Author’s response to reviews

Title: Which providers can bridge the health literacy gap in lifestyle risk factor modification education: a narrative synthesis

Authors:
Sarah M Dennis (s.dennis@unsw.edu.au)
Anna Williams (a.williams@unsw.edu.au)
Jane Taggart (j.taggart@unsw.edu.au)
Anthony Newall (a.newall@unsw.edu.au)
Elizabeth Denney Wilson (e.denney-wilson@unsw.edu.au)
Nicholas Zwar (n.zwar@unsw.edu.au)
Timothy Shortus (tshortus@hotmail.com)
Mark F Harris (m.f.harris@unsw.edu.au)

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Author’s response to reviews: see over
Dear Editor

Re: 1798602595677470 Which providers can bridge the health literacy gap in lifestyle risk factor modification education: a narrative synthesis

Thank you for sending this paper out for review so quickly and for the reviewers’ thoughtful comments on this paper. Our response to the reviewers and the details of the changes made are set out below. The changes have been tracked in the manuscript.

Reviewer 1 recommended that tables 1 & 2 be incorporated into the text. Table 1 contains the search terms used for the review which is very detailed and we felt it was clearer in table format. The content from table 2 has been incorporated into the methods section and all subsequent tables renumbered.

A sentence about the quality of the studies has been included in the results section. A sentence has also been included in the discussion section when limitations of the study are discussed.

(1) Which one of the SNAPW was found having more significant improvement related to health literacy intervention? In another word, is health literacy intervention equally effective/ineffective on all the five behaviours?

We agree with reviewers 1 and 2 that it is important to know which health literacy interventions might have different effects on SNAPW outcomes and these results have been reported in another paper currently under review with BMC Family Practice. A sentence has been added to the results section describing overall results for each SNAPW risk factor however the numbers are too small for this to be reported by provider although this information is provided in table 3.

Overall, health literacy and SNAPW risk factor were both improved for 61% (14/23) of interventions to address nutrition, 54% (15/28) for physical activity, 43% (3/7) for weight and 40% (6/15) for smoking.

(2) Only 4 articles were from Australia and New Zealand, but a substantial portion of the discussion is related to policy in Australia, the different between cultures and healthcare systems and other factors should also been taken into consideration when discussing practical implications.

The review was funded to inform policy decisions in Australia which shaped the way in which we had written the discussion. The references to Australian policy examples have been removed from paragraph 5 in the discussion. The reference to Australian policy in paragraph 4 remain and have been expanded, see comments from reviewer 2 below.

Table 3 (was table 4) “No” has been changed to “No.” for all headings

Figure legends were listed at the end of the paper but have now been added to the figures themselves.
Reviewer 2
1. I had difficulty understanding the choice to define the “outcome measure associated with health literacy” as noted in the Methods section in the paragraph after #5 of key definitions. The concepts of self-efficacy, motivation and patient activation are not always a measure of health literacy- as the term “health literacy” is most commonly used in the reported literature- although performing poorly in one of these domains may clearly be associated with low health literacy. Although the authors do acknowledge the need to broaden their measure of health literacy in the last paragraph of the discussion section, it may make use of this term confusing for many readers. Please consider using a term such as “self-management skills,” where the traditional definition of health literacy represents one component of this skill-set.

The following sentence has been added to methods section to clarify this issue:

We could not identify established tools for measuring interactive and critical health literacy so we looked to the self-management literature for instruments that measure the concepts of self-efficacy, patient motivation, confidence and broader social support such as the Diabetes Self Efficacy Scale, the Social Support Survey and measures of Prochaska and DiClemente’s Stages of Change Model

2. The types of studies reviewed were varied, making synthesis of the findings extremely challenging. Importantly, each of the lifestyle changes addressed in the SNAPW definition may require different types of interventions. It would be helpful to separate the SNAPW components and more clearly discuss which type of intervention may be helpful for each issue- as the authors begin to address in paragraph 5 of the Discussion section.

We agree with reviewers 1 and 2 that it is important to know which health literacy interventions might have different effects on SNAPW outcomes and these results have been reported in another paper currently under review with BMC Family Practice. A sentence has been added to the results section describing overall results for each SNAPW risk factor however the numbers are too small for this to be reported by provider although this information is provided in table 3.

3. In the section “Findings” in the abstract, please clarify the sentence that “Non medical health care providers were more effective ...(than whom?) in improving health literacy.” Is this statement really an accurate conclusion given the confounding by intensity of intervention and inability to fully define each intervention?

We agree with the comments made by reviewer 2 about the uncertainty around the intensity of the intervention and members of the team. Details of the team members have been added to the summaries in Table 4 and “more” has been removed from the sentence in the findings section of the abstract. The main point we were trying to make was that addressing health literacy and behaviour change regarding SNAPW risk factors can take time and may involve several visits or prolonged visits with at least one health professional. In a fee-for-service model there is a need for policies to support the intensity of interventions required. It may not matter which health professional, or trained lay health worker is more effective, but may be related to which provider is able to spend the time with the patient and has the skills to support patients to develop health literacy and to make lifestyle changes.

The health professionals involved in the multi-disciplinary teams have been added to the summaries in Table 4 (renamed from Table 5).

All minor changes suggested by reviewer 2 have been made.
“Consumers” has been replaced with the word “patients” throughout.
The searches were completed by June 2009, this has been corrected in the abstract.
The health screening programs in paragraph 4 have been explained in a little more detail.

Reviewer 3
For example, how many of the studies focused on numeracy and increased numeracy through a specific intervention (such as calculating medication times)? In other words, if they could also examine the IOM’s definition of health literacy and help synthesize their message around the different components of it, that would help reader with a more strict view of health literacy appreciate the author’s conclusions.
Thank you for this comment and we have looked at the descriptions of the included interventions in more detail to describe this and examples have been included in the results section and additional descriptions to the Table 4 (renamed from Table 5). The interventions were designed to address lifestyle risk factor management and not activities such as understanding medication use. Literacy rather than numeracy is the major impediment to SNAPW risk factor modification. The health literacy framework for the review built on the work of Nutbeam and the additional information has been included in the study summaries in Table 4. In summary, because the interventions were targeting SNAPW risk factor management they focused on providing information (leaflets, education sessions, computer based information) either one to one or in a group setting. Many of the interventions included motivational interviewing and counselling with goal setting to support patients to be empowered to make changes. Some of the interventions were targeted at people from low socioeconomic backgrounds (13), low levels of education (12) or ethnic groups (11) where information and support was culturally tailored. The information in the summary Table 4 describes the components of the intervention in terms of format, broad content and intensity. The diversity of the interventions means that it is difficult to synthesise this much further.

I hope that we have addressed all the reviewers’ concerns.

Yours sincerely

Dr Sarah Dennis
Senior Research Fellow
Centre for Primary Health Care and Equity
UNSW