Author’s response to reviews

Title: Prescribing of diabetes medications to people with type 2 diabetes and chronic kidney disease: a national cross-sectional study

Authors:

Jo-Anne Manski-Nankervis (jomn@unimelb.edu.au)

Sharmala Thuraisingam (sharmala.thuraisingam@unimelb.edu.au)

Janet Sluggett (janet.sluggett@monash.edu)

Gary Kilov (Gary.kilov@unimelb.edu.au)

John Furler (j.furler@unimelb.edu.au)

David O'Neal (dno@unimelb.edu.au)

Alicia Jenkins (alicia.jenkins@ctc.usyd.edu.au)

Version: 1 Date: 29 Sep 2018

Author’s response to reviews:

30/9/2018

Prof Shlomo Vinker
Editor, BMC Family Practice

Dear Prof Vinker,

Re: FAMP-D-18-00287

Prescribing of diabetes medications to people with type 2 diabetes and chronic kidney disease: a national cross-sectional study

Thank you for reviewing our study, and to the reviewers for their helpful input. I have responded to each of their comments below.

Editor comments

This is an interesting and important epidemiological study, Please follow the reviewers' remarks
Response: Thank you for your positive feedback.

Nedeljka Ivkovic (Reviewer 1) comments

Please, pay attention on general formatting guidelines: preparing main manuscript text (use double line spacing, include page numbering)

Response: Apologies for this oversight. The formatting of the document has been updated with double line spacing and page numbering.

Comment: Please, pay attention on general formatting guidelines: preparing tables (table titles max 15 words: title of Table 3. exceeds the maximum allowed 15 words; color and shading may not used: please note Table 1. and Table 2).

Response: Thank you for your comment.

1. The name of Table 3 has been updated to: “Odds ratio for factors associated with ≥1 prescription of non-insulin diabetes medication inconsistent with guidelines” As such, it is now limited to 15 words. (page 26)

2. Colour and shading have been removed from Tables 1 and 2 (page 26 and 28)

Comment: Please, pay attention on general formatting guidelines: reference preparation guidelines (for helping: names of all authors up to six, title of article is not italic, etc.) Look at recently published articles in this journal to assist with referencing please.

Response: Thank you for your feedback. Referencing has been updated to Vancouver style, allowing up to six authors names, and italics have been removed (page 19).

Comment: In Title page corresponding author in not identified.

Response: An Asterix has been placed at the end of Jo-Anne Manski-Nankervis’ name in the Title page (page 1) to indicate she is the corresponding author.

Comment: In Result section lines 18, and 27 word " see" is excess and should be deleted. On next page line 1 bracket is unnecessary.

Response: Thank you for your suggestion. I have removed the word “See” as part of the reference to Table and Figures (Page 9, Results, paragraph 1 and 2). The redundant ) has been removed (Page 10, end of second last paragraph)
Comment: In List of abbreviation the abbreviation ADEs you mention in Background line 25 is missed.

Response: “ADE: Adverse drug event” has been added to the List of Abbreviations on page 17.

Comment: Abbreviation BMI should be written in next row.

Response: “BMI: Body mass index” has been added to the list of abbreviations on page 17.

Eugene Merzon (Reviewer 2) comments

The definition of non-insulin diabetes medications at doses inconsistent with current ADS guideline recommendation should be more clarified in the "Methods" section.

Response: Thank you for your suggestion. On page 7 we have clarified the definition of non-insulin diabetes medications at doses inconsistent with current ADS guideline recommendations by the addition of the first sentence in the below text:

“The ADS guidelines provide maximum recommended doses of medications by CKD stage. A prescription was labelled as not consistent with guidelines if it was prescribed when ADS guidelines stated that it was not recommended or should be avoided, or when dosed in excess of that recommended (21). Where medication doses were specified as a range on the prescription, the minimum of the range was used in the analysis to be conservative. Prescriptions with no dosage recorded, or dosage documented as “mdu” or “immediate”, were coded as missing and excluded from the analysis focusing on associations of prescribing to guidelines. The components of combination products were considered as separate medications.”

The actual dose recommendations in the guidelines are also stated in Supplementary Table 2.

Comment: In "Statistical Analyses" you've mentioned that age was removed due to multicollinearity with HbA1c and diabetes duration. I would recommend you to include age in the model, because GFR calculation based on age and gender.

Response: Thank you for your suggestion. We did consider including age in our model, however the model with HbA1c and diabetes duration (and without age) was more stable and performed better (even when taking into account degrees of freedom). Age can be included in the model (and HbA1c and diabetes duration dropped), however the performance of the model reduces slightly. Also, given that age is correlated with HbA1c and diabetes duration, it seemed more informative to include HbA1c and diabetes duration in the model as essentially these are what seem to be increasing as age increases. As a result, we have not incorporated age in the final model in order to have a more stable model.
Thank you for considering our paper for publication and for the helpful suggestions of the reviewer. We look forward to hearing the outcome of our submission.

Best regards,

Jo-Anne Manski-Nankervis

Department of General Practice
University of Melbourne
E: jomn@unimelb.edu.au