

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

Over the past few years, new diseases such as Avian flu, Severe Acute Respiratory Syndrome (SARS) have emerged, while other diseases that were once thought in decline such as Tuberculosis (TB) have reemerged after having developed resistance to known antimicrobial drugs. As a result, fears from disease outbreaks have increased in both number and complexity.

A cross sectional descriptive self administered question based survey was conducted. This part involved only Riyadh region as part of a national study including all MOH physicians working in notifying disease in both governmental Primary Health Care Centers (PHCC's) and hospitals. The study sample involved 970 physicians. Only completely filled records were included [760 (78.4%)].

There was a total of 550 (72.4%) physicians from 205 PHCCs and 210 (27.6%) from 21 hospitals. The physicians' ages ranged from 25 to 60 years. The majority were in the 30-45 years age group (62.4%). Their mean age  $\pm$  Standard Deviation (S.D) was  $41.6 \pm 7.8$  years. The majority were males 545 (71.7%). Saudi nationality constituted only 4.3%, and Egyptian physicians were the most common among non-Saudis (33%). More than half (66.2%) had been working for MOH for 11-20 years. General practitioners (GPs) comprised the majority of physicians (78.9%), followed by specialists (19.3%), and consultants (1.8%).

Poor knowledge in general surveillance information was found among over half the respondents (58.3%), most (87.1%) scored poor knowledge in the notifiable diseases, and none achieved 100% correct answers in disease notification.

Over half (61.7%) agreed that the case definition in the surveillance system was clear, and 63.1% agreed that the operating surveillance system was good. Sixty

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percent agreed that the current notifiable diseases were sufficient, 70.1% were not sure if another disease should be added, 21.7% thought that some diseases (eg. HIV/AIDS, Chicken pox, rubella) should be added; 13.8% suggested removing some notifiable diseases such as: poliomyelitis, Gillian Barre Syndrome, suspected polio, and measles.

Sixty one percent strongly agreed that MOH should arrange training courses in surveillance, and 57.3% strongly agreed to attend such courses. The majority (88.2%) hadn't attended any surveillance system training courses, and only 38.9% had a clear manual about surveillance. Seventy percent stated that they faced difficulties in notifying communicable diseases ranging from always to rarely. Difficulties reported were: patients uncooperative in giving information (55.9%), health inspector not always present (44.1%), insufficient time due to high patient load (35%), too much information to record (28.6%), patient not knowing his address (26.5%), communication system either busy or out of order (20.7%), and other reasons such as language barrier, staff not cooperative, patient didn't care, and results come late (14.4%).

Physicians who reported difficulties in conducting control measures constituted (30.1%). The most common reasons were: uncooperative contacts (90%), no communication system with patient (84.7%), unclear control measures of the diagnosed disease (81.7%), unknown patient's address (76.8%), transportation difficulties (75.1%), uncooperative non-governmental hospitals (44.1%), the information required to fill was not clear (37.1%), physicians' lack of knowledge of the control measures of the diagnosed disease (35.8%), and other reasons (14.4%).

Physicians who had read about surveillance system comprised 85.8%, ranging from always to rarely. Journals and/or bulletins were the most common sources (60.7%), books (48.2%), internet (25%), and other sources (eg. MOH memo, mass media, symposia) (11.3%).

More than half (62.4%) stated that they received feedback from the directorate or regional district: always (11.6%), mostly (22.8%), sometimes (43.9%), and rarely (21.7%). Feedback was received in the form of letters (46.6%), reports (39.7%), journals and/or bulletins (25.1%), periodic meetings (5.1%), other means (eg. phone, through health inspector) (5.1%), and symposia (4.4%). Feedback was received via: Fax (43.9%), mail (37.8%), by hand (32.3%), and others (eg. hospital administration, regional director, newspaper) (7.8%).

Over half (55.7%) gave suggestions for improving the surveillance system, such as: periodic training courses, particularly directed at new physicians. Courses should be in English for non-Arabic speaking doctors, accredited from the Saudi council, and they should be held in a nearby place to minimize transportation and guarantee their appearance. Suggestions to improve the feedback system included: internet access and developing a website for feedback, more cooperation from referring hospitals, cooperative coordinators between the hospitals and the PHCCs.

Physician's good knowledge was significantly higher among non-Saudis (100%) (P-value=0.01), male physicians (77.6%) compared to females (22.4%) (P-value=0.002), and GPs (78.6%) compared to specialists (20.4%) and consultants (1%) (P-value < 0.001). In addition, physicians working in PHCCs scored significantly higher knowledge

score (63.3%) compared to hospital physicians (37.6%), P-value< 0.001.

There was no effect of physician's attitude toward attending training courses in surveillance on their knowledge of the notifiable diseases (p-value=0.05). Physicians who had a clear manual and those who had read about surveillance scored significantly higher knowledge levels (P-values <0.001 and 0.03 respectively).

Difficulties faced by physicians in communicable disease notification was significantly lower among those who had attended training courses on surveillance (P-value <0.05), and those who had a clear manual (P-value =0.005).

**- Reported by: Dr. Ghada Alqudaihi, Dr. Randa Nooh, Dr. Abdullah Al-Rabeah (Field Epidemiology Training Program).**

**Editorial notes:** An epidemiological surveillance system is a set of interconnected elements and activities. It is well-known as a central part of health care system in order to monitor priority health events known to be taking place in the population and contributes to the achievement of surveillance objectives.<sup>1</sup>

Early detection of disease outbreaks through notification helps health authorities plan preventive measures in order to control their spread. Despite

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**Table 1: Effect of some of the physician's practices on their knowledge of notifiable diseases.**

PHYSICIANS' PRACTICES IN SURVEILLANCE	PHYSICIANS' KNOWLEDGE OF NOTIFIABLE DISEASES				X <sup>2</sup>	P-VALUE
	Good knowledge (N=98)		Poor knowledge (N=662)			
	No	%	No	%		
<b>Attended training courses in surveillance system:</b>						
Yes	18	18.4	72	10.9	53.3	0.01
No	80	81.6	590	89.1		
<b>Had a clear manual about surveillance system:</b>						
Yes	57	58.2	240	36.3	165.2	<0.001
No	35	35.7	333	50.3		
Don't know	6	6.1	89	13.4		
<b>Read about surveillance system :</b>						
Yes	86	87.8	566	85.5	48.6	0.03
No	12	12.2	96	14.5		

# Impact of Bronchial Asthma Symptoms on the Lifestyle of Asthmatic Saudi Children, Riyadh, Saudi Arabia, 2006.

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  $\pm$  3.9). Their diagnostic age ranged from 1 month to 7 years (mean 1.6, SD  $\pm$  1.36). Almost half were students 98 (49%), their grade levels ranged from Kindergarten to Grade V1; 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 who lived in the same household ranged from 3 to 25 (mean 7.2, SD  $\pm$  2.95); those suffering from bronchial asthma ranged from 1 to 10 (mean 2.3, SD  $\pm$  1); 39.0% reported a currently smoking family member, of whom fathers constituted 75.9% 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 reported visiting the hospital at least once in the past year, while 73.0% visited Primary health care centers. Among those who had visited the hospital, 70.0% regularly followed up at asthma clinic, over half (52.0%) followed up 4-6 times per year. Among those who had visited the PHCC, 29.0% visited up to two times, and 1.5% over ten times.

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 children 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.<sup>1</sup>

Asthma is a major problem in the Kingdom of Saudi Arabia. Its prevalence has risen from 8% in 1986 to 25% in 2001,<sup>2</sup> affecting about 10%-15% of school age children.<sup>3</sup>

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)**

	No.	%
<b>Impact on asthmatic children in general:</b>		
Cannot enjoy holiday outside home	196	98.0
Cannot sleep well during asthma attack	195	97.5
People don't understand that I cannot cope with Perfume/ smoke.	185	92.5
Cannot participate in sports or other physical activities	151	75.5
Cannot own pets	148	74.0
Frequent visits or hospitalization	115	57.5
<b>Impact on asthmatic schoolchildren: (n = 98)</b>		
Ashamed to use inhaler at school	75	76.5
Frequent absence from school	92	93.9
Absence from Exams	36	36.7
Lower level of achievement in studies	70	71.4
Admission into hospital	50	51.0
<b>Impact on asthmatic children mothers (n = 200)</b>		
Limitations on social life.	198	99.0
Difficult to ask friends & relatives not to smoke in house.	196	98.0
During hospitalization, family and other children suffer.	195	97.5
The instruments used for treatment are costly	194	97.0
Difficult to ask friends and relatives not to use perfume & incense in my house	194	97.0
Teachers do not know how to deal with asthmatic child if he or she developed BA attack at school (schoolchild).	94	95.9
Frequent absence from work (employed mothers n = 34)	34	100.0

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this, notification suffers some obstacles as shown by worldwide studies. One of these obstacles is underreporting even with the clear directions from MOH requiring medical providers to report notifiable infectious diseases to their regional directorate.<sup>2,3</sup>

It is crucial for many diseases to be reported on time as timeliness is a key surveillance system metric in order to implement the control measures and prevent the disease spread and should be periodically evaluated. As a result, the knowledge of the physicians about the correct timing is crucial. Furthermore, it is mandatory for these physicians to report on time and be aware of the control measures of each disease and overcome the difficulties that they may face. Physicians' good knowledge constituted only 12.9% in terms of identifying the time for reporting the 36 notifiable

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.<sup>4</sup>

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.

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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.<sup>4</sup>

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.<sup>5</sup>

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.<sup>6</sup>

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.<sup>7</sup>

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.

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# Association between MMR vaccine and Autism: Issue of Argument.

The MMR Vaccine (Measles, Mumps, Rubella) is a live attenuated virus vaccine. Its efficacy is 95% (Range 90-98%), giving lifelong immunity. It is scheduled as 2 doses; once at 12 months, and another at 4-6 years.

Autism is one of a group of disorders known as autism spectrum disorders (ASDs). They are developmental disabilities that cause substantial impairment in social interaction and communication and the presence of unusual behaviors and interests. The severity of Autism varies greatly, from little speech and poor daily living skills, to functioning well in most settings. Its onset is usually before 3 years of age, and lasts throughout a person's life. It can occur in all racial, ethnic, and socioeconomic groups and are four times more likely to occur in boys than in girls. Causes of Autism remain unknown, although both genetic and environmental factors are implicated.<sup>1</sup>

In 1998, a paper published in *The Lancet* by Dr. Andrew Wakefield et al. suggested that the MMR vaccine could contribute to the development of autism.<sup>2</sup> This paper caused a lot of media attention, and many parents consequently refused MMR for their children. The MMR-autism theory is based on the idea that intestinal problems, such as Crohn's disease, are the result of viral infection, and can contribute to the development of autism. In 1993, Wakefield et al. reported isolating measles virus in the intestinal tissue of persons with Inflammatory Bowel Disease (IBD). However, the validity of this finding was later brought into doubt when it could not be reproduced by other researchers.<sup>4,5</sup>

The 1998 Wakefield study<sup>2</sup> reviewed reports of children with bowel disease and regressive developmental disorders, mostly autism, and suggested that MMR vaccine led to intestinal abnormalities resulting in impairment of intestinal function and developmental regression within 24 hours to a few weeks of vaccination. This hypothesis was based on only 12 children, which are too few to allow generalization of results. Also, they were referred to the researchers and may therefore

not be a representative sample of autism cases; there was no healthy comparison group; and in at least 4 of the 12 cases, behavioral problems had appeared before IBD symptoms.

Taylor et al in 1999 published a study that argued against the suggested link between autism and the MMR vaccine. This study looked at all the known cases of ASD in children living in certain districts of London who were born in 1979, or after. The ASD patients were then matched with an independent registry of vaccinations. Among 498 children with autism, it was determined that the age at diagnosis was the same regardless of whether the children had received the MMR vaccine before or after 18 months of age, or whether they had never been vaccinated.<sup>6</sup>

In 1999, the British Committee on Safety of Medicine conducted a systematic review of reports of autism and GI diseases after receipt of MMR vaccine. They concluded that the available information did not support any association between the vaccine and autism or other diseases.<sup>7</sup>

In 2002, Madsen et al. conducted a study among all children born in Denmark from January 1991 up to December 1998.<sup>8</sup> The total number was 537,303 children, among who 440,655 had been vaccinated with the MMR vaccine. The researchers did not find a higher risk of autism among vaccinated children. Although there were a much higher number of vaccinated children in the study group, the sample was large enough to have a higher statistical power than previous studies that had suggested the association between MMR and autism, thus providing much stronger evidence.

DeStefano et al. investigated whether there was a difference in the age at which children with autism and without autism received their first MMR vaccination. The study's findings showed that children with autism received their MMR at similar ages as children without autism.<sup>9</sup>

Should we delay vaccination until we know more about the negative effects of the vaccine? The answer is no, since current epidemiological evidence does not support a causal

link between MMR vaccine and autism.

**-Reported by: Dr. AbdulKarim J. AIQuwaidhi, Dr. Randa M. Nooh. (Field Epidemiology Training Program).**

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## ملخص باللغة العربية

مدى معرفة وإدراك وتطبيق أطباء وزارة الصحة للتبليغ عن الأمراض السارية في منطقة الرياض.

تعتبر المراقبة الوبائية للأمراض المعدية الركيزة الأولى للمكافحة والوقاية منها. والمراقبة الوبائية هي العملية المنتظمة والمستمرة لجمع وتحليل وترجمة المعلومات الإحصائية الصحية اللازمة لتخطيط وتنفيذ وتقييم نشاطات الصحة العامة مع التغذية الراجعة للجهات ذات العلاقة. ومن ثم استعمال هذه المعلومات في اتخاذ إجراءات الوقاية والمكافحة. وحيث أن الواجهة الأولى في استقبال الحالات والتشخيص هي فئة الأطباء، لذلك وجب تقييم هذه الفئة والقيام بما يلزم من أجل مراقبة وبائية فاعلة.

قام فريق من برنامج الوبائيات الحقلية بدراسة مقطعية شملت منطقة الرياض كجزء من دراسة وطنية لجميع مناطق المملكة. هدفت هذه الدراسة إلى معرفة مستوى أطباء وزارة الصحة فيما يتعلق بالأمراض السارية وطرق التبليغ عنها و تقييم النظام المتبع في التبليغ والصعوبات التي يواجهها الأطباء وطرق تحسينه.

شملت الدراسة ٧٦٠ طبيب. متوسط أعمارهم ٤١,٦ سنة (انحراف معياري ٧,٨). شكل الرجال ٧١,٧% و شكل السعوديون ٤,٣%. أما بالنسبة للجنسيات الأخرى شكلت الجنسية المصرية ٣٣%, تلتها الجنسية السودانية ١٧,٥%, ثم الجنسيات الأخرى. كان ٦٦,٢% من الأطباء يعملون في وزارة الصحة بالمملكة لمدة تتراوح من ١١ إلى ٢٠ سنة.

خلصت الدراسة إلى تدني مستوى معرفة الأطباء بالأمراض السارية المدرجة في قائمة وزارة الصحة للتبليغ بما يقارب ٨٧,١%. وقد اعتمد التحليل المبدي للبيانات على اعتماد نسبة المعرفة بالأمراض المبلغ عنها ٨٠% وأكثر كنسبة مقبولة للمعرفة. بالرغم من أن حوالي ٨٥,٨% من الأطباء يقرأون عن المراقبة الوبائية بصورة فردية. وقد وافق بشدة غالبية الأطباء (<٦٠%) على ضرورة عقد وزارة الصحة لدورات تدريبية للأطباء فيما يتعلق

بالأمراض السارية والتبليغ، و عبر ٩٩% من الأطباء عن رغبتهم في حضور مثل هذه الدورات.

أظهرت النتائج أن ما يزيد عن ٩٠% لم يحضروا أي دورة تدريبية عن المراقبة الوبائية من قبل وأن من لديه دليل عمل إرشادي عن المراقبة الوبائية لا يتجاوز ٤٠%.

تمت التوصية على إقامة دورات تدريبية للأطباء العاملين في المراقبة الوبائية بصفة دورية ومستمرة تنظم من قبل المديرية للشؤون الصحية / الطب الوقائي. إصدار دليل عمل واضح باللغتين العربية والإنجليزية عن المراقبة الوبائية، الأمراض المعدية وطرق التبليغ عنها على أن يراعى تحديثه بما يستجد في المراقبة الوبائية. إقامة دورات إرشادية وتدريبية للأطباء الجدد العاملين في المراقبة الوبائية.

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تقييم مدى تأثير أعراض الربو الشعبي على أنماط الحياة المختلفة لدى الأطفال السعوديين المصابين بحساسية الصدر بمدينة الرياض في المملكة العربية السعودية لعام ٢٠١٧هـ.

يشكل الربو السبب الرئيس للمرض المزمن في مرحلة الطفولة ويمكن أن يؤدي إلى اضطرابات شديدة الوطأة في حياة الطفل المصاب والأسرة. وهو مسؤول عن نسبة هامة من أيام الغياب عن المدرسة بسبب المرض المزمن. هدفت هذه الدراسة إلى تقييم مدى تأثير أعراض الربو الشعبي على أنماط الحياة المختلفة لدى الأطفال السعوديين المصابين بالربو، وتأثير ذلك على أسلوب حياتهم و حياة أمهاتهم وعائلاتهم.

قام فريق من برنامج الوبائيات الحقلية بدراسة مقطعية شملت الأطفال السعوديين المصابون بالربو، تم فيها أخذ عينة عشوائية مكونة من ٢٠٠ طفلاً مريضاً. وقد تم إجراء

الدراسة عن طريق مقابلة الأطفال المرضى وأمهاتهم خلال مراجعتهم لعيادة الربو في كل من مجمع الرياض الطبي ومستشفى الأمير سلمان بمدينة الرياض. ومن خلال المقابلة تم تعبئة استبيان مكون من شقين.

من بين الأطفال المشمولين بالدراسة و البالغ عددهم ٢٠٠ طفلاً، كان ٦٠% منهم من الذكور و ٤٠% من الإناث. تراوحت أعمارهم بين خمسة أشهر إلى اثني عشر عاماً من العمر، ٤٩% منهم كانوا من الطلاب، و ١٠% يفترض بأنهم في المدرسة و لكن لم يكونوا مسجلين بالمدارس.

بينت الدراسة ان ٣١% من العينة قد راجعوا المستشفى و ٧٣% قد راجعوا المراكز الصحية خلال العام المنصرم. تم تنويم ٣١% في المستشفى منهم ٦٠,٥% نوموا في أقسام العناية المركزة بالمستشفى. خلال التنويم كانت الأمهات تصاحب أطفالهن في ٩٨% من الحالات.

بالنسبة للمشاكل التي يقابلها الأطفال المصابون بالربو في حياتهم اليومية، أوضحت الدراسة ان ٩٨% منهم لا يستمتعون بالعطلة خارج المنزل، ٩٧,٥% لا يستمتعون بالنوم الهادي أثناء نوبة الربو، ٩٣,٩% كانوا يعانون من الغياب المتكرر عن المدرسة، ٧٦,٥% عبروا عن خجلهم بالنسبة لاستخدام بخاخ الفنتولين بالمدرسة، ٧١,٤% عبروا عن انخفاض مستوياتهم الدراسية، ٣٦,٧% أقروا بغيابهم عن الاختبارات.

بالنسبة لأمهات الأطفال المصابون بالربو عبر ٩٩% عن معاناتهن من القيود الاجتماعية التي يفرضها مرض أطفالهن بالربو على حياتهن، وجميع الأمهات الموظفات (١٠٠%) سجلن نسبة غياب متكرر عن أعمالهن لنفس السبب.

أكدت هذه الدراسة تأثير الربو الشعبي على أساليب وأنماط حياة الأطفال المصابون بالربو، من حيث نشاطاتهم اليومية، تسجيلهم في المدارس، نسبة غيابهم عن المدرسة، وامتداد هذا التأثير على حياة أمهاتهم وعائلاتهم.

إعداد: د. عزيزة دنقس، د. رانده نوح (برنامج الوبائيات الحقلية).

## Symptoms on the Lifestyles of Asthmatic Saudi Children, Riyadh, Saudi Arabia, cont...

(Continued from page 4)

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The Saudi Epidemiology Bulletin welcomes reports from the regions. Please send your reports to the address shown. Thank you.

Send correspondence, comments, calendar listings, or articles to:

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Website: [www.fetsp.edu.sa](http://www.fetsp.edu.sa)

## Mark your calendar . . .

### Inside the Kingdom

**February 24-26, 2007: Arab Child Health Conference.**

**Venue:** The King Faisal Conference Hall, Riyadh Intercontinental Hotel, Riyadh, Kingdom of Saudi Arabia.

**Contact:** Ministry of Health, Riyadh, KSA.

**Tel. :** 966(1)4602332

**Fax.:** 966(1)4602316

**April 01-04, 2007: 3rd Saudi Annual EBM Conference & Workshop.**

**Venue:** The Westin Hotel, Jeddah, Kingdom of Saudi Arabia.

**Contact:** Academic Affairs, King Abdulaziz Medical City - Jeddah, KSA. Tel. +966-2-6240000 ext. 21244 / 21562.

**Fax. +** 966-2-624000 ext. 21009

**E-mail:** [ngcebm@ngha.med.sa](mailto:ngcebm@ngha.med.sa)

**Website:** [www.ngha.med.sa/ebm](http://www.ngha.med.sa/ebm)

**May 15-16, 2007: 1st Middle East Conference on Hypertension.**

**Contact:** Postgraduate Training Center, King Abdul Aziz Medical City.

**Tel.:** 966(1) 2520252 ext. 45672 / 45448 / 45449

**Email:** [ptc1@ngha.med.sa](mailto:ptc1@ngha.med.sa)

**http://**[www.ngha.med.sa](http://www.ngha.med.sa)

**June 4-6, 2007: 7th Scientific Meeting of the Saudi Society of Family and Community Medicine.**

**Venue:** King Faisal Hall Conference Hall, InterContinental Hotel, Riyadh.

**Contact:** Saudi Society of Family & Community Medicine, P.O.Box 40161, Al-Khobar 31952, Saudi Arabia

**Fax.** +966-3-8824241

**E-mail:** [ssfcmhq@yahoo.com](mailto:ssfcmhq@yahoo.com)

### Outside the Kingdom

**June 19-21, 2007: 6th Jordanian Public Health Association**

**Conference & 3rd TEPHINET Regional Scientific Conference**

**Contact:** Jordan FETP program director: Dr. Sami Sheikh Ali

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**http://**[jordan.tephinet.org/cgi-files/abs\\_db.cgi?action=abstype](http://jordan.tephinet.org/cgi-files/abs_db.cgi?action=abstype)

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## Selected notifiable diseases by region, Jan — Mar 2007

	Riyadh	Makkah	Jeddah	Madinah	Taif	Qassim	Eastern	Hasa	Hafr Al-batin	Asir	Bisha	Tabuk	Hail	Al-Shamal	Jizan	Najran	Baha	Al-Jouf	Goriat	Gonfuda	TOTAL	
Measles	81	49	105	2	11	19	164	34	582	175	2	9	9	31	173	133	4	44	#	0	2100	
Mumps	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Varicella	1494	326	1648	469	184	1155	1331	925	313	970	192	940	89	156	220	322	15	148	34	53	10984	
Meningitis mening.	2	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	7	
Meningitis other	28	1	13	2	24	7	6	7	1	2	1	3	0	0	0	0	0	2	0	0	97	
Hepatitis B	257	2	355	77	20	90	167	7	0	43	15	93	3	1	19	10	0	28	0	30	1217	
Hepatitis C	168	3	288	35	6	64	103	7	2	29	14	29	1	0	2	2	0	19	0	9	781	
Hepatitis unspecified	8	0	7	0	0	0	0	7	0	6	0	14	0	0	26	0	0	0	0	0	68	
Hepatitis A	46	17	42	30	5	21	22	2	7	28	0	15	17	24	41	25	2	7	0	3	354	
Typhoid & paratyphoid	5	3	15	2	0	1	15	2	0	21	0	0	3	0	1	0	0	1	0	9	78	
Amoebic dysentery	19	0	772	10	10	1	51	43	1	52	19	0	2	1	25	0	0	0	0	9	1015	
Shigellosis	8	0	3	1	0	0	9	3	0	0	0	3	0	1	1	7	0	0	0	2	38	
Salmonellosis	80	1	44	3	0	4	77	22	15	3	13	12	0	2	0	10	0	12	0	0	298	
Brucellosis	93	9	8	16	36	179	76	6	53	241	55	15	39	33	33	40	0	16	0	6	954	

## Comparisons of selected notifiable diseases, Jan - Mar 2006-2007

DISEASE	Oct-Dec 2007	Oct-Dec 2006	Change %	Jan-Dec 2007	Jan-Dec 2006	DISEASE	Oct-Dec 2007	Oct-Dec 2006	Change %	Jan-Dec 2007	Jan-Dec 2006
Cholera	0	0	0	0	10	Meningitis mening	7	10	-30	7	22
Diphtheria	0	2	-100	0	2	Meningitis other	97	105	-8	97	395
Pertussis	7	2	250	7	34	Hepatitis B	1217	995	22	1217	4264
Tetanus, neonat	9	5	80	9	18	Hepatitis C	781	692	13	781	2964
Tetanus, other	3	3	0	3	8	Hepatitis unspecified	68	246	-72	68	391
Poliomyelitis	0	0	0	0	0	Hepatitis A	354	902	-61	354	2631
Guilain Barre Syndrome	32	24	33	32	105	Amoebic dysentery	78	51	53	78	293
Measles	2100	83	2430	2100	807	Amoebic dysentery	1015	717	42	1015	2907
Mumps	6	26	-77	6	79	Shigellosis	38	35	9	38	149
Rubella	0	6	-100	0	23	Salmonellosis	298	230	30	298	1572
Varicella	10984	12693	-13	10984	43070	Brucellosis	954	1063	-10	954	3997

## Diseases of low frequency, Jan – Mar 2007

Yellow fever, Plaque, Diphtheria, Poliomyelitis, Rabies, Haemolytic Uraemic Syndrome: No Cases.

Pertussis: 7 Cases (Qassim 3, Jeddah 2, Makkah 2).

Neonatal Tetanus: 9 Cases (Makkah 6, Jeddah 1, Eastern 1, Jazan 1).

Ecchinococcosis: 5 Cases (Riyadh 3, Eastern 2).

Guillian Barre Syndrome : 32 Cases (Riyadh 10, Madinah 3, Jeddah 3, Eastern 3, Jazan 3, Asir 2, Makkah 2, Hafr Al-Batin 2, Qassim 1, Hassa1, Hail 1, Qunfudah 1)