



# النشرة الوبائية السعودية



نشرة فصلية متخصصة في مجال الوبائيات تصدر عن وزارة الصحة • الوكالة المساعدة للطب الوقائي • برنامج الوبائيات الإقليمي  
المجلد السادس عشر • العدد الأول • يناير / مارس ٢٠٠٩

## Saudi Epidemiology Bulletin

Department of Preventive Medicine and Field Epidemiology Training Program  
Ministry of Health / Riyadh / Jan-Mar 2009 / Volume 16, Number 1

ISSN 1319-3965

www.fetp.edu.sa

### Medical illnesses among chronic psychiatric inpatients in Taif mental hospital, Taif, Saudi Arabia, 2008 (1429H)

Medical comorbidity is common among chronic psychiatric inpatients. Associated risk factors include use of psychotropic medications, nature of the mental illness and behavioral factors. This cross-sectional study was conducted among chronic psychiatric inpatients at Taif mental hospital, who had been admitted for at least one year and with no plan for future discharge, with or without medical condition. The aims of the study were to evaluate the mental diseases pattern, pattern of medical illnesses and pattern of psychotropic medication use among chronic psychiatric inpatients. Data were collected by direct observation of the patients and the surrounding environment and by chart review during the months of April and May 2008 (1429 H).

During the study period there were 465 permanent psychiatric inpatients at the hospital, distributed over 13 wards, 76.8% males and 23.2% females. The highest percentage of inpatients of both sexes fell within the age group 41-50 years. Most inpatients had been admitted for over 10 years (89.2%), and almost all were Saudis (97.6%).

Among the total inpatients, 72.5% were diagnosed as schizophrenics, 20.2% as mentally retarded and 7.3% other psychiatric diagnoses; 91.0% were on antipsychotic medication. Over half of the inpatients (55.5%) had at least one associated medical comorbidity. The highest percentage (95.2%) of medical comorbidities fell within the > 70 year age group, while the lowest (40.7%) fell within the 31-40 year age group.

At least one medical illness was seen among 51.3% of patients with schizophrenia, 74.5% among patients with mental retardation, and 44.1% among those with other mental illnesses. Among all inpatients, 70.5% had medical

(Continued from page 2)

### INDEX

- Medical illnesses among chronic psychiatric inpatients in Taif mental hospital, Taif, Saudi Arabia, 2008 (1429H), cont..... 1
- Quality of life of children with type 1 diabetes mellitus and the difficulties they and their families face..... 3
- Prevalence of Hepatitis B and C among blood donors at Qatif central hospital, 1993—2008 ..... 5
- SEB Arabic page ..... 6
- Calendar ..... 7
- Notifiable Disease Reports ..... 8



## Medical illnesses among chronic psychiatric inpatients in Taif mental hospital, Taif, Saudi Arabia, 2008 (1429H), cont...

(Continued from page 1)

comorbidity with known onset of medical illness either before or after mental illness diagnosis, and 29.5% with unknown onset.

The pattern of comorbidities among psychiatric inpatients was: heart diseases (37.9%), epilepsy (35.7%), hypertension (19.2%), diabetes mellitus (19.8%), respiratory diseases (18.3%), skin diseases (6.0%), infectious diseases (18.7%), and other medical diseases (15.4%).

Some patients had more than one medical illness. Patients with schizophrenia and mental retardation had the highest medical comorbidities. Heart diseases were the highest medical comorbidity among schizophrenics followed by diabetes mellitus, while epilepsy was the highest among patients with other mental illnesses and those with mental retardation. Infectious diseases and hypertension were higher among patients with other psychiatric diagnoses. The frequency of medical illnesses distributed by psychiatric illnesses among psychiatric inpatients is demonstrated in table 1.

Among the total permanent psychiatric inpatients, 16.5% had associated psychiatric comorbidity; 17.8% among schizophrenics, 2.12% among mentally retarded patients, and 44.1% among other mentally ill patients.

– Reported by: Dr. Jaber Sharaheeli,

Dr. Randa Nooh (Field Epidemiology Training Program).

**Editorial notes:** The medical comorbidity of psychiatric patients is a topic of increasing clinical and research interest. High rates of a wide range of comorbid medical illnesses have been described among psychiatric patients, with chronic medical illnesses, such as hypertension, heart disease, pulmonary disease, and diabetes mellitus, being the most common.

Medical illness complicates the treatment of mental illness, and patients with severe mental illness die at an earlier age from physical health problems than do those without mental illness.<sup>1,2</sup>

Psychiatric patients are less motivated to seek medical care for illness, and often have limited access to medical care. Psychiatric medications are also associated with negative health effects, such as impaired glucose tolerance, effects on renal and liver function, weight gain and many others.<sup>1</sup> The association between manic-depressive illness and diabetes mellitus has been attributed to genetic relations between the diseases or to pathogenic mechanisms that are common to both.<sup>1</sup> Also, the frequency of diabetes mellitus in hospitalized patients diagnosed with bipolar disorder is higher than in the general population. Manic-depressive patients with diabetes mellitus have a more severe course of illness.<sup>3</sup>

Several factors increase the risk of medical comorbidity among psychiatric patients, such as certain medications that cause weight gain, which is associated with diabetes and hypertension; Poor attention to personal hygiene, which is associated with skin infections; high rates of smoking, which contributes to asthma, acute respiratory disease, heart disease, and lung cancer; reduced physical activity and fitness, which contributes to hypertension and heart disease. Psychiatric patients with a comorbid substance use disorder have the highest risk for medical disorders such as heart diseases, asthma and gastrointestinal diseases.<sup>4</sup> The duration of institutionalization and behavioral factors such as nail-biting and sexual contact may also play a role in acquiring infectious diseases mainly Hepatitis B and C.<sup>5</sup>

The major two mental illnesses among patients in this study were schizophrenia followed by mental retardation. Schizophrenia was higher than other mental illnesses among both genders and in all age groups. It was also higher among males than females in all age groups. On the other hand, mental retardation was higher among females although it showed fluctuations among different age groups.

In our study, medical comorbidity was present in a substantial number of psychiatric inpatients. Heart diseases,

(Continued on page 7)

**Table 1: Frequency of medical illnesses distributed by psychiatric illnesses among chronic psychiatric inpatients in Taif mental hospital, Taif, Saudi Arabia, 2008 (1429H).**

Medical illnesses	Schizophrenia N=106 (58.2%)	Mental Retardation N=70 (38.5%)	Other psychiatric diagnoses N=6 (3.3%)	Total N=182
Heart diseases	60 (56.6%)	7 (10.0%)	2 (33.3%)	69 (37.9%)
Epilepsy	16 (15.1%)	45 (64.3%)	4 (66.7%)	65 (35.7%)
Hypertension	24 (22.6%)	9 (12.9%)	2 (33.3%)	35 (19.2%)
Diabetes mellitus	32 (30.2%)	2 (2.9%)	2 (33.3%)	36 (19.8%)
Respiratory diseases	20 (18.8%)	12 (17.1%)	1 (16.7%)	33 (18.3%)
Skin diseases	10 (9.4%)	1 (1.4%)	0 (0.0%)	11 (6.0%)
Infectious diseases	24 (22.6%)	7 (10.0%)	3 (50.0%)	34 (18.7%)
Other medical diseases	6 (5.6%)	22 (31.4%)	0 (0.0%)	28 (15.4%)



## Quality of life of children with Type 1 diabetes mellitus and the difficulties they and their families face.

Type-1 diabetes is associated with numerous organic and psychological complications, which influences the quality of life of affected individuals.

This cross-sectional study aimed to assess certain aspects related to the quality of life of diabetic children and their families.

The study included 140 mothers of type-1 diabetic children aged between 6 and 12 years from the outpatient pediatrics clinics of Prince Salman Hospital, and the pediatrics diabetic clinics of both the pediatric Hospital of King Saud Complex and the King Khalid University Hospital, Riyadh, Saudi Arabia.

The mean age of participant diabetic children was 9.7 years (standard deviation  $SD \pm 2.1$  years). Females constituted 53.6%; 93% were Saudis; 78.6% were at school, of whom 42.6% reported excellent school performance.

The mean maternal age was 39.0 years ( $SD \pm 7.9$ ); 49.3% of mothers were secondary school graduates and above, compared to 59.3% of fathers. Illiterate mothers constituted 18%, compared to 7.1% of fathers. Working mothers constituted 16.4%.

Over half of the study sample (55%), had been diagnosed with diabetes within the previous four years, and only 5.8% had suffered from diabetes for 9 to ten years. Over half (52.1%) reported having diabetic relatives living with them at home, 46.6% of whom were siblings and 9.6% were mothers.

Regarding diabetic children's practice of insulin injection and glucose home monitoring, 29.3% injected insulin and performed glucose home monitoring by themselves, all of whom were older than 8 years. These included 37% of the females and 20% of the males ( $p$  value  $< 0.05$ ). A large proportion of mothers (85.7%) administered the injection and performed glucose home monitoring for their children; 41.4% of the children had glucose home monitored twice or more per day, and only 9.3% performed it only if they felt unwell.

Almost half of the mothers (49.3%) stated facing difficulty in finding suitable food items for their diabetic

children in restaurants, 37.8% faced this difficulty in supermarkets, and 68% reported never found suitable food items at school.

Table 1 demonstrates certain activities and psychosocial aspects of diabetic children and their mothers that are affected as a result of the child's health state. Regarding the child's daily activities, 62.9% of mothers never noticed any limitations on their child's activities, 5.7% stated always noticing limitations, and 5.0% often. From the children's perspective, 37.9% complained of having less activity than their friends.

Disruption of the family's activities as a result of the child's health status was reported as never (35.0%), often (10.7%), or always (5.0%). Forty four mothers (31.4%) reported always having limited time for their personal needs as a result of their child's health requirements.

School staff informed of the child's diabetic state was the child's teacher (88.9%), student director (50.8%), headmaster (41.3%), or school nurse (5.6%). Cooperation of the school staff members was reported particularly towards snack times (43.2%), injection time (82.5%), frequent use of lavatory (10.3%), and frequent absence from school (26.7%). If the diabetic child became sick at school, mothers were called to pick up the child (92.1%), or the child was taken care of by the teacher (20.6%) or school nurse (4.0%). There were no significant differences in the children's overall school performance with regards to different levels of cooperation of the school staff ( $p = 0.14$ ).

Regarding some aspects of medical care, 52 (37.1%) were always versus 62 (44.3%) were never able to contact treating staff any time. 109 (77.9%) and 117 (83.6%) were able to find the medicine and insulin syringes respectively, in the hospital most of the times, and 65.0% reported never finding the test strips at the hospital. Glucose home monitoring devices had been provided by the hospitals to only 34.3%.

Regarding the number of times participant children visited the emergency room (ER) due to diabetes in the previous year, 41.4% had visited the ER 1 to 3 times, 3.6% had visited the ER over eleven times, 14.3% visited the ER 4 to 11 times, and 40.7% never. Among ER visitors, 37.3% were strongly satisfied with the level of care they had received while 8.4% were not.

By looking into some factors and their relation with the frequency of ER visits, although most of 12 year old children 22 (56.4%) had not visited the ER in the previous year, and the females had visited ER less than males (56.0% vs. 63.1%), the differences were not significant ( $p = 0.19$  and  $0.90$ ) for age and gender respectively.

The frequency of ER visits was slightly higher among children who did not have another diabetic at home (62.7% vs. 56.2%,  $p = 0.70$ ), those children of mothers with high knowledge about diabetes (62.7% vs. 50.0%,  $p = 0.73$ ), but was similar regarding diabetes duration ( $p = 0.09$ ). Children who injected insulin or performed glucose home monitoring for

(Continued on page 4)

**Table 1: Activities and psychosocial aspects of diabetic children and their mothers that are affected as a result of the child's health state**

Activities and psychosocial aspects	N (%)
Mother noticed limitation of child activity	52 (37.1)
Child complaining low activity	53 (37.9)
Mother find limitation of time for personal need	108 (77.1)
Mother feels shy to tell others about child diabetes	44 (31.4)
Mothers bothered by pity feelings from others	60 (43)
Mother feels bad luck due to child diabetes	55 (39.3)
Child feel inferior due to diabetes	39 (28)
Child has problems in getting along with others	50 (35.7)



## Quality of life of children with type 1 diabetes mellitus and the difficulties they and their families face, cont ...

(Continued from page 3)

themselves were more likely not to have visited the ER (45.5% vs. 38.5%,  $p = 0.91$  and 47.7% vs. 37.5%,  $p = 0.69$ , respectively). No association was found between frequency of glucose home monitoring and frequency of ER visits ( $p = 0.12$ ).

By asking the mothers about their feelings regarding certain aspects of their child's diabetic state, 31.4% reported feeling embarrassed of telling others about their child's diabetes, 42.9% were bothered by feelings of pity from others, and 39.3% reported a feeling of bad luck as a result of their child's diabetes. With regard to the child's psychosocial status, some mothers stated noticing that their children felt inferior to others (27.9%), and had problems in getting along with others (35.7%). The activities and psychosocial status of the diabetic children were not related to the presence of another diabetic at home, or to knowing other diabetic children. The only significant relation among mothers was found between feelings of bad luck and knowledge level about diabetes (34.3% vs. 52.6%;  $p = 0.04$ ) for high and low level respectively.

Two mothers (1.4%) were members of a society or an organization that cared for diabetic children, and 3 children (2.1%) participated in a diabetic club. About one third of the mothers (33.6%) knew other mothers of diabetic children with whom they exchanged experiences. Only 16 children (11.4%) who came in contact with or shared activities with other diabetic children.

From the mothers' point of view, the child was the main source of difficulty in dealing with his/her diabetic state (62.1%), and the health staff was the major source of support (74.3%).

Sources of education on diabetes among mothers were mainly the treating physician (96.4%) followed by the diabetic educator (76.4%). This was similar among children (81.4% and 63.6%, respectively).

The most known problems of diabetes among mothers were signs and symptoms of hyperglycemia (90%), signs and symptoms of hypoglycemia (88%), and actions in either situation,

followed by methods and sites of injecting insulin (75.0%). Among children, the most known areas were signs and symptoms of hyperglycemia (79.3%), signs and symptoms of hypoglycemia (78%), and actions in either situation, followed by proper diet (52.1%). Older children had significantly higher diabetic knowledge ( $p = 0.03$ ). There was no significant difference in level of diabetic knowledge by gender.

– Reported by: Dr. Khawater Bahkaly, Dr. Abdul Jamil Choudhry (Field Epidemiology Training Program).

**Editorial notes:** Type 1 diabetes usually initiates in children and young adults. Genetic and environmental factors play a role, in addition to diet, obesity, and stress.<sup>1</sup> Recent research has shown that the health-related quality of life in children with diabetes is markedly poorer than that of children in the general population, more closely resembling that of children with serious chronic diseases such as cystic fibrosis and leukemia.<sup>2</sup>

In general, mothers in our study perceived their children's quality of life as good. The diabetic state of the child was perceived as having a moderate impact on the child's and the family's activities, relatively low impact on psychosocial aspects, and no impact on school performance.

The study showed that diabetic knowledge of both children and mothers was insufficient. This lack in knowledge was not related to the mothers' academic educational level. The mothers' claim of finding difficulties in contacting health staff may be related to the deficiency in diabetes knowledge and self management. Frequent follow up, in addition to continuous guidance and help in dealing with diabetes should improve self-efficacy for self-management, patient satisfaction and decrease emergency room visits. This finding is similar to the results of two previous studies, in both of which the intervention groups had received significantly more recommended preventive procedures, helpful patient education and personal support than

controls.<sup>3,4</sup>

The study showed that families; mothers in particular, carried the load of diabetes management, as a result of which they suffered from some psychosocial problems. However, studies have demonstrated general improvement in family adjustment with time.<sup>5</sup>

Health care should concentrate on education of diabetic children and their families toward diabetes self management through group teaching and practical sessions. Health education should also be extended to the general population through mass media and school health services. Establishment of diabetic organizations and clubs may improve knowledge and provide personal support, which can lead to better metabolic control and better life. One staff member should be trained at each school to understand the disease so as to be able to respond to the diabetic student's needs.

### References:

1. Lissauer T, Clayden G. Illustrated textbook of pediatrics. Richard Furn; 2nd ed. London (UK) 2001: P. 337-8.
2. Hesketh KD, Wake MA, Cameron FJ. Health-related quality of life and metabolic control in children with type 1 diabetes. *Diabetes Care* 2004; 27: 415–20.
3. Howells L, Wilson AC, Skinner TC, Newton R, Morris AD, Greene SA. A randomized control trial of the effect of negotiated telephone support on glycaemic control in young people with Type 1 diabetes. *Diabetic Medicine* 2002; 19(8): 643–8.
4. Wagner EH, Grothaus LC, Sandhu N, Galvin MS, McGregor M, Artz K, Coleman EA. Chronic Care Clinics for Diabetes in Primary Care: A system-wide randomized trial. *Diabetes Care* 2001; 24:695-700.
5. Northam E, Anderson P, Adler R, Werther G, Warne G. Psychosocial and family functioning in children with insulin-dependent diabetes at diagnosis and one year later. *J Ped Psych* 1996; 21(5):699-717.



## Prevalence of Hepatitis B and C among blood donors at Qatif central hospital, 1993-2008.

Hepatitis B and C are common blood-transmitted viruses that can cause chronic and fatal disorders. Their prevalence varies by nationality and geography. The objectives of this study was to find out the prevalence of both hepatitis B and C among blood donors at Qatif Central Hospital in the past 16 years, and to detect any change in the trend of prevalence over the study period.

The study was a descriptive retrospective study based on reviewing available records of the Blood Bank of Qatif Central Hospital, Qatif, Eastern Province, Saudi Arabia, between years 1993-2008. The first four months of each year were taken as a representative sample of that year. Within this study period there were 22,404 blood donors who were included in our study.

The yearly number of blood donors showed a continuous increase over the years, such that by the end of the study the number of donors (n=1998) was more than double that of the first year of the study (n=913).

Among the study population, 516 (2.3%) were HBsAg positive and 297 (1.3%) were anti-HCV positive. The prevalence of HBsAg positive cases showed a gradual decrease over time from 4.4% in 1993 to 1.4% in 2008. Similarly, the prevalence of anti-HCV positive cases showed a gradual decrease from 1.8% in 1993 to 0.5% in 2008.

The study showed a major decline in the positivity rate of both diseases over the study period, which reflects success of the preventive measures and strategies that the Saudi Ministry of Health has taken.

– Reported by: Dr. Nasser A. Alfaraaj, Dr. Nasser A. Alhamdan (Field Epidemiology Training Program).

**Editorial notes:** Blood transfusion service is a vital part of modern health care systems. Although strict screening of blood and its products has dramatically reduced HCV and HBV post-transfusion infection rate, a residual risk of

transmission of infection remains despite all efforts.<sup>1</sup> Evaluation of data on the prevalence of Hepatitis B and C viruses among blood donors not only permits for assessment of infections among the blood donor population, but also gives an idea about the prevalence of these infections among the community.

In the 1980's, studies in KSA found a high endemicity of HBV, ranging from 5% to 10%.<sup>2</sup> In the early 1990's, the prevalence of HCV was estimated to be 2.7%.<sup>3</sup> In 1991, the prevalence of HCV among Saudi blood donors in Riyadh was 2.24%,<sup>4</sup> and was 3.6% in Makkah in 1994.<sup>5</sup> However, the prevalence showed a decline over the years. A study conducted at King Khalid University Hospital, Riyadh, between years 1987 to 2000 reported that the prevalence of HBsAg positive cases among blood donors had declined from 3.7% in 1987 to 1.7% in 2000.<sup>6</sup>

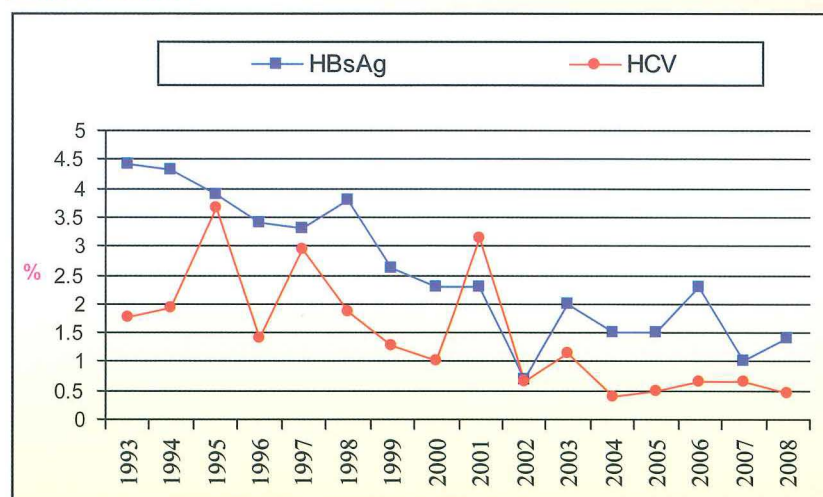
Our study supports the results of previous studies, whereby the trend of prevalence of both hepatitis B and C was found to decline over the study period, from levels as high as 4.4% and 3.7% respectively in the early 1990's to 1.4% and 0.5% respectively in year 2008. This reflects the success of the preventive measures that the Saudi Ministry of Health has undertaken against HBV and HCV infection. However, the true benefits of this decline will be appreciated in the

relatively distant future, with its impact on the chronic hepatitis B and C and their sequelae, primarily liver cirrhosis and hepatocellular cancer.

### References:

1. Kupek EJ. Residual transfusion risk of hepatitis B and C. *J Viral Hepat* 2001; 8: 78-82.
2. Al-Faleh F. Hepatitis B infection in Saudi Arabia. *Ann Saudi Med*. 1988;8(6):474-480.
3. Shobokshi O, Ayoola A, Al-Quaiz M, Karawi M, Skakni L I, Madani T A . Consensus guidelines for the management of hepatitis C infection. *Saudi Med J* 2003; 24 (S2): S100-117.
4. Al-Mofarreh M et al. Prevalence of antibodies to hepatitis C virus in blood donors in Riyadh. *Ann Saudi Med*. 1991, 11: 501-3
5. Ahmad MS, Mahtab AM, Abdullatif AS, Tashkandy MA, Kashreed MS, Maulana A. Prevalence of antibodies against the hepatitis C virus among voluntary blood donors at a makkah hospital. *Saudi J Kidney Dis Transpl*. 1995;6(2):122-4.
6. Al Faleh FZ. Changing pattern of hepatitis viral infection in Saudi Arabia in the last two decades. *Ann Saudi Med* 2003;23:367-71

**Figure 1. The prevalence of HBsAg and anti-HCV positive cases among blood donors at Qatif Central Hospital, during the first quadrant of years 1993-2008.**





## ملخص باللغة العربية

الأمراض العضوية بين المرضى النفسيين  
المزمنين المنومين في مستشفى الأمراض النفسية  
بالبطائف عام ١٤٢٩ هـ (٢٠٠٨ م).

إن المرضى النفسيين المزمنين المنومين بالمستشفيات النفسية معرضون بدرجة كبيرة للإصابة بالعديد من الأمراض العضوية خاصة المزمنة منها كمرض السكري وارتفاع ضغط الدم وأمراض القلب والصرع. ويعود ذلك للكثير من العوامل منها طبيعة المرض النفسي والأدوية النفسية وبعض السلوكيات. هذه دراسة عرضية مقطعية للمرضى النفسيين المزمنين المنومين في مستشفى الأمراض النفسية بالطائف لأكثر من عام ولا توجد خطة لخروجهم من المستشفى. هدفت الدراسة لوصف نمط الأمراض العضوية والنفسية والأدوية النفسية المستخدمة في مجتمع الدراسة. تم جمع المعلومات من ملفات المرضى بالإضافة إلى الملاحظة المباشرة.

كان عدد المرضى النفسيين المنومين ٤٦٥ منهم ٧٦,٨٪ من الذكور و ٩٧,٦ سعوديون وأغلبهم في المرحلة العمرية من ٤١-٥٠ سنة (٣٦,٨٪) وأكثرهم منوم لأكثر من ١٠ سنوات (٨٩,٢٪). أغلب المرضى هم مرضى الفصام (٧٢,٥٪) ثم مرضى التخلف العقلي (٢٠,٢٪) ومجموعة متنوعة من التشخيصات الأخرى تمثل مجتمعة (٧,٣٪). أكثر المرضى كانوا على الأدوية المضادة للذهان (٩١,٠٪).

بلغت نسبة المرضى النفسيين المصابين بأمراض عضوية (٥٥,٥٪) أغلبهم من الإناث (٦٧,٥٪) وضمن الفئة العمرية أكثر من ٧٠ سنة (٩٥,٢٪).

من ضمن المرضى النفسيين المصابين بأمراض عضوية، كان ٣٧,٩٪ يشكون من أمراض القلب، ٣٥,٧٪ من مرض الصرع، ١٩,٨٪ من مرض السكري، ١٩,٢٩٪ من ارتفاع ضغط الدم، ١٨,٣٪ من أمراض الجهاز التنفسي، ١٨,٧٪ من الأمراض المعدية، ٦,٠٪ من الأمراض الجلدية و ١٥,٤٪ من أمراض عضوية متنوعة. أغلب المرضى النفسيين المصابين بأمراض عضوية كانوا مرضى الفصام (٥٨,٢٪)، يليها مرضى التخلف العقلي (٣٨,٥٪) والأمراض النفسية الأخرى (٣,٣٪). أكثر أمراض القلب (٥٦,٦٪) كانت بين مرضى الفصام، أكثر أمراض الصرع بين المصابين بالأمراض النفسية الأخرى (٦٦,٧٪) ثم مع المصابين بالتخلف العقلي (٦٤,٣٪). أكثر أمراض السكري وارتفاع ضغط الدم ٣٣,٣٪ كانت بين المصابين بالأمراض النفسية الأخرى. ظهرت أغلب الأمراض العضوية بعد تشخيص المرض النفسي وأيضا بعد التنويم بالمستشفى.

أوضحت الدراسة أن الأمراض العضوية تحدث بنسبة عالية بين المرضى النفسيين المزمنين، و أن طبيعة المرض النفسي والأدوية النفسية وقلة الحركة تمثل أهم العوامل المؤدية لذلك. تحتاج هذه الفئة من المجتمع إلى المزيد من العناية والاهتمام من الناحية الطبية بجانب الناحية النفسية وكذلك العمل على تقليل العوامل المؤدية لها كإنتاج أدوية نفسية ذات آثار جانبية أقل. تمت التوصية على العمل على رفع مستوى الرعاية الطبية بجانب الرعاية النفسية بين المرضى النفسيين المزمنين والعمل على توفير الأدوية النفسية ذات الآثار الجانبية الأقل، والعمل على تحفيز برامج النشاط الرياضي.

إعداد: د. جابر شراحيلى، د. رانده نوح (برنامج الوبائيات الحقلية).

نوعية المعيشة بالنسبة للأطفال المصابين  
بالنوع الأول من داء السكري والصعوبات التي  
يواجهونها هم وعائلاتهم في التعايش معه.

النوع الأول من السكري قد يُسبب العديد من المضاعفات العضوية والنفسية، ويؤثر على الحياة اليومية. هدفت الدراسة لتقييم نوعية المعيشة لدى الأطفال المصابين بالسكري وعائلاتهم.

هذه دراسة عرضية مقطعية تُضم ١٤٠ من أمهات أطفال مرضى السكري النوع ١ تتراوح أعمارهم بين ٦ و ١٢ سنة من عيادات أطفال مستشفى الأمير سلمان، و مجمع الملك سعود ومستشفى الملك خالد الجامعي بالرياض، في الفترة بين رمضان و ذي الحجة ١٤٢٨ هـ.

البنات شكّلن ٥٣,٦٪ من عينة الدراسة. متوسط العمر والانحراف المعياري (٩,٧ سنة ± ٢,١). الأداء المدرسي العام كان ممتازاً بين ٤٢,٦٪. متوسط أعمار الأمهات كان (٣٩,٠ سنة ± ٧,٩). بالنسبة للمستوى التعليمي للأمهات كان ٤٩,٣٪ من خريجات المدرسة الثانوية. أكثر من نصف عينة الدراسة تم تشخيصهم بمرض السكري قبل أقل من أربع سنوات (٧٧ (٥٥٪). كان ٧٣ (٥٢,١٪) لديهم قريب مريض بالسكري في نفس المنزل، ٣٤ (٤٦,٦٪) منهم كانوا أشقاء و ٧ (٩,٦٪) كانوا أمهات.

بخصوص ممارسات الأطفال من حقن الأنسولين ومراقبة الجلوكوز، ٢٩,٣٪ يُمكنهم حقن الأنسولين ومراقبة الجلوكوز بأنفسهم، (٣٧٪ من البنات و ٢٠٪ من الأولاد) (p-value = ٠,٠٥). نُصِف الأمهات ٦٩ (٤٩,٣٪) ذُكرن بأنهن يواجهن صعوبة في أغلب الأحيان في إيجاد الغذاء المناسب لأطفالهم

المرضى بالسكري في المطاعم و ٥٣ (٣٧,٨٪) في الأسواق المركزية. كما أوضح ٩٥ (٦٨٪) أنهم لا يجدون الغذاء المناسب في المدرسة.

بخصوص نشاطات الطفل اليومية، ٥,٧٪ لاحظت أمهاتهم قصور في نشاطهم مقارنة بأقرانهم، و ٦٢,٩٪ لم يلاحظن أي تأثير. من جانب الأطفال، ٣٧,٩٪ إشتكى من النشاط المنخفض مقارنة بأصدقائهم.

فيما يتعلق بإعلام المدرسة حول مرض الطفل، ٨٨,٩٪ أخبروا المعلمين، و ٥٠,٨٪ أخبروا مدير المدرسة. لاحظت ٤٣,٢٪ التعاون الدائم مع أطفالهم المرضى بالسكري بخصوص أوقات الوجبات الخفيفة، ٨٢,٥٪ بخصوص وقت الحقن، ١٠,٣٪ بخصوص حاجة الطفل المتكررة لدورة المياه، و ٢٦,٧٪ بخصوص الغياب المتكرر عن المدرسة.

بالنسبة لبعض نواحي العناية الطبية، ذكر ٤٤,٣٪ أنهم لم يتمكنوا من الاتصال بالفريق المعالج خارج وقت المراجعة الدورية، و ٨٥٪ كانوا راضين عن الخدمات المقدمة في غرفة الطوارئ.

نسبة زيارة عرفة الطوارئ كانت أعلى قليلاً بين الأطفال الذين ليس لديهم اقارب مرضى بالسكري في المنزل (٦٢,٧٪ مقابل ٥٦,٢٪) (p = ٠,٧٠)، وبين أطفال الأمهات الواسعات الإطلاع حول المرض (٦٢,٧٪ مقابل ٥٠,٠٪) (p = ٠,٧٣).

ذكر ٤٤ (٣١,٤٪) من الأمهات انهن يشعرن بالخجل في حالة إخبار الآخرين عن مرض الطفل، ٤٢,٩٪ يتسابقن من مشاعر الشفقة من الآخرين نحو أطفالهم، و ٢٩,٣٪ يشعرون بالحظ السيئ بسبب مرض أطفالهم. فيما يتعلق بحالة الأطفال النفسية، ٢٧,٩٪ من الأمهات لاحظن بأن أطفالهم يشعرون بالنقص بسبب المرض، و ٣٥,٧٪ كان لدى الطفل مشاكل في الإنسجام مع الآخرين.

الأمهات في هذه الدراسة اعتبرن ان معيشة أطفالهم متأثره نوعاً ما فيما يتعلق بالنشاطات الجسمية و أقل من ذلك بالنسبة للناحية النفسية، ولا تأثير للمرض على الأداء المدرسي. أغلب الأمهات اتفقن على عدم وجود أشخاص في المدارس يُمكنهم أن يعتنوا بالأطفال المرضى بالسكري.

مستوى المعرفة بمرض السكري عند الأطفال و الأمهات كانت غير كافية وافتقرت لبعض النواحي الأساسية. جزء كبير أيضاً من الأطفال لا يستطيعون أن يتعاملوا مع مرضهم ويعتمدون كلياً على الآخرين. أظهرت الدراسة غياب المنظمات والنوادي والمعسكرات التي يُمكن أن تقدم الدعم والتعليم للأطفال المرضى بالسكري أو عوائلهم.

إعداد: د. خواطر بهكلي، د. عبد الجميل شودي (برنامج الوبائيات الحقلية).



## Medical illnesses among chronic psychiatric inpatients in Taif mental hospital, cont...

(Continued from page 2)

epilepsy, hypertension, diabetes mellitus, respiratory diseases and infectious diseases represented the main bulk of the medical illnesses. Contributing risk factors were likely the nature of mental illness, antipsychotics use, in addition to behavioral risk factors, inactivity in particular.

Both psychiatrists and physicians should increase their efforts to detect, document and treat medical comorbidities among their psychiatric inpatients. It is recommended that Taif mental hospital administration should reconsider the integration between drug treatment and psychosocial treatment as deinstitutionalization, besides introduction and maintenance of sports and outings program for their inpatients. The study findings could be used as the basis for future studies.

### References:

1. Lyketsos CG, Dunn G, Kaminsky MJ, Breakey WR. Medical comorbidity in psychiatric inpatients relation to clinical outcomes and hospital length of stay. *Psychosomatics* 2002; 43: 24–30.
2. Kamara SG, Peterson PD, Dennis JL. Prevalence of Physical Illness Among Psychiatric Inpatients Who Die of Natural Causes. *Psychiatr Serv* 1998; 49: 788-793.
3. Cassidy F, Ahearn E, Carroll BJ. Elevated frequency of diabetes mellitus in hospitalized manic-depressive patients. *Am J psychiatry* 1999; 156:1417–1420.
4. Dickey B, Normand ST, Weiss RD, Drake RE, Azeni H. Medical morbidity, mental illness, and substance use disorders. *Psychiatric services* 2002; 53(7): 861-867.
5. Ahmet K, Aykut O, Yasemin B, Yunus S, Mehmet O, Neslihan K, et al. Prevalence and Genotypic Distribution of Hepatitis GB-C/HG and TT Viruses in Blood Donors, Mentally Retarded Children and Four Groups of Patients in Eastern Anatolia, Turkey. *Jpn. J. infect. Dis* 2005; 58, 222-227.

## Mark your calendar . . .

### Inside the Kingdom

**May 4-7, 2009: The 8th Scientific Conference of the Saudi Society of Family and Community Medicine: Community Medicine: Reality and Expectations.**

**Location:** Jeddah, Saudi Arabia

**Venue:** Jeddah-Ramada Continental.

**Contact:** Dr Khalid Aseri, Consultant of Community Medicine.

**Email:** [info@commed8.com](mailto:info@commed8.com)

**Website:** [www.commed8.com](http://www.commed8.com)

**June 10, 2009: Women Health Care for Family Physician Symposium.**

**Organized By:** Women's Specialized Hospital.

**Location:** King Fahad medical City, Riyadh.

**Contact:** Continuing Medical Education Department, Academic and training Affairs, King Fahad Medical City, P.O. Box 59046 Riyadh 11252.

Tel.: 288-9999 Ext. 7497 / 4114 / 4454. Fax: 288-999 Ext. 4118 / 4292.

**E-mail:** [cme@kfmc.med.sa](mailto:cme@kfmc.med.sa)

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

### Outside the Kingdom

**April 27 – May 1st, 2009: 12th World Congress on Public Health: Making a Difference in Global Public Health: Education, Research and Practice.**

**Location:** Istanbul, Turkey.

**Contact:** Congress Organizer, address: Mustafa Kemal Mahallesi 41. Sokak No:42 Eskişehir Yolu 7. Km. 06520 Çankaya/ Ankara.

Fax: +90 312 219 57 01.

**E-mail:** [gozde@zed.com.tr](mailto:gozde@zed.com.tr)

**Website:** [www.worldpublichealth2009.org](http://www.worldpublichealth2009.org)

**Saudi Epidemiology Bulletin (SEB) is published quarterly by the Department of Preventive Medicine and the Field Epidemiology Training Program (FETP) of the Ministry of Health.**

*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:*

*Saudi Epidemiology Bulletin  
Editor-in-Chief  
P.O. Box 6344  
Riyadh 11442, Saudi Arabia*

**For epidemiological assistance,**  
*call or fax the FETP at  
01-496-0163  
Website: [www.fetp.edu.sa](http://www.fetp.edu.sa)*

### Department of Preventive Medicine:

- **Dr. Khalid Al-Zahrani**  
*Assistant Deputy Minister for Preventive Medicine, and SEB Supervisor*
- **Dr. Nasser Al-Hozaim**  
*General Director, Parasitic and Infectious Diseases Department*
- **Dr. Amin Mishkhas**  
*Director, Infectious Diseases Department*

### Field Epidemiology Training Program:

- **Dr. Mohammed Al-Mazroa, FETP**  
*Supervisor, SEB Editor-in-Chief*
- **Dr. Randa Nooh**  
*Consultant Epidemiologist, Bulletin Editor*
- **Dr. Abdul Jamil Choudhry**  
*Consultant Epidemiologist.*



## Selected notifiable diseases by region, Jan - Mar 2009

	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	12	0	0	0	0	1	2	0	1	0	0	0	0	25	0	2	0	0	0	0	0	43
Mumps	0	0	1	0	0	1	63	0	0	12	0	0	6	0	1	1	0	0	0	0	0	85
Rubella	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Varicella	1886	345	697	566	436	1163	1195	948	285	749	295	333	100	136	423	767	58	144	117	81	10724	
Meningitis mening.	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Meningitis other	22	0	6	6	12	18	6	3	1	1	0	2	3	1	0	1	0	0	0	0	0	82
Hepatitis B	318	0	286	129	31	86	212	6	4	103	10	69	8	52	52	44	3	25	5	16	1459	
Hepatitis C	175	3	232	40	14	57	145	4	1	33	6	24	3	1	5	10	0	15	4	3	775	
Hepatitis unspecified	12	0	4	0	0	0	0	1	0	4	0	4	0	0	71	0	0	0	0	0	96	
Hepatitis A	58	28	23	46	56	27	24	8	14	10	2	26	2	7	54	90	0	5	4	0	484	
Typhoid & paratyphoid	0	0	10	9	0	1	1	9	4	13	1	0	2	0	0	1	0	4	0	1	56	
Amoebic dysentery	21	17	464	6	7	1	133	16	0	41	40	0	0	0	1	4	0	1	0	1	753	
Shigellosis	11	0	0	2	0	1	9	2	2	0	0	0	0	0	1	12	0	1	1	0	42	
Salmonellosis	81	1	8	8	0	1	86	17	7	0	7	6	0	0	1	23	0	1	2	1	250	
Brucellosis	102	10	11	36	54	211	141	9	56	184	69	9	67	17	30	64	6	0	1	16	1093	
Dengue Fever	0	423	197	1	3	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	628	
Khomra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	

## Comparisons of selected notifiable diseases, Jan - Mar 2008 - 2009

DISEASE	Jan-Mar	Jan-Mar	Change	Jan-Mar	Jan-Dec	DISEASE	Jan-Mar	Jan-Mar	Change	Jan-Mar	Jan-Dec
	2009	2008		%	2009		2008	2008		2007	%
Cholera	0	0	0	0	7	Meningitis mening	2	3	-33	2	7
Diphtheria	0	0	0	0	0	Meningitis other	82	83	-1	82	299
Pertussis	10	10	0	10	30	Hepatitis B	1459	1377	6	1459	5066
Tetanus, neonat	7	3	133	7	13	Hepatitis C	775	840	-8	775	2733
Tetanus, other	3	1	200	3	4	Hepatitis unspecified	96	93	3	96	255
Poliomyelitis	0	0	0	0	0	Hepatitis A	484	647	-25	484	1678
Guilain Barre Syndrome	9	23	-61	9	121	Amoebic dysentery	56	87	-36	56	269
Measles	43	72	-40	43	158	Amoebic dysentery	753	877	-14	753	3311
Mumps	85	7	1114	85	31	Shigellosis	42	48	-13	42	188
Rubella	3	0	0	3	15	Salmonellosis	250	282	-11	250	1292
Varicella	10724	21708	-51	10724	60007	Brucellosis	1093	918	19	1093	3447

## Diseases of low frequency, Jan – Mar 2009

Yellow fever, Plaque, Poliomyelitis, Rabies: No Cases

Pertussis: 10 Cases (Qassim)

Neonatal Tetanus: 7 Cases (Jeddah 4, Makkah 2, Jazan 1)

Echinococcosis: No Cases