Author’s response to reviews

Title: Information needs in people with diabetes mellitus: a systematic review

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Author’s response to reviews:

Authors’ point-by-point response

Dear Reviewer,

We are grateful for the thorough review process. We have considered every comment, all of which were very helpful for our paper.

You will find a point-by-point list of replies below.

Furthermore, a native speaker has corrected the paper carefully. Typos were corrected, and parts of the result and discussion section reworded.
Reviewer #1

- The paper addresses an important issue and makes some interesting points but it does not contain any significantly new information.
  - Research beforehand showed that there was no available review about information needs of people with diabetes. With this review, we provide currently available knowledge concerning this very important topic.

- Some editing is needed in places.
  - A native speaker has corrected the paper.

- There are a lot of appendices that may not be needed in a journal article.
  - We attached all documents required in the author instructions or usually are enclosed to systematic reviews. Additional file 1 is the flowchart that shows the data selection process and will be included into the result section of the main document. Additional file 2, the PRISMA-Checklist needs to be appended following the author instruction. The search strategy is usually requested for publication, so we decided to attach it.

- It is not clear why the background, page 7, is placed before the abstract. The paper does not flow logically.
  - We are sorry that the manuscript you read was not in the correct order. We checked the manuscript that we uploaded, and everything was placed following the authors’ instructions.

- Clarify whether the key words will help readers retrieve the paper.
  - We chose ‘diabetes’ and ‘systematic review’ to improve finding our review by using it as a key word. ‘Information need’ is not MeSH-Term in Pubmed but we added it to enhance the search. We also added information-seeking behaviour as Mesh term.

- Use 'people with diabetes' rather than diabetes patients.
  - Thank you for pointing that out. We checked our manuscript and changed the term ‘diabetes patient’ to ‘people with diabetes mellitus (DM)’.
• Indicate how the search algorithm was 'piloted'
  o We piloted the search strategy by comparing search results with predetermined sets of relevant references that were found by pre-search activities. We added this information in the manuscript (see section ‘search strategy’).

• Indicate why 'lack of information' was a search term. Often the design and layout and difficulty finding the information are issues rather than the fact that information is lacking.
  o Actually ‘lack of information’ was not part of our search strategy. We deleted this term, and apologize for this error (see corrected section ‘search strategy’).

• Indicate whether reference lists of the papers identified were searched.
  o We used backward citation tracking. This is now mentioned in the manuscript within the ‘study selection process’ section.

• Indicate who decided 'the type of information needed by diabetes patients in general.' Is well documented that what health professionals think people need and what the people think they need are vastly different.
  o ‘In general’ should say all people with diabetes, not only certain subgroups. We reworded the sentence and hope it is clearer now. We only included studies analysing IN of people with DM that were self-reported. Studies analysing IN of people with DM reported by relatives or healthcare professionals, or IN of relatives or health care professionals, were excluded. We added this information to the ‘inclusions, exclusion’ section: “Publications were included that contained self-reported IN of people with DM (any type) as a primary or secondary research aim (...) Studies reporting the IN of relatives or healthcare professionals were excluded, as well as studies where relatives or health care professionals reported IN of people with DM.”

• Clarify what sustainability means in the context of the sentence.
  o Correct is ‘suitability’ (see ‘result’ section).

• Indicate whether the criteria for writing readable and comprehensible information were considered in any studies and by the authors.
  o No study considered or analysed readability or comprehensibility. We added this information in the ‘results’ section.

• Clarify whether children were participants in Roper et al’s study, if so, what was the age range, and whether they indicated they wanted to know the information listed. The
language is not the language children generally use. Did health professionals decide what information was needed?

Similar comments apply to the information about older people.

- The age range of participants recruited for the study of Roper et al was 8–18 years. IN were reported of children and adolescents with age 10-18 years. We added this information in the manuscript (section: ‘Results — Information needs and age’). Yes, children self-reported their information needs.

- Table 2: It would be useful to include information about the study aims and methods.

  - Please find information about the aims/findings and methods used for all included studies in table 1.

- Indicate why dentists do not provide information about oral health. It is not common for GPs to do so.

  - Sorry, this was a misunderstanding from our side. The topic of this study was not oral health (this was topic of the study of Lindenmeyer et al. (2013)), but oral anti-hyperglycaemic drugs. We have corrected the mistake.

- Clarify what is meant by 'knowledge differences and correctness.' Also indicate whether you mean knowledge or information. If the latter accuracy might be a better term than correctness.

  - We changed the text passage to clarify meaning: “Knowledge, diabetes experience and IN are strongly related. Therefore, both studies recommended identifying the individual level of knowledge and whether it is correct [2-4].” (see: ‘Results — Information and participation preferences, knowledge about diabetes and experience with the diabetes’)

- Indicate who decided people with diabetes had 'unmet needs.'

  - Two publications indicated that people with DM reported having unmet needs [5, 6]. The rest of the publications described ‘unmet needs’ in the discussion section to express a need for further research. However, the term ‘unmet needs’ was not defined in the studies. We rearranged the reporting of this topic; we included it in the result section, and shortened the passage in the discussion.

- Clarify what is meant by 'The overall quality of the studies was satisfying.' The word satisfying is most like the cause of the lack of clarity.

  - We rewrote the whole discussion section and included more information on the critical appraisal now within the result section: “The critical appraisal showed that two of the 25 identified studies fulfilled all or most of the checklist criteria of
NICE. The other studies met some (n=14) or a few criteria (n=8)” (see ‘Results’ section)

• The conclusion needs to address the study aim.
  o We rearranged the conclusion section to address the study aim, and also changed the conclusions in the abstract.

Reviewer #2

• Background: The authors report that data on information needs from Germany is sparse. I am not sure that this sentence is necessary or adds anything as the review relates to world literature. In addition, the reference given to support this statement is almost 20 years old.
  o We agree and deleted the sentence.

• Methods: Search strategy: the search terms listed do not tally with those outlined in the search strategies in the Appendix; some of those listed (such as "knowledge need" and "wish or desire of information") appear as separate terms, while others (such as "quest" and "lack") do not appear in the appendix at all.
  o Thank you for your advice. We checked the terms and changed that section. ‘Lack of information’ was not part of the search strategy. We removed it. The term ‘request’ was corrected. (see section ‘Search strategy’)

• Methods: Inclusion and exclusion criteria: if the aim of the review was to identify the information needs of people with diabetes, why were studies relating to people with a risk of diabetes included?
  o We agree that people at risk of diabetes are a special target group that might differ from people with diabetes. Hence, we removed the three studies addressing people at risk of diabetes.

• Methods: Inclusion and exclusion criteria: Were studies looking at tools to capture information needs included even if they did not report on actual needs? It is unclear whether this was an inclusion criteria or simply part of the data extraction process.
  o No, we only included studies that contained self-reported IN of people with DM. We adapted the description of the inclusion criteria.

• Methods: Critical appraisal: the names/types of the specific appraisal tools used should be provided together with an explanation of the scoring system used (i.e. what ++, + and - relates to in Table 1). In addition, the reference given for the NICE report indicates that the relevant information can be found on page 286, but the report does not have a page 286.
We added the explanation to the method section (see “Critical appraisal” section)

• NICE: “The study’s quality was described as followed: ‘(++) All or most of the checklist criteria have been fulfilled, where they have not been fulfilled the conclusions are very unlikely to alter. (+) Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter. (-) Few or no checklist criteria have been fulfilled and the conclusions are likely or very likely to alter.’”

• “The critical appraisal for mixed-methods studies include whether the mixed-methods design was appropriate, and whether the integration was relevant to address the research question (objective). The criteria also consider whether the limitations are considered, associated with this integration, e.g. the divergence of qualitative and quantitative data (or results) in a triangulation design was appropriate.”


• Results: More information should be provided on the results of critical appraisal, such as the issues that were identified (e.g. which checklist criteria were not commonly fulfilled?). This will allow readers to determine whether this has implications of the conclusions that can be drawn from the individual studies and from the review itself.

• We added more precise information to table 1 by adding the number of criteria that were met and not met, and added the following to the manuscript: “It was noticeable that within the qualitative studies most of the criteria were fulfilled but eight of 14 studies did not describe the role of the researcher sufficiently and six studies gave no indications concerning ethical approval. None of the included quantitative studies reported how selection bias was minimised and included studies using mixed-method design reported little about the quantitative part of their study design. The results of the critical appraisals are shown in table 1.”

• Results: Subgroups of information needs: more information should be provided on the studies that investigated an association with IN - study purpose, participants etc. - so that the reader can better understand the associations identified.

• We added a column in table 1 to show which studies include associated factors. We also rearranged the Results section. Almost all studies provided (qualitative) descriptions of relations between IN and associated factors, except one, which provided a quantitative analysis. Furthermore, instead of usually investigated factors as age, sex or SES, most studies addressed more complex factors such as participation preferences or information seeking. We hope that this is clearer now.
Results: Subgroups of information needs: More information should also be reported for Reference 23, together with the results of comparative statistics if these were used (this currently reads "different diagnoses and diseases are significantly associated with different medicine information needs").

- Duggan et al analysed patients with different chronic diseases and calculated correlations (Pearson coefficient) between IN, in particular concerning medication, and age, sex, and socioeconomic status. He found, for example, that higher socio-economic status was positively correlated with the need for drug information [7]. We added this information in the Results section.

Results: Information needs and age: Did all of the studies in young people focus on and/or include information needs reported by the children themselves or by their parents/carers? It would be useful to clarify this since some of the included children are relatively young and potentially having help with disease management.

- We changed the explanations about inclusion criteria to emphasize that we only included studies with self-reported IN (“Publications were included that contained self-reported IN of people with DM as a primary or secondary research aim.”). Consequently, all studies focusing on children or young people reported IN as reported by the children themselves.

Results: Associated factors: It would be better to summarise the information provided in Table 4 within the text rather than including it as a table. As it currently stands, this section does not convey much information.

- We removed table 4, as suggested, and provide the information within the text.

Discussion: A large part of the discussion appears to summarise the findings related to unmet need rather than setting the overall results in context.

- We replaced the section of unmet needs to the results section and provided a short discussion point. We rearranged all of the discussion and rewrote the conclusion completely.

Figure 1: reasons for exclusion should be included in the table rather than as a footnote.

- Thank you for your advice. We changed our figure following your recommendation and concerning the new number of included publications having deleted three studies including people at risk of DM.

Table 1: it might be more helpful to sort the studies in Table 1 by type of diabetes rather than by outcome and study design. It would also be useful to include the breakdown of male to female participants in each study.
We carefully discussed your suggestion. However, we think that a first overview at the meta level by stratifying outcome and study design and describing the study findings within these strata is more helpful. Hence, we suggest keeping our construction.

We added numbers of male and female participants in table 1 as suggested.

- Table 4: This could be excluded and the contents summarised in the text.

See above. We deleted table 4 as suggested.

Editor

- Please complete and upload a PRISMA Checklist rather than a PRISMA-P Checklist as this is a systemic review not a protocol.

P8 line 2-3. PRISMA-P is guideline for reporting protocols for systematic review, not for the methods required for a systematic review. Please quote the methods document (e.g. Cochrane Handbook, CRD handbook) used to guide the methods used. Also, add that the review is reported following PRISMA (not PRISMA-P) guidance.

We have applied the PRISMA checklist and corrected the text.

Search Strategy: Please refer to the full search strategies in the appendix as it is not clear to the reader that full search strategies are available.

Thank you for pointing that out. We added that the search strategy is in detail compiled in the Appendix.

Search Strategy: The start dates of the databases are not reported in the main text. You could add that the databases were search from their inception to June 2015 in the main manuscript. Also you could refer to the appendix for full details of the databases (platforms, coverage dates).

We adopted your hint and implemented it in the text.

consider rewriting ‘Included search terms..’ to say ‘Search terms for IN included: “information need”… This indicates that use key terms but also point to the strategies in the appendix so the reader can see the full list of terms. Remove any terms from his paragraph that are not included in any search strategy in the appendix.

Thank you for your advice, we changed that part following your recommendation.

as above, rewrite ‘Included search terms..’ to say ‘Search terms for Diabetes included: “Diabetes…”'
See above — we changed that part, following your recommendation.

One reviewer comments that the full search strategies appear convoluted. They Ovid ones are, which make them time consuming to read and understand however they are correct, appear to be replicas of the original strategies and reproducible so I advise leaving them as they are.

We made no changes regarding the Ovid tables, following your recommendation.

Page 8, Line 54: comma not needed.

We removed the sentence

Throughout the manuscript there are a few typos and incorrect use of commas. Please check thoroughly.

A complete check by another native speaker was performed. Typos were corrected, and parts of the result and discussion section reworded.

References:


