Reviewer's report

Title: The Effect of Health Literacy on Knowledge and Receipt of Colorectal Cancer Screening: a survey study

Version: 1 Date: 23 January 2007

Reviewer: Joan Austoker

Reviewer's report:

General

1. Is the question posed by authors new and well defined?
The research question is new and fairly well-defined. It is clear from the text that the research question is primarily to determine the association between health literacy and CRC screening knowledge/behaviour for a larger trial.

3. Are the data sound and well controlled?
The data collection procedures and subsequent explanation of the statistical analysis that were performed is more than adequate. There was not an enormous need to control for differences between the two groups. It was appropriate not to include education in the multivariate model.

4. Does the manuscript adhere to the relevant standards for reporting and data presentation?
The reporting and data presentation in the paper is clear and concise.

6. Do the title and abstract accurately convey what has been found?
Both convey accurately the findings of the research.

7. Is the writing acceptable?
The writing style is more than acceptable.

Other Comments

1. My apologies if I am unclear of the ethics requirements in North Carolina/Maryland, but it does seem quite strange to the reader to see that no informed consent was elicited from patients (e.g. did the patients know they were taking part in a study? Was verbal consent elicited?). Perhaps more information required regarding what information about the study participants were told when approached by the researchers.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?
The methods are appropriate and fairly extensively described. Could it be clarified who administered the survey in the physician’s exam room (3rd paragraph under heading ‘measurements’).

Could the authors provide further information on the items used for measuring participant methods for learning about health topics (were these physician, internet, leaflets, mass media, etc).

Uncertainty about the last line under ‘Participants’ – please see ‘other comments 1’.

Under measurements the word ‘refused’ is pejorative. Could ‘patient who refuse to participate…’ be changed to ‘patients who declined to participate’?

Could the authors indicate which ‘prior published studies’ were used to estimate the approximate 50% limited health literacy rate please (1st paragraph under heading ‘statistical analysis’).

5. Are the discussion and conclusions well balanced and adequately supported by the data?
The discussion is generally well-balanced and conclusions are supported by the presented data.

It would be prudent to offer an alternative explanation for the similarity in self-reported CRC screening rates in the two literacy groups (as opposed to the lack of power). I do not think that this would detract from the results of the study but do believe that there may be more factors that contribute to the self-reported/actual CRC screening rates than has been suggested (e.g. physician recommendation or physician interest in promoting CRC screening, health insurance status of the participants, etc).

Could the authors provide more information in the conclusion concerning how these results would structure the trial? As the findings did not suggest that there was significant differences in uptake of CRC screening (albeit probably due to the small sample size), then more information should possibly be included on why increasing participants knowledge of CRC screening is essential for future research.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

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.