Reviewer's report

Title: Factors associated to hypertension prevalence, unawareness and treatment among Costa Rican elderly

Version: 1 Date: 13 January 2008

Reviewer: Theodore Kotchen

Reviewer's report:

1. Within each Health Area, how were subjects selected for study? What was the refusal rate for participation? How many subjects are in each of the following age groups: 60-69; 70-79; 80+? Were participants asked to give informed consent?

2. Please provide more information about the accuracy and reliability of the automatic, digital blood pressure measuring device. Was cuff size adjusted for arm girth?

3. The definition of "hypertension" is not clear. Is it the average of the 2 measurements or the higher measurement or the second measurement? Within the text, there seems to be some difference in the definition. If individuals have been told by a doctor that they have hypertension, but are not on antihypertensive medications and their blood pressure is not currently elevated, are they considered to have hypertension? What percent of hypertensives are defined by this criterion?

4. The Discussion refers to uncontrolled hypertension even in populations with good access to medical care. It would be instructive to include information about the control rates of hypertension control in these subjects.

5. How was dietary intake assessed?

6. The text states that 27% of hypertensives who are unaware of their condition are under treatment. Please explain.

7. More recent NHANES references about hypertension prevalence and control rates in the U.S. might be cited.

8. Compared to men aged 60-69, the odds of men aged 70-79 having hypertension are not significantly increased, in contrast to the age effect in women. Could this reflect selective survival of these older men?

9. The final paragraph in the manuscript, referring to different cut points, is confusing and seems to be a non-sequitor. What is the evidence that a blood pressure of 158/92 mmHg be a defining threshold? I strongly suggest deleting this paragraph.

10. The Discussion could be shortened.
**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.