhere to the guidelines than general practitioners. Similar trends were also found between type of practice environment, primary, secondary and tertiary care. They also report that physicians, in general, are more aware of western medicine guidelines than traditional Chinese medicine guidelines. They conclude that more education on the both guidelines is necessary.</p> <p>General comments :</p> <p>Although the topic is relevant and the methodology is sound, the paper needs major formating before it is ready for publication.</p> <p>1) It is too lengthy and the results are too detailed. This dilutes the main message that should be highlighted by the results.</p>
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- 2) The manuscript needs to be edited by someone more familiar with the English language. Many sentences are unclear.
- 3) Although the survey can be used to assess practitioners' knowledge and awareness of guidelines, a survey cannot accurately assess implementation of the guidelines or impact of the guidelines on the clinical practice. This would need to be done through chart audits or clinical outcome of electronic clinical database (physician visits, labs etc).
- 4) The author should briefly describe how the 4 guidelines differ...to understand why physicians are expected to know all 4 guidelines. If this is to be published outside of China, it would be important to describe how the approach to diabetes differs between western medicine and traditional Chinese medicine.
- 5) The tables are busy and not that informative beyond what is summarized in the text.
- 6) The discussion lacks focus and does not provide any insight on how to address the gaps that were identified. How does the lack of awareness affect diabetes care in China? (This is only briefly covered in the introduction)

Specific comments :

- 1) Individuals should be referred to as « patients with diabetes » rather than to « diabetics ».
- 2) Page 6, lines 40-45 : what are the discrepancies that required verification by phone?
- 3) Since your sample is more than 1000 participants and subgroups are more than 100 participants, there is no need to include decimals for results (i.e 98.97% can be 99%), or at least present only one decimal.
- 4) When presenting significant results in the text, the p values for significance should be included.
- 5) Page 17, lines 16-19 « It's well known that exercise is forbidden for ... and stabilized». This is a gross misinterpretation of the guidelines. Patients with diabetes who have experienced an episode of severe hypoglycaemia are still able and encouraged to participate in physical activity as appropriate for the level of fitness or physical capacity. What limits their participation to physical activity is their other conditions (frailty, neuropathy, heart condition, etc). Except during an acute symptomatic episode (limited to a few hours), having a history of a severe hypoglycaemia is not a contra-indication to physical activity. Rather, indicates a need for proper education to prevent and manage hypoglycaemia to further avoid future severe episodes. People with diabetes, especially those treated with insulin need to be aware of hypoglycaemia as they may have to tolerate up to 1-2 episodes of mild hypoglycaemia per week to reach target A1C.
- 6) Table 1. : « Physicians self-reported reference to Diabetes Guidelines » do you mean Physicians consulting or reading the guidelines?

VERSION 1 – AUTHOR RESPONSE

-Reviewer 1:

Overall this is a well written paper addressing physician awareness and adherence to diabetes guidelines in China. Few minor suggestions as follows.

Q1. The references cited in the introduction seem dated (1980-2014 is still almost 9 years old), please use more recent citations and specify the time period for some of the statistics mentioned. If these are 2020 values please make this clear.

Response:

We sincerely appreciate the reviewer taking the time to review our manuscript and providing us with positive feedback. We have updated the references in the introduction to include the latest data, the time periods for some of the statistics mentioned have been specified in the text.

Q2. I am not familiar with all 4 guidelines, mainly just the ADA standards. I think it will be helpful to the readers to understand distinguishable differences in these.

Response:

To help readers understand the distinguishable differences among these guidelines, we have included detailed information about four guidelines in the introduction section. These include the "Standards of Medical Care in Diabetes", "Guideline for the Prevention and Treatment of Type 2 Diabetes Mellitus (T2DM) in China", "National Guidelines for the Prevention and Control of Diabetes in Primary Care", and "Guidelines for Prevention and Treatment of Diabetes in Chinese Medicine".

-Reviewer 2:

This paper present the results of a nationwide survey of knowledge and adherence to diabetes guidelines in China. The authors surveyed 1150 primary care, secondary care and tertiary care physicians from 192 cities (30 provinces) of China. They found that specialists had more knowledge and were more likely to adhere to the guidelines than general practitioners. Similar trends were also found between type of practice environment, primary, secondary and tertiary care. They also report that physicians, in general, are more aware of western medicine guidelines than traditional Chinese medicine guidelines. They conclude that more education on the both guidelines is necessary. Although the topic is relevant and the methodology is sound, the paper needs major formatting before it is ready for publication.

Q1. It is too lengthy and the results are too detailed. This dilutes the main message that should be highlighted by the results.

Response:

We sincerely appreciate the Reviewer taking the time to review our manuscript and providing us with positive feedback. We have simplified some of the results, such as stratified analysis among various physicians. Specifically, we have highlighted the comparison results between physicians in different hospital levels. Furthermore, we have made efforts to simplify the wording and emphasize the key information.

Q2. The manuscript needs to be edited by someone more familiar with the English language. Many sentences are unclear.

Response:

We have invited a co-author who is highly proficient in English, with a background in studying abroad, to carefully edit the manuscript again.

Q3. Although the survey can be use to assess parctioners's knowledge and awareness of guidelines, a survey cannot accurately assess implementation of the guidelines or impact of the guidelines on the clinical practice. This would need to be done through chart audits or clinical outcome of electronic clinical database (physician visits, labs etc).

Response:

Thank you for your comment. We agree with you and have revised the language accordingly.

Q4. The author should briefly describe how the 4 guidelines differ...to understand why physicians are expected to know all 4 guidelines. If this is to be published outside of China, it would be important to describe how the approach to diabetes differs between western medicine and traditional Chinese medicine.

Response:

Thanks for your comment. To help readers understand the distinguishable differences among these guidelines, we have included detailed information about four guidelines in the introduction section. These include the "Standards of Medical Care in Diabetes", "Guideline for the Prevention and Treatment of Type 2 Diabetes Mellitus (T2DM) in China", "National Guidelines for the Prevention and Control of Diabetes in Primary Care", and "Guidelines for Prevention and Treatment of Diabetes in Chinese Medicine".

Q5. The tables are busy and not that informative beyond what is summarized in the text.

Response:

Many thanks for your comments. We have streamlined the content of the tables and converted some of them into image format to make the results appear clearer and more concise.

Q6. The discussion lacks focus and does not provide any insight on how to address the gaps that were identified. How does the lack of awareness affects diabetes care in China? (This is only briefly covered in the introduction)

Response:

Many thanks for your comments. Based on the feedback from Reviewer 2, we recognized that the original discussion section lacked focus. In response, we have reorganized and revised the discussion section of the article to address this concern. Specifically, we have highlighted two main findings and explored physicians' understanding of specific recommendations, facilitating factors in the implementation of diabetes guidelines, as well as the barriers they face. Additionally, we have provided potential solutions in light of these results.

Q7. Specific comments:

(1) Individuals should be referred to as «patients with diabetes» rather than to «diabetics».

Response:

We agreed with you and have revised all instances of "diabetics" in the text to "patients with diabetes."

(2)Page 6, lines 40-45 : what are the discrepancies that required verification by phone?

Response:

Many thanks for your comments. We have reedited the sentence. After collecting the questionnaires, we noticed that a few of them contained logical errors. In such cases, we verified the accurate information via phone calls. For instance, if a physician selected their familiarity with the guidelines as 'unfamiliar' but chose 'Frequent reference' for the reference situation, a phone call was required to confirm whether there was a mistake in filling out the form.

(3)Since your sample is more than 1000 participants and subgroups are more than 100 participants, there is no need to include decimals for results (i.e 98.97% can be 99%), or at least present only one decimal.

Response:

Many thanks for your comments. We have made modifications to the numerical values in the article as suggested.

(4)When presenting significant results in the text, the p values for significance should be included.

Response:

Many thanks for your comments. The p values for significance results have been supplemented.

(5)Page 17, lines 16-19 « It's well known that exercise is forbidden for ... and stabilized». This is a gross misinterpretation of the guidelines. Patients with diabetes who have experienced an episode of severe hypoglycaemia are still able and encouraged to participate in physical activity as appropriate for the level of fitness or physical capacity. What limits their participation to physical activity is their other conditions (frailty, neuropathy, heart condition, etc). Except during an acute symptomatic episode (limited to a few hours), having a history of a severe hypoglycaemia is not a contra-indication to physical activity. Rather, indicates a need for proper education to prevent and manage hypoglycaemia to further avoid future severe episodes. People with diabetes, especially those treated with insulin need to be aware of hypoglycaemia as they may have to tolerate up to 1-2 episodes of mild hypoglycaemia per week to reach target A1C.

Response:

Many thanks for your helpful comments. We have reedited the sentence in the text accordingly.

(6)Table 1. : «Physicians self-reported reference to Diabetes Guidelines» do you mean Physicians consulting or reading the guidelines?

Response:

Many thanks for your comments, and we have revised this accordingly. The phrase "Physicians' self-reported reference to Diabetes Guidelines" refers to the physicians' self-reported referencing status of diabetes guidelines, which includes specific options such as 'Frequent reference', 'Occasional reference', 'Infrequent reference', 'Rare reference', and 'No reference'.