Reviewer's report

Title: Burden and predictors of Hypertension in India: Results of SEEK (Screening and Early Evaluation of Kidney Disease) Study

Version: 1 Date: 20 December 2012

Reviewer: Laura Plantinga

Reviewer's report:

Farag et al. examined the prevalence of and risk factors for hypertension in a community-based, multi-center screening study in India. I have a few suggestions to improve the paper.

Major Compulsory Revisions

1. My main concern is whether this paper is of interest to nephrologists specifically or whether it is more of a general interest (either medicine or public health) article. The study itself was designed to screen for kidney disease, but this paper focuses mainly on hypertension with little mention of the kidney markers. In some places the paper discusses the cardiovascular risk of hypertension as well which may put it in the cardiology field. While I think hypertension is kidney disease topic, I would suggest that the authors emphasize the kidney-related aspects of the study for this journal.

2. I think the introduction could be shortened considerably. Focusing on the kidney disease consequences of hypertension (see #1) would help.

3. While the sites are described well, there is no information on how subjects were recruited. Were there public announcements? Did recruitment focus on those at high risk for kidney disease? Or were such people more likely to volunteer? This is important to assess the generalizability of this study.

4. The Results need their own heading. Additionally, tables and figures need to be numbered in the order in which they appear---this caused considerable confusion in reading the paper. All tables and figures need more descriptive, stand-alone titles.

5. Table 3: rather than presenting computer output please make a table that has the ORs, 95% CIs and p-values with variables described fully.

6. In Figure 1, are these values age-adjusted? It may be more useful to see center differences after adjustment for age (and perhaps other key variables). Otherwise it is unclear if these differences are due only to characteristics of patients (rather than of the site).

7. Do not repeat numbers in the text that are already in the table; this makes the results section even more dense and hard to read.

8. The awareness results feel tacked on. Perhaps this should be a main aim of the study?

9. Do not report full results in the Discussion---p-values, etc, are not necessary
10. The authors mention in the discussion that prevalent hypertension could be both a consequence and cause of kidney disease. But since the authors present high serum creatinine and albuminuria as risk factors for hypertension in their model, I think it should be clarified earlier that kidney markers and hypertension are merely associated.

11. The discussion should compare the risk factors in India to other nations---to illustrate that the risk factors are the same as those seen elsewhere, meaning prevention should be targeted to the same populations.

12. The authors state “we observed a low awareness and control of HTN.” Where are the control data?

13. The concluding statement about limiting salt intake is not supported by the data presented.

Minor Essential Revisions

1. What does “Self reported history of medications was verified” mean? Were medication bottles checked or were medications simply reported and those that did not match known medications thrown out?

2. Be careful about wording that involves “risk” (see Figure 2 for example). Only cross-sectional data are available, so only prevalence can be assessed.

3. Please describe the “stepwise selection process” used in building the model. Was this a computer-assisted process or was this a matter of judgment as to clinical and statistical significance?

4. Was center added as a covariate (fixed effect) or as a random effect?

5. I am not sure what the purpose of Table 4 is and the title is not clear. I think this can be removed.

6. In the discussion it is noted that sedentary occupation was more prevalent in those with hypertension and that smoking was less prevalent in this group---are these adjusted for age? I suspect age is responsible for these findings.

Discretionary Revisions

1. How far apart were the two BP measurements?

2. Did the authors use eGFR instead of serum creatinine in any models? The calculation was discussed but I could not find the results using this.

Level of interest: An article of importance in its field

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

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