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EDITORIAL

Asthma prevalence trends in Chile: a prelude of the Global Asthma Network findings?



In one of the most seminal papers on the prevalence and its trends of asthma in children worldwide, Asher et al.¹ showed that, comparing 1994 with 2002, there was some indication that in areas where asthma prevalence was highest in 1994, the trend was to stabilization or even reduction; while in areas with low prevalence in 1994 the trend was to increase. The bottom line would be that there is a maximum prevalence potential in each population which could have been reached in certain areas (such as in some English-speaking countries -apparently not due to translation bias),² while in others this was not achieved in 2002. The prevalence of asthma in Latin American countries was quite high at that time, and the results from the study by Mallol et al.³ in this issue of *Allergologia et Immunopathologia* seem to confirm the idea that there can be a maximum prevalence of asthma (when all predisposed individuals show symptoms). In fact, the results from Santiago (Chile) included in the aforementioned paper show that the prevalence of current symptoms of asthma was 11.1% in 1994; 16.6% in 2002; and 13.4% in 2015. Although the authors state that there is a significant increasing trend according to the statistical analysis, it is difficult to say what is the trend between 2002 and 2015. Probably not an increase, anyway. Interestingly, the results of the prevalence of asthma diagnosis follow a parallel path (11.5% in 1994; 16.6 in 2002; and 13.4% in 2015).

When considering factors associated to asthma symptoms and comparing them between 2002 and 2015, it is striking that smoking was not risk factor for asthma symptoms -maybe due to the healthy worker bias-. But what is quite alarming is that the proportion of adolescents who smoke which was high in 2002 (21.8%) increased even higher by 2015 (28.9%).

In the current issue of *Allergologia et Immunopathologia* there is also a paper on smoking among adolescents in several Latin American cities,⁴ such as Córdoba and Corrientes (Argentina); Curitiba and Uruguiana (Brazil); Havana (Cuba); Veracruz (México); and Ciudad del Este (Paraguay).

When answering to the question: “Did you smoke at least one cigarette every day for 30 days?”, 13.9% adolescents answered positively, what is much higher than the one found by the Chilean group (although their definition of smoking is not clearly indicated in their paper).

Returning to asthma prevalence and risk factors in Chile, the only consistent risk factor (of those studied) in both years in which an environmental questionnaire was applied (2002 and 2015) was female gender. This has been consistently found,⁵ and while it is male gender which is the risk factor of wheezing during the first years of life; female gender constitutes the risk after puberty. Hormonal changes and gender-specific differences in environmental exposures have been used to explain this situation.

In summary, in Santiago (Chile) a kind of plateau of asthma prevalence might have been reached between 1994 and 2015. Is this a prelude of the findings of the Global Asthma Network which will be available in the months to come?

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