Reviewer's report

Title: Individual and neighborhood-level socioeconomic characteristics in relation to smoking prevalence among black and white adults in the southeastern United States: a cross-sectional study

Version: 1 Date: 22 September 2011

Reviewer: Peter Baade

Reviewer's report:

This manuscript describes an interesting study in which the authors describe the associations between current cigarette smoking prevalence and individual-level and neighborhood-level characteristics in a large group of black and white adults.

Compulsory revisions

1. I wasn’t sure why the authors presented all the results stratified by sex and race. This would seem to substantially limit any comparisons between males and females, and black and white, which I would have thought would be of major interest. Indeed, in the discussion (page 9, first paragraph) the authors suggest that the associations varied to some extent by race and gender. This would suggest interactions were included in the models, however the stratified approach precluded that option. Also, the authors’ analytical approach mean that comparisons of the strata-specific prevalence ratios (as has been done on page 7, third paragraph) can only be descriptive, and not tested statistically.

2. While the authors acknowledge in the results (page 6, first paragraph) that household income and educational attainment were generally low among both blacks and whites, this is not mentioned later in terms of how the results of this study can be generalized to the broader community. Comments such as those made in the last paragraph on page 9 would seem to be more appropriate if derived from a population-based cohort, rather than the current study cohort.

3. Given the stated study objectives would seem to be an ideal candidate for the standard multilevel modeling approach, it would help if the authors provided more justification for the specific analytical approach that they used.

Minor Essential Revisions:

4. First paragraph (page 3) – “recent work has begun to examine….” should include some references.

5. First paragraph (page 3, line 4). For clarity and consistency, “…increased smoking across…” should be “….increased smoking prevalence across…”.

Discretionary Revisions

6. The first paragraph under statistical methods (page 5) would seem better suited to the results section.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:
I declare that I have no competing interests