# LETTERS

## Prevalence of psychiatric disorders in older patients attending an Arab tertiary facility

The phenomenon of population aging which was defined as an increase in the median age of the population is already a major social and health problem in a developing country such as Saudi Arabia and represents a challenge to the psychiatric profession (Hafez *et al.*, 2000).

Psychiatric research among the older adult population in the Gulf region is relatively scanty in comparison with the developed world (Ghubash *et al.*, 2004). Cognitive disorders and depression among older people have been studied (Ogunniyi *et al.*, 1998) but other mental disorders in late life have received little attention.

The aim of this study was to explore the demographic characteristics and the diagnostic profile of geriatric patients attending the Psychiatry and Neurology outpatient clinics of a tertiary hospital. This cross-sectional study was conducted in the combined outpatient clinics of Neurology and Psychiatry of King Fahd Hospital from June 2007 to December 2011. The inclusion criteria were those aged ≥60 years after obtaining an informed consent.

The majority of the sample were illiterate (95.5%) with difficulties in communication, so interviewing the caregivers was mandatory in most of the domains examined. All subjects and/or caregivers were interviewed on demographic data (age, gender, level of education and income, marital state, employment status, current smoking or alcohol use, and living arrangement), sites and reasons for referral to the clinics, self- and prescribed medications, and the following physical illnesses were inquired – diabetes, hypertension, chronic obstructive pulmonary diseases, ischemic heart disease, osteoarthritis, and visual or hearing difficulty.

A full clinical examination including physical, neurological, and psychiatric examination was carried out, followed by, administration of the Structured Clinical Interview for DSM-IV-Axis I Disorders (SCID-I) Clinical Version (SCID-CV) (First *et al.*, 1997).

Data was analyzed using SPSS 13.0 (Statistical Package for Social Science, SPPS Inc, Chicago, IL, USA) and Epi-Info 6 (Centers for Disease Control, Atlanta, GA, USA).

During the study period (2007–2011), a total of 412 patients (247 males and 165 females) with a mean age of 66.6 years ($SD = 12.4$, range 60–84) were assessed for neurological and psychiatric evaluation, mainly resided (92.7%) in Al-Hassa. Of the included patients, 179 (43.4%) have been screened positive for psychiatric disorders with mean age of 68.3 years ($SD$ 16.8; range 60–84). Univariate analysis showed that females were significantly more affected with psychiatric disorders, while being illiterate, living alone, smokers and with unsatisfactory income increase the likelihood of psychiatric problems but without statistical significance. The older patients with psychiatric disorders were more likely to suffer from more than one morbid condition especially hypertension (see Tables S1 and S2, available as supplementary material attached to the electronic version of this paper at www.journals.cambridge.org/jid_IPG).

Prevalence for current individual axis 1 mental disorders by gender reveled that, overall 32.6% of the sample had at least one psychiatric disorder. The most commonly identified disorders among the entire sample were anxiety disorders (31.3%), dementia (29.6%), and depressive disorders (26.3%). No cases of bipolar disorder were found. Generalized anxiety disorder was the most prevalent anxiety disorder affecting 20.7% of the sample. Of the 53 subjects diagnosed with dementia, the majority ($n = 30$, 57%) had Alzheimer's disease (AD), while 25% had vascular dementia (VD) and 18% mixed Alzheimer and VD. The only statistically significant differences in prevalence of psychiatric disorders in relation to genders were that more men were affected by dementia. In the dementia group, the onset of the disorder occurred on average $4.8 \pm 3.7$ years before the presentation (anxiety disorder, AD, $4.5 \pm 4.0$; VD, $5.6 \pm 4.0$; major depression, MD, $4.5 \pm 2.17$), whereas in the depression group, it was $20.5 \pm 11.77$, $24 \pm 5.2$, and $27.5 \pm 7.1$ for minor depression, MD, and dysthymia, respectively. For schizophrenia and anxiety disorders, the onset of the disorder occurred on average $35.9 \pm 7.5$ and $24.1 \pm 8.5$ years before presentation, respectively. Comorbid Axis I psychiatric diagnoses were found in 24 cases (13.4%) (see Table S3, available as supplementary material attached to the electronic version of this paper at www.journals.cambridge.org/jid_IPG).

Logistic regression analysis generated to examine for the possible correlates predictors of psychiatric disorders among older patients revealed that age ≥70, unsatisfactory income, and the presence

of ≥2 medical comorbidities were significant possible predictors for the development of psychiatric disorders among the included sample (see Table S4, available as supplementary material attached to the electronic version of this paper at www.journals.cambridge.org/jid_IPG).

In this study the rates of current Axis-I DSM-IV disorders using the SCID were found to be common, affecting nearly one-third of the sample (32.6%), which is in agreement with previous studies (Lyness *et al.*, 1999). However, anxiety disorders appears to be much higher suggesting the need for further rigorous research to identify the factors behind this observation.

Subjects with dementia (29.6%) were higher than the ratio previously reported among older Saudis by Ogunniyi *et al.* (1998) (2.1%). The higher prevalence may be because a larger proportion of the patients with organic mental disorders are being managed at the general hospital set up (i.e. King Fahd Hospital) and continued to follow-up in the outpatient clinics. A clear predominance of males was observed contrary to the findings of similar studies ((Lyness *et al.*, 1999). Women may not attend hospitals as frequently as men for cultural reasons, as they are totally dependent on men to take them there.

Several limitations of this investigation should be recognized. First, since the data is from a hospital situation, the findings cannot extend into the community. Hence the findings need to be confirmed by community-based studies. Second, inferences of causality cannot be accomplished because of the design of this study (cross-sectional). Finally, there was no data of the SCID diagnosis in community or primary care settings in Saudi Arabia for comparison.

In conclusion, psychiatric disorders are common among older persons attending a tertiary care setting in Saudi Arabia. Primary care physicians in this region must be particularly trained to detect the psychiatric disorders among older adults with attention given to anxiety disorders, given their prevalence, medical and psychiatric comorbidity. Similar studies as well as epidemiological investig-ations, are important to raise awareness toward the different types of psychiatric disorders encountered among older adults in Saudi Arabia enabling the development of more specific prevention strategies and proper management.

## Conflict of interest

None.

## References

**First, M. B., Spitzer, R. L., Gibbon, M. and Williams, J. B. W. (eds.)** (1997). *Structured Clinical Interview for DSM-IV Axis I Disorders-Clinical Version (SCID-CV)*. Washington: APA Press.

**Ghubash, R., El-Rufaie, O., Zoubeidi, T., Al-Shboul, Q. M. and Sabri, S. M.** (2004). Profile of mental disorders among the elderly United Arab Emirates population: sociodemographic correlates. *International Journal of Geriatric Psychiatry*, 19, 344–351.

**Hafez, G., Bagchi, K. and Mahaini, R.** (2000). Caring for the elderly: a report on the status of care for the elderly in the Eastern Mediterranean Region. *Eastern Mediterranean Health Journal*, 6, 636–643.

**Lyness, J. M., Caine, E. D., King, D. A., Cox, C. and Yoediono, Z.** (1999). Psychiatric disorder in old primary care persons. *Journal of General Internal Medicine*, 14, 249–254.

**Ogunniyi, A. *et al.*** (1998). Dementia in Saudi Arabia: experience from a university hospital. *Acta Neurologica Scandinavica*, 98, 116–120.

Mostafa Amr, Tarek Tawfik Amin, Dahoud Al-Rhaddad and Khalid Sallam

Faculty of Medicine, Benha University, Egypt
Email: sallamk2000@gmail.com

## Effects of vitamin B12 supplementation on cognition, depression, and fatigue in patients with lacunar stroke

We read the review by Moore *et al.* (2012), recently published in this journal, with great interest and compliment the authors for their thorough review of cognitive impairment and its relation to vitamin B12.

The authors identified only four intervention studies in neurological patients presenting with vitamin B12 deficiency. Although vitamin B12 is specifically associated with cerebrovascular