COMORBIDITY OF ALCOHOLISM IN OUTPATIENTS WITH PSYCHIATRIC DISORDERS IN THE EMERGENCY PSYCHIATRIC DEPARTMENT

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Key words: alcoholism, psychiatric disorders, comorbidity, cage test.

ABSTRACT

It is well known that there is high co morbidity between psychiatric disorders (particularly depression and personality disorders) and alcoholism.

Aim of this study is to investigate the co morbidity of alcohol abuse/dependence in outpatients seeking psychiatric help in the Emergency Psychiatric Department (EPD) of two General Hospitals.

For a three-month period, all the adult outpatients examined in the EPD of two General Hospitals completed the CAGE (Cut down, Annoyed, Guilty, Eye-opener) questionnaire, which uncovers hidden alcoholism. The outpatients' demographics and reason of psychiatric examination were noted. CAGE was given by residents acquainted with its use.

The sample included 320 outpatients (mean age±SD: 41.79±15.4) years. There were 27.5% positive answers. Men presented significantly higher CAGE scores compared to women (t test $p<0.01$). Patients diagnosed with personality disorders had higher scores compared to patients with other psychiatric disorders.

In conclusion, alcohol abuse seems to be high in Greek psychiatric outpatients compared to the general population, a finding in accordance with the international bibliography. The systemic investigation of alcohol abuse as a comorbidity factor and as a factor that is associated with psychiatric illness seems to be important. Males with personality disorders seem to be a high-risk group.

INTRODUCTION

Disorders that are related to alcohol use are reported by the World Health Organization (WHO) to be a major public health problem, which, according to recent estimates, correspond to 3.4% of global disease burden for men (Evans et al., 2003) . In the United States (where 8 million individuals, age 18 and over, fulfil the DSM-IV-TR criteria for alcohol dependence ("Substance dependence", 1994)), it has been shown that alcohol dependence increases mortality risk up to 50%, independently of the quantity of alcohol consumed (Dawson, 2000). In the same country, alcohol dependence has a prevalence of 3.8% (Grant et al., 2004). According to WHO, alcohol abuse/dependence -related disorders have a prevalence of 1%-5% in the developing and developed countries, including Greece (*Global Status Report on Alcohol 2004*, 2004). In Greece, according to a recent study (Rehm et al., 2005), the yearlong consumption of alcohol per individual is 11.39 lt. and the country is ranked 10th between twenty-six European countries in harmful alcohol use rate. Furthermore, alcohol use is very widespread in young persons, particularly males (Kitsos et al., 2006) .

Major difficulties exist when planning health care programs for addicted patients, mainly that of comorbidity between psychiatric disorders and dependence (Kessler et al., 1997). Clinical psychiatry uses the concept of comorbidity in order to describe complex symptomatology and any additional clinical entity, which co-exists with another diagnosed clinical disorder. Particularly relevant to alcohol dependence, comorbidity refers to mental dysfunction that predates alcohol use or follows, influencing the therapeutic perspectives of patients. The comorbidity of psychiatric disorders and alcohol use includes psychotic (Dervaux et al., 2005), mood, personality and other major mental disorders (Bowden-Jones et al., 2004). However, there is a paucity in Greek studies regarding this comorbidity.

The aim of this study was to investigate the existence of alcohol abuse/dependence in adult psychiatric outpatients that are admitted in the Emergency Psychiatric Department (EPD) and to record the comorbidity of alcohol abuse/dependence in these patients.

METHOD

For a three months period all the adult outpatients examined in the EPD of two general hospitals completed the CAGE (Cut down, Annoyed, Guilty, Eye-opener) questionnaire, which uncovers alcoholism. The test includes four questions, answered by yes or no. Two or more positive answers suggest alcohol abuse/dependence. Residents acquainted with its use administered the questionnaire.

The CAGE questionnaire has been validated for screening inpatients (Malet et al., 2005), outpatients (Whiteman et al., 2000), as well as, psychiatric patients (Dervaux et al., 2005) for alcohol abuse/dependence. Furthermore, the CAGE questionnaire is widely used for the detection of hidden alcoholism in primary care (Williams et al., 2006) and in adolescent populations and young adults (Carballo et al., 2006). The sensitivity of the CAGE is comparable to that of an external criterion, such as clinical diagnosis (Bataille et al., 2003). In the present study we used its Greek version (Athanasaki-Touroula et al., 1989).

We recorded the demographics of participants (sex, age, education level and family status), the cause for attending the EPD, as well as, previous clinical diagnoses and hospitalizations. The present diagnostic categorization was done using a semi-constructed clinical interview, according to DSM-IV-TR criteria. Data input and analysis was done with SPSS version 10 statistical package (SPSS Inc., Chicago, IL, USA).

SAMPLE

The study included 320 emergency room outpatients (169 men and 151 women) with mean age±SD: 41.79±15.40 years (men 41.11±14.41, women 42.54±16.45). As to family status, 47.3% were single, 35.7% were married, 14.4% were divorced and 2.5% were widowed. Fifty one percent were employed and 49% were unemployed. Regarding education level, 5.7% had received none, 22.7% had followed a six-year school curriculum, 15.7% had received nine years of schooling, 30.7% had received twelve years of school education and 20.3% had university degree education. Regarding psychiatric diagnosis, 21.3% were diagnosed with anxiety disorder, 19.4% with mood disorder, 24.1% with psychotic disorder, 20% with personality disorder and 5% with organic brain syndrome. Finally, 10.3% of the subjects did not present a specific psychopathology (Indefinable Psychiatric Disorder, Non Psychotic), according to DSM-IV-TR.

RESULTS

A positive score in CAGE (positive answers ≥ 2, table 1) was noted for 27.5% of all patients: 38.5% of men and 15.2% of women had a positive CAGE score (x^2 $p<0.01$). Men had a higher mean score than women (1.20 vs 0.52, t test $p<0.01$), with no statistical difference as to age and education level between genders (t test $p>0.05$, table 2). CAGE score presented no statistical difference between employed and unemployed patients (0.99 ± 1.37 vs 0.82 ± 1.38, t test $p>0.05$). As to family status, married individuals presented lower scores compared to single persons (0.66 ± 1.23 vs 0.97 ± 1.34, t test $p<0.05$) and to divorced (0.66 ± 1.23 vs 1.41 ± 1.68, t test $p<0.01$). Patients diagnosed with personality disorders had higher scores (table 1) compared to patients with other psychiatric disorders (ANOVA $p<0.01$). There was a negative correlation between CAGE score and education level in the total sample (Pearson correlation sig. 2 tailed, $p<0.01$, $r = -0.190$). This relation remained strong even when examined vis-à-vis clinical diagnosis (partial correlation sig. 2 tailed, $p<0.05$, $r = -0.142$). Age was not correlated with CAGE (Pearson correlation sig. 2 tailed, $p>0.05$, $r = -0.081$; table 3). The questionnaire presented high reliability (alpha: 0.84).

DISCUSSION

Alcohol abuse/dependence coexists with psychiatric disorders very often and seems to be significant higher compared to the general population. It is of interest that this comorbidity concerns all the diagnostic spectrum of DSM-IV-TR, a finding that is compatible with results of other epidemiological community studies (Kessler et al., 1997; Regier et al., 1990).

Furthermore, the study confirms the predominance of men with psychiatric disorder vis-à-vis alcohol abuse/dependence, a finding that also applies for non-psychiatric populations (Kitsos et al., 2006). The existence of personality disorders, which, according to relevant studies, is very frequent in alcoholism, was also confirmed in our study (Kessler et al., 1997). This finding must take into consideration the well-known relation between violent behavior, alcoholism and personality disorders, particularly in young adult males (Bahlmann et al., 2002; Conte et al., 1991). These patients, probably, use alcohol to self-medicate their painful psychiatric symptomatology, in particular psychotic or neurotic anxiety (Addolorato et al., 2005; Khantzian, 1985; Regier et al., 1990). Education level seems to be a protective factor, independent of psychiatric disease. Finally, CAGE seems to be an instrument that can be easily applied (with good sensitivity and specificity) in the EPD to detect hidden alcoholism.

TABLE 1: Psychiatric morbidity in sample subjects

	N	Age (mean±SD)	CAGE test score (mean±SD)	CAGE ≥2
Anxiety disorders	68 (21.3%)	38.47±16.42	0.60±1.03	13 (19.10%)
Mood disorders	62 (19.4%)	46.95±14.41	0.80±1.40	15 (24.20%)
Psychotic disorders	77 (24,1%)	40.79±15.61	0.36±0.90	7 (9.10%)
Personality disorders	64 (20%)	36.07±10.62	1.97±1.57	39 (30.90%)
Organic brain syndromes	16 (5%)	60.44±19.83	0.50±1.36	2 (12.50%)
Other diagnoses	33 (10.3%)	43.00±16.42	1.15±1.32	12(36.40%)
Total(s)	320 (100%)	41.79±15.41	0.92±1.39	88(27.50%)

TABLE 2: Summary of sample demographics and CAGE scores

Gender	Age (mean±SD)	CAGE score (mean±SD)
Men (N=169)	41.11±14.41	1.28±1.51
Women (N=151)	42.53±16.45	0.52±1.10
Total(s)	41.79±41	0.92±1.28

TABLE 3: Correlations between Education and CAGE score

		Age	Education
Education	Pearson Correlation	-0.189**	--
	Sig. (2-tailed)	0,001	--
	N	320	--
CAGE score	Pearson Correlation	-0,081	-0,190**
	Sig. (2-tailed)	0,153	0,001
	N	320	320

** Correlation is significant at the 0.01 level (2-tailed).

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