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Medicine

ASSESING MENTAL AND BEHAVIOURAL DISORDERS IN PATIENTS WITH ALCOHOL-INDUCED LIVER INJURY

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ABSTRACT:
ALCOHOL ABUSE IS BOTH A VERY PREVALENT AND ILL-TREATED HEALTH PROBLEM. WE PROSPECTIVELY ANALYZED THE SOCIO-DEMOGRAPHIC INDICATORS AND PARACLINICAL DATA AND APPLIED QUESTIONNAIRES IN A GROUP OF PATIENTS ADDMITED IN A PSYCHIATRIC CLINIC WITH MENTAL AND BEHAVIOURAL DISORDERS DUE TO USE OF ALCOHOL. THE GOAL WAS TO CREATE A SOCIO-DEMOGRAPHIC PROFILE OF A CHRONIC AND ABUSIVE ALCOHOL USER AND TO COMPARE THE METHODS OF DETECTING ALCOHOL CONSUMPTION. BIOLOGICAL MARKERS TAKEN ALONE ARE NOR SO SPECIFIC, NOR SO SENSITIVE, BUT ASSOCIATED WITH EACH OTHER AND WITH THE QUESTIONNAIRES COMPLETED BY THE PATIENTS DURING HOSPITALIZATION, WE CAN HIGHLIGHT THE PROBLEM OF ALCOHOL CONSUMPTION REGARDING ALCOHOL INTAKE, POTENTIAL DEPENDENCE ON ALCOHOL AND EXPERIENCE OF ALCOHOL-RELATED HARM AND BUILD AN INDIVIDUAL PATTERN OF USE SO WE CAN KNOW HOW TO MANAGE EACH CASE AND START THE NEXT STEPS IN ASSESSING LIVER FUNCTION.

KEY WORDS: ALCOHOL CONSUMPTION, ALCOHOLIC LIVER DISEASE, ALCOHOL WITHDRAWAL SYNDROME, AUDIT, CAGE

INTRODUCTION

Alcohol abuse is one of the most prevalent and ill-treated health problems. It is very common to consider that the harms of alcohol consumption occur only to those who are

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addicted to it, usually called "alcoholics". This idea is partly wrong and generates a fatal delay in addressing the problems of alcohol abuse. Alcohol addicts represent only about 5% of the population and are only those who use specialized services and treatments[6].

Alcohol-use Disorder (AUD) is a preventable disease and is one of the leading causes of mortality associated with liver disease in Romania and worldwide. A recent WHO (World Health Organization) report indicates that alcohol abuse is a risk factor in about 50% of cases of cirrhosis and alcohol consumption leads to 3.3 million deaths (representing about 6% of all global deaths)[7].

The National Institute on Alcoholism and Alcohol Abuse defines alcohol-use disorder as consumption of more than 2 drinks per day in females and more than 3 drinks per day in males, or binge drinking as consumption over a period of 2 hours of more than 4 drinks in females and more than 5 drinks in males[8].

Studies in many countries have proved the existence of a linear relationship between overall alcohol consumption and the standard liver death, therefore alcohol consumption is strongly associated with liver-related mortality[9].

People resort to alcohol in order to bear an untreated chronic pain more easily, as well as to get over or to forget some sexual abuse or acts of violence. Patients often isolate themselves socially and tend to drive under the influence of alcohol. In addition to alcohol dependence, these people tend to develop other addictions such as opioids, nicotine or bezodiazepines and unfortunately these polysubstance users are difficult to manage properly, requiring specialized treatment. Most of the time, due to the defective medical system and the doctors' busy schedule, two of the most common pathologies associated with alcohol consumption, anxiety disorder and masked depression, are omitted during these consultations. By not treating these pathologies correctly the psychotherapeutic approach and detoxification therapy become difficult[10].

The main goal in treatment of AUD is to induce and maintain alcohol abstinence in patients with alcohol liver disease using pharmacological therapy and behavioral interventions such as psychoeducation, motivational interviewing, cognitive behavioral therapy and supportive therapy[11].

The most used intervention is motivational interviewing during brief intervention sessions that aims to be non-confrontational and non-judgmental. It attempts to provide feedback on the results of clinical evaluations, compare the patient's consumption with medically validated norms, discuss the negative effects associated with consumption, formulate recommendations to reduce alcohol consumption and discuss the benefits, provide

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[6] Higgins-Biddle JC, Babor TF. 1996. „Reducing Risky Drinking. A report on early identification and management of alcohol problems through screening and brief intervention." (The Alcohol Research Center, University of Connecticut Health Center for The Robert Wood Johnson Foundation).

[7] Yoon Y-H, Chen CM. 2016. „Liver cirrhosis mortality in the United States: national, state, and regional trends, 2000-2013." Surveillance Report #105, 2000–2013

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[9] Stein E, Cruz-Lemini M, Altamirano J, Ndugga N, Couper D, Abraldes JG, Bataller R. 2016. „Heavy daily alcohol intake at the population level predicts the weight of alcohol in cirrhosis burden worldwide." *J Hepatol.* 65(5):998-1005; N, Sheron. 2016. „Alcohol and liver disease in Europe--Simple measures have the potential to prevent tens of thousands of premature deaths. ." *J Hepatol.* 64(4):957-67

[10] Singal AK, Bataller R, Ahn J, Kamath PS, Shah VH. 2018. „ACG Clinical Guideline: Alcoholic Liver Disease." (Am J Gastroenterol) 113(2):175-194

[11] Leggio L, Lee MR. 2017. „Treatment of Alcohol Use Disorder in Patients with Alcoholic Liver Disease." *Am J Med* 130(2):124-134

informative materials, train on keeping a record of alcohol consumption. The key is to have a collaborative approach that respects the patients' autonomy using an empathic attitude[12].

MATERIAL AND METHODS

The present prospective study took place in the Psychiatry I Clinic of the Clinical Neuropsychiatric Hospital of Craiova for a period of 1 year, from 1st January 2021 to 31st December 2021.

Our study group was composed of 86 patients admitted in the Psychiatry I Clinic of the Clinical Neuropsychiatric Hospital of Craiova. The criterion for inclusion in the study was a main diagnosis of mental and behavioural disorder due to use of alcohol at admission or at discharge, coded with F10 according to ICD-10 (International Classification of Diseases, Tenth Revision). We did not include in the study patients with other psychiatric disorders that also have secondary alcohol consumption.

The aim of our study was to create a socio-demographic profile of a chronic and abusive alcohol user and to compare the methods of detecting alcohol consumption (psychiatric interview, paraclinical examinations and questionnaires). The ultimate goal is to identify the pattern of alcohol use and find a suitable management for each patient by determining the type of intervention required and the next steps in assessing liver function.

Our subjects underwent routine paraclinical examinations and professional psychiatric examination and the ones with somatic complaints were further investigated to assess somatic status, to detect unidentified comorbidities and to establish dose adjustment.

Patients were given 2 questionnaires to complete during hospitalization: the AUDIT and CAGE. The patients agreed to participate after we explained to them the study's details and the anonymity of the questionnaires.

We stored socio-demographic indicators and other medical data identified in the patients observation sheets: age, gender, place of residence, educational level, employment, marital status, as well as paraclinical data and the AUDIT and CAGE scores. No personal data were used for the study, therefore no symbols that uniquely identifies a person, in accordance with the current European Commission regulations.

We used the Microsoft Office package (Microsoft Corp., Redmond, WA, USA) to write and process the collected data. We stored the measured parameters and used them for secondary processing and graphical representation in Microsoft Excel. We wrote the article in Microsoft Word.

AUDIT QUESTIONNAIRE[13]

The AUDIT (Alcohol Use Disorders Identification Test) has been used worldwide since 1989 and enquires about **alcohol intake, potential dependence on alcohol and experience of alcohol-related harm.**

[12] Weinrieb RM, Van Horn DH, Lynch KG, Lucey MR. 2011. „A randomized, controlled study of treatment for alcohol dependence in patients awaiting liver transplantation." *Liver Transpl* 17(5):539-47; Foxcroft DR, Coombes L, Wood S et al. 2014. „Motivational interviewing for alcohol misuse in young adults." *Cochrane Database Syst Rev* (8):CD007025

[13] Saunders JB, Aasland OG, Babor TF et al. 1993. „Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on early detection of persons with harmful alcohol consumption - II." *Addiction* 88:791-804; Hall W, Saunders JB, Babor TF et al. 1993. „The structure and correlates of alcohol dependence: WHO Collaborative Project on the early detection of persons with harmful alcohol consumption- III." *Addiction* 88:1627- 1636

The World Health Organization (WHO) has set up a 150-item pool, many of which are borrowed from other alcohol screening tools or other items covering diagnostic criteria for various categories of alcoholism. These questions were administered to 1888 people, their answer being quoted according to the frequency of occurrence of the phenomenon evaluated on a 4-point scale (from 0 = never to 4 = daily).

Based on a "step-by-step" statistical analysis, those questions that gave the rarest affirmative answers were gradually excluded. Furthermore, based on the calculation of the alpha-Cronbach's confidence coefficient, the correlation with the amount of alcohol consumed daily by a subject and the factorial analysis, other questions that did not work well were eliminated and thus remained 10 questions that constitute the AUDIT test. Questions 1-3 measure alcohol consumption, questions 4-6 drinking behavior, 7-8 side effects and 9-10 alcohol problems. (Table 1)

AUDIT's sensitivity was 87-96% and the specificity was 81-98% for harmful alcohol consumption in all 6 centers of the study. For a score of 8, maximum sensitivity and specificity was found, which means that beyond this score we can speak of an individual with a harmful alcohol consumption.

Table 1. AUDIT test, questions and scoring[14]

Question	Answer	Scoring
1. How often do you have a drink containing alcohol?	Never Monthly or less 2-4 times a month 2-3 times a week 4 or more times a week	0 1 2 3 4
2. How many standard drinks containing alcohol do you have on a typical day when drinking?	1 or 2 3 or 4 5 or 6 7 to 9 10 or more	0 1 2 3 4
3. How often do you have six or more drinks on one occasion?	Never Less than monthly Monthly Weekly Daily or almost daily	0 1 2 3 4
4. During the past year, how often have you found that you were not able to stop drinking once you had started?	Never Less than monthly Monthly Weekly Daily or almost daily	0 1 2 3 4
5. During the past year, how often have you failed to do what was normally expected of you because of drinking?	Never Less than monthly Monthly Weekly Daily or almost daily	0 1 2 3 4
6. During the past year, how often have you failed to do what was normally expected of you because of drinking?	Never Less than monthly Monthly Weekly Daily or almost daily	0 1 2 3 4
7. During the past year, how often have you had a	Never	0

[14] Babor, Thomas F. 2001. „AUDIT: the Alcohol Use Disorders Identification Test : guidelines for use in primary health care, 2nd ed.” *World Health Organization*

feeling of guilt or remorse after drinking?	Less than monthly Monthly Weekly Daily or almost daily	1 2 3 4
8. During the past year, how often have you been unable to remember what happened the night before because you had been drinking?	Never Less than monthly Monthly Weekly Daily or almost daily	0 1 2 3 4
9. Have you or someone else been injured as a result of your drinking?	No Yes, but not in the past year Yes, during the past year	0 2 4
10. Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?	No Yes, but not in the past year Yes, during the past year	0 2 4

CAGE QUESTIONNAIRE

The CAGE test was developed by Mayfield, McLeod, and Hall (1974) and is one of the most widely used test in current medical practice for screening for alcoholism. Its name comes from the four questions in the test that contain the words "Cut down", "Annoyed", "Guilty" and "Eye opener" and which are the four areas explored by the test (Table 2).

CAGE is a pencil-and-paper test and the subject has to choose an answer between "yes" and "no". Two or more affirmative answers indicate that the patient is at risk for alcohol problems and needs help. Sensitivity is high ranging from 60 to 95% and specificity from 40 to 95%[15].

The test is especially indicated in the primary medical network, in the general medicine office because it is very easy to apply, its completion takes about 1-2 minutes. It is also applied by internists and especially by nurses in the waiting room of patients or in clinical wards[16].

The limitations of this test are that it does not specify the time frame to which the question refers, does not assess the level of consumption (frequency and quantity) and episodes of healthy drinking and fails to distinguish between harmful or hazardous consumption and alcohol dependence.

Table 2. CAGE test, questions and scoring

Questions	Answers	Scoring
1. Have you ever felt you should cut down on your drinking?	No Yes	0 1
2. Have people annoyed you by criticizing your drinking?	No Yes	0 1
3. Have you ever felt bad or guilty about your drinking?	No Yes	0 1
4. Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (eye-opener)?	No Yes	0 1

The test is positive for 2 or more positive answers. A single question with a positive answer justifies a more in-depth assessment of consumer behavior.

[15] Beresford TP, Blow FC, Hill E et al. 1990. „Comparison of CAGE questionnaire and computer-assisted laboratory profiles in screening for covert alcoholism." *Lancet* 336:482-485

[16] Bernardt MW, Mumford H, Murray RM. 1984. „Can accurate drinking histories be obtained from psychiatric patients by a nurse conducting screening interviews?" *Brit.J.Addiction* 79:201-206

RESULTS AND DISCUSSIONS

The clinical study enrolled all the patients admitted in the Psychiatry I Clinic of the Clinical Neuropsychiatric Hospital of Craiova in 2021 (from 1st January 2021 to 31st December 2021) who were diagnosed with mental and behavioural disorder due to use of alcohol (alcohol intoxication, dependence and withdrawal with and without delirium), meaning 86 human subjects.

More than one third of the patients were in the 45-54 years category. The mean age was 46.9 years with a standard deviation of 11.1 years.

Figure 1. Distribution of patients according to age groups

The time from the onset of alcoholic behavior to the onset of symptoms is a long one, which can be prolonged for several years and can be influenced by both existing somatic comorbidities and the many psychosocial stressors, but also by the support of the entourage.

It is very possible that in the full process of globalization, the incitement that other psychoexciting substances confer will be much more attractive compared to that created by alcohol consumption. It is believed that younger generations are more attracted to the consumption of ethnobotanicals and narcotics. Their social and anxiolytic character seems to have replaced the consumption of ethanol. However, the effects of these products are not at all benign, and the lack of concrete data on their composition often prevents the administration of the appropriate antidote.

The increased incidence is in the 45-54 years group, when patients are mature and find peace in alcohol consumption. Their knowledge about the consumption of ethnobotanicals is limited compared to young people, and the fear of the unknown urges them to consume the classic alcohol. And these prejudices may explain the higher frequency of ethanol consumption at these ages.

Only 4 patients over the age of 65 years were admitted for an alcohol problem, so a simple and at the same time sad explanation is that the lifespan of heavy drinkers is short due to numerous complications, so a large number of patients with chronic ethanol use do not reach these advanced ages.

At the same time, we consider from our experience that there are many people, especially in rural areas, who have alcoholic symptoms, but they do not present to doctors from a number of prejudices and fears, which further clog them in the abyss of addiction and helplessness.

Many patients do not realize that alcohol can damage them mentally and put them out of use with impaired daily functioning. Here arise many popular and traditional perceptions that consider alcohol as a cultural factor.

Mental and behavioural disorders due to use of alcohol were far more common in men than in women. Analyzing the distribution of patients according to urban and rural areas, we noticed that here was also a significant difference. (Table 3).

Table 3. Distribution of patients according to gender and environment of residence

Parameters	Number of cases
Gender	
Men	83
Woman	3
Environment of residence	
Urban	30
Rural	56

Data from the literature show higher alcohol consumption among the male population, as we can also see in our study.(Table 3) Out of a total of 86 patients, only 3 female patients were found. We cannot say exactly why the number of females was so small, but we can make some assumptions about the much greater stigma of females regarding alcohol consumption and subsequent hospitalization in a psychiatric clinic, as well as the precarious year in which the society has to go through this pandemic. Not to mention that we studied only patients who were diagnosed with behavioral disorders due to alcohol consumption, without taking into account other mental illnesses that lead to alcohol consumption.

We know that in our country alcohol consumption, especially in rural areas, acquires cultural and traditional values, related to the mentality of the people, a mentality almost impossible to change with all the opinions of doctors and all prevention materials of health promoters.

This could be an explanation for the increased number of rural patients included in our study.(Table 3) Most patients diagnosed with mental alcoholic-use disorders came from rural areas. Increased accessibility, own production of alcoholic beverages obtained by distillation and fermentation and the false idea of health conferred by alcohol increase the rate of consumption among patients in Romanian rural environment. It is also very possible that the multitude and diversity of psychotic symptoms developed due to the impregnation with alcohol is also caused by the impurity of the alcohol obtained in one's own household. The famous phrases of "wine made without additives" can give a better taste, but do not deprive the home made wine of increased concentrations of methanol or other chemicals almost impossible to track.

Table 4. Distribution of patients according to employment, educational level, marital status

Parameters	Cases
Educational level	
Elementary	16
Secondary	19
Tertiary	11

Employment	
Student	3
Employed	20
Unemployed	33
Retired	10
Social aid	11
Job loss	9
Marital status	
Widowed	7
Divorced	25
Married	23
Never married	31

Regarding the distribution of patients according to educational level (Table 4) our results are in line with specialized studies that claim that people who complete secondary education such as professional school or high school but fail to obtain a diploma have a higher risk of developing alcohol abuse or addiction in adulthood. Also completing up to 8 years of education was associated with a increase in risk, comparate to college graduates.

Most of the patients in our study were those without activity, such as the unemployed, retired, with job loss and social aid.(Table 4) Work is an important factor in the overall health and well-being of all people. Financial maintenance plays an important role, both globally and for the psychiatric patients. It gives us a purpose, promotes independence, helps us develop social contacts and is a factor in preventing physical and mental health problems. Income is directly related to health through the material conditions and resources it provides to meet basic needs and health. It also influences mental health through its social and emotional significance. One aspect of the economic privilege of people with a higher level of education is their relatively secure position in the labor market. In general, uncertainty about the possibility of keeping a job in the future leads to stress reactions and a general reduction in psychological well-being, which can lead to alcohol use to help them better cope with these problems.

We found it useful to document the marital status of our patients, given that the association between mental health and social relationships has long been of great interest. Most of our patients were divorced or never married.(Table 4) Relationships can be both a source of satisfaction and a source of conflict, which has a significant effect on mental health. Infidelity, abuse, separation or loss of a loved one can play a role in causal factors in the pathology we study. Unmarried and divorced people are at increased risk for developing psychological problems that they often treat with alcohol, exacerbating symptoms and increasing the risk of suicide.

Reviewing our data, it is difficult to draw a picture of the alcoholic patient admitted in the Psychiatry Clinic. However, if we take into account the highest incidences we can say that a specific profile would be represented by a middle-aged male patient from a rural area, unemployed, with secondary education, divorced or never married.

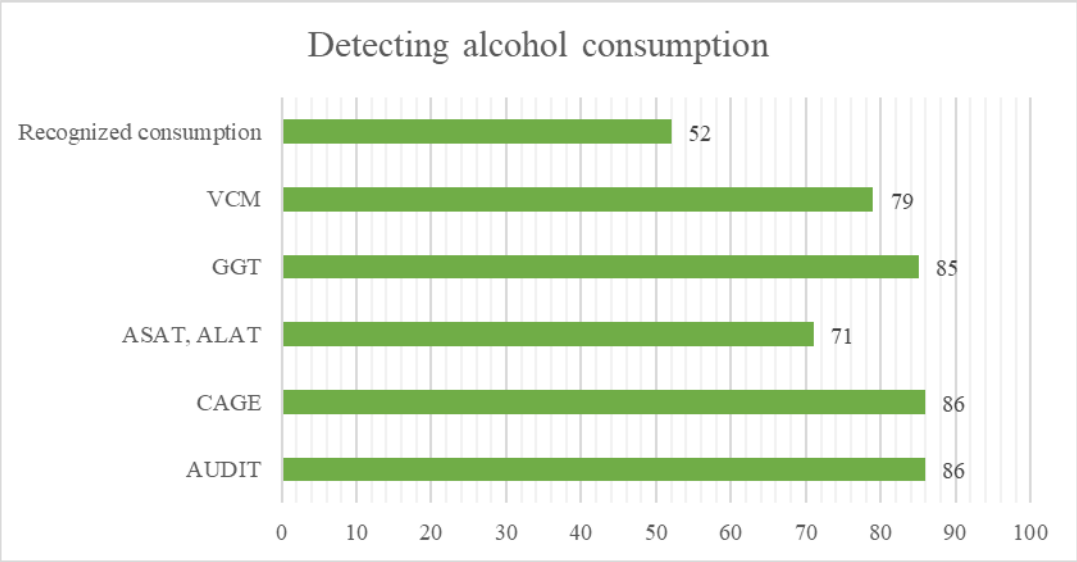

Figure 2. Effectiveness of alcohol detection methods by number of cases

In Figure 2 we insert the number of patients who admitted to alcohol consumption at the first psychiatric interview, the number of patients in whom we found modified values of alcohol biological markers ASAT, ALAT, GGT, VCM, as well as the number of patients who had scores over 7 on the AUDIT and over 2 on the CAGE questionnaire. Just 79 patients had the VCM value modified, 85 had the GGT modified and 71 had the ALAT+/- ASAT modified.

Transaminases are liver enzymes involved in protein metabolism. Their testing is one of the oldest and most widely used markers in the detection of chronic alcohol consumption. Serum levels of two transaminases are usually determined: aspartate-aminotransferase (ASAT), also known as glutamic-oxalacetic transaminase, and alanine-aminotransferase (ALAT), known as glutamic-pyruvate transaminase. While ASAT is also found in the muscles and heart, ALAT is only found in the liver, so the increase in its serum levels is suggestive of liver damage. Alcohol increases the serum titer of these enzymes by increasing the permeability of liver cell membranes or by killing these cells[17].

GGT is a liver enzyme involved in protein metabolism. Normally this enzyme does not reach the bloodstream unless the liver cell membranes rupture and allow the enzyme to be released into the extracellular fluid and then into the blood. Occasional alcohol consumption, even in large quantities, or daily consumption of 5 drinks / day (approximately 60 g of pure alcohol) for 3 weeks does not increase GGT[18]. The increase in GGT betrays a longer consumption, for example the serum level increases significantly at an excessive consumption of more than 6 weeks. In patients with pre-existing liver damage, this time may be shorter. The increase in serum GGT levels due to alcohol consumption is due to the

[17] Alcoolismul: Detectie, Diagnostic si Evaluare. Un compendiu de scale, chestionare si interviuri standardizate. 2002. *Radu Vrasti.* Timisoara: Timpolis

[18] M, Salaspuro. 1994. „ Biological state markers of alcohol abuse.” *Alcohol Health & Research World* 18:131-135

stimulation of enzyme synthesis, the destruction of liver cell membranes and / or the death of liver cells[19].

The VCM marker is an increase in the volume of red blood cells under the influence of chronic alcohol consumption. The mechanism by which alcohol increases the volume of red blood cells (also called macrocytosis) is unknown, but it is thought to be due to the toxic effect of alcohol on young forms of red blood cells and bone marrow or the nutritional deficiencies of folic acid or vitamin B_{12} produced by alcohol. This marker is found in 35 to 40% of alcoholic patients[20]. The increase in red blood cell volume correlates positively with the duration of alcohol consumption.

It has long been considered that the assessment of a subject who consumes alcohol through questionnaires or scales is not reliable due to his tendency to deny drinking behavior. However, many studies have shown the opposite, and today it is believed that their testimony can be taken into account. The accuracy of the subjects' answers depends on a number of factors, including: cultural norms, the presence or absence of other people during the interview, the characteristics of the interview, the attitude of the interviewer, the motivation of the subject[21].

A very important aspect that we discovered during the study and confirmed with data from the literature is that even if psychiatric patients tend to be afraid to interact with the doctors when presenting to the emergency room or in the early hospitalization days and don't recognize the tendency of chronic and abusive alcohol consumption, the questionnaires completed a few days later highlighted the patients' ease in recognizing addiction and the difficulties they go through everyday due to alcohol consumption. Only 52 patients admitted to alcohol consumption at the first psychiatric interview.

According to World Health Organization (WHO)[22] the range of AUDIT scores is from 0 to 40, thus divided:

- 0: abstainer who has never had any problems from alcohol
- 1-7: low-risk consumption
- 8-14: hazardous or harmful alcohol consumption
- 15 or more: likelihood of alcohol dependence (moderate-severe alcohol use disorder)

Biological markers taken alone are nor so specific, nor so sensitive, but their association could increase the power of discrimination between alcoholics and non-alcoholics. Moreover, taking into account the questionnaires completed by patients during hospitalization, we can really highlight the problem of alcohol consumption regarding alcohol intake, potential dependence on alcohol and experience of alcohol-related harm and build an individual pattern of use so we can know what we are dealing with and how to manage each case.

Although not all patients admitted to alcohol consumption on the first psychiatric interview, after completing the questionnaires we found that all 86 patients had a CAGE

[19] CS, Rosman AS and Lieber. 1990. „Biochemical markers of alcohol consumption." *Alcohol Health & Research World* 14:210-218

[20] AS, Rosman. 1992. „Utility and evaluation of biochemical markers of alcohol consumption." *J. Substance Abuse* 4:277-297

[21] Babor TF, Brown J, Del Broca FK. 1990. „Validity of self-reports in applied research on addictive behaviours: Fact or fiction?" *Behav.Assess* 12:1-27

[22] Babor, Thomas F. 2001. „AUDIT: the Alcohol Use Disorders Identification Test : guidelines for use in primary health care, 2nd ed." *World Health Organization*

score above 2 and an AUDIT score above 7, 12 of them with values between 8 and 14 and 74 of them with a score above 15.

Unfortunately, we cannot perform other paraclinical or imaging investigations in our psychiatric clinic, but we can be an important pillar in acohol liver disease because we can further direct patients to an internist.

CONCLUSIONS

Alcohol use constitutes a huge economic burden in Romania. The evolution is usually progressive, with a modest response to specialized treatment, caused by poor therapeutic compliance. Family support is generally modest, with the family showing contradictory feelings that in most cases lack empathy and acceptance of the existence of a disease and not just a hedonic habit.

There is a need for perfect interdisciplinary collaboration between the general practitioner, internist and psychiatrist to adopt the best therapeutic strategy, with optimal results and minimal risk of relapse. This long-awaited collaboration must be doubled by counseling and psychotherapy for both the patient and their relatives. All these steps and plans aim at the social, professional and family reintegration of the patient with the increase of the quality of life. The main goal is to reach and maintain abstinence.

The questionnaires proved to be more accurate in detecting patients with problematic alcohol consumption than laboratory data, but we definitely need to corroborate the questionnaires with the paraclinical values so we can identify a pattern of use and realize the possible hepatic damage. In doing so, during the brief interventions we will try to persuade patients and their caregivers to consult an internist for liver function evaluation and monitorization, so that the alcohol liver disease will not occur or advance and bring more economic burden.

CONFLICT OF INTERESTS

The authors declare that they have no conflict of interests.

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