Author’s response to reviews

Title: Interventions to improve benzodiazepine prescribing, lessons from the past 20 years to guide future interventions

Authors:

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Version: 3 Date: 27 October 2010

Author’s response to reviews: see over
27 October 2010

Dear Editor

Thank you for the reviews and the comments. We did consider these very carefully and have modified the manuscript accordingly. Please find below the specific responses to each of the Reviewers’ comments.

We have not conducted a formal systematic review as we do not consider the data are robust enough (for example for any type of mathematical aggregation or meta analysis), and the studies do not assess similar enough outcomes to warrant this technique, we believe. We have used the PRISMA methodology suggested by BMC Health Services Research, and we think that this provides a good analysis to help to move this field forward by reviewing what has gone before. We appreciate the Reviewers’ comments indicating that such a review is timely and needed by researchers in this field.

We look forward to hearing further from the Journal.

Sincerely,

Alesha Smith
Reviewer's report
Title: Interventions to improve benzodiazepine prescribing, lessons from the past 20 years to guide future interventions
Version: 2
Date: 16 September 2010
Reviewer: Annette Moxey

Reviewer's report:
The use of benzodiazepines in the elderly is an important area of research and it is therefore appropriate to summarise the available literature on interventions that aim to improve prescribing. Thank you to the reviewer for the positive comments.

However, my preference is to see this paper written as a proper systematic review. Thank you for your helpful suggestions, we have read the following comments and made changes, these are also reflected in red print in the article.

INTRO
- Needs more information to support the need for a systematic review in this area e.g. intro should include information on the potentially harmful effects of benzodiazepines. This has now been included; please see pages 3 and 4 under the 'introduction section'

- Why has a 20-year timeframe been selected? This information has been included, please see page 4, paragraph 2

METHODS
- Search strategy: Although the relevant databases have been searched, I suggest using additional more specific terms such as "audit and feedback" and "decision support systems". We decided to use search terms that were slightly broader than this so that certain intervention types were not missed. The authors have now also included a 3rd search strategy, a citation search' to increase rigour and capture studies that might have been missed using the selected search terms – 1 more study has now been included in the article, resulting from this additional strategy.

- Inclusion criteria: Did articles need to directly specify that the study was undertaken in an elderly population? Were there any inclusion criteria around study design? e.g. RCTs, non-RCTs? This information should be provided. Further details on the inclusion criteria have been added, please see page 4 ‘study eligibility criteria’

- Quality assessment of included articles should be performed. We have now included the study design for each intervention (please see tables 1-3), in line with the other reviewer’s comments. This will assist readers in determining the quality of the evidence resulting from these articles.

- Need to indicate that 2 people reviewed included articles
  . This has been included, please see page 5 ‘study selection’

- pg 6, "risk of bias" paragraph belongs in the discussion as it is talking about the strengths and limitations of the review. BMC Health Services research asked the authors to follow the PRISMA guidelines, the ‘risk of bias’ in these guidelines is placed in the methods section
**RESULTS**
- pg 6, sentence on data extraction belongs in the methods section. Because we are following the PRISMA guidelines, this has been included in the results section.

- I would appreciate an overall summary of the types of articles collected (e.g. number of articles from each country, different study designs used) as well as information on the quality of the studies included. This information, as relevant, is now available in tables 1-3 and now also includes the different study designs.

- Summary of results/narrative synthesis should be provided in the results section (most of this information is currently in the discussion). The article has been rearranged; please see ‘results’ and ‘discussion’ sections.

- Tables 1-3 need to include a column for study design. This has been included in tables 1-3

**DISCUSSION**
- Information relating individual study findings should appear in the results Section.- Discussion section should be dedicated to interpreting study findings, possible explanations, real world implications, directions for future research, and strengths and limitations of the review. The article has been modified to include these suggestions, please see ‘results’ and ‘discussion’ sections.

- pg 8 Towle and Adams 2006 reference needs to be numbered and included in the reference list. This has been included

**REFERENCE LIST**
- references 42 to 56 are missing. I also think that more authors need to be included in each reference (some only have one followed by et al - does this reflect the journal's guidelines?) Reference list has been updated and modified to meet the BMC Health Services Research style.

I would like to see (either in the intro or discussion) acknowledgement of existing systematic reviews that have been undertaken in relation to decision support and other interventions for prescribing. E.g. there are a number of reviews authored by Sallie-Anne Pearson, Jeremy Grimshaw, Martin Eccles and others. For instance, it may be appropriate to state in the intro that although a number of systematic reviews have been undertaken, none have focused specifically on issues and interventions surrounding benzodiazepine use in the elderly. This has been added please see ‘introduction’ section. Page 4, Paragraph 1.

**Level of interest:** An article whose findings are important to those with closely related research interests – Thank you
Reviewer's report
Title: Interventions to improve benzodiazepine prescribing, lessons from the past 20 years to guide future interventions
Version: 2
Date: 14 September 2010
Reviewer: Ashley Sohn
Reviewer's report:
Improving the use of benzodiazepines –Is it possible? A non-systematic review of interventions tried in the last 20 years

The authors would like to thank the reviewer for the positive comments and interest in our article. We have made the suggested changes. These are also highlighted in red in the main article.

Major Comments
1. Review Strategy: Ovid and google scholar allow for the inclusion of articles that cite your selected articles. This allows for the authors to include three key pieces common in systematic reviews (two of which you already have): 1-articles selected from search. 2-articles selected from references of those papers in one. 3-articles that cite those found in one. I have now included the 3rd search strategy (citation search), 6 more studies were retrieved for full text analysis and 1 study has met the criteria and is now included in the review.

Did more than one author review titles/abstracts/articles? If not, was there a method used to determine eligibility when opinions differed (perhaps a third author)? What was the percentage of studies requiring a second (or third) opinion? Because this is a non-systematic review, most of this will increase rigor but is not necessary. AS reviewed the titles and abstracts, when there was uncertainty ST reviewed the article and it was discussed until consensus was reach. This has now been included in the article under ‘study selection’.

2. It is mentioned that the references of articles were searched for eligibility. The 31 articles presented in the flow chart, and described at the bottom of page 6, do not appear to reflect any such references. The authors should clearly indicate where the selected articles were chosen from. The articles all came from the literature searches described.

3. Consistency: there are several areas in the paper (some mentioned specifically below) where sentence structure varies inconsistently. For instance, when two adjacent sentences use numbers, either numbers in both sentences should be written out (one, two, etc) or they should be in number form (1, 2, etc). Additionally, the format of table 2 does not match the format of table 1 (note specifically the subheadings). The physical order of lists should be maintained throughout the paper. For example, the subheadings of education in table 1 vary from the order listed in the discussion. The sentences throughout the paper have been amended and the tables modified.

4. Results in tables: Some of the results state specific degrees of change, while others merely report that a change was seen. This has now been added except for Hagen et al, 2005 where the specific degree of change is not given.

Minor Comments
1. Page 4, line 4- there is an opening parenthesis that does not belong. I suggest rewording the sentence to say -using keywords (… etc) alone and in combination with anxi*- rather than repeat the same list twice. This has been changed, please see pg 4 ‘information sources’
2. Page 4, line 6- missing the word “the” the’ has been added
3. Page 5, part C- maintain consistency in sentence structure similar to that of parts A and B. Use “ie” instead of “for example.” Also, the word “or” is needed before opioid users. This has now been changed, please see page 5
4. Page 5, summary measures- the first two sentences say the same thing. This paragraph has been modified; please see page 6 ‘summary measures’
5. Page 5, three lines up from the bottom- no comma is needed between ‘benzodiazapines’ and ‘to.’ Comma has been deleted
6. Page 6, four lines from the top- “location” should not be capitalized Location has been un-capitalised
7. It appears there are four sets of headings in table one. Two of them include only the target of the intervention, while the other two (first and last) include all headings (study size, results etc). The insertion of different headings makes the overall appearance of this table weak. The headings could be bolded or in all caps. The tables have been modified to make this clearer
8. Page 10, end of paragraph three - it is unclear how the authors draw the conclusion that “it does not matter which health professional delivers the education” from the information provided. This sentence has now been modified; please see page 11, lines 3-5
9. Page 11, lines 8-10 – This last paragraph/sentence is confusing and needs to be re-worded. This paragraph has been modified, please see page 11 (last 2 lines) and page 12 (first 2 lines)

Level of interest: An article of outstanding merit and interest in its field – Thank you