Reviewer's report

Title: The prevalence of angina symptoms and association with cardiovascular risk factors, among rural, urban and rural to urban migrant populations in Peru

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Reviewer: Gary Collins

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The prevalence of angina symptoms and association with cardiovascular risk factors, among rural, urban and rural to urban migrant populations in Peru

The article describes the Peru Migrant study which was designed to investigate differences in specific cardiovascular risk factors between rural-to-urban migrant and non-migrant groups. The study used the Rose Angina questionnaire to record chest pain as definite, possible and non-exertional. The article describes an interesting study, but in its current form does not read coherently.

Minor Essential Revisions

The authors refer to a previously published protocol, however, the results section need to describe in more detail than they currently have, information regarding the study sample. What is n for each of the 3 groups for example? This is not clear and is only first mentioned in Table 2. Some basic characteristics is needed.

The authors need to specify upfront and clear manner what cardiovascular risk factors are of interest etc and why these particular risk factors.

The authors have used the Rose Angina questionnaire, and on page 5 state that this has been used in both developed and developing countries. Some references would be useful here. Have the authors used a translated version of the questionnaire? If so a reference again would be needed. Or did they translate this themselves, if so something details on this would be useful.

Participants were selected stratified by age-groups. What were the age groups?

The authors have used the 12-item GHQ and a validated version of the SASCAT. Can the authors elaborate on why they have used these particular instruments and why they have relevance in this study? This should be made much clearer. The rationale for the mental health component of the study is not entirely clear and the abstract also makes no reference to the mental health component. In fact the abstract is noticeably short on information and should be re-written to explain the aims of the study. What is the SASCAT? What does it measure and why have the authors used it?

The authors divide the SASCAT component into “quartiles”, this is incorrect and
should be termed quarters. There are 3 quartiles, lower, median and upper which
divide the continuous component into four equally side intervals called quarters.
See

Altman DG, Bland JM. Statistics Notes: Quartiles, quintiles, centiles and other

Compared to the rest of the manuscript, the results section is disappointingly
short. Especially given the length of the tables. Can the authors elaborate on the
results.

The authors state in the strengths and limitations section that these were
exploratory analyses. They should clearly state this upfront. Was this really
designed as an exploratory study? The protocol they refer to does not imply this.
They conducted a power calculation and they appear to have achieved the
numbers they set out to collect. Can the authors comment on this.

Similarly, the state their work was limited by a lack of statistical power. This is a
rather weak statement to make and one which is not supported by anything. Can
the authors comment.

• Discretionary Revisions

Some references the authors appear to have omitted which could be useful and
referred to against their results and conclusions.

McNally R. Rural to urban migration and changes in cardiovascular risk factors in

Torun B, Stein AD, Schroeder D, Grajeda R, Conslik A, Rodriguez M, Mendez H,
Martorell R. Rural-to-urban migration and cardiovascular disease risk factors in

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.