Reviewer’s report

Title: High prevalence of lack of knowledge of symptoms of acute myocardial infarction in Pakistan and its contribution to delayed presentation to the hospital

Version: 2 Date: 6 June 2007

Reviewer: Sharon McKinley

Reviewer’s report:

General

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

Review of revised BMC Public health manuscript by Muhammad S Khan, Fahim H Jafary, Azhar M Faruqui, Syed I Rasool, Juanita Hatcher, Nish Chaturvedi and Tazeen H Jafar "High prevalence of lack of knowledge of symptoms of acute myocardial infarction in Pakistan and its contribution to delayed presentation to the hospital."

The authors have addressed many of the substantive concerns raised in my first review. I have also noted the responses to the other reviewer’s substantive comments. However I consider that there remain substantive concerns about the reporting of the research in the manuscript.

1. The putative interaction between education levels and tobacco smoking still features prominently as a finding of the study, despite the circumspect acknowledgement that no statistically significant relationship was found in the analysis. No inferences can be made from this insignificant finding, which may be due to chance. It should be noted in the results but nothing further made of it. It has been omitted from the abstract but is still in the conclusion.
2. The limitation of including only patients who had chest pain should be added, given the increasing amount of research being published that reports the occurrence of other AMI symptoms without chest pain, and of clusters of symptoms that do not always include chest pain.
3. The symptom named “grabrahat” may not be unique to Pakistanis or other South Asians experiencing acute coronary syndrome. General feelings of uneasiness, anxiety and a sense of impending doom are recognised symptoms of acute coronary syndrome. Therefore there should be acknowledgement that the grabrahat symptom probably is documented in other cultural groups, but described more vaguely. It would be interesting to learn the literal translation into English of “grabrahat”, if there is one. This may be a useful addition to the description of ACS symptoms for those with English as their first language.
4. It needs to be explained more clearly in the statistical methods that the repeat analysis using the 2 hour cut off was the sensitivity analysis.
5. The authors have added a single statement and a single reference to the conclusion that “public education alone may not be sufficient” to change behaviour in seeking treatment for ACS symptoms. This is insufficient – there is cumulative evidence that public education campaigns have little impact on patient behaviour in responding to ACS symptoms (see Kainth A, Hewitt A, Sowden A, Duffy S, Pattenden J, Lewin R, Watt I, Thompson D. Systematic review of interventions to reduce delay in patients with suspected heart attack. Emerg Med J. 2004 Jul;21(4):506-8). The problem of the possible means of influencing patient response to ACS symptoms needs to included in the discussion.

I have for asked the advice of the editors about how much correction of English expression a reviewer should do, and await their advice before making any corrections to expression. Whatever the response about that, there are some terms used by the authors that would be perceived as derogatory by many people. The term “mentally retarded” (p. 7) should be changed. Daily functioning and IQ apparently were not measured. Perhaps more correct terms could be intellectually impaired or developmentally delayed. The terms “literate” and “illiterate” appear to refer to those who did or did not receive any formal education. It is preferable to use these objective terms to describe people rather than the derogatory terms “illiterate” and “mentally retarded”.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author...
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: 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 declare that I have no competing interests'