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CORRESPONDENCE

Questionnaires in asthma epidemiology

To the Editor:

In epidemiological studies of asthma, questionnaires are widely accepted methods of identifying affected subjects. International Study of Asthma and Allergies in Childhood (ISAAC) is an international project aiming to determine the prevalence of asthma, allergic rhinitis and eczema in children living in different countries [1].

The written questionnaire includes questions on respiratory symptoms such as frequency and severity of wheezing and cough. It ends with a question about diagnosed asthma.

Published results of the worldwide ISAAC study pointed to a large variation in the prevalence of self-reported symptoms of asthma [2–4]. The question concerning whether the child had ever had asthma ranged 1.6– 28.2%. In our town, physicians are reluctant to diagnose children as having asthma, if they have recurrent wheezing.

The frequency of asthma in Curitiba was 6.5 and 8.6%, respectively for 6-7 and 13–14 yr olds using the ISAAC questionnaire. This is definitely an underestimation of the prevalence of asthma.

Table 1. – Frequency of active asthma symptoms

Criteria	Age group	
	6–7 yrs (n=1666)	13–14 yrs (n=2946)
More than four attacks of wheezing in the last 12 months	85 (5.1)	101 (3.4)
One to three attacks, in addition to disturbed sleep due to wheezing	161 (9.7)	190 (6.5)
One to three attacks, never woken with wheezing, but with dry cough at night and wheezy after exercise	15 (0.9)	50 (1.7)
Total	261 (15.7)	341 (11.6)

Data are presented as number with percentages in parentheses.

Thus, to assess a more realistic prevalence, we selected questions that could be considered strongly suggestive of a diagnosis of asthma. They are presented in table 1.

This cumulative frequency was then named "probable asthma". Although there is a tendency to pick up more severe asthma, it may not detect all cases of asthma. However, it is more informative than relying on the question "have you ever had asthma?" We suggest that "probable asthma" is closer to actual figures and may be helpful in comparing point prevalence of active asthma in different countries.

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