Reviewer’s report

**Title:** Socioeconomic and demographic predictors of selected cardiovascular risk factors among adults living in Pohnpei, Federated States of Micronesia

**Version:** 1  
**Date:** 16 May 2014

**Reviewer:** Diego Gómez-Arbeláez

**Reviewer’s report:**

- **Major Compulsory Revisions**
  (The author must respond to these before a decision on publication can be reached. For example, additional necessary experiments or controls, statistical mistakes, errors in interpretation).

  # Are the authors presenting in tables 3, 4 and 5 the p for trend or the p value for each calculated odds ratio ?. As described in Statistical Methods the p values seem to correspond to the odds ratios, so there are several p values that are not being reported. The authors are only reporting one p value per box, while the p value should be reported for each calculated odds ratio. So, the results presented could have an erroneous interpretation.

- **Minor Essential Revisions**
  (The author can be trusted to make these. For example, missing labels on figures, the wrong use of a term, spelling mistakes).

  # There are some minor mistakes (differences) in the p values described in Results and those presented in the tables. For example, authors describe in page 11 “women reporting paid employment had 1.71 times the odds …”, while the corresponding OR in table 4 is 1.72. In the same page the authors describe “Women with high income had over twice the odds of high BP than those with low income (OR: 2.36, CI: 1.23-4.52, p<0.001).”, while the corresponding value in table 4 is p=0.001. Please correct these minor differences.

- **Discretionary Revisions**
  (These are recommendations for improvement which the author can choose to ignore. For example clarifications, data that would be useful but not essential).

  This is an interesting paper which aim to evaluate the association between socioeconomic and demographic characteristics and the presence of selected cardiovascular risk factors in adults from Pohnpei, Federated States of Micronesia. Nevertheless, there are some concerns that authors should reflect.

  # The STEPwise approach to surveillance (STEPS) is a widely known strategy to collect useful data in WHO member countries. This method assess several cardiovascular risk factors. However, the authors have chosen only four of these risk factors (daily tobacco use, low physical activity, high blood pressure and
central obesity) to determine its association with some socioeconomic and demographic characteristics; but its selection is not described in sufficient detail. It would be useful to expand the justification (Methods section) about why only these factors have been analysed.

# In Discussion and Conclusions, the authors should be more specific and clarify what this study adds to current evidence on socioeconomic characteristics and cardiovascular risk factors in low-to-middle income countries. Moreover, the authors should propose a possible explanation for its results.

For instance, there are some important results that authors are not highlighting in the manuscript. A higher education level is associated in a consistent manner with lower odds for those behavioural cardiovascular risk factors (daily tobacco use and low physical activity), therefore it would be convenient to emphasise about the importance of education on preventing these cardiovascular risk factors.

Furthermore, in the general population of this study a higher household income and paid employment status were associated with higher odds of high blood pressure and central obesity, respectively. In this sense, the authors could provide a clearer and more comprehensive review of current evidence on socioeconomic status and cardiovascular risk, taking into account the interesting discrepancy between developed and developing countries. There are more systematic and up-to-date reviews on this topic (e.g. McLaren L, 2007) for citation.

# I suggest removing the models 2 and 3 of Table 3 to make it less dense, and thus to facilitate its understanding by readers.

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