## **Brief Communication**

Prevalence of minor psychiatric illnesses among attendants of a Primary Health Care Center in Northwestern Saudi Arabia

> Nahar M. Al-Azemi, SBFM, ABFM, Brian Driver, FRACGP, MRACMA, Salem Khalil, MBBS, FFCM, Mohamed A. Salih. DGO MHPE

Minor psychiatric disorders form a high proportion of clinical problems that face primary care doctors in the Kingdom of Saudi Arabia (KSA).1 Previous studies in this area have had conflicting results in different parts of the world with a frequency ranging from 10-40% among primary care patients. 1.2 Moreover, psychiatric disease is regarded a social stigma in Saudi Arabia and in many other countries.3 Many of the studies carried out in the KSA to determine the extent of psychiatric morbidity were hospitals based and do not reflect the real size of the problem.2 The present study utilizes the general health questionnaire-30 (GHQ30), which is an extensively administered and validated screening tool for determining the prevalence of minor psychiatric disorders and for checking the clinical assessment of general practitioners (GPs).

This is a cross-sectional study of the prevalence of minor psychiatric disorders and associated socio-demographic characteristics among patients seen at the Air Base Primary Care Center, Tabuk from 27 April to 10 June, 1998. The Center was serving the Air Force employees and their dependents. We enrolled adult Saudi patients from both sexes from 18 years of age or above, namely, from the minimum age for acceptance in the military service. Sick patients who cannot answer the questionnaire and those who were coming for dressing or for dental care, were excluded from the study. The GPs clinically assessed the subjects to identify minor psychiatric disorders. The data were collected by the Arabic version of the GHQ30. The socio-demographic characteristics were added to the same questionnaire. The clinical assessment data were recorded in a 6 points rating scale ranging from a normal/stable person to psychologically distressed that warranted hospital admission. Data confidentiality and patients privacy were observed. Analysis was carried out by the Statistical Package for Social Sciences, using parametric tests for ordinal and non-parametric tests for nominal data. A p-value was set at <0.05 for statistical significance.

During the data collection period, 259 attendants were eligible, 250 of them agreed to participate in the study, giving a response rate of 96%. Of these, 84 (33.6%) had an abnormal questionnaire score.

The GPs labeled 12.8% subjects as having psychiatric disorders, 9.6% subclinical emotional disturbance and 2.8% with mild psychological illness. Compared with the GHQ30 standard, the GPs clinical assessment had 21.4 sensitivity, 91.6 specificity, with 56% positive predictive value and 69.7% negative predictive value. The subjects age ranged from 18-58 years, 219 (87.9%) were between 18-40 years, with a mean age of 30 + 8.5. Most participants were males (78%). Military employees (172) formed almost two thirds of the total study subjects. Of these 25% were doing office work, 24% technical and 26% physical work, while 1% were businessmen and 25% were unemployed. Job satisfaction was reported by 95% of subjects. Most of the subjects were married (72%) while 26% single and 1% widowed. The mean marriage duration was 10.4 years (+7.5). Of the married subjects, 81% reported no marital problems, others admitted having varied problems. Most subjects, 134 (54%) were living in the Air Base Cantonment and 112 (45%) were resident in another area, but inside Tabuk City. The type of housing was mostly governmental (54%) with 36% rented and 10% owning houses. The majority (87%) were living with their families and only 4% living alone. Only 6% of subjects admitted having a family history of mental illness. Most of the subjects (93%) received at least elementary education. The low income group formed 69%, followed by the middle income (27%) and the high income (4%) groups. Among the distressed groups, age, gender, education, marital status with problems, and particularly job satisfaction and family history of mental illness showed a statistically significant association (Table while occupation, military or civilian employment, income, residence area, marital status. housing status or type, had no statistically significant difference.

With a high response rate of 96%, the results of our study showed a high point prevalence (33.6%) of minor psychiatric disorders among mixed Saudi military (two thirds) and civilian (one third) primary care attendants. This prevalence does not represent the Saudi general population because most of our subjects are from a special group as regards occupation, age and gender, two thirds military, 88% of young age from 18-40 years and 78% males. A study carried out in Riyadh1 in general community primary care centers, using the same instrument (GHQ30), gave a prevalence rate of 47%. However, both studies found a prevalence rate of at least one third of the study population. International studies give similar prevalences, for example, ranging from 36% in Italy4 and 45% in Western Australia.5 The following socio-demographic characteristics showed

Table 1 - The frequency distribution of socio-demographic factors demonstrating statistically significant association with minor psychiatric disorders among the attendants of the Air Base Primary Care Center. Tabuk from 27th April to 10th June 1998.

Socio-demographic factors	Frequency		Proportion		P-value
	All Groups N=250	% Distribution	Healthy n (%) N=166 (0.66)	Distressed n (%) N=84 (0.34)	
Age Group					
18-40	219	87.6	140 (0.6)	52 (0.4)	p<0.05
>40	31	12.4	26 (0.84)	5 (0.16)	
Mean	30.3		31.3	28.3	
Standard Deviation	8.5		88	7.5	
Sex					
Male	196	78.4	137 (0.70)	59 (0.3)	p<0.05
Female	54	21.6	29 (0.54)	25 (0.46)	•
Education					
Non-educated	18	7.2	8 (0.44)	10 (0.56)	p<0.05
Educated	232	92.8	158 (0.68)	74 (0.32)	1
Mental illness	15	6	5 (0.33)	10 (0.67)	p=0.00
Yes	235	94	161 (0.69)	74 (0.31)	P 0.00
No			101 (0107)	()	
Job satisfaction					
Satisfied	237	94.8	163 (0.69)	74 (0.31)	p=0.00
Not Satisfied	13	5.2	3 (0.23)	10 (0.77)	,
Marital problems					
No problem	149	81	106 (0.71)	43 (0.29)	p<0.05
With problems	35	19	18 (0.51)	17 (0.49)	F 40.00

statistically significant lower prevalence rates with minor psychiatric disorders: older age, male gender, higher educational level, married status. Family history of mental illness, job dissatisfaction and marital problems are strongly associated with high prevalence. Unemployment and technical jobs are also associated with high prevalence, but the place of living showed no difference. Our findings are consistent with many previous studies.1,2 The discrepancy exists between the GP clinical assessment and the GHQ30 results, indicating that the GPs are missing some of the cases. These findings are also supported by some international studies.6 The GPs miss more psychiatric problems by their low sensitivity.<sup>2</sup> In our study, the sensitivity of the GP diagnostic assessment was as low as 21.4% which led to low detection ability. Primary Care doctors who face most of these problems should pay special attention to detect such disorders at early stages when their management is much simpler. One limitation for generalization of the results of our study was that the subjects were drawn from a specific community. But, in spite of that, the practical implications are important and applicable in many clinical situations. To solve the problem, there is a need to increase the awareness of GP and PHC doctors of these disorders by appropriate training to improve their clinical and diagnostic skills. This strategy is more effective in treatment than changing the lifestyle. socio-economic and environment of the study population.

Received 4th September 2004. Accepted for publication in final form 25th October 2004.

From the Department of Family Medicine, North West Armed Forces Hospitals Program, Tabuk, Kingdom of Saudi Arabia. Address correspondence and reprint requests to Dr. Nahar M. Al-Azemi, Department of Family Medicine, North West Armed Forces Hospital, PO Box 100, Tabuk, Kingdom of Saudi Arabia. Tel. +966 (4) 4411088. Fax. +966 (4) 4412124. E-mail: naharaz@hotmail.com

## References

- 1. Alfares E, Al Shammary S, Alhamad A. Prevalence of psychiatric disorders in academic PC Department in Riyadh. Saudi Med J 1992; 13: 49-53.
- 2. Howe A. Can GPs audit their ability to detect psychological distress? One approach and some unresolved issues. Br J Gen Pract 1998; 48: 899-902
- 3. Ohta Y, Kawasaki N, Araki K, Mine M, Honda S. The factor structure of the general health questionnaire (GHQ-30) in Japanese middle-aged and elderly residents. Int J Soc Psychiatry 1995; 41: 268-275.
  4. Bellantuono C, Fiorio R, Williams P, Cortina P.
- Psychiatric morbidity in an Italian General Practice. Psychological Medicine 1987; 17: 243-247.
- Febbo S, Burvill P. Validation of an Italian translation of the 30-item CHQ for use in Australia. Aust N Z J Psychiatry 1995; 29: 266-269.
- 6. Chocron Bentata L, Vilalta Franch J, Legazpi Rodriguez I, Auquer K. Franch L, Ramirez Arrizabalaga R. The diagnosis of mental disorders by PHC physician. Antecion Primaria 1996; 18: 22-26.