#### ОРИГИНАЛЬНЫЕ ИССЛЕДОВАНИЯ

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## **KEY CHARACTERISTICS OF WOMEN AND MEN SUFFERING FROM ALCOHOL DEPENDENCE IN THE CONTEXT OF AUTO-AGRESSIVE BEHAVIOUR**

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Aim. To define the clinically and practically significant differences in characteristics of women and men who suffer from alcohol dependency in terms of auto-aggressive behavior associated with alcohol dependence. The article presents the analysis of data obtained in 124 subjects divided into two groups 62 subjects each, women and men suffering from alcohol dependence. Results. The study shows that women and men suffering from alcohol dependence have certain features throughout the course of the disease in the context of the auto-aggressive behavior. Most of the subjects were characterized by a hereditary development of the alcohol dependency represented by the presence of the alcoholism in mothers among 32% of female patients versus 10% among male ones. Women, in general, had more severe alcohol dependence (84% of the female subjects had rapid progression of the disease). The duration of therapeutic remission in most of the cases was less than a year, there were no prolonged therapeutic remissions (3 to 5 years).

Conclusion. Women and men have different course of the alcohol dependence, including the auto-aggressive behavioral characteristics, which in turn requires special attention of the medical services that provide narcological and anti-suicidal aid to both female and male patients. Development of gender-specific therapeutic approaches to the treatment of alcohol dependency is also required.

*Keywords:* alcohol dependence, auto-aggressive behavior, gender-specific alcohol addiction.

Alcohol abuse is a major problem for the modern society, it has negative medical and social consequences, and is also one of the most significant reasons of the lethal outcomes, increased incidence of the disease, and disability. The correlation between the average rate of alcohol ingestion per head and mortality rate among population is proved by the numerous studies. Approximately 17% of female mortality is due to alcohol dependence. The same parameter is higher among men, i.e. -24% [1, 2, 3, 4]. The ratio between the men and women suffering from chronic alcoholism

in developed European countries and the USA is now between 1:5 and 1:2, respectively, although earlier it was 1:12 and even less. Our country has had the constant ratios in the middle of the 1980-s: in 1991 it the ratio was 1:9 and its value increased up to 1:6 in 1995. Nowadays the ratio is 1:5. American report that a 2:1 ratio in the USA [5, 6]. But the analysis of the level of alcohol consumption among high school students in the USA hasn't shown notable gender distinctions. The similar results are presented by the Brazilian authors. The development of the female alcoholism is caused by the increasing affective disorders (depression, phobic anxiety etc.) [7, 8].

The crisis in economic and sociopsychological situation in the country has negative influence on youth, especially young girls and men, and is marked as a risk factor for the intensive increase in alcoholism rates. Alcohol dependence in adolescents has appeared as a result of emotive stress and personal disadaptation. Statistical analysis of the studies dedicated to the female and male alcoholism revealed certain discrepancies in data [4, 5, 6]. Although nowadays the relationship between alcoholism and suicidal conduct is well established, the major part of the published works were dedicated to men suffering from alcoholic dependence, while female alcoholism was considered an "inconvenient" and "non-delicate" topic for a discussion or research. There is no doubt that female suicide rates a lower as compared to male subject, however women tend to attempt suicide more often. which unfortunately sometimes has a success.

Thus, the aim of the study was to find out whether the men and women who suffer from alcoholic dependence have clinically and practically significant clinical differences for narcology and suicidology.

According to the fore mentioned aim, the objective of the study was to evaluate differences in characteristics of women and men in terms of auto-aggressive behavior associated with alcohol dependence which could make the treatment as much individual as possible in the aspect of the main narcological disease.

## Materials and methods

Medical records from both public and private clinical practice were obtained for 62 women and 62 men who suffer from alcohol dependency (WSAD MSAD. and respectively). The diagnoses were set according to the International Statistical Classification of Diseases and Related Health Problems. All the examined patients had the second stage of the disease. Inclusion criterion was the presence of "alcoholic dependence". Accordingly, patients with the other types of dependences (except nicotine dependence), patients with endogenous mental diseases and structural diseases of the central nervous system, which occured before the development of the alcoholic dependence, were not included in the study. Another exclusion criterion was patient's refusal to give the agreement for the participation in the study. The average age of the subjects was 38.8 (4.3) years among women and 41.9 (4.3) among men. The family life in marriage was approximately -17.3 (6.6) among women and 17.4 (5.1) among men. The patients were comparable according to the socio-demographic factors. A "frontal" comparison of all the drug characteristics was performed in both groups. Statistical data processing was conducted using the guide on applied and medical statistics [9], data processing pack – Microsoft Excel 2007, and Statistica 7.0. The statistical analysis has been completed in two stages. The prior stage included the analysis of the obtained data according to the type of distribution, and the descriptive statistical features of the extracts were also taken into account. The data adequacy according to the normal distribution was performed using the Pearson's chi-squared test  $(\chi^2)$  and visual analysis of the similarity of the empiric and theoretical allocation with the use of the necessary histogram [9]. The statistical analysis of the data was performed using parametrical and non-parametrical methods of mathematic statistics (using the Student's and Wilcoxon's criteria). Descriptive statistics were used to describe the basic features of the data in the study.

# **Results and discussion**

The statistically significant differences among female and male patients who suffer from alcoholic dependence are presented in the table 1.

It was proven that hereditary predisposition to alcoholism from the paternal side played a major role in the development of alcohol dependence, up to two times more often than the one from maternal side. Hereditary predisposition

Table 1

Narcology parameters			
Sign	Index of WSAD	Index of MSAD	Value p
Hereditary predisposition to alcoholism from the maternal side	32,26%	9,68%	0,0152
Rapid progression of the disease	84%	31%	0,0001
Moderate progression of the disease	16%	55%	0,0008
Amnestic disorders	100%	68%	0,0004
Age of the alcohol abuse onset	26,03(0,82)	21,87(0,37)	0,000001
Age of the abstinent syndrome onset	28,84(0,83)	24,61(0,37)	0,000001
The abuse of "light" alcohol surrogates	3%	53%	0,000001
The abuse of the "heavy" alcohol surrogates	0%	19%	0,0216
Resuscitation required	0%	40%	0,0001
The average duration of the alcohol consumption period (days)	21,26(1,87)	7,95(0,91)	0,00001
The duration of the recent alcohol consumption period (days)	21,58(2,05)	8,66(1,12)	0,000001
The remission period (days)	87,16(10,30)	48,06(4,32)	0,000083
Tolerance(liters)	0,87(0,06)	1,14(0,06)	0,004006
Treatment parameters			
The duration of the therapeutic remission (days)	195,32(19,25)	153,82(31,12)	0,007966
Repeatedly treated (percent from the total number of the tested patients)	100%	37%	0,00001

## The statistically significant differences among female and male patients suffering from alcoholic dependence

accounts to up to 100% cases of alcohol dependency in men. As shown on the table, the two groups have the statistically important differences according to maternal predisposition to alcoholism. As we can clearly see in the table 1 female patients were characterized by a rapid progression of the disease in 84% while there were no cases slow progression of alcoholism with dependency. More than half of the cases (55%) of male alcoholism were characterized by a moderate progression of the disease. The patients in both groups were rather young at the onset of alcohol abuse and the development of the abstinent syndrome. A later onset of the disease (approximately 5 years) was observed among women, which corresponds to the literature data. [1, 9]. Women developed the second stage of the disease including abstinent syndrome much faster than men do. At the same time women were less tolerant to "heavy drinking", had longer periods of remission. Although patients in both groups had a history of alcohol surrogates consumption, women had never used the so-called "heavy" surrogates (mordant, antifreeze etc.), which may explain the absence of the resuscitation procedures performed within this category of patients. Amnestic disorders were observed in 100% of female patients. The major part of them had victimized and paracriminal behavior.

Considering the treatment parameters, one can notice that no female patient had successful treatment in her medical record, which may be attributed to the rapid progression of the disease, longer alcohol consumption periods which are obvious, even marginal, with frequent suicide ideations. More than 1/3 of women had undergone treatment three times or more. Only 37% of men who suffer from alcoholic dependence sought for medical help due to the "social acceptance" of alcoholism.

We observed that men and women had different course of the alcohol dependence, including the auto-aggressive behavioral characteristics, which in turn required special attention of the services that provide medical aid to both female and male patients.

### Conclusions

1. Women who suffer from alcohol dependence had a worse course of the disease in terms of the personal auto-aggressive behavior compared to men.

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2. This was mainly attributed to the rapid progression of the disease and longer duration of the alcohol consumption period which was accompanied by frequent parasui-

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cidial reactions.

3. Both female and male patients with alcohol dependency require gender-specific treatment options.

Authors declare no conflict of interest.

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