Reviewer's report

Title: Socio-demographic factors associated with smoking and quit of smoking among 426,344 pregnant women in New South Wales, Australia

Version: 1 Date: 22 September 2005

Reviewer: Tim Coleman

Reviewer's report:

General
Peer Review Report on Social-demographic factors associated with smoking in pregnancy ....

General Comments
Smoking in pregnancy remains a substantial public health problem and information on the characteristics of women who continue to smoke in pregnancy is required. Consequently the majority of information contained in this report answers an important question and is both important and publishable. In places, this manuscript is slightly repetitive and this could be improved before publication.

Major Comments
1 I do not think that the comparison between women falling into the categories “heavy” and “light” smoker is particularly worthy of publication. To my knowledge this distinction has no proven clinical significance and hence the implications of being in either category are unclear. Additionally at a different point in the manuscript, the authors allude to the fact that it is difficult to validate women’s reports of heaviness of smoking during pregnancy. This means that biochemical validation of the heaviness of smoking is probably need to objectively allocate women to different categories. Additionally as women’s rates of metabolising nicotine increase in pregnancy and this is likely to have an impact on the number of cigarettes smoked, it is difficult to state in advance what constitutes heavy and light smoking in pregnancy.

2 Tables 1 and 2 present factors associated with continued smoking and smoking cessation during pregnancy respectively. This is fairly repetitive and, as one might expect, very similar explanatory factors are associated with these two outcomes in multi-variate analyses. The only meaningful differences between the two tables of results are the directions of associations. Presenting results in this way does little to enhance the clarity of the paper and I would recommend removing the analysis of factors associated with smoking cessation during pregnancy. The public health problem for which we need a solution is smoking during pregnancy and consequently, it makes more sense to identify the factors associated with this and the characteristics of this group of women.

Minor points
Title: “quit of smoking” is cumbersome.

Abstract: The results section of this is fairly repetitive and could be improved by reducing analyses as stated above. The conclusions section in the abstract does not make reference to the unique findings of the survey and could be made without the study having been performed.

3rd paragraph, page 9, final sentence: This is unclear.

Discussion: A great deal of the discussion deals with the harm that smoking in pregnancy causes,
but this is most appropriately dealt with in the background section to the paper justifying the need for the survey. There is some discussion of previous intervention studies, but the relevance of these could be made more clear to the current manuscript. Perhaps the discussion section should discuss the novel, interesting findings of the survey more clearly. For example, the discussion could suggest components of smoking interventions that are appropriate socio-economically disadvantaged women who do not engage with ante-natal care services early in their pregnancy.

Another interesting finding from the survey of which little is made is that smoking rates amongst young pregnant women are much higher than those amongst young women in population generally. This may be a reflection of the finding from other surveys, that pregnant women who smoke in pregnancy may have very different attitudes and beliefs compared to others.* I feel that if the authors gave this finding more prominence, it would improve the utility of their manuscript greatly.

* See Owen and Penn Health Development Agency surveys on UK HDA website.

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:

NO COMPETING INTERESTS