Reviewer’s report

Title: Prevalence and Associated Risk Factors of Chronic Bronchitis in First Nations People

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Reviewer: Pietro Pirina

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In the present manuscript the authors evaluated the prevalence of chronic bronchitis in two Canadian Aboriginal Communities and the different risk factors associated with an increased prevalence of the disease.

Specific comments

1) The mean age of the study population was 34.8 ± 14, that is low for a disease such as chronic bronchitis which has its highest prevalence in the fifth, sixth, seventh decade of life. If the authors would have administered the questionnaire to subjects of 45 years of age or older (instead to 18 years old), the prevalence of the disease would have been much higher. This doesn't mean that it is not helpful to make an early diagnosis of the disease, but chronic cough with phlegm in a 30 years old patient is more likely to be linked to bronchial asthma rather than to a chronic bronchitis. In other words, in this range of age the probability of misdiagnosis is very high if you do not complete the diagnostic process with a functional and clinical investigation of the patient. It is very risky for a doctor making a diagnosis of chronic bronchitis in a 30-year-old patient without an instrumental clinical approach aimed to exclude a diagnosis of asthma.

2) It is not reported in the paper how the information on the presence or absence of respiratory allergies was collected in the questionnaire. Although there are no informations on the total IgE, skin Prick test and an instrumental diagnosis of asthma, informations on the presence or absence of nasal symptoms may be useful as the comorbidity between asthma and rhinitis it is usually very high. A targeted questionnaire evaluating the prevalence of chronic bronchitis in a population should be able to exclude, as far as possible, the allergic subjects. Chronic cough can be a symptom of bronchial asthma.

3) The prevalence of chronic bronchitis is usually higher in men than in women. Is this inversion of the ratio a fact already known among aboriginal Canadians? How is the ratio in the general Canadian population? What are, according to the authors, the reasons for this higher prevalence in women than men? Moreover, it seems that the information about consumption of cigarettes in terms of pack-years it was low in this study. What assumptions can be made?

4) What do the authors mean with "personal non-traditional use of tobacco"? Given that the prevalence of current smokers was higher among men, how the authors explain the higher prevalence of chronic bronchitis in women than in men?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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