
Bronchial asthma has significant impact on childhood activities, schooling, dietary practices, in addition to the financial burden on the family. We were interested in assessing the socio-clinical profile of asthmatic Saudi children, and the impact of their symptoms on their life styles. A cross sectional, descriptive study was conducted at the Pediatric outpatient clinics of two major hospitals in Riyadh (Riyadh Medical Complex (RMC) and Prince Salman Hospital (PSH)), among asthmatic Saudi children of both sexes.

Two hundred participated in the study; 120 (60%) from RMC Pediatric Hospital and 80 (40%) from PSH, based on the average patients visiting the Asthma clinic per month from both hospitals. The sample composed of 120 (60%) males and 80 (40%) females. Their ages ranged between 5 months to 12 years (mean 6.4 years, SD ± 3.9). Their diagnostic age ranged from 1 month to 7 years (mean 1.6, SD ±1.36). Almost half were students 98 (49%), their grade levels ranged from Kindergarten to Grade V; 20 (10%) were supposed to be registered at school but were not.

Of the total participants, 79.0% had a positive family history of bronchial asthma. The number of family members those suffering from bronchial asthma ranged from 1 to 10 (mean 2.3, SD ± 1); 39.0% reported a currently smoking family member, of whom fathers constituted 75.5% and mothers 2.4%; 85.5% smoked cigarettes, 6.0% shisha, and 8.5% both.

Reported triggering factors were inhaled irritants (eg. tobacco smoke, incense, air fresheners, fumes or other) 98.5%, cold weather 96.0%, viral illness 95.5%, Exercise 70.5%, pets (eg. cats, birds and dogs) 56.5%, Stress 42.5% and pollen 40.5%.

Thirty one percent had been hospitalized during the previous year, among those 6.5% had been admitted to Intensive Care Unit (ICU). The frequency of admission into hospital in the previous year was once among 62.9%, with duration of under one week among 77.6%. During hospitalization, mothers accompanied 98.0%, sisters 1.5%, and a relative 0.5%. When the mother accompanied the child in hospital, a relative took care of her other children in 93.9%.

Regarding adverse effects on the child’s lifestyle, 97.5% reported inability to sleep well during the asthma attack, and 98.0% could not enjoy their holidays outside their homes because of asthmatic triggers. Frequent absence from school was reported by 93.9%; 76.5% reported embarrassment of using inhalers at school to avoid comments from their friends; 71.4% reported lower academic achievement; 42.9% had been absent from school between 4-8 days, 36.7% reported absence from exams.

Among mothers’, 99.0% reported limitations on their social life, 98.0% found difficulty in asking their friends and relatives not to smoke in their house, 95.9% reported that teachers did not know how to deal with the asthmatic child if they developed an attack at school. Among 34 (17.0%) employed mothers, all reported frequent absence from work as a result of their asthmatic child’s illness.

- Reported by: Dr. Aziza A. Donques, Dr. Randa M. Nooh (Field Epidemiology Training Program).

Editorial notes: Bronchial Asthma is considered the most common chronic childhood disease. It is the major cause of school absenteeism, contributing to an estimated 10 million missed school days annually.

Asthma is a major problem in the Kingdom of Saudi Arabia. Its prevalence has risen from 8% in 1986 to 25% in 2001, affecting about 10%-15% of school age children.

Asthma in children has a substantial impact on health and quality of life, such as restriction of activities, interrupted sleep, disturbed routines, increased stress, and poor school performance. A study assessing the impact of bronchial asthma in children in India

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Table 1: Impact of bronchial asthma on lifestyles of asthmatic children and their mothers: (N = 200)

<table>
<thead>
<tr>
<th>Impact on asthma children in general:</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot enjoy holiday outside home</td>
<td>196</td>
<td>98.0</td>
</tr>
<tr>
<td>Cannot sleep well during asthma attack</td>
<td>196</td>
<td>97.5</td>
</tr>
<tr>
<td>People don't understand that I cannot cope with Perfume/smoke</td>
<td>185</td>
<td>92.5</td>
</tr>
<tr>
<td>Cannot participate in sports or other physical activities</td>
<td>151</td>
<td>75.5</td>
</tr>
<tr>
<td>Cannot own pets</td>
<td>148</td>
<td>74.0</td>
</tr>
<tr>
<td>Frequent visits or hospitalization</td>
<td>115</td>
<td>57.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact on asthma schoolchildren: (n = 98)</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashamed to use inhaler at school</td>
<td>75</td>
<td>76.5</td>
</tr>
<tr>
<td>Frequent absence from school</td>
<td>92</td>
<td>93.9</td>
</tr>
<tr>
<td>Absence from Exams</td>
<td>36</td>
<td>36.7</td>
</tr>
<tr>
<td>Lower level of achievement in studies</td>
<td>70</td>
<td>71.4</td>
</tr>
<tr>
<td>Admission into hospital</td>
<td>50</td>
<td>51.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact on asthma children mothers (n = 200)</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limitations on social life</td>
<td>196</td>
<td>99.0</td>
</tr>
<tr>
<td>Difficult to ask friends &amp; relatives not to smoke in house</td>
<td>196</td>
<td>98.0</td>
</tr>
<tr>
<td>During hospitalization, family and other children suffer</td>
<td>195</td>
<td>97.5</td>
</tr>
<tr>
<td>The instruments used for treatment are costly</td>
<td>194</td>
<td>97.0</td>
</tr>
<tr>
<td>Difficult to ask friends and relatives not to use perfume &amp; incense in my house</td>
<td>194</td>
<td>97.0</td>
</tr>
<tr>
<td>Teachers do not know how to deal with asthmatic child if he or she developed BA attack at school (schoolchild)</td>
<td>94</td>
<td>95.9</td>
</tr>
<tr>
<td>Frequent absence from work (employed mothers n = 34)</td>
<td>34</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Assessment of Knowledge, Attitude, and Practices of Ministry of Health physicians toward surveillance system in Riyadh region, cont

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diseases. This is similar to the knowledge of disease notification among doctors in government hospitals in Benin City, Edo State, Nigeria (11.9%), and indicating poor doctor's knowledge.4

Lack of sufficient training and lack of clear written manuals may explain the poor knowledge of the physicians, and calls for periodic training courses in surveillance.

Difficulties faced by the physicians in notification in addition to their low Steps taken to overcome such difficulties may include undergraduate education on surveillance, training courses, clear written manuals, and multidisciplinary cooperation to improve communication with patients. Simple, short and readily accessible forms may help improve reporting rate.

Feedback in response to notification, ensures its effectiveness. The low level of feedback needs to be studied separately, to determine factors that affect the feedback system and ways to overcome the difficulties.

References:

Impact of Bronchial Asthma Symptoms on the Life style of Asthmatic Saudi Children, Riyadh, Saudi Arabia, cont.....

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revealed that asthma has an impact on the social, educational and emotional aspects of lives as well as financial burden on families. Among 162 children with Bronchial Asthma, restrictions in going out were reported in 48.8%, 59.8% of parents reported preventing their asthmatic children from attending social functions, and dietary restriction in 94%. Regarding the impact on parents work, 26.4% of fathers and 50% of working mothers took leave for 5 days (range 3.3–18) due to their child’s illness. Restriction of family’s social life was reported by 24.2% while 19.4% reported adverse effects on the family’s holidays. Absence from school showed a median of 4 days in the preceding 6 months.4

A study of the socioclinical profile of asthmatic children and the impact of asthma on their lifestyle was carried out in Al Majmaah, KSA, among 606 asthmatic children under 13 years old. Absence from school for about 1-3 weeks was reported by 8 (6%) with mild asthma, 6 (23%) with moderate asthma and 9 (39%) with severe asthma. Bronchial Asthma adversely affected their sleep pattern and schooling and resulted in overstay in the hospital.5

Our findings are in concordance with previous studies. A major impact of asthma was observed on children's activities, such that 75.5% could not participate in sports or other physical activities. Coughlin reported that sports affected 64% of asthmatic children.6

Asthma is one of the common reasons for missing school. In our study 93.9% reported frequent absence from school, with a longest period of 24 days; 36.7% reported absence from exams; 10.5% of asthmatics who were supposed to be at school were not, which is a relatively high frequency of missing education. Speight, et al observed that, since starting school, one third of 7 year old asthmatic children had missed more than 50 days of school as a result of asthma symptoms, which is three times higher than usual absenteeism.4

Absence from school may also be related to social stigma, since more than two thirds (76.5%) of schoolchildren in our study were ashamed of using Ventolin inhaler at school.

This study confirms the impact of bronchial asthma on lifestyles of asthmatic children and their mothers. Health education to raise awareness of parents and school teachers are recommended. It should be stressed to parents to continue registering the asthmatic child at school. Teachers should support asthmatic schoolchildren. Mass media can play an important role in this respect.

References:
4. Lodha R, Puranik M, Kattal N, Kabra SK. Social and economic impact of
Symptoms on the Lifestyles of Asthmatic Saudi Children, Riyadh, Saudi Arabia, cont...
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