

## ADMISSION TO THE PSYCHIATRIC EMERGENCY SERVICES OF PATIENTS WITH ALCOHOL-RELATED MENTAL DISORDER

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**Abstract:** *The assessment of presentation of patients with psychiatric disorders related to alcohol consumption in the Clinic and PII departments of Psychiatry and Neurology Hospital Brasov. All the patients with psychiatric disorders hospitalized between 2007 and 2009 related to alcohol consumption were analyzed in terms of socio-demographic variables: gender, age, residence, marital status, employment status, educational status. Of 7146 patients hospitalized in the study period, 811 (11.35%) were admitted for psychiatric disorder related to alcohol consumption. In 2007 there were 2612 patients hospitalized in acute departments from which we had a rate of 7.61% hospitalized with alcohol-related mental disorder. In 2008 and 2009 we can see a yearly increase in the percentage of patients with alcohol-related mental disorders with a percentage of 11.14% for 2008 and 15.59% for 2009. The number of patients with severe symptoms related to alcohol abuse was triple in 2009 compared with 2007. The number of admissions for alcohol-related symptoms increases from one year to another with approximately 5% per year with maintaining the gender ratio. Most alcohol-related disorders were found after 40 years for both men and women. It was observed a decreasing number of admissions of persons employed from 2007 to 2009.*

**Key words:** *alcohol-related psychiatric disorder, emergency, economic crisis.*

### 1. Introduction

Over 75 million people are currently affected by alcohol use disorders, such as alcohol dependence and abuse and over 2 billion people worldwide consume alcoholic drinks, which can have immediate impact and long term consequences on health and social life [1].

Depending on the amount of alcohol consumed and the pattern of drinking, alcohol consumption can lead to drunkenness and alcohol dependence [2].

It can result in disablement or death from accidents or contribute to depression and suicide. Moreover, it can cause chronic illnesses such as cancer and liver disease in those who drink heavily for many years.

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Alcohol causes 3.2% of all deaths worldwide and is the third most common cause of death in developed countries [3]. In the developing countries alcohol is the leading cause of illness and disease. This measure takes into account the number of years lost due to premature deaths as well as the years spent living with disability [4].

Alcoholism also is responsible for more than 195.000 deaths per year in EU, from which 45.000 from cirrhosis, 50000 from cancer, 10000 suicides, 17000 from traffic accidents, 27000 other accidental deaths and 17.000 due to psychiatric conditions [5, 6]. Many studies showed that alcohol related consequences are more harmful in the East-Europeans countries that have a lower capacity to control the alcohol consume especially through preventive measures [7, 8].

Drinking patterns vary greatly from country to country and so do health impacts and policy responses. Romania is currently one of the top 20 places in the world in alcohol consumption per capita [9]. Recorded adult per capita consumption is around 11.3 liters of pure alcohol and appears to have remained stable in recent years. Some unrecorded alcohol production is also seen in the country, adding around 4.0 liters to recorded consumption and giving a total adult per capita consumption of pure alcohol in Romania of around 15.3 liters [10].

## 2. Method

Our study was retrospective and longitudinal of developments in the emergency presentation of patients with psychiatric disorders related to alcohol consumption in the Psychiatric Clinic and PII departments of Psychiatry and Neurology Hospital Brasov, from January 2007 - December 2009.

All the patients with psychiatric disorders related to alcohol consumption were analyzed in terms of socio-demographic variables: gender, age, residence, marital status, employment status, educational status.

Documenting the selected group of patients was performed by analyzing their observation sheets, available in the Archives of Psychiatry and Neurology Hospital Brasov.

Results were compared in the three years (2007-2009) to analyze dynamic data. Statistical analysis was performed using SPSS 10.

## 3. Results

From a total number of 7146 patients hospitalized between 2007 and 2009, 811 (11.35%) were admitted for psychiatric disorder related to alcohol consumption. One of the main finding was the fact that the number of patients admitted was almost double in 2009 compared with 2007 (figure 1). The ratio between male and female is considerably higher for man ( $p < 0.005$ ).

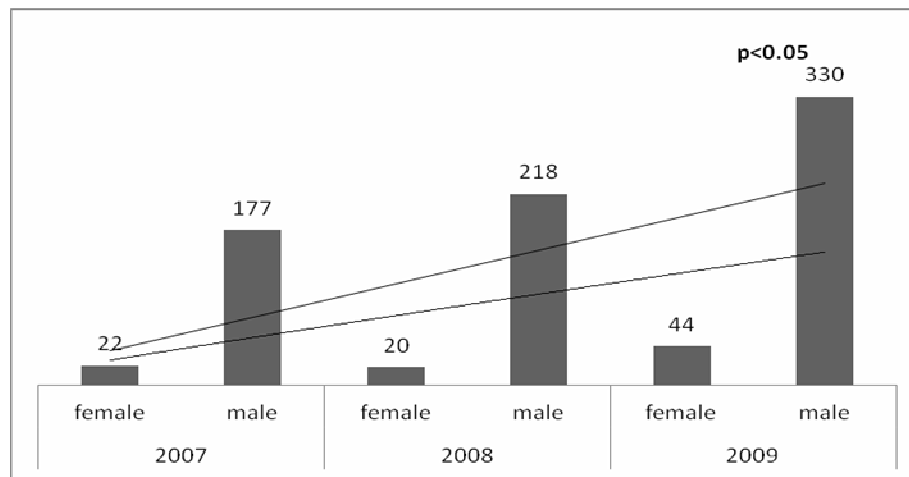


Fig. 1. Trends of hospitalization from 2007 to 2009

The number of patients with alcohol-related mental disorders Table 1

Years	Total number of patients hospitalized		Patients with alcohol-related mental disorders	
	N	%	N	%
2007	2612	100	199	7,61
2008	2136	100	238	11,14
2009	2398	100	374	15,59

In 2007 there were 2612 patients hospitalized in acute departments from which we had a rate of 7.61% hospitalized with alcohol-related mental disorder. In 2008 and 2009 we can see a yearly increase in the percentage of patients with alcohol-related mental disorders with a percentage of 11.14% for 2008 and 15.59% for 2009.

In terms of diagnostics we notice important changes during the study. In 2007 were hospitalized a number of 64 patients with acute intoxication, 5 female (22.75%) and 59 male (33.35%) and we can see that the number of patients hospitalized with alcohol-related mental

disorder was increased yearly both for female and male. In 2008 there were 89 patients hospitalized (9 female and 80 male) and in 2009 we had 169 patients hospitalized (18 female and 151 male).

For uncomplicated withdrawal there were 138 patients hospitalized for the study period 2007-2009 from which we had 46 in 2007 (9 female and 37 male), 41 in 2008 (3 female and 38 male) and 51 in 2009 (5 female and 46 male). We can obviously see that the ratio of female hospitalized (17 patients) is considerably lower than the ration of males (121 patients).

*Type of diagnostic*

Table 2

Years	2007				2008				2009			
	female		male		female		male		female		male	
Number/percentage	N	%	N	%	N	%	N	%	N	%	N	%
Acute intoxication	5	22,75	59	33,3	9	45	80	36,7	18	40,9	151	45,75
Uncomplicated withdrawal	9	40,9	37	20,9	3	15	38	17,43	5	11,35	46	13,95
Delirium tremens	6	27,25	77	43,5	7	35	94	43,12	18	40,9	116	35,15
Induced psychotic disorder	2	9,1	4	2,25	1	5	6	2,75	3	6,85	17	5,15
Total	22	100	177	100	20	100	218	100	44	100	330	100

From a total number of 318 patients with delirium tremens hospitalized during the study period there were 83 hospitalized in 2007 (6 female and 77 male), 101 patients in 2008 (7 female and 94 male) and 134 patients in 2009 (18 female and 116 male). We can see that the percentage rise from 2007 to 2009 constantly and also the ratio for female hospitalized is lower than the ratio for male.

The number of patients with induced psychotic disorder increased in this period. In 2007 there were 6 patients hospitalized (2 female and 4 male), in 2008 were hospitalized 7 patients most of them males (6 patients) and in 2009 were hospitalized 20 patients also most of them male (17 patients).

The analysis for work status of patients hospitalized with alcohol-related mental disorder revealed next results.

*The occupational status of patients*

Table 3

year	employee		pensioned		without occupation		welfare		unemployed	
	N	%	N	%	N	%	N	%	N	%
2007	54	30,5	48	27,1	68	38,4	1	0,6	6	3,4
2008	64	29,4	73	33,5	77	35,3	2	0,9	2	0,9
2009	74	22,4	125	37,9	107	32,4	6	1,8	18	5,5

In 2007 there were 177 patients hospitalized with alcohol-related mental disorder from which 54 of them were employed, 48 were pensioned, 68 were without occupation, 1 was welfare and 6 patients were unemployed. In 2008 the number of patients hospitalized increased with 41 patients comparing to 2007. 64 patients were employee, 73 patients were pensioned, and 77 patients were without occupation, 2 patients welfare and 2 patients unemployed.

For 2009 we had 74 patients employed, 125 patients pensioned, 107 without occupation and 18 unemployed

#### 4. Conclusions

Of the 811 cases hospitalized from 2007 to 2009, the maximum was found in 2009 when the economic crisis starts in Romania. These findings could be due to socio-economic conditions in with the rebound on heavy individual and family situation characterized by deficiencies, stress, and poverty. The number of admissions for alcohol-related symptoms increases from one year to another in 2007-2009 period with approximately 5% per year.

Most alcohol-related disorders were found after 40 years for both men and women. Patients retired and unemployed people accounted for most of those hospitalized for alcohol-related disorders (65.5%) compared with 30.5% employed. The number of days of hospitalization in the emergency psychiatric hospital for alcohol-related disorders has doubled in 2009 compared with 2007. No differences were observed in the marital status of patients with alcohol-induced disorders.

Despite the anterior findings that alcohol-dependence is more common in men, women begin to consume alcohol in an abusive manner at a more advanced age than men and therefore alcohol-induced disorders appear later.

Once installed alcohol-dependence evolves quickly, and in midlife women may have similar health problems and the same social, relational and professional consequences.

Regarding alcohol-related disorders can be observed in maintaining dynamic frequency voluntary admissions for acute alcohol intoxication and withdrawal with delirium.

One of the important observations of the study was decreasing number of admissions of persons employed from 2007 to 2009 which can demonstrate an increase individual responsibility during economic crisis. Many alcohol abusers do not seek treatment services because they do not perceive their drinking as a problem or because they prefer to handle it on their own [11,12].

Our study and others suggest that alcohol-dependent individuals may benefit from targeted educational interventions that increase their knowledge about the symptoms of alcohol abuse or dependence, its consequences, and the availability and effectiveness of treatment services.

## References

1. Chaloupka, F.J., Grossman, M., Saffer, H.: *The effects of price on alcohol consumption and alcohol-related problems*. In: Alcohol Res Health. 2002;26(1):22–34.
2. Trolldal, B., Ponicki, W.: *Alcohol price elasticities in control and license states in the United States, 1982–99*. In: Addiction. 2005; 100(8):1158–1165.
3. Mackenbach, J.P., Kunst, A.E., Groenhouf, F. et al.: *Socioeconomic inequalities in mortality among women and among men: an international study*. In: Am J Public Health. 1999;89(12):1800–1806.
4. Dyer, A.R., Stamler, J., Paul, O. et al.: *Alcohol consumption, cardiovascular risk factors, and mortality in two Chicago epidemiologic studies*. In: Circulation 1997;56:1067-74.
5. Anderson, P., Baumberg, B.: *Alcohol in Europe*. London: Institute of Alcohol Studies. 2006. Available from: [http://ec.europa.eu/health-eu/news\\_alcoholineurope\\_en.htm](http://ec.europa.eu/health-eu/news_alcoholineurope_en.htm) [accessed 10 October 2009].
6. European Commission: *Alcohol-related harm in Europe - Key data*. Available from: [http://ec.europa.eu/health/ph\\_determinants/life\\_style/alcohol/documents/alcohol\\_factsheet\\_en.pdf](http://ec.europa.eu/health/ph_determinants/life_style/alcohol/documents/alcohol_factsheet_en.pdf) [accessed 15 October 2009].
7. Powles, J., Zatonski, W. et al.: *The contribution of leading diseases and risk factors to excess losses of healthy life in eastern Europe: burden of disease study*. In: BMC Public Health 2005,
8. Rehm, J. et al.: *Alcohol accounts for a high proportion of premature mortality in central and eastern Europe*. 2007 April 1, DOI10.1093/ije/dyl294. In: Int. J. Epidemiol. 36: 458-467.

9. Health Status of Population in Romania. Bucharest, Romania: National Institute of Statistics; 2001.
10. Alcohol per capita consumption, patterns of drinking and abstention worldwide after 1995. Appendix 2. European Addiction Research, 2001, 7(3):155–157.
11. Cunningham, J.A., Sobell, L.C., Sobell, M.B., Agrawal, S., Toneatto, T.: *Barriers to treatment: why alcohol and drug abusers delay or never seek treatment*. In: *Addict Behav* 1993; 18:347–353.
12. Grant, B.F.: *Barriers to alcoholism treatment: reasons for not seeking treatment in a general population sample*. In: *J Stud Alcohol* 1997; 58:365–371.