Reviewer’s report

Title: Cardiovascular risk among Aboriginal and non-Aboriginal smoking male prisoners: Inequalities compared to the wider community

Version: 2 Date: 11 July 2011

Reviewer: Vittoria Conti

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GENERAL POINTS

This observational study aims to assess the prevalence of specific cardiovascular risk factors among a population of Aboriginal and non-Aboriginal male prisoners and to compare the findings with data obtained in general population.

Although the topic of the study is really relevant and interesting, some aspects need to be clarified, in order to highlight the quality of the present study, especially in relation to the design of the study and the adopted methodology.

The title and abstract do accurately convey what has been found.

The data are sound enough and well controlled.

The discussion is correctly constructed, and the conclusions clearly stated.

The writing is acceptable, but the text needs sub-editing in places to improve the readability of the work.

My major concerns regard the methods.

SPECIFIC POINTS

Major Compulsory Revisions:

a. I do not think that one single measurement of the blood pressure (at the baseline interview) is the best way to identify subjects with arterial hypertension. It is generally diagnosed on the basis of a persistently high blood pressure. Blood pressure is characterized by large spontaneous variations both during the day and between days, months and seasons. Therefore the diagnosis of hypertension should be based on multiple blood pressure measurements, taken on separate occasions over a period of time (See Journal of Hypertension 2007, 25:1105–1187). In addition, have you thought to enroll individuals who were diagnosed as having arterial hypertension BEFORE the study enrollment, and then who were already in therapy with antihypertensive drugs?

This lack of data needs to be addressed by the authors since this could be considered a major flaw in the study.

b. In the methods section the authors should clearly explain how (and where) they have obtained the data about the general population. In addition, they should clarify if the way adopted to identify subjects with arterial hypertension (and with the others CVRF) in the study population is the same used for general
population.

c. The authors should provide a correct definition of ‘disadvantaged socioeconomic groups in the general population’. It is not clear for the reader if the two groups (prisoners and general population) were comparable not only for age and gender (‘men of similar age in the community’: mean age?), but also for other characteristics.

d. Statistical analysis section is missing.

e. Why did the authors refer to ‘Nicotine Replacement Therapy’? Did the protocol of the present study include a smoking cessation program?

Minor Essential Revisions

a. Abstract: In the background section the authors should briefly describe previous related research, identify the questions that are still unanswered and propose exactly what the paper will address. I would slightly modify this part of the abstract.

b. Introduction: ‘In addition to all prisoners in this study being a current smoker (with 70% smoking 20+ cigarettes per day), the prevalence of other CVRF was very high’: this sentence is not clear. Please, clarify.

c. Methods: ‘Hypertension was defined as a systolic reading of 1400mmHg or more’: please, correct this data.

d. Some spelling mistakes need to be corrected.

Discretionary Revisions

a. ‘This trial is registered with the Australian New Zealand Clinical Trials Registry #12606000229572. It was funded by the National Health and Medical Research Council, the NSW Department of Health, and the Queensland Department of Health. Nicotine Replacement Therapy was provided free-of-charge by GlaxoSmithKline’: I would insert this sentence in the ‘Informed consent and ethical approvals’ section.

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

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.