

Co-Occurrence of Psychiatric Diseases in Patients with Alcohol Use Disorders and Psychiatric Treatment Discontinuation

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Abstract

Background: Alcohol addiction is a chronic and relapsing disease that has affected many patients throughout the world. As alcohol interferes in brain neurotransmitters, it can cause mood and behavior changes.

Aim: Through this study we wanted to examine the prevalence of comorbidity between alcohol dependence and psychiatric disorders in patients hospitalized for alcohol detoxification. We also evaluated the effect of alcohol in the discontinuation of treatment for these psychiatric diagnoses.

Method: In our study, we included 92 male patients (mean age 41.4 years old), hospitalized in American Hospital and Department of Psychiatry, University Hospital Center "Mother Theresa", Tirana, Albania, June 2015-October 2016, with the diagnosis of alcohol use disorders (AUD), DSM-IV TR. Any female patient was presented to our service with the diagnosis of AUD. We analyzed the prevalence of psychiatric disorders in these patients.

Result: After the psychiatric evaluation, we found comorbidity in 39% of the patients. About 31% of patients with comorbidity referred that they have found alcohol consumption as a "self-treatment" for their anxiety and 90% of the latter ones, had Anxiety disorders as a comorbidity.

Discussion: Alcohol addiction and concomitant psychiatric disorders are found very often between our patients. The psychological evaluation and the appropriate treatment is crucial leading to a better health outcome, a lower risk of alcohol relapse and healthier patients.

Keywords: Comorbidity, Treatment discontinuation, Anxiety Disorder, Alcohol abuse

Introduction

Mental and Substance Abuse Disorders have a high prevalence throughout the world [1, 2]. According to National Institute of Drug Abuse (NIDA), when two disorders or illnesses occur in the same person, simultaneously or sequentially, they are described as comorbid. Comorbidity also implies interactions between the 2 illnesses that affect the course and prognosis of both [3]. A lot of studies highlight the strong association between the comorbidity and the severity of substance misuse [4]. But is it difficult establishing causality or directionality because sometimes, diagnosis of a mental disorder may not occur until symptoms have progressed to a specified level [5]. On the other hand, subclinical symptoms may also prompt drug use, as a form of self-medication like using alcohol for relieving symptoms of anxiety disorders. In other cases comorbid disorders

share similar symptoms, making it more difficult defining which disorders developed first [6]. Among the wide range of substances abused, alcohol use has been shown to cause significant physical, psychological, and social health harms to individuals, families, and communities [7]. Alcohol affects brain function by interacting with multiple inhibitory and excitatory neurotransmitter systems, thereby disrupting the delicate balance between them [8]. Short-term alcohol exposure, induce inhibitory influences. But in long-term abuse, the brain attempts to compensate by tilting the balance back toward equilibrium, leading to alcohol tolerance [9]. When alcohol consumption is abruptly discontinued or reduced, these compensatory changes are no longer opposed by the presence of alcohol. This can lead to the excitation of neurotransmitter systems and the development of alcohol withdrawal syndrome, manifested by anxiety, restlessness and heart palpitations. Many times the patient continues alcohol abuse as a form of self-medication for these symptoms. On the other hand, some patients suffering from anxiety

disorders, start alcohol consumption to “relieve” their symptoms. That’s one of the reason why comorbidity of alcohol use disorders and anxiety or depressive disorders is high [9]. Data from studies in the general population show that, persons with anxiety or depressive disorders have a 2- to 3-fold increased risk of alcohol use disorders and the course of each of these problems seems be complicated by the other condition [10-13]. That’s why diagnosing and treating these patients is often difficult [14]. Furthermore, many patients with these co-occurring disorders do not seek treatment, or present very late to the treatment services, becoming a challenging problem for themselves and the medical team too [15, 16]. Even if high-income countries result with the highest prevalence of heavy drinkers, people with lower socioeconomic status appear to be more vulnerable to the consequences of alcohol consumption. When alcohol consumption is part of tradition, as in our country Albania, many patients consider heavy alcohol use as social drinking, leading to a late clinical diagnosis and more psychiatric comorbidities [17-19].

Objective

Through this work we wanted to examine the prevalence of co-occurring psychiatric disorders in patients with Alcohol Use Disorders and weather the comorbid condition accelerate alcohol abuse. We studied also the relationship between the occupational status of the patients and the specific psychiatric comorbidity and evaluated the effect of alcohol in the discontinuation of treatment for these psychiatric diagnoses.

Method

This is a retrospective study performed in American Hospital, Tirana, Albania during the period June 2015-October 2016. In the study, we included 92 male patients, Albanian nationality, mean age 41.4±4.9 years old, range 25-66 years old hospitalized in Addiction Unit with the diagnosis of alcohol use disorders (AUD), DSM-IV TR. They presented voluntary in the hospital to begin the treatment procedures. Any female patient was presented to our service with the diagnosis of AUD. Many of patients have been screened at first by psychiatric emergency unit.

The diagnosis of severe Alcohol Use Disorders was made using AUDIT, CAGE questionnaires and DSM-IV TR criteria. All patients had a history of chronic ethanol consumption in average amounts of 11.6+5.6 drinks/day (range 3-50 drinks/day). One drink is equal to 8 gr of pure alcohol. The prevalence of psychiatric disorders in these patients has been analyzed. Diagnoses are set using DSM-IV TR and ICD 10 criteria. Demographic variables included in logistic regressions were age, sex and employment status. The patients sample was divided according to age as follows: less than 35 years: 33%; 36–45 years: 27%; 46-55 years: 20%; more than 56 years: 20%.

Statistical methods

Values are expressed as mean ± SD. Comparisons were made by logistic correlation. The correlation coefficient r was measured and a P-value <0.05 was considered statistically significant.

Results

60% of alcohol abusers with comorbidity were less than 45 years old (table1) (figure 2). After the detailed psychiatric evaluation, using DSM-IV TR criteria, we found the presence of comorbidity in 39 % of alcohol abusers (figure 1). The psychiatric comorbidities were divided in 2 major subgroups: Anxiety disorders, present in 71% of cases, and Depressive disorders, present in 29% of cases (figure 3). A

statistically significant correlation between the presence of Anxiety disorders and employment status was revealed. Employed alcohol abusers seem to suffer 8 times more from anxiety disorders than from depression (figure 4) P<0.0001 . While in unemployed patient group, depressive disorder result the most frequent comorbidity (figure 4) P<0.01. When asked about the causes of abusing alcohol, 31% of all comorbid patients referred that they have used alcohol to relieve anxiety symptoms(figure 5) .And 90% of them, were in anxiety disorders group (figure 6). On the other hand, only 10% of alcohol abusers with depression have seen alcohol as a self-treatment p<0.005. 52% of patients with dual diagnosis had started at least one treatment course for psychiatric disorders. 32% of dual diagnosis patient have discontinued psychiatric treatment because of alcohol related issues.

Table 1: Different age groups

Age (years)	Less than 35	36-45	46-55	More than 56
Percentage of patients	33%	27%	20%	20%

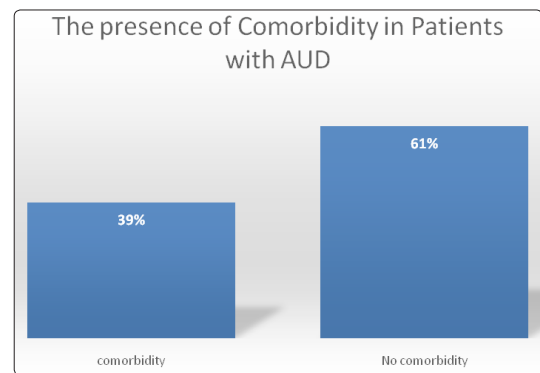


Figure 1

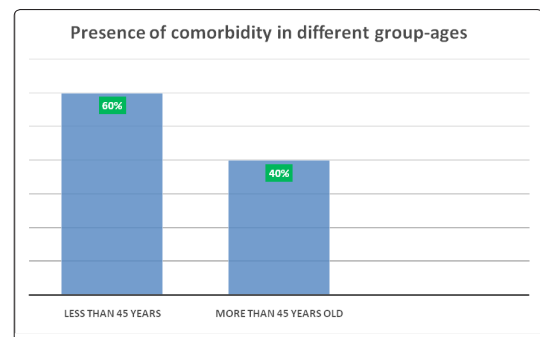


Figure 2

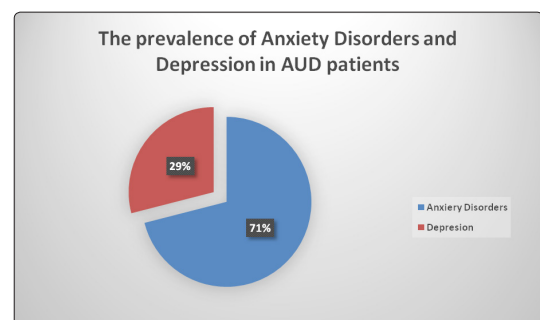


Figure 3

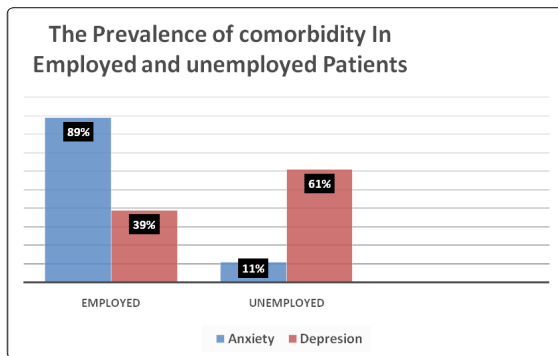


Figure 4

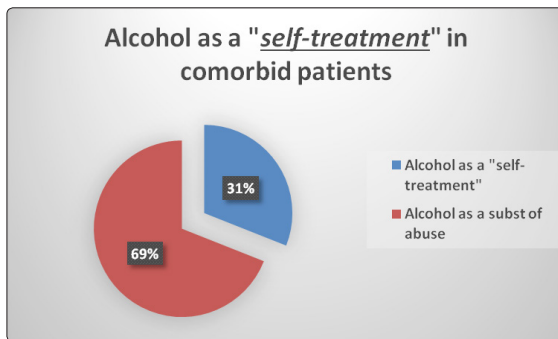


Figure 5

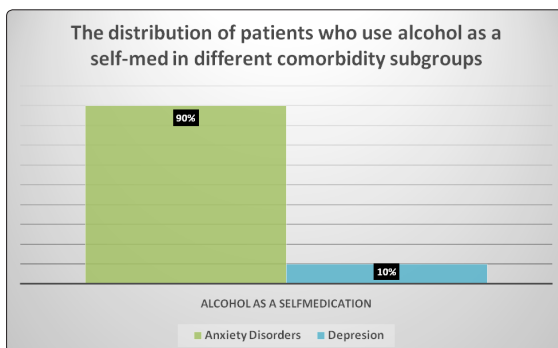


Figure 6

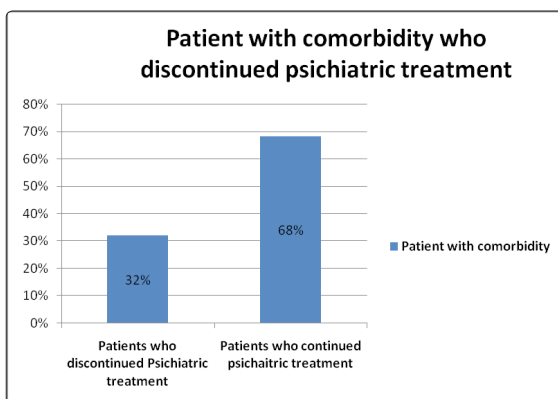


Figure 7

this comorbidity in Albanian population is limited [17, 21, 22]. In our work we found comorbidity in 39 % of alcohol abusers. Several studies highlight similar conclusions. According to SAMHSA (Substance Abuse and Mental Health Services Administration) 35% of patients with Substance Use Disorders have both a mental Disorder [23]. But, the percentages can be even higher for several reasons. One of the reasons is that co-occurring disorders may be difficult to diagnose due to the complexity of symptoms, as both may vary in severity. Often, alcohol withdrawal symptoms mimics symptoms of anxiety disorders, and the latter ones are missed, or undervalued [10]. Furthermore, under diagnosed psychiatric diseases can lead to an increase of alcohol abuse. As a result, the patient can suffer more physical and psychological disabilities [20]. Similar findings revealed Harry Man Xiong Lai and his colleagues in their meta analyses, were they confirm the strong association between AUDs, mood and anxiety disorders.

Age is another factor influencing comorbidity. In our study about 60% of the patients were less than 45 years old. Larger study made in Albania for similar topics, state that service users for narcotics and alcohol are mainly young persons [17]. Kevin P. Conway and his team share similar results. They have met comorbidity in about 33% of young alcohol abusers [24]. Similar findings had Liberto, Karlamangla. In their studies they show that most of alcohol abusers with psychiatric comorbidities are younger than 45 years old. With age, he saw a decrease in alcohol consumption and alcohol-related problems among heavy drinkers [25, 26]. Similar findings have SAMSHA which states that mental disorders rates were highest among adults ages 26 to 49 (42.7%). In our study we found anxiety Disorders in 71% of patients, and major Depression in 29% of them. According to NIDA anxiety disorders are the most common type of mental disorders, followed by depressive disorders among Alcohol abusers [2]. On the other hand, persons diagnosed with mood or anxiety disorders are about twice as likely to suffer also from a drug or alcohol use disorder [13, 27, 28].

Interesting findings in our study were that, anxiety disorders were more common in employed group, competing to depression in the other group. Several factors can influence in this significant difference. About 89 % of patients with anxiety disorders are married and in important job positions. They have referred a higher pressure from the family, society, and stigma as well. These factors can influence in higher prevalence of anxiety disorders [29]. On the other hand, unemployed abusers, with poor or lack of family and social support, tend to suffer more from depression. Similar conclusions revealed Smith and Torvik in their papers [20, 30]. Due to some sedating property of ethanol [31], alcohol abusers tend to use it as a self-medication to alleviate mood and anxiety symptoms [32]. But Crum and La Flair deepen these conclusions. In their studies they state that, in the patients who use alcohol as self-treatment, the risk for persistent alcohol dependence is high [33]. Similar conclusions revealed our study. About 31% of patients with comorbidity referred that they have found alcohol consumption as a "self-treatment" for their anxiety, and 90% of them, have anxiety disorders as a persistent psychiatric comorbidity. Osterberg and Blaschkein their studies state that alcohol use is an important factor for psychiatric treatment discontinuation because of the alcohol temporary relief effect combined with perceived and feared side effects of mixing medication with alcohol. Even if we had similar conclusion in our study, this finding needs further exploration. Alcohol addiction and concomitant psychiatric disorders are found very often between

Discussion

Co-occurring anxiety disorders, depression and AUDs are of great interest to researchers and clinicians [20]. Detailed information about

our patients. Limited data exist about this comorbidity in Albanian population. Early diagnosis and the appropriate treatment is crucial and can lead to a better health outcome, a lower risk of alcohol relapse and healthier patients [34-45].

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