Bronchial Asthma in Indian children - The most neglected disease

Bronchial Asthma is an important public health problem at the global level[1]. There have been few studies among school age children both in urban and rural areas in India, but most of them are localized regional studies and depended on questionnaires, which has limitations, hence do not give true picture of asthma in the community. Bronchial asthma is not a disease confined only to respiratory system, but also has systemic effects. If not identified early, particularly in a child can lead to increased morbidity and mortality. The burden of asthma affects the patients, their families, and society in terms of lost work and school, lessened quality of life, increased emergency visits, hospitalizations and deaths[2]. During childhood period, bronchial asthma is often under diagnosed and under treated, which may lead to severe psychosocial disturbances in the family1. The proportion of school children suffering from bronchial asthma has increased more than double in the last ten years. The increase in the prevalence of asthma in children will have serious implications in their adult life as 40% of children with trivial wheeze and 70-90 % with troublesome symptoms continue to have symptoms in mid adult life[3].

Childhood bronchial asthma varies widely from country to country. At the age of 6-7 years, the prevalence ranged from 4 to 32 %2. In India, the mean prevalence of bronchial asthma in 6-7 age group children was found to be at 7.24± 5.42% in a systematic review by Ranabir Pal and team[2].

All these studies do not give a true picture of the prevalence of asthma in children and do not talk about the treatment they are receiving and the response to the treatment, if given any. Questionnaire[4] based studies target mostly the school going children, leaving a large population of illiterates and urban slum children because of which we will never get a true prevalence value. The understanding of these questionnaires by the students or their parents and answering thereafter is not reliable. Most of these studies have no spirometric confirmation. Spirometry is a performance based investigation, and most of the children do not perform adequately. In children with asthma, sometimes the spirometric values may be normal. So, studies based only on spirometry may also not give true picture of prevalence of asthma.

Physician or doctor based diagnosis of asthma also has many pitfalls. Various terms are used to describe the condition as wheezy bronchitis, asthmatic bronchitis, chronic cough, nocturnal cough or wheeze, allergic bronchitis, airway disease etc., which are very confusing and do not serve the purpose as there are no well defined diagnostic criteria, particularly in our country.

Because of all these factors, bronchial asthma in a child, in India, is both under diagnosed or over diagnosed as well as under reported and under treated. With increasing ambient air pollution, rapid urbanization, industrialization, changes in life styles, increasing psychological stresses, even in young children, the prevalence of Bronchial asthma is definitely going to rise in future.

It is time that a comprehensive, population based, prospective and observational study be planned and executed. Extending over a period of two to three decades, study should include evaluation of causative factors of bronchial asthma, particularly related to regional differences in India. The study should also look into associated co-morbidities of asthma, diagnostic methods being used, management criteria followed and last but not the least, whether we are achieving the goal of our treatment, that is the control of asthma in that particular child. The last aspect is the least explored area, which ultimately will speak of all our efforts to see an asthmatic child to perform equally in our society, have a normal childhood equal to his friends and siblings, and first of all to allow the asthmatic child to take a normal, uninterrupted breath.

Address for correspondence: Dr. C N Prasad, Professor, Department of Pulmonary Medicine, Prathima Institute of Medical Sciences,Karimnagar,Telanagana,India.

Email: seeprasad@gmail.com

REFERENCES

1. Kumar GS, Roy G, Subitha L, Sahu SK. Prevalence of bronchial asthma and its associated factors among school children in Urban Puducherry, India. J Nat Sci Biol Med. 2014; 5(1):59-62.
2. Pal R, Dahal S, Pal S. Prevalence of bronchial asthma in Indian children. Indian Community Med.2009; 34(4):310-6.
3. Qureshi UA, Bilques S, Ul Haq, Khan MS, Quireshi MA, Qureshi UA. Epidemiology of bronchial asthma in school children (10-16 years) in Srinagar. Lung India.2016;33(2):167-73.
4. Asher MI, Keil U, Anderson HR,Beasly R, Crane J, Martinez F, et al. International study of asthma asnd allergies in childhood(ISAAC): Rationale and methods. Eur Respir J.1995;8:483-91.

Please cite this article as: Prasad C N. Bronchial Asthma in Indian children - The most neglected disease.Perspectives in medical research 2016;4:2:1.

Sources of Support: Nil,Conflict of interest:None declared