Reviewer's report

Title: Understanding the relationship between psychological distress and healthy lifestyle behaviours to prevent vascular disease: a qualitative study of patients and general practitioners

Version: 1 Date: 9 August 2013

Reviewer: Margaret Cupples

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This study’s aim was to explore GPs' and patients' perspectives about the relationship between psychological distress, the process of behaviour change and cardiovascular disease.

Major Compulsory Revisions

1. Three questions are posed by the authors - the first of these is not clearly defined; the second ("did behaviour choices result in changes in distress?") cannot be definitively answered by qualitative work, which reveals perceptions but not definitive measures. Clarification to the aim and question being asked is required.

2. Linked to this lack of clarity, the second para of the introduction states that previous work attempting to show an association between psychological distress and lifestyle behaviours failed to do so - I am not at all clear why then this study is based on a premise that there is a relationship existing between these factors? This requires explanation.

3. Further clarity is needed regarding description of the identification and selection of patients for the study - how many groups were identified? Is it 3 categories of distress, each with 2 divisions (rural/urban) and two further divisions for gender? - It would be helpful to report how many were invited overall.

4. The questions posed to the patients and practitioners were different - suggesting that different emphasis was placed on the components of the interviews. The lack of consistency in approach adds to the lack of clarity in respect of the questions defined for the study. The GPs' focus is on psychological health rather than distress; the patients' focus is on 'stress' - consistent use of terminology and clear definition of the meaning of terms used is important. It may be that this is an accurate record of the methodology or it may be that the paper requires revision, considering careful use of consistent terminology, appropriate to the stated aim and research question. Acknowledgement of this issue is required.

5. In relation to the findings, it is important to note that anxiety, depression and stress are not synonymous - the manuscript does not make clear what is being
explored and recorded. Furthermore, several quotes do reflect sources of stress but do not illustrate the impact of that stress on behaviour choices, nor do they illustrate the actual process of behaviour change, as suggested by the sub-heading. Other factors are also reported in relation to lifestyle behaviours - but these again do not appear to have been explored in such a way as to provide new insight into their impact on processes of change. More consideration should be given to reporting the interpretation of data and provision of appropriate supportive data for themes and analyses presented.

The discussion reads well but the conclusions reached are not well supported by data reported within the results section, nor by the analysis of those which are presented.

6. The limitations of the work in respect of the characteristics of respondent participants - both GPs and patients - need further discussion. For example, of the 16 GPs invited only 5 agreed to take part - why?? - this may suggest bias in the data. 14 of the 16 patients had completed a higher qualification - this should be acknowledged. Similarly the absence of patients with high distress levels must also limit the application of findings to practice.

7. I feel it would be relevant to include acknowledgement and discussion of current literature which reports the wider influences on behaviour change - to include the factors of an ecological model and, for example, the components described in the concept of the 'behaviour change wheel'. Further exposition of the conceptual model presented is required.

8. The conclusion indicates that stressors were discussed within the paper - and this is so. In fact it may be more accurate to describe the work in relation to an exploration of stressors, rather than an exploration of psychological distress, in relation to lifestyle behaviours.

**Level of interest:** An article of limited interest

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I have published research in the area of behaviour change and cardiovascular disease and continue to work in this area. However, I can declare that I have no other competing interests.