Reviewer's report

Title: Cardiovascular Risk Factors among Chamorros

Version: 1 Date: 16 May 2006

Reviewer: Sora P Tanjasiri

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General

Overall this is a very interesting study that shares important and new information about risk factors for an understudied and underserved population. The suggestions I have made for improvements are relatively minor in nature, although some are not as straight forward to deal with as others.

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

1. The leading cause of death for APIs is cancer, not heart disease. See the CDC website at http://www.cdc.gov/nchs/deaths.htm for more information.

2. There is an error in paragraph 2 of the Introduction, that starts "Complicating cardiovascular disease in the API community is the fact..." The sentence states that the 2000 census was the first to disaggregate APIs, but the 1990 census also disaggregated Asians and Pacific Islanders into different subgroups. The main difference between the two was that in 1990, individuals could only choose one group, while in 2000 they could select more than one. This had an important effect on Pacific Islanders, especially Chamorros and Native Hawaiians, since the majority are multiracial.

3. In the last paragraph of the Introduction, the authors state that the paper will report on the behavioral risk factors for heart disease. I think the term "behavioral" is a little misleading, since they report on disease states (diabetes and hypertension). I would recommend removing this word from the sentence.

4. Under Methods, I think it would be very helpful to the readers to have more information on the construction of the Chamorro Directory International, in order to understand how representative the directory is of the population: how constructed, geographic focus, etc. The authors also use the terms "convenience sample" to reflect the directory sample, and "randomly sampled" to denote their selection of respondents from the directory for participation in the survey. This is also a bit confusing as it relates to generalizability of their findings. It would be better to address the issue of representativeness/generalizability more directly. This is further complicated by the change in their respondent selection process midway through the participant recruitment process (paragraph 2 of the Methods). Because they essentially began stratifying by age midway through, generalizability becomes even more unclear.

5. Can the authors describe how consent was obtained, and whether individuals were anonymous (which seems to not be the case because names were obtained from a directory)? Since the data is self-report, the issue of confidentiality (and hence, reliability and validity) would seem to be very important.

6. Why did the authors select the US guidelines for obesity criteria based upon BMI? Work in New Zealand and the Pacific suggest that the criteria should be different, given the tendency for Pacific Islanders to have larger body frame sizes. It would be helpful for the authors to discuss this in order to sensitive future researchers in the continental U.S. to these measurement issues.

7. I found that the display of some of the data (such as in Table 3) was not as helpful as seeing the actual chi-square percentages and p-values. It was more difficult to rely solely on the text of the results for this information, especially since the text did not report on the actual proportions relating to each variable. From a community-planning perspective, however, it is often these percentages that help to drive material and program development. If the reason for the lack of data tables was the low sample sizes (and hence the instability of their findings), then this should be stated with an emphasis on the exploratory nature of the study.
8. In the Discussion section, it is important for the authors to state the limitation of self-report data, as well as any biases that might have been introduced via the telephone survey mode. In addition, I agree with the authors that age adjustment is a very important concern when comparing their data to the U.S. national average. This can be better dealt with by saying things like "Chamorros appeared to be less likely to adhere..."

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

9. On page 2 of the Introduction, first paragraph, the complete name of the CDC is the "Center for Disease Control and Prevention."

10. The first paragraph of the Results should be moved to the Methods section, and the last paragraph of the Methods should appear in the first paragraph of the Results.

Discretionary Revisions (which the author can choose to ignore)

11. I believe the more common federal term for the population is "Asian American & Pacific Islander" (as in the AAPI White House Initiative). I suggest the authors use that nomenclature in their paper.

12. Also, I believe it is more common to refer to the "continental U.S." rather than the "mainland," which has a perjorative tone to the term.

What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.