Reviewer's report

Title: Prevalence of asthma and allergies in the Greek-Cypriot and Turkish-Cypriot communities in Cyprus: a bi-communal cross-sectional study.

Version: 5 Date: 26 March 2013

Reviewer: Alejandro Videla

Reviewer's report:

Major compulsory reviews

Abstract:
The phrase “Controlling for risk factors” should be replaced with a phrase commenting only the differences that remained significant in the adjusted analysis. The phrases referring that the pattern remained higher for a group can only be applied to adjusted analysis. If the OR were higher for a group but the difference did not show statistical significance, the purpose of the statistical adjustment is lost.

The last phrase is not clear. The message so far had been that the presence of risk factors was more frequent in the G/C community but against published literature this community had a lower prevalence of respiratory outcomes. I think a possible rephrase could be: “Even as risk factors were not clearly more frequent in any community, the G/C children had more risk factors and had a lower prevalence of asthma and allergies.”

Prevalence of asthma and allergic symptoms in the G/C and T/C communities

Correct multivariate for multivariable

The part stating that the ORs did not change their pattern but lost significance in adjusted analysis should be rephrased. I.e: “After controlling for participants’ characteristics in multivariate models, prevalence ratios were different for ….. . Associations for…….did not show statistical significance”.

Prevalence of asthma and allergic symptoms in the G/C and T/C communities

“After repeating” should be rephrased as “In a subgroup analysis of children from both parents of Cypriot the results remained largely unchanged (Table 3). The prevalence in the T/C decreased for all study outcomes…”

Minor essential revisions

The paper needs extensive English editing, I have noted some corrections but I think the writing style should be edited to obtain a more concise and clearer phrasing. I am presenting alternatives in several cases to guide the authors. Maybe a correction by an English native speaker could be useful.

Abstract

Aim: To estimate the prevalence among…

Methods: 13-14 years. Relative differences…
Results: among children in the G/C compared with the T/C community. Surprisingly, the proportion reporting family history of allergy almost doubled among the G/C group. Controlling for risk factors did not modify

Background:
“A characteristic example…” I believe a clearer version could be “In Germany, the population of West Germany presented a 150% increase of prevalence in the pre-unification period while the East Germany population had a marginal increase in the same period. The difference narrowed gradually after re-unification”
“…were recently reported to be rising”

Definition of outcome variables
“The Turkish version was tested …parents and found to be concordant”

Definition of predictor variables
“animals kept in the household”

Population characteristics
“While many presumably protective factors as per the hygiene hypothesis”

Prevalence of asthma and allergic symptoms in the G/C and T/C communities
“Lower prevalence was observed for all respiratory outcomes”
“…a slightly higher prevalence of current eczema symptoms was found among”
“Despite the much lower…” this phrase is too long and should be shortened into several parases.

Association of asthma and allergic symptoms with predictors involved in the hygiene hypothesis
“suggest a protective effect absent in the older age-group”
“While no overall effect was observed in this group, there was some evidence…”
“the association with maternal smoking during pregnancy is restricted to the T/C group..”

Discussion
“Refuting our original hypothesis”
“allergies was found”
“increased risk of allergies in the children”
“It is likely that allergic diseases were underdiagnosed in”
“This may be a consequence of less access of the previous generation of T/C to specialized primary care and therefore less detection of disease or alternatively the result of using other diagnostic terms…”
“Eczema was more frequent in the G/C community, differing from the prevalence trend of …”
“Probably genetic susceptibility or unknown environmental risk factors might reinforce (?) the …”

Omit “there are discussed below in turn”

“…increased the risk by 40%”

“a significant risk of wheezing with exposure to tobacco smoke”

Conclusions

“…reinforced this difference”

**Level of interest:** An article of importance in its field

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

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