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Abstract 15734

Epidemiology Of Bronchial Asthma Among School Children In Aljouf City, Kingdome Of Saudi Arabia

A.S. Al frayh
 King Saud University - Riyadh/SA

Presentation preference: Either Poster or Oral

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Type: **Scientific Abstract**

Category: **14.02 - Pediatric Asthma (PEDS)**

RATIONALE: There is a global increase of asthma prevalence on the last four decades. Wheezing among children in Saudi Arabia was estimated to be 17%. Epidemiological research showed that variation of prevalence from region to region within the country may be explained partially by variability of indoor and outdoor allergens. The objective of the study was to determine the prevalence of bronchial asthma among Saudi school children in Aljouf City.

METHODS: Saudi children in elementary and intermediate school at Aljouf Province, North Western of Saudi Arabia. A total of 8000 school boys and girls were randomly selected and enrolled in the study, which represent 9% (8000/60,000) of the total number of pupils, boys and girls (based on the prevalence rate of bronchial asthma among school children reported earlier in Saudi Arabia).

Self administered pre-tested questionnaire directed to parents

Affirmations

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was used. The questionnaire was previously standardized and validated to the Saudi Community. It comprises 35 questions on history and a family history of atopic asthma, environmental asthma, exposure to animals, pet, and tobacco, and use of antiasthma medications. Data were analyzed using the statistical program SPSSIPC to calculate Chi-square differences.

RESULTS: A total of 6500 questionnaire were returned, 500 were excluded and 6000 were analyzed. The ages of pupils ranges from 6-15 years, 53% boys and 47% girls of the total sample.

The cumulative prevalence of questionnaire diagnosed asthma (QDA) was 11% among boys and 10% among girls. The mean age at diagnosis was 4.2 + 1.2 years. The overall prevalence of physician diagnosed asthma (PDA) was 9% (540/6000) among boys and 8% (480/6000) among girls.

There was a significant association of QDA with certain respiratory symptoms (cough and wheeze) and atopy (allergic rhinitis, eczema, atopic dermatitis) in subjects and their family members.

Validation of the questionnaire against physician diagnosis was 80%. The specificity of questionnaire was 96%.

CONCLUSIONS:

The prevalence of asthma in Aljouf is comparable to prevalence rate in other regions of Saudi Arabia, Jedda, Riayadh, and Dammam) however there are some regions with much higher prevalence rate like Hail, 22.9%, Jizan 24.3% and Qassim 15.1%. The prevalence of asthma is influenced by family history of asthma, other atopic manifestations and environmental factors.

The future of asthma epidemiology lies in the development of prevention strategies. The challenge of the future is the development of intervention trials to find factors which truly cause asthma.

3. The Presenting Author is an Early Stage Investigator:

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