Reviewer’s report

Title: Relationship of Literacy and Heart Failure in Adults with Diabetes

Version: 1 Date: 19 January 2007

Reviewer: Barry Weiss

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GENERAL COMMENTS

Overall, this paper has the potential to make a contribution to the literature on health literacy, because there have been no good studies pertinent to heart failure. But, there are some issues with this paper that need to be addressed – both in the methods and in the conclusions. Pertinent to the methods, it is not clear how you determined if patients did or did not have heart failure. Pertinent to the conclusions, there was NO relationship between literacy and heart failure after adjusting for education, yet your paper (eg, abstract) tries to make like there is.

SPECIFIC COMMENTS

Page 2, Abstract After reading through the paper, I think the results and conclusions sections of the abstract misrepresent the results of the study by failing to point out that the association between literacy and heart failure disappears if you adjust for education.

Page 2, Para 1 Would be desirable to use less dramatic language than “exploded.” Also note that the 1992 NAL did not use the classification of “functionally illiterate.” Finally, it would be preferable to cite statistics from the 2003 NAAL, rather than the 1992 NAL. Or even better, use the health literacy data from the 2003 NAAL.

Page 2-3 I found the introduction, overall, to be too long. Recommend shortening by about one half. Also, need a specific statement of objectives – ie, exactly what you plan to do. The objectives given in the last sentence of the introduction are quite vague compared to what was really done.

Page 4, Para 1 What were the sociodemographic and lifestyle variables that were targeted because they were likely to be associated with outcomes? And, how did you now that the patients selected for contact had those variable?

Page 4, Para 2 In the first full paragraph, there is a great deal of discussion and commentary on the methods. Such discussion belongs in the discussion section of the paper. This paragraph is also unclear about how you determined if patients had heart failure. This is a key factor in the validity of the study and must be explained in detail. Currently, the methods include no description of how this was done.

Page 4, Last Para The description of the Self-Administered Comorbidity Questionnaire should contain the same level of detail as the description of the S-TOFHLA.

Page 5, Analysis After reading the methods used for the analyses, and the description of all the analyses that were performed, it becomes even more clear that the statement of objectives in the introduction section is very superficial. That statement should explain exactly what it is that you planned to do and learn.

Page 5, Para 2 The methods stated that you excluded subjects with limited literacy due to poor vision. How was vision measured and what criteria were used for exclusion? Same question about physical impairment?

Page 5, Para 3 Here you stated that you excluded education from the analysis. This propriety of excluding education from such analyses has been extensively discussed by health literacy experts with the conclusion that it is not appropriate to exclude it. This is because education is an easy-to-measure variable. If it has the same ability to predict outcomes as does literacy, then we can simply ask patients about education. On the other hand, if literacy offers something different than education level in terms of predicting outcomes (in many studies it does – even more so than education), then we want to know about literacy. I recommend...
keep literacy in the analysis.

Page 5, Para 4 Here in the results you describe results of glycated hemoglobin and blood pressure measurements. I don’t recall seeing anything in the methods section of the paper about collecting such measurements.

Page 5, Para 5-6 Here is becomes clear that literacy is not associated with heart failure after other sociodemographic covariables, including education, are taken into account. Those other covariables are a lot easier to measure than literacy.

Page 6-7 Discussion of the implications of the study, which goes on for nearly two full pages, is too long. Suggest condensing to half it current length.

Page 7, Limitations Why would people with limited literacy be less likely to enroll in the study. I thought participants were selected and agree to enroll via a phone call. Also, in this section you say that you have no information about functional health status, yet earlier you stated that subjects were excluded if they had physical limitations that interfered with literacy assessment. So, you do have some information of this sort.

What next?: Reject because too small an advance to publish

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.