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SOME COMORBIDITIES OF BENZODIAZEPINE ADDICTED PATIENTS

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Keywords: benzodiazepine, alcohol, anxiety disorders.

Abstract: Comorbidity represents the diagnosis of one or more disorders in addition to the primary disease in a person for a certain period of time. In other words, comorbidity refers to a simultaneous process not related to the main pathological process. However, patients with addiction to alcohol or other drugs have anxiety comorbidity which requires an efficient and appropriate pharmacotherapy.

INTRODUCTION

Benzodiazepine addiction and abuse may be often associated with the abuse of other substances (such as alcohol, cannabis, cocaine, heroine, methadone, amphetamines). Sedatives are frequently used for relieving the adverse effects of these substances (Midmer et al. 2006). Contrary to their wide margin of safety when used alone, if benzodiazepines are taken with alcohol they are extremely dangerous, and accidental overdose were also described (Skurtveit et al. 2008).

By repeated use looking for the euphoric effect, patients develop tolerance to the sedative effect, and progressively, bigger doses are used. However, tolerance to the depressing effects on the brain stem is developed much slower and the patient consumes increasingly more substance to become euphoric which may trigger respiratory depression and low blood pressure that might threaten the life of the patient (Mohammadi et al. 2006).

In most cultures, alcohol is the most frequently used brain depressant and the cause of a significant morbidity and mortality. It is believed that 90% of adults from USA have had some experience with alcohol at a certain time of their life and a large number of them had one or several adverse life events related to alcohol (Chirita et al. 2002, Klein-Schwartz et al. 1991).

MATERIALS AND METHODS

The group study was composed of 134 patients (ages ranging between 20 and 66 years), 49 male and 85 female, selected among benzodiazepine addicted patients, admitted in Clinic V of Socola Psychiatric Hospital from Iasi, during the period January 2009 – December 2010. Before their initial evaluation, patients were explained the structure of the study. The patients included in the study agreed and gave an informed consent, which was obtained before performing any procedure of the study.

In the case of our study, the consumption of other substances was pointed through the interview of the patients and caregivers. Also, the data obtained had a more limited frequency than what it is described in literature.

RESULTS AND DISCUSSION

Alcohol, as associated risk factor in our study, shows no statistically significant differences ($\chi^2 = 0.03$; GL = 1, p = 0.853).

In the studied cases, the statistical processing confirmed the significant association between anxiety disorder patients and alcohol consumption (**p=0,0002**), the relative risk of anxiety being nearly 6 times higher in the case of alcohol consumption (RR=5,85; IC95%: 2,21 – 15,49).

Table no. 1. Statistical differences in the distribution of patients with anxiety disorders according to vicious habits

Characteristic	Anxiety disorder		None		Test χ ²		
	n	%	n	%			
Alcohol consumption							
Yes	12	9,0	27	20,1	$\chi^2 = 14,02$; GL = 1;		
No	5	3,7	90	67,2	p = 0.0002		
Smoking							
Yes	7	5,2	23	17,2	$\chi^2 = 2.81$; GL = 1;		
No	10	7,5	94	70,1	p = 0.093		

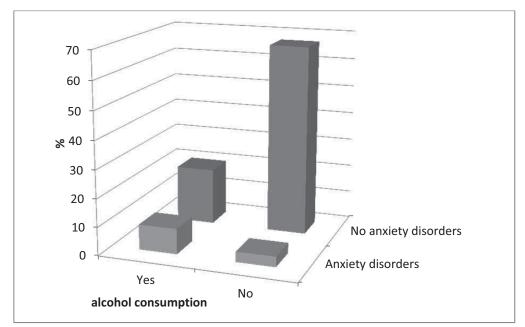


Fig. no. 1. Distribution of patients with anxiety disorders according to alcohol consumption

Smoking patients with anxiety disorders showed no statistically significant distributions. (p=0,093).

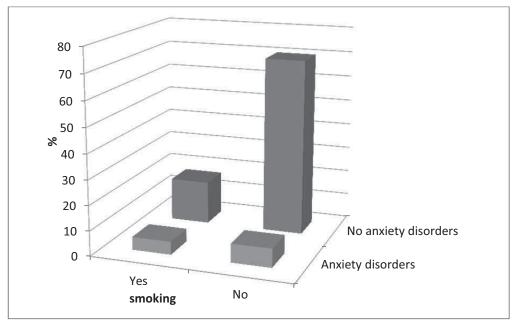


Fig. no. 2. Distribution of patients with anxiety disorders according to smoking

Smokers or those who acknowledged alcohol consumption represent approximately equal shares in patients with or without major significant depression (p=0,579 vs p=0,874).

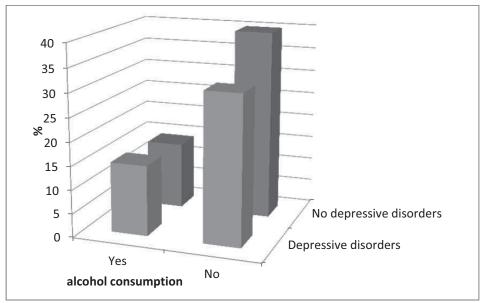
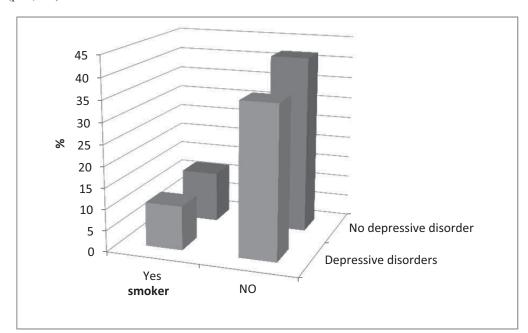


Fig. no. 3. Distribution of patients with major depressive disorder according to alcohol consumption



Smoking patients with anxiety disorders showed no statistically significant distributions (p=0,093).

Fig. no. 4. Distribution of patients with major depressive disorder according to smoking

Table no. 2. Statistical differences in the distribution of patients with major depressive disorder according to their vicious habits

Characteristic	Depressive disorders		None		Test χ ²		
	n	%	n	%			
Alcohol consumption							
Yes	20	14,9	19	14,2	$\chi^2 = 0.31$; GL = 1;		
No	42	31,3	53	39,9	p = 0.579		
Smoking							
Yes	14	10,4	16	11,9	$\chi^2 = 03$; GL = 1; p = 0,874		
No	48	35,8	56	41,8	p = 0.874		

In the studied cases, the statistical analyses confirmed the significant association between personality disorder patients and alcohol consumption (p=0,0002), the relative risk of anxiety being 3 times higher in the case of alcohol consumption (RR=3,23; IC95%: 1,57 – 6,63).

Smoking patients with personality disorders showed no statistically significant distributions in comparison with those not having this vicious habit (p=0,067).

Table no. 3. Statistical differences in the distribution of patients with personality disorders according to their vicious habits

Characteristic	Anxiety disorder		None		Test χ^2		
	n	%	n	%			
Alcohol consumption							
Yes	14	10,4	25	18,7	$\chi^2 = 3,23$; GL = 1;		
No	10	7,5	80	59,7	p = 0.002		
Smoking							
Yes	9	6,7	21	15,7	$\chi^2 = 3.37$; GL = 1;		
No	15	11,2	95	70,9	p = 0.067		

The statistical processing of behavioral parameters in the case of patients with sleep disorders showed that a significantly higher number of patients associate sleep disorders with smoking (**p**<**0,001**), and not with alcohol (p=0,761) which was also pointed out in specialty studies.

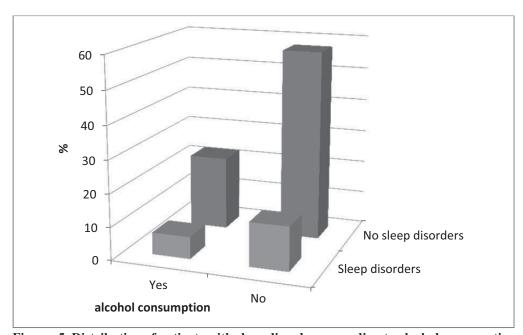


Fig. no. 5. Distribution of patients with sleep disorders according to alcohol consumption

CONCLUSIONS

Patients with addiction to alcohol or other drugs have anxiety comorbidity which requires an efficient and appropriate pharmacotherapy. Consequently, for such patients, cautiousness should override the prohibition of anxiolytic prescription. Nevertheless, although the incidence of benzodiazepine non-medical use is quite low in comparison to their legitimate medical use, which is very widespread, the issue of addiction and the risk of benzodiazepine addiction remains of utmost importance in the psychiatric, hospital and ambulatory practice, as well as its appropriate treatment.

The motivation for choosing this study was the fact that this type of studies may be used for making analogies with other populations or regions (by series of comparable studies performed on various populations) or for documenting evolution in time by means of a number of comparable studies conducted on the same population.

Moreover, this kind of study may be useful for: drawing public and political attention to the extent of a community issue, for service planning, for finding existing as well as necessary needs, describing the impact of a disease in a population, the level of disabilities associated with the disease, service demand and economic costs.

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