Author’s response to reviews

Title: Awareness, agreement, adoption and adherence to type 2 diabetes mellitus guidelines: a survey of Indonesian primary care physicians

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Author’s response to reviews: see over
Jakarta, 14 April 2014

To Editor

BMC Family Practice Journal

Dear Editor,

Thank you for further suggestion toward the improvement of manuscript entitled “Awareness, agreement, adoption and adherence of physicians to type 2 diabetes mellitus guidelines in Indonesia”. Please find enclosed our revised manuscript which we hope adequately address the request.

We address the editors’ request concerning ethics and consent statement in the page following this letter (page 2).

We also like to re-address the reviewers’ comments by providing each comment with corresponding lines and page in the manuscript to aid the process as you could see in page 3 onward.

We hope that this manuscript could be further processed for publication in your journal.

Sincerely yours,

Indah S. Widyahening, MD

Faculty of Medicine University of Indonesia

Also on behalf of all the co-authors
Responds to the editors’ comments

1. Requesting ethics statement

Research involving human subjects (including human material or human data) that is reported in the manuscript must have been performed with the approval of an appropriate ethics committee and be in compliance with the Helsinki Declaration (http://www.wma.net/en/30publications/10policies/b3/index.html). A statement to this effect must appear in the Methods section of the manuscript, including the name of the body which gave approval, with a reference number where appropriate. If a study has been granted an exemption from requiring ethics approval, this should also be detailed in the manuscript (including the name of the ethics committee that granted the exemption). Please note that this information is essential and we cannot proceed without it.

The following information has been included in the manuscript,

The Health Research Ethics Committee of the Faculty of Medicine Universitas Indonesia reviewed and approved the study. P6 line 17-19

2. Requesting consent statement

Please state in the Methods section whether written informed consent for participation in the study was obtained from participants or, where participants are children, a parent or guardian.

The following information has been included in the manuscript,

The questionnaire was put in the delegates pack together with an information leaflet on consent for survey participation. Returning of the self-completed questionnaire by responders was seen as their token of consent. Before handing out their certificate of attendance conference participants were informed about the possibility of participation. P6 line 13-17
Responds to reviewers’ comments.

Reviewer 1: R. Erandie Ediriweera de Silva

Minor Essential Revisions

Methods

1. P2, 1st paragraph – the following section is not clear, Please rephrase.

“adoption (i.e. follow in general in the appropriate patients; always/more than half/less than half/Never)”.

Has been rephrased into the following sentence:

adoption (i.e. the recommendation is being followed in general in the appropriate patients; always/more than half/less than half/never). P.6 line 2

Results

2. P4, paragraph 5 under results. Please rephrase this sentence.

“We did not performed statistical analysis on the adherence to screening as we found too few adherent (7 events)”

Has been rephrased in to the following sentence:

We were not able to investigate the presence of participant characteristics on the adherence to screening as the number of events was too small (7 events). P.8 line 22-24

Discussion

3. P5, 2nd paragraph under discussion. - This sentence can be rephrased as follows for better readability.

There was high awareness among respondents on the need for screening of those without diabetes symptoms for type 2 diabetes risk factors.

Thank you. We rephrased the sentence according your suggestion: P.9 line 24
4. P6, paragraph 5 -

Adherence to actions recommended in guidelines may require organization and is facilitated when tools are in place to put the recommendations into practice.

Thank you.

Has been rephrased according to your suggestion.

Adherence to actions recommended in guidelines may require practice organization. Besides, adherence is facilitated when tools are in place to put the recommendations into practice. P10 line 23-25

5. P6, paragraph 5 -

Our data reveal that adherence to all the recommendations was quite low (<50%) participants did not implement a system to promote and monitor that recommendations are followed in their practice.

Has been rephrase in to the following sentence:

Our data reveal that adherence to all the recommendations was quite low since less than 50% of responders did not implement a system to promote and monitor that recommendations are followed in their practice. P11 line 2-4

6. P6, paragraph 6 -

Our findings on the low adherence of the recommendation on screening and diagnosis may explain why, as has been reported by the Indonesian Ministry of Health [2], that two thirds of the diabetes population in Indonesian remain un-diagnosed.

Has been rephrased according to your suggestion: P11 line 5-6

7. P7, Conclusion -

Our study shows that while In Indonesian a majority of the diabetes population remain undiagnosed, many patients diagnosed with diabetes remain in poor glycemic control, and high awareness of the Indonesian type 2 diabetes guideline doesn’t lead to adoption or adherence to its recommendations.

Has been rephrased according to your suggestion:

Our study shows that high awareness of the guideline does not always lead to adoption nor adherence to its recommendations. The production and dissemination of guidelines alone is not sufficient to ensure that research evidence gets into practice. Improvement of clinicians’ awareness
of, agreement with, and adoption to guidelines need to be incorporated into strategies to improve guideline adherence. P13 line 9-13

Reviewer2: Neesha Patel

Major Compulsory Revisions

Background

Page 4, references need to be provided for ‘diabetes being a complex condition’ and a reference for ‘diabetes being a emerging health problem in Indonesia’.

The authors also refer to international diabetes guidelines – again references need to be provided to make it clear as to which international guidelines they are referring to here.

Respond:

References have been added as requested.


Diabetes is an emerging health problem in Indonesia;


The international diabetes guidelines;


It would useful to the read if the authors included a sentence on whether similar studies have been carried out in other countries. At the moment, it’s difficult to understand the need for this study, what the study adds and how future research can benefit from the findings?

Respond:

Thank you. We have incorporated results of similar studies in the introduction:

Several surveys have shown that the adherence varies per guideline recommendation.[11-15] Barriers to guideline adherence have been identified, including the inability to access guidelines and physicians’ attitude and belief toward the guidelines.[16] Pathman et al. reported that for the consistency between patient care and guidelines recommendations, physicians must be aware of, agree with, decide to adopt (i.e. decide it is appropriate and feasible to use in their own practice), and adhere to the recommendations (i.e. actually follow them for appropriate patients at the appropriate time).[17, 18] Several studies have been conducted based on this ‘awareness to adherence’ model, yet only one came from developing countries.[17]

We would like to know whether this model applies also for a developing country like Indonesia. In this study we explore the degree of general practitioners’ awareness of agreement with, adoption of and adherence to the type 2 diabetes mellitus guidelines in Indonesia, and identify associated physicians’ characteristics.

The authors claim to have developed a questionnaire but do not provide any information on why they did not carry out any psychometric testing which is crucial when developing a questionnaire. Or was it that they modified an existing questionnaire? This needs to be clarified in further detail together with a justification for psychometric testing was not carried out.

Respond:

We agree with the reviewer that this point was not clear in our manuscript. In the revised manuscript we include more information on the followed procedure.

Based on the evaluation of hypertension guidelines questionnaire by Heneghan et al. (19), we developed a similar questionnaire centered on items in the Consensus on the Management of Type 2 Diabetes Mellitus 2011 by the Indonesian Society of Endocrinology.

The questionnaire was tested in five GPs from the Community Medicine Department of the Faculty of Medicine Universitas Indonesia to determine whether the questions were clear, understandable, and in a logical order (face validity). Moreover the same GPs and three endocrinologist who are familiar with the diabetes guideline were asked to criticize the content of the questionnaire (content validity). Based on the results of this pilot, minor changes were made. Further psychometric evaluation of the reliability was not performed.
The recruitment strategy needs further clarity. The questionnaire was administered to primary care practitioners at an annual conference. More detail needs to be provided on how the questionnaire was administered to primary care practitioners at the conference and why was this deemed an appropriate place to recruit practitioners as appose to approaching them at their practices? Was the questionnaire administered face-to-face? Or was it included in the delegates pack?

Respond:

Thank you for your remarks. It is indeed not clear in our previous manuscript. Below we copy the text we added to the new manuscript.

The final questionnaire was distributed to all physicians attending the Indonesian Association of Family Practitioners annual conference on November 2012 in Jakarta, Indonesia. The questionnaire was put in the delegates pack together with an information leaflet on consent for survey participation. Returning of the self-completed questionnaire by responders was seen as their token of consent. Before handing out their certificate of attendance conference participants were informed about the possibility of participation. P6 line 12-16

Obtaining representative samples from the large number of Indonesian GPs, exceeding 70,000, who are distributed over the archipelago possess challenges for our type of research. Recruitment of responders among those attending a conference in Jakarta (capital city of Indonesia) was seen as more practical although it might not represent physicians who do not have opportunity to attend such meeting. However, our responders represent GPs from all parts of Indonesia. P12 line 13-18

A section on the limitations of the study needs to be included in the discussion.

For example, what are the limitations of using a questionnaire? What are the limitations of the recruitment strategy? What would a mixed methods design have added? Or even a qualitative study design?

Respond:

A section concerning the strengths and limitations of the study have been added in final part of the discussion.

Obtaining representative samples from the large number of Indonesian GPs, exceeding 70,000, who are distributed over the archipelago possess challenges for our type of research. Recruitment of responders among those attending a conference in Jakarta (capital city of Indonesia) was seen as more practical although it might not represent physicians who do not have opportunity to attend such meeting. However, our responders represent GPs from all parts of Indonesia. Our response rate is within the range of that of similar studies as reported by the systematic review of Mickan et al.[17] p12 line 13-19

Self-reporting is the most simple and inexpensive method of measuring adherence. However, it has several limitations including over-estimation due to recall bias and social desirability bias.[24] These drawbacks have been addressed through determination of specific time period in the questionnaire,
assessment of specific behavior related to the recommendations, non-judgmental statements and confidentiality. P 12 line 20-24

More consideration needs to be made for the clinical implications of this study findings as well the implications for future research. E.g. would Indonesia benefit from a system like the Quality and Outcomes Framework (QOF) that’s currently in place for primary care practitioners in the UK?

Respond:

Implications are added in the final paragraphs of the discussion section,

The awareness-to adherence model may help to identify GPs’ specific concerns with recommended practice changes. If uptake of a specific recommendation is low, qualitative approach to the concerns and barriers might be useful. Implementation of a quality assurance system which could further illustrate the care being received by diabetes patients in relation to the clinical outcomes is believed to be beneficial to promote adherence to guideline recommendations and increase the quality of diabetes care.[25] p 13 line 1-6

Minor Essential Revisions

Background

The authors need to define and describe the difference between type 1 and type 2 diabetes. Perhaps even consider abbreviating the term type 2 diabetes using (T2D or T2DM).

Respond:

Thank you, We revised the text accordingly:

Type 2 diabetes, which is resulted from a progressive insulin secretory defect on the background of insulin resistance has been recognized as an emerging health problem in Asia Pacific, including Indonesia. On the other hand type 1 diabetes, which is resulted from β-cell destruction is less common in the region. p4 line 12-15

We also avoid abbreviation of type 2 diabetes in conform to the recommendation of the American Diabetes Association.

It would be helpful if the authors could justify why they did not assess knowledge of the diabetes guidelines.

Respond:

We consider that the knowledge is measured by the questions on awareness of the selected guidelines’ recommendations.
Results

Missing data

With 15% missing data for respondent characteristics, why did the authors choose to impute data using mean or median as oppose to regression imputation?

Respond:

We used mean and median values for imputation since we thought we had not the proper participant characteristic's to do regression analyses for imputation P7 line 18-20

For an international audience – it would be helpful if the authors could define what they mean by ‘solo practice’ and ‘practiced in Java’.

Respond:

Thank you. We made that clear in the revised manuscript by adding the following sentences: Characteristics of the GP respondents are presented in Table 1. The higher proportion of them were female (68%), doing a solo (individual) practice (54%), practice in Java-the most populated island in Indonesia (72%) and had participated in diabetes management training (64%). P8 line 5-8

Typo – first paragraph – Adherence to screening has (had) no missing data....

Respond:

Thank you. It has been revised as suggested. P8 line 2

Discussion

Paragraph 2 – what do the authors mean by ‘random blood glucose’? Are they referring to HbA1c? This needs to be clarified.

Respond:

“random blood glucose” has been modified in to “random blood (plasma) glucose”. p10 line 7

Re-write: the word ‘apparently’ to discuss the study findings. Please consider another word e.g. the majority of our respondents believed it was more appropriate....

Respond:

Thank you. We used your suggestion in the revised manuscript.
The majority of our responders believed it is more appropriate to examine patients with classic diabetes symptoms with a fasting plasma glucose test and 2-hour post-prandial plasma glucose test.

Paragraph 5 – typo in the last sentence. The word ‘participants’ is used instead of ‘respondents’.

Respond:

Thank you. It has been revised in to ‘responders’ also in other parts of the manuscript.

The last sentence on the study response rate needs to be moved to the results section.

Respond:

The last sentence concerning the study response rate actually compared the response rate in our study with other study (Mickan, et al). We think it is more appropriate to be placed in this section.

Information about the response rate in our study has also been described in the result section in the following sentence:

From the 662 conference participants, 414 questionnaires (63%) were collected. P7 line 23

Conclusion

Typo e.g. In Indonesian – should read in Indonesian.

Doesn’t – ‘does not’ would be better.

The first sentence needs to be re-phrased highlighting the key findings and messages of this study. Again, the authors need to consider (a sentence) on the clinical implications of the study findings as well the implications for future research.

Respond:

We followed your suggestions:

Our study shows that high awareness of the guideline does not always lead to adoption nor adherence to its recommendations. The production and dissemination of guidelines alone is not sufficient to ensure that research evidence gets into practice. Improvement of clinicians’ awareness of, agreement with, and adoption to guidelines need to be incorporated in to strategies to improve guideline adherence. P13 line 9-13.