Author's response to reviews

Title: Does smoking status affect the likelihood of consulting a doctor about respiratory symptoms? A pilot survey in Western Australia.

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Version: 3 Date: 24 November 2008

Author's response to reviews: see over
Are smokers more likely to be encouraged to consult a doctor about their symptoms? A survey in Western Australia. Moyez Jiwa, Hayley Arnet, Georgia Halkett, Marthe Smith, Moira O’Connor, Julia Rhodes, Kate Poland and Max Bulsara

Response to reviewers’ comments shown in red below:

Reviewer’s report
Title: Are smokers more likely to be encouraged to consult a doctor about their symptoms? A survey in Western Australia.
Version: 1 Date: 1 October 2008
Reviewer: Anders Ostrem

Reviewer’s report:
There are obvious limitations to this paper. The population was recruited from only two rural practices in Western Australia. Also there was a high proportion of female respondents. Also there was a limited number of symptoms included in the vignettes and the representativeness was not established. All of these weaknesses are clear from the paper. Even with these limitations the paper have to assests that makes me recomend it to be accepted without revision.
1. The method is little used to obtain patients perspectives of disease - but seem to be a pactical approach that can easily be used in primary care.
2. The paper emphasises that we still need to inform the smoking population about the risks of smoking and early symptoms of disease. As such important message that we still have work to do!

Level of interest: An article of limited interest
Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests

This reviewer requires no response.

The prognosis for lung cancer remains about 10% survival at 5 years. If more smokers were encouraged to be vigilant about presenting symptoms sooner rather than later lives could be saved.
Reviewer’s report

Title: Are smokers more likely to be encouraged to consult a doctor about their symptoms? A survey in Western Australia.

Version: 1 Date: 24 July 2008
Reviewer: Christine M Bond

Reviewer’s report:
Comments on paper: Are smokers more likely to be encouraged to consult a doctor about their symptoms? A survey in Western Australia.

This is potentially an interesting piece of work but the current study should probably be regarded more as a pilot or feasibility study for the reasons summarised below.

The answers to your required specific questions follow, then my detailed comments.

1. Is the question posed by the authors well defined? No

Aims further clarified.

2. Are the methods appropriate and well described? Appropriate but not fully described

More detail offered.

2. Are the data sound? Yes, but no response rate. And really only pilot data

We agree these are pilot data and this has been explicitly stated.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

5. Are the discussion and conclusions well balanced and adequately supported by the data? Yes

6. Are limitations of the work clearly stated? Yes

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? Yes

8. Do the title and abstract accurately convey what has been found? Not the title

Title and abstract: The title and abstract have been changed. We agree that this is a pilot study.

9. Is the writing acceptable? Yes generally but some ambiguities and disjointed flow

We have reviewed the text and it is now more coherent.

Major Compulsory Revisions

1. Should make it clearer that study is about the advice given by ‘significant’ others

The focus on significant others should be more evident from the outset.
3. In general more detail is required in the methods.

More detail is offered about the development of the vignettes. The basis on which some vignettes were labeled ‘cancer vignettes’ has been clarified.

3. How many practices are there in metropolitan Perth? How many were approached/volunteered? How were the selected two identified? What was their catchment area?

As above, the details about the catchment area have been included. The number of patients seen at the practices is stated. The wider context in which we conducted this study is mentioned.

4. How many questionnaires were left with reception?

300 questionnaires were available over the six week data collection phase and this is highlighted.

5. In general far more detail required on the survey compilation including construction of vignettes, who did this, peer review for validity, the importance of line (2 6) scenarios (why 2 6?), why 28 cases (why not any other number?) were labelled as ‘cancer’ cases.

With six clinical variables each constructed as a binary variable we had (2 to the power of 6) vignettes i.e. 64. We choose this number to limit the required sample size as described in the methods and to be consistent with the formula 50 + 8 x X where X is the number of variables for 80% power. This is also referenced.

6. Need to know how many questionnaires picked up from receptionists to give a denominator and possibility of calculating an estimated response rate. How many people might have passed through each consulting room over a six week period? Was there any eligibility for completing a form e.g. under 21 years excluded?.

These details are now included.

Minor Essential Revisions

Title
7. I wonder if a more appropriate title might be ‘Does smoking status affect likelihood of consulting a doctor about respiratory symptoms?. A survey in Western Australia’. At the moment the title implies people who are smokers are more likely to consult which seems to contradict the introductory text.

Abstract

The title and abstract have been changed. We agree that this is a pilot study.

8. There is often ambiguity in the abstract (last sentence of results and last line of
Conclusion) and in the rest of the text about whether smoking status is the respondent’s smoking status or the central character in the vignette.

This has been addressed.

Background
9. Line 6/7 of the first paragraph do not quite make sense as it implies cough or breathlessness are not symptoms. Should it be ‘other symptoms’ in line 7?.

Corrected.

10. Lines 7/8 read as though GP has the history of cancer symptoms.

Clarified.

11. In general the first paragraph of the Background does not really flow – lots of disjointed statements.

Reworked.

12. When referring to the paper Corner et al please clarify whether smoker thought their own smoking was an everyday cause or whether the point of this paper was that they did not link their own smoking with the symptoms.

Addressed.

13. Would it be helpful to be consistent between terms ‘paper cases’) and vignettes or make the link clearer.

We are now consistent.

14. Nowhere does the Background section refer to ‘significant’ other or lay referrel networks yet this seem to be the premise of the empirical work.

Addressed.

Methods
15. Personal identifiers are normally included for the purpose of sending reminders. Given the nature of the survey distribution I am not sure why these would have been required regardless of anonymity?

The question of anonymity was irrelevant and this issue has been removed from the methods section.

16. How many people were involved in the pilot?
These details have been included.

17. Asking if the vignette character ‘had cancer’ seems very leading invalidating the responses.
We can’t change this but don’t agree that it invalidates the responses.

18. What were the response options for the questionnaire? For example Likert scale or closed option, of yes, no.

The question of anonymity was irrelevant and this issue has been removed from the methods section. The questions asked of respondents are now incorporated as figure 2.

19. What was cluster? Was it practice?

Clustering is by respondent. Each respondent answered questions about 9 vignettes chosen at random.

Results
20. Demographics of sample should be provided particularly as referred to in Discussion.

Addressed.

21. Some sentences are ambiguous e.g. ‘of the clinical details incorporated in the vignettes the longer the duration of the symptoms of breathlessness and weight loss were more likely to lead to this suggestion’. Does this mean duration of symptoms (any symptom) (which is what seem to be the case on page 8 under ‘Recommending an appointment with a doctor within one week’), or is it duration specifically of symptoms of breathlessness (which is what it says), but I am not sure this is what was in the questionnaire?

Addressed and also include the questionnaire in figure 2.

Discussion
22. Mention of older females is not reported in the Results.

Now addressed.

23. Top page 10 – first time significant others mentioned.

Addressed.

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published
Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:
NO conflicting interests
Reviewer's report

Title: Are smokers more likely to be encouraged to consult a doctor about their symptoms? A survey in Western Australia.

Version: 1 Date: 22 September 2008
Reviewer: Jennifer Cleland

Reviewer's report:
The methodology is very atheoretical, the sample size is small and thus the paper has limited value and generalizability.

- Major Compulsory Revisions
I found the title of this article most confusing, possibly due to the use of the passive rather than the active. A more accurate title might be "What respiratory symptoms and patient variables encourage advice to seek medical help? A survey ...." My suggestion is just that but I do recommend a more accurate title. The recruitment of 140 responses over 2 weeks from 2 general practices is a very small sample size, probably an artifact of the methodology. However, some comment on the methodology in the discussion would be useful - how many patients passed through those practices over the time period in question? What proportion of patients completed a questionnaire? Would the authors recommend this approach in future? Etc.

These issues have been addressed in response to comments to previous reviewers.

More detail on the vignette development is essential. Who was involved in their development? Just how many people were they piloted with, and who were these people? How were they revised after piloting? How were the advice options presented? What was the completion rate (ie how many respondents gave responses for all 9 vignettes)? How many people gave a response for each of the 64 scenarios/were all 64 incorporated into the analysis?

The number of times each vignette was presented to the respondents is clarified. There was no systematic bias in the responses to the vignettes and as shown in the majority of cases the questions asked about the vignettes were answered (1202 /1260).

The methodology is very atheoretical. A much more robust way to predict how people will behave (the behaviour = giving advice) is to use a theory of behaviour prediction or change as a basis for questionnaire development e.g., theory of reasoned action, theory of planned behaviour (TPB). TPB has been used widely in healthcare research and may well have been used in respiratory. The best known authors of this type of work are Marie Johnston, Jillian Francis, Martin Eccles - search for Johnston as an author in the BMJ website for some useful articles. Vignettes can be based on the TPB - TPB questionnaire studies are widely published.
We accept that the Theory of planned behavior offers a basis for questionnaire
development and have recommended that future research might reflect on this
theoretical framework. However that was not what we did in this project and it is not
possible to address this concern other than to acknowledge that it might help to
ensure a robust approach in a future study. Nevertheless in this exploratory study we
feel we are presenting a useful result.

Analysis - looks OK but a statistical review is required. 21% of the variability
could be explained from 4 of the variables - how much variability could be
predicted from any one of these variables? More should be made of this in the
discussion - is 21% good, bad or indifferent - is this of any use?
It would be useful to start the discussion with what was found and what this
suggests, rather than respondent details (which should be in the discussion, but
later).

The discussion has been reworked.

The methodological limitations of this study - method of recruiting participants
and atheoretical basis - must be discussed. This really seems like a pilot as a
result.

**Level of interest:** An article of limited interest  
**Quality of written English:** Acceptable  
**Statistical review:** Yes, but I do not feel adequately qualified to assess the
statistics.

The data have been corrected and all the figures in the paper have been reviewed
by Max Bulsara, biostatistician in the project.

**Declaration of competing interests:**
I declare that I have no competing interests.
Reviewer’s report
Title: Are smokers more likely to be encouraged to consult a doctor about their symptoms? A survey in Western Australia.
Version: 1 Date: 6 October 2008
Reviewer: Noel O’Kelly

Reviewer’s report:
This is an interesting study looking at patients’ perceptions of health seeking behaviour directly concerning their recommendation to attend a GP for patients’ profiles that would suggest lung cancer. There are a number of comments that the reviewer has that may enhance the paper.

At times it was difficult to follow the flow of the results and the sub analysis of the result cohorts. At times numbers were used, then, percentages with no reference to the numbers the percentages pertained to. There was also no full results table – in numbers – in the paper.

A flow chart detailing the numbers of vignettes – and the resultant recommendations may have made it easier to analyse the results for the reader.

We chose not to include a flow chart but have addressed the other concerns by rewriting the text.

The paragraph in the results section “identifying potential cancers” illustrates this point. 53% of the respondents were unsure if there was a chance that symptoms related to cancer. This relates presumably to 58.8% responses. It difficult to see how you can have a fractional response suggesting a rounding up of the percentage. This paragraph was very hard to visualise as the writing up was confusing and difficult to follow. At the start of the paragraph there is a comment that respondent identified 17.7% of cancer vignettes – however 4 lines further down a comment is made that respondents only identified 25% of cancer vignettes – likely or very likely responses that cancer was suspected – but it is unclear.

The section headed ‘Identifying potential cancers’ contained data from a previous version of the paper where we had not addressed the issue of multicollinearity. The data have been corrected and all the figures in the paper have been reviewed by Max Bulsara, biostatistician in the project. The number of times each vignette was presented to the respondents is clarified.

The paragraph on the bottom of page 5 also causes some confusion. Firstly it is stated that vignettes for “cancer” patients were based on a greater than 5% risk of lung cancer. Then secondly it is stated that the “cancer “vignettes were based on a greater than % risk and the presence of persistent symptoms as assessed by physicians in the team. So which vignettes as reported in the results are cancer vignettes – the former or later?
The basis on which vignettes were labelled cancer vignettes has been more clearly enunciated.

On page 8 paragraph “recommending an appointment with a doctor in one week”- one of the factors associated with this was stated- whether the respondent felt that cancer was a likely diagnosis. I cannot see in table one where the evidence for this statement comes from.

This variable cannot be included because it raises the issue of multicollinearity and was removed.

There are some worries that only 2 GP practices were involved in the study. This may affect the generalisability of the results – It is also noted that in table 1 showing respondent profiles no correlation to advice reference attending a GP could be made on these parameters. Is this because the study was not powered to do this – as evidenced by the wide confidence limits and non-significant results?

The power calculations are formally addressed and the limitations of the study fully articulated.

Also it is noted that the main aim of the study was to demonstrate that a history of smoking augurs to a potential diagnosis of lung cancer. However as reported in the discussion the odds of recommending an attendance at a GP within 1 week related to symptoms more than a history of smoking- more discussion of this point is felt to be warranted- in fact the symptom profile seemed to be factor more important than smoking- although this was also a significant factor of patients believing that cancer was likely or very likely.

Within the context of a pilot study we have been circumspect about drawing conclusions beyond the limits of our data. However there have been some additions to the discussion not least the section on the Theory of planned behavior.

In essence this is an interesting study – well constructed which looks at the importance of patients’ perceptions reference the importance of seeking GP help with worrying symptoms. A key aspect is the appreciation of concerning symptoms and the need for appropriate fast referral. If this study is extrapolated more work needs to be done on the social marketing side of significant respiratory conditions – especially lung cancer- especially in understanding worrying symptoms and the importance of a smoking history. The article would benefit from more coherent writing and discussion with reference the results of the study and their importance in a wider perspective.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**
I do not have any competing interests