Authors' reply

Respuesta de los autores

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To the Editor:

After thanking Arnedo Pena et al for their interesting comments about our article¹ and, in particular, the heartfelt tone in which they are made, we would like to make some clarifications.

As the authors point out, the article "Incidence of asthma and risk factors in a cohort of schoolchildren aged from 6-7 years old to 14-15 years old in Castellón (Spain) following the International Study of Asthma and Allergies in Childhood (ISAAC)" was published in *Medicina Clínica* (30 June 2007) after we sent our original article to *Archivos de Bronconeumología*, therefore, we unfortunately did not have any news of your interesting paper, partly comparable in objectives and methodology to ours and that would have been enlightening to discuss.

The ISAAC study (http://isaac.auckland.ac.nz) does not contemplate the follow up of cohorts among its objectives, but bases its methodology on the transverse incisions to different groups of children at different times. Indeed, the publication of the main results obtained in Spain was performed with changes in the prevalence of asthma between phases I and III (2 transverse incisions to different groups of children aged 6 to 7 and adolescents aged 13 to 14, in 1994-95 and 2002-03).³ In this study, and in the ISAAC methodology, we base our affirmation on ISAAC not being able to estimate the incidence of asthma.

A different question is that some participating groups in the ISAAC study had coherently used the infrastructure and information generated by their participation to monitor the 6 to 7 year old schoolchildren in phase I in 1994, repeating the study in 2002, a design which does allow for estimations of the incidence rate supplied by the authors.

The authors of the letter rightfully regret not having the absolute number of asthma cases, which could help in understanding the incidence rate differences between Huelva and Castellon. During the whole monitoring period, a total of 37 cases appeared (10.1%) among the 365 that presented no signs of asthma in the first study. The new cases provided 244 people-year of monitoring, that together with the 2,113.6 people-year of monitoring for the rest add up to a total of 2,357.6 people-year. The annual incidence, therefore, is 15.69 per 1,000 people-year (37/2,357.6). If we had assumed the start of their asthma at halfway through the period, the monitoring time of the cases would have been reduced by half, 122 people-year and the annual incidence rate would have been 16.55‰.

As far as the possible explanations for the differences in asthma incidence between the two cities, we essentially agree with the authors. However, we believe that all the assumptions indicated would reaffirm the difference found between both cities. With respect to the case definitions, the requirement of wheezing in the last year, accompanied by the positive bronchial provocation test, theoretically would be a more restrictive definition of asthma, and would therefore have a lower incidence. The youths from Huelva were older in the monitoring, when theoretically the asthma would begin to reduce its incidence. The larger proportion of males would also imply a lower incidence of asthma, given that it is more frequent in women at that age. The losses in the follow up are slightly lower in our study (55% response) and the lack of response is analysed discarding the existence of selection bias. All of this makes us believe that there are real differences in the incidence of asthma between both cities.

We congratulate ourselves, together with the authors of the Castellon study, on having been able to contribute solid estimations of asthma incidence in children and teens. These data are coherent with the international evidence already published on the important variability of this disease, both within a country as well as among different countries.^{4,5}

References

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