

ANXIETY-DEPRESSIVE DISORDERS IN PATIENTS WITH ALCOHOL DEPENDENCE COMPLICATED BY TOBACCO SMOKING

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Abstract. *The study confirms the observation that "smokers drink and drinkers smoke". In this study, we aim to assess the relationship between nicotine addiction and the severity of affective disorders in hospital patients with alcohol dependence. The study involved 105 inpatient patients diagnosed with alcohol dependence. They were provided with SCID-I, AUDIT, Fagerstrom test for nicotine addiction, Hamilton Depression and Anxiety assessment scale. The results showed that the average severity of affective disorders was high in patients with alcohol dependence and nicotine addiction, but there was no significant difference between nicotine-dependent and independent groups in the severity of affective disorders. Comparative studies between smoking patients with alcohol dependence and various smoking or non-smoking groups with affective disorders can provide valuable information.*

Keywords: *alcoholism, nicotine addiction, affective disorders*

Depression and alcohol addiction have a bidirectional relationship. Depression can provoke the development of alcohol dependence, and alcohol dependence can be one of the etiological factors of the occurrence of a depressive episode. Alcoholism and depression increase the risk of developing each other twice [8]. The prevalence of alcohol dependence during 12 months and during life in patients with major depressive disorder is 3 and 24%, respectively [2]. Prolonged abuse of high doses of alcohol increases the risk of depression, suicidal attempts, as well as severe anxiety and disomnia by 40% [3]. In patients with bipolar depression, alcohol abuse is noted especially often - in 55% of cases, and is characterized by an earlier debut, high comorbidity with anxiety disorders and personality disorders, illegal actions [1].

Extensive research has found that "smokers drink and drinkers smoke." In addition, the most ardent alcohol users are also the most ardent tobacco users. The authors say that patients with severe alcohol dependence are also highly dependent on nicotine [1].

Most adult alcohol or tobacco users first tried these drugs in early adolescence [5]. Gulliver et al., the daily number of smoking cigarettes and tobacco dependence is positively correlated with alcohol dependence [6].

Together between alcohol addiction, tobacco smoking, depression and anxiety, there are certain psychobiological mechanisms of pathology. Neurotransmitters work together in a cascade of excitation or inhibition between complex stimuli and complex reactions, which leads to a pleasant feeling of well-being in an ordinary person. According to Cade's theory of reward, this disruption of intercellular interactions leads to anxiety, anger, and other "bad feelings", or craving for a substance that can help counteract these negative emotions. Alcohol is known to activate the norepinephrine system in the limbic system through an intercellular cascade containing serotonin, opioid peptides, and dopamine. Alcohol can also have direct effects by producing neuroamines

that interact with opioid receptors or dopaminergic systems [7, 8]. Nicotine is the main ingredient in tobacco, which causes strengthening. Ultimately, nicotine triggers the release of dopamine in the nucleus accumbens [5]. Alcohol consumption also leads to the release of dopamine, although the mechanism by which alcohol produces this effect is not fully understood. Nicotine and alcohol can cause the same opiopeptide reactions during emotional disorders [9, 10].

Smokers with concomitant Affective Disorders become addicted to nicotine, rise to a more severe level of dependence, and experience more severe nicotine withdrawal symptoms than smokers without Affective Disorders [2]. The presence of depression in Anamnesis has a negative effect on the results of treatment aimed at stopping smoking [3]. Smoking can reduce the likelihood of relapse of depression in some people, and depression can occur after quitting smoking on these subjects [4]. In the population of patients with alcohol dependence, the prevalence of tobacco dependence reached 79%. It is assumed that the severity of alcohol dependence reflects the severity of nicotine dependence of patients; patients with severe alcohol dependence they were also heavily dependent on nicotine. There are certain psychobiological mechanisms of concomitant diseases between alcohol addiction, tobacco smoking, depression and anxiety. Neurotransmitters seem to work together in a cascade of arousal or inhibition between complex stimuli and complex responses, leading to a pleasant sense of well-being in a normal person. In the cascade theory, violations of these intercellular interactions cause anxiety, anger, and the desire to use a substance that helps get rid of these negative emotions. Another study found that people with current anxiety disorder were more likely to report withdrawal symptoms even after nicotine withdrawal control (DSM criteria); however, this finding is potentially complicated by the fact that the "current" status of mood disorder/anxiety disorder may be a consequence of tobacco use. Experiencing symptoms of depression or anxiety while trying to quit tobacco can affect a person's ability or desire to quit smoking completely: people with a history of anxiety and depressive disorders are in most cases less successful in trying to quit smoking [1].

In general, symptoms of anxiety or depression that occur in the context of nicotine withdrawal may be a manifestation of the withdrawal syndrome itself and are not necessarily related to the underlying propensity for anxiety-depressive disorder.

Whether the symptoms of anxiety and/or depression are a component of pharmacological nicotine withdrawal and/or a predisposition to psychopathology related to affects is complicated by the fact that individuals with a history of depression or anxiety disorders are more likely to smoke and have a higher mortality rate [7] and thus are more likely to be suffer from withdrawal symptoms after stopping using. Alcohol is known to activate the norepinephrine system in the limbic system through an intercellular cascade that includes serotonin, opioid peptides and dopamine. Alcohol can also cause direct action through the production of neuroamines that interact with opioid receptors or with dopaminergic systems. Smokers with comorbid depressive disorders are more likely to become addicted to nicotine, move to a more serious level of dependence and experience a more severe level of nicotine dependence withdrawal symptoms than smokers without depressive disorders. Surveys of both clinical and non-clinical population groups indicate that at least 90% of people with alcohol dependence are also addicted to nicotine. Smoking needs can reduce the negative effects of a person associated with depression and anxiety [6]. Alcohol users can add an "alcohol" response to an "alcohol" response to cope with a difficult situation [5]. Surveys of clinical and non-clinical population groups show that at least 90% of people with alcohol dependence also depend on nicotine [10].

The purpose of the study was to assess the correlation between nicotine addiction and the severity of Affective Disorders in alcohol-dependent patients.

Research materials and methods.

For the Study, 105 smoking men addicted to alcohol were selected in a row, who were admitted to the Samarkand regional Narcological hospital for two months, the clinical base of the Department of Psychiatry, medical psychology and Narcology of the Samarkand State Medical University.

All patients had to meet the DSM-IV criteria to determine alcohol dependence. Surveys of patients included in the sample were conducted after detoxification, four weeks after the last alcohol intake. All patients gave written consent after fully explaining the results of the study. Individuals under the age of 18 who suffer from mental retardation or cognitive impairment, as well as psychotic disorder, were excluded from the study. Alcohol consumption disorders detection test (AUDIT): this test allows you to identify people who consume alcohol and identify cases of alcohol consumption, harmful use and alcohol dependence. Fagerstrom nicotine addiction Test (Find): It contains data that assess the number of cigarettes consumed, for the use of interest and addiction. Heatherton et al. Fagerstrom studied and completed the tolerance questionnaire. To measure depression and anxiety, violence was assessed based on symptoms using the clinician-developed 17-point depression assessment scale, the Hamilton depression assessment scale (Ham-D), and the 14-point Hamilton anxiety Assessment Scale developed by the clinician scale (HADS). For the analysis, the SPSS 10.0 statistical set was used for the windows. We compared the rates of anxiety and depression in people with and without nicotine addiction to alcohol. The categorical variables were compared using the chi-square statistical method. Odds rates and 95% confidence intervals are calculated. For one variable analysis on continuously distributed variables, the differences between the tools were compared using a t-test. SMOL (abbreviated Interdisciplinary list of personalities), computer versions of the Lusher test, quality of life assessment, Beck Depression Scale (BDI), Spielberger is a method of measuring anxiety, life satisfaction developed by Khanin, original testing to assess compliance (informed informed participation of patients in the treatment process), a method of incomplete sentences developed specifically for patients with diabetes. To assess cognitive functions, techniques of memorizing 10 words, the TMT test (test test), the removal of objects and concepts, the interpretation of proverbs and parables, pictograms were used. For all statistical analysis, the p values were two-tailed, and the differences were considered significant at $p < 0.05$.

Research results.

The study sample consisted of 105 patients (average age 39.6, 5.1 years, 24-58 years). Of the 105 patients, 86 (81.9%) suffered from nicotine addiction, 61 (58.1%) graduated from elementary school, 85 (80.1%) were individual entrepreneurs, and 77 (73.3%) were married. There were no statistically significant differences in socio-demographic indicators between the two groups, except for the level of Education. In this group of alcohol-dependent patients, the level of education of nicotine-dependent people was much higher. The average age of onset of alcohol consumption for the entire sample was 18.98, 4.72 years (range=12-30), the average duration of intensive alcohol consumption was 3.38, 4.48 years (range= 0.5–25), the average age of onset of smoking was 17.18, the average age of alcohol consumption was 4.19 years (diapason 8-30), and the average duration of smoking was 25.44 and 8.12 (range=13-44).

Severity of nicotine addiction and anxiety violence (General: $R=0.16$, $p=0.07$; mental: $R=0.165$, $p=0.06$; somatic: $R=0.147$, $p=0.11$) or harmful alcohol abuse ($R=0.10$, $p=0.26$). A positive correlation was found between the severity of nicotine addiction and the severity of depression ($r = 0.236$, $p=0.001$).

The average of total anxiety violence among patients with alcohol dependence, as well as nicotine dependence, was 9.6, 7.4, mental anxiety-4.59, 3.87 and somatic anxiety-5.4, 3.6. These average scores were above the overall (6.36 and 6.49), mental (3.36 and 2.68) and somatic (3.00-4.42) anxiety levels in the group without nicotine addiction. The average severity of nicotine-dependent group depression is (5.3, 3.2) higher than the nicotine-independent group (3.14, 4.62), compared to the group where correlation was not found. In particular, anxiety was high among people who were and were not addicted to nicotine. The nicotine-dependent group had a higher average rate of depression severity, but the difference did not reach the level of significance ($t(105) = 1.38$, $p=0.17$). No significant difference was found in terms of anxiety between nicotine-dependent and non-dependent groups (General: $t(105) = 1.31$, $p = 0.19$; mental: $t(105) = 1.57$, $p=0.12$; somatic: $t(105) = 1.16$, $p=0.24$). Probably the development of symptoms of depression during alcoholism. When depressive symptoms are secondary to alcoholism, they may disappear within a few days or weeks of abstinence as the withdrawal syndrome weakens. Various studies have shown that depression increases or decreases smoking, and morbidity and predictors of major depression have been studied after successful treatment from smoking. However, according to our results, despite the fact that depression in alcoholics with nicotine addiction was higher than without nicotine addiction, the difference was significant. It should be noted that there is a correlation between the severity of nicotine addiction and the severity of depression among patients with alcohol dependence. Among alcohol users who come for treatment, about two-thirds have symptoms resembling anxiety disorders. The relationship between major anxiety disorders and alcoholism is still not clear, it is known that the frequency and the severity of anxiety and symptoms of depression increase during the period of deprivation due to withdrawal syndrome. The conclusions drawn on the basis of this study are limited to the design of a one-time measure. This clearly showed a link between the level of nicotine addiction and depression and anxiety among this alcohol addiction group. In conclusion, our findings did not confirm our hypothesis that among patients with alcohol dependence in the hospital there will be less nicotine addiction, depressive, and also less anxious. This conclusion also contradicts the results of most previous studies. However, since depression and anxiety scores in our sample were below the recommended cut-off point, it can be assumed that smoking, whether at a level that is considered nicotine addiction or not, can affect depression and anxiety. The answers to the following questions may help in further studying the relationship between smoking, depression and anxiety in patients with alcohol disorder.

Conclusion.

1. Our results did not confirm our hypothesis that among alcohol-dependent patients, nicotine-dependent people are less depressed and less anxious.
2. However, since the rates of depression and anxiety in our sample are below the recommended limits, it can be assumed that smoking can affect Affective Disorders, regardless of whether they are at the level of nicotine addiction or not.
3. Therefore, further research is required to study the interrelationships between these groups.

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