Author's response to reviews

Title: Knowledge of modifiable risk factors of heart disease among patients with acute myocardial infarction in Karachi, Pakistan: a cross sectional study

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Version: Date: 13 January 2006

Author's response to reviews:

Dear Sir/Madam,

Enclosed is our manuscript entitled 'Knowledge of modifiable risk factors of heart disease among patients with acute myocardial infarction in Karachi, Pakistan', for consideration by Heart. We feel it would be eminently suitable for the broad, international readership of BMC cardiovascular disorder for the following reasons.

Cardiovascular disease (CVD) is a major global public health problem. Progressive urbanization, changes in lifestyles and behavior contribute to the rising burden of CVD. People of South Asian descent have one of the highest risks of CVD in the world. It is likely that escalation of the global CVD epidemic will be most marked in countries where such populations predominate, such as Pakistan and India.

Prevention of coronary heart disease (CHD) is the most effective way of fighting the epidemic of this illness in Pakistan. Knowledge of modifiable risk factors for heart diseases has been identified as a prerequisite for change in behavior and is often targeted by prevention programs. Although knowledge alone is insufficient, it is assumed to be a key component of behavioral decision making about CVD risk-reduction behaviors, and provides clues for action.

A recent study on risk factors for heart disease has shown that tobacco use, ghee intake, raised fasting glucose, high cholesterol, paternal history of CVD, low income, and low levels of education are associated with premature myocardial infarction in Pakistan. As several of these risk factors are modifiable, it makes sense that an estimate of the level of knowledge of these modifiable risk factors will contribute towards developing appropriate strategies to reduce this epidemic of heart disease in Pakistan.

To the best of our knowledge, this is the first study of knowledge of risk factors for heart disease and its determinants in this high risk population of Pakistan. We found a mere 42% of our subjects had a good level of knowledge about heart disease. Moreover, only 20% were able to correctly identify all four risks factor of heart diseases in the Pakistani population were fully aware of all four key modifiable risk factors. We found that ethnicity; formal years of education, exercise, and type of family system, tobacco chewing and knowledge of symptoms of heart attacks were independently associated with good level of knowledge of modifiable risk factors for heart disease. Our findings highlight a striking lack of knowledge among individuals with a first heart attack and this call for efforts such as targeted public health education to increase the level of knowledge of risk factors of heart disease.

The manuscript has been read and approved by all the authors, the requirements for authorship have been met, and each author believes that the manuscript represents honest work. There are no conflicts of
interest. I, Dr. Tazeen H. Jafar, Director, Clinical Epidemiology Unit, The Aga Khan University, Karachi, Pakistan, Phone: 92-21-4930051 ext 4818, FAX: 92-21-493-4294, email: tazeen.jafar@aku.edu, am the corresponding author.

The manuscript contains an abstract (253 words), manuscript text (2772 words), 1 figure, 2 tables and 1 appendix. We would be happy to reduce the word count once the reviewers have had the chance to evaluate the paper.

If you have any questions, or if I can be of any assistance, please feel free to call or email. Thank you for your consideration.

Suggested changes
1. Manuscript has been reviewed by Juanita Hatcher for copy editing.
2. Name of review board/institution that granted ethical approval for the study and required details has been added in the method section
3. Details regarding the development and validation of the questionnaire employed in the study have been also added in the method section.
4. Formatting of the manuscript is done according to journal requirement.

Sincerely,

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