



Alcohol Dependence in Elderly People

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Abstract

This review discusses various aspects of alcohol dependence in the elderly, including prevalence, diagnosis, treatment and prevention. The available evidence suggests that, despite the growing prevalence of alcohol abuse and alcohol dependence among the elderly in many countries of the world, not enough attention is paid to this problem. The implementation of a comprehensive program for the prevention and treatment of alcohol dependence in the elderly would improve the quality of life of this category of the population, as well as save significant funds that could be used to improve medical and social care for the elderly.

Received: Dec 03, 2021

Accepted: Jan 04, 2022

Published Online: Jan 07, 2022

Journal: Journal of Addiction and Recovery

Publisher: MedDocs Publishers LLC

Online edition: <http://meddocsonline.org/>

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Introduction

The number of elderly people in the world is growing every year. In Europe, the rate of growth in the number of older people over the past decades has been twice as fast as the growth rate of the entire population [1]. According to the forecast of WHO experts, the number of people aged 65 and over will increase in Europe from 86.8 million in 2010 to 122.5 million in 2030 [2]. Given the growing number of older people, an urgent task is to conduct research to study their health status and develop, based on the results of these studies, measures to improve the quality of life of older people. Alcohol abuse by the elderly is a rather acute medical and social problem that requires urgent measures to address it. Alcohol abuse and alcohol dependence are the second most frequent reasons for older people seeking psychiatric care, 15% of visits for outpatient care, about 10% of admissions to therapeutic departments of hospitals [3].

In most European countries, there is no dynamic monitoring of alcohol consumption among older people because it is generally accepted that the prevalence of alcohol-related problems in older people is lower than in the general population. At the same time, according to the results of the GENACIS project, conducted at the beginning of this century in 35 countries of the world, including some countries of the European Union, the prevalence of alcohol consumption among the population does not decrease with age [4]. Moreover, it was found that the prevalence of high alcohol consumption (> 23 grams per day) increases with age, and there is also a tendency for the frequency of alcohol consumption to increase. According to the available data, over the past decade, the level of alcohol consumption among older Europeans has increased, which is explained by a complex of psychosocial and economic factors [7][2]. The prevalence of alcohol abuse among older people varies significantly in different countries and is 4-6% in the United States, Canada



and Western Europe, 6.3% in South Korea, 18.4% in Israel [5]. According to German researchers, 10% of residents of nursing homes suffer from alcohol dependence [6]. Screening results in Belarus showed that half of urban men over 45 have a high risk of developing alcohol-related problems according to the AUDIT test [7]. Cross-country comparisons on this indicator are difficult due to the use of different measures for the level of alcohol-related problems.

Alcohol abuse among older people is often referred to as a “hidden” problem, due to a number of factors that make it difficult to identify: 1) older people are reluctant to admit the fact of alcohol abuse. 2) Many older people are socially isolated, making it difficult to diagnose alcohol-related problems. 3) Doctors and social workers rarely ask older people about their attitudes towards alcohol, believing that such problems are more related to young people. In addition, many doctors are pessimistic about the likelihood that older people are able to change their life stereotype and give up alcohol. 4) Problems associated with alcohol in the elderly can be masked by such disorders typical of the elderly as depression, insomnia, and impaired consciousness.

Some authors conditionally divide the contingent of elderly people suffering from alcohol dependence into those whose dependence was formed at a young and mature age (2/3 of all patients with alcohol dependence in old age) and those who have the onset of the disease at the age of 50-60 years [8]. These patient groups differ in a number of socio-demographic and clinical characteristics. As a rule, the severity of alcohol dependence is more pronounced in patients of the first group [9]. They also have significantly more alcohol-related health problems. The prognosis for the treatment of patients with late onset of the disease is more favorable, they are more likely to have spontaneous remissions [10].

Longitudinal studies have shown that stable remission is observed in 21% of elderly people, and in patients with late onset of alcoholism this indicator is twice as high as in patients with early onset [4]. It is also believed that genetic factors play the main role in the etiology of early onset alcohol dependence, while late onset alcohol dependence is mainly formed under the influence of social factors: decreased interpersonal contacts, loneliness, decreased social activity, social isolation, job loss, death of a family member etc. [11] The etiological factor of alcohol dependence at a later age can also be health problems associated with aging: affective disorders, insomnia, cognitive impairment, chronic somatic diseases [4,12]. The onset of alcohol dependence often coincides with retirement, the emergence of free time, and a decrease in social control [12].

Alcohol abuse and alcohol dependence in the elderly is associated with a whole range of social (family, financial and legal problems) and medical problems (increased risk of coronary artery disease and stroke, accidents, osteoporosis, dementia and Parkinson's disease) [12-14]. The toxic effects of alcohol in combination with involution changes in the brain lead to a rapid progression of the psychoorganic syndrome [15]. In an epidemiological study conducted in the United States, it was shown that the prevalence of alcohol-related problems among people over 55 years of age with cognitive impairment is 1.5 times higher than in those without cognitive impairment [2]. Alcohol dependence was found in 13.3% of patients with senile dementia, in 17.2% of patients with senile dementia in combination with atherosclerosis, and in 14.7% of patients with Pick's disease [7]. Alcohol abuse also dramatically increases the risk of develop-

ing cirrhosis of the liver, liver cancer and upper digestive tract cancer [2]. Some studies have shown a high co-morbidity in the elderly of alcohol dependence, depression and personality disorders [15]. A characteristic feature of depression in alcohol-dependent older people is a more severe clinical course and a high risk of suicide [16].

A separate problem is the combination of alcohol intake with medications that older people take as prescribed by a doctor, since about a third of older people take 4 or more drugs daily [17]. A Pennsylvania study of 83,321 elderly people aged 65-106 showed that 20.3% of them consume alcohol while taking medications that are not compatible with alcohol [2]. Another study from Wisconsin showed that 38% of older adults regularly consume alcohol while taking medication [18]. The interaction of alcohol with drugs can change the pharmacokinetics of drugs, weaken or enhance their effects, enhance the side effects of drugs, and cause a disulfiram-like reaction [19]. The negative consequences of the combined intake of alcohol and medications can be the liver damage, kidneys, impaired consciousness, and impaired coordination of movements, which significantly increases the risk of injury [6].

Diagnosing alcohol-related problems and alcohol dependence in older adults is challenging because traditional screening tools are not adapted for older people. Typically, screening tools focus on identifying current alcohol-related problems, while a thorough alcohol history should be taken in older people. For example, the widely used AUDIT test has not been validated enough to diagnose alcohol-related problems in the elderly [3]. However, there are tests that have been adapted to detect alcohol-related problems in older people. These include the geriatric version of the Michigan Screening Test (MAST-G), which is highly sensitive and specific [15]. The test results are interpreted as follows: the respondent receives one point for each positive answer to the test question. A score of 5 or more indicates that alcohol-related problems exist. Identifying alcohol-related problems in older adults should begin with a routine screening in which the doctor asks questions about the amount and frequency of alcohol consumed.

In order to reduce dissimulative tendencies, questions about drinking habits should be asked in the context of studying the patient's lifestyle and his recreational activity. It is important to note that due to their increased sensitivity to alcohol, alcohol-related problems in older people can occur even with small amounts of alcohol. Therefore, the dose of alcohol consumed is one of the main criteria for assessing the level of alcohol-related problems in older people. Along with the basic symptoms of alcohol dependence (hangover, loss of quantitative control), the behavioral effects of alcohol are important diagnostic criteria for indicating the presence of alcohol-related problems. Additional diagnostic signs may be liver disease (alcoholic hepatitis, cirrhosis), peripheral polyneuropathy, traces of trauma and damage (abrasions, bruises).

Some doctors are skeptical about the treatment of alcohol dependence in older people. However, the available evidence suggests that it is possible to reduce the incidence of alcohol-related problems in older people with relatively simple prevention strategies. In particular, in a randomized study, the effectiveness of a short intervention was shown when used in primary care settings [20]. A short intervention is a conversation with a patient, during which the patient is given advice on how to reduce or stop drinking alcohol. This method consists of the following steps: 1) in a supportive manner, avoiding resistance, it is nec-

essary to point out to the patient about his alcohol problems. 2) Concern should be expressed that as alcohol abuse continues, the level of alcohol problems will progressively increase. At the same time, attention should be paid to the alcohol-related problems already existing in a particular patient. 3) Specific recommendations should be made for reducing or stopping alcohol consumption. 4) If available, educational materials should be provided on the negative effects of alcohol abuse and how to reduce alcohol-related problems. 5) It is necessary to appoint a second appointment to the patient after several weeks in order to assess his condition and make a decision on the subsequent tactics. If, after counseling, there are no positive changes in the patient's condition and he continues to abuse alcohol, it is necessary to motivate him in order to be included in the therapeutic process.

The treatment of alcohol dependent elderly people has some particularities that should be borne in mind. The characteristic features of alcohol dependence in the elderly are low tolerance, the severity of the clinical symptoms of alcohol withdrawal syndrome and an increase in its duration, and frequent amnestic forms of intoxication [21,22]. Considering that alcohol withdrawal syndrome in the elderly is more severe, often accompanied by impaired consciousness, as well as high comorbidity, detoxification is recommended to be carried out in stationary conditions. Detoxification should include the normalization of water and electrolyte balance, as well as the appointment of thiamine in order to prevent Korsakoff syndrome. In the process of relieving alcohol withdrawal syndrome, benzodiazepines should be used with caution, since concomitant liver dysfunctions change their pharmacokinetics and increase sensitivity to them. In this regard, in order to reduce the risk of side effects, it is recommended to use short-acting benzodiazepines, avoiding the use of long-acting benzodiazepines (diazepam) [13].

The range of pharmacological agents that can be used for the purpose of anti-relapse prophylaxis in elderly patients is not large. One study has shown the effectiveness of naltrexone in the prevention of relapse in elderly patients [1]. Disulfiram should be used with caution for a short time, given its toxic effects that increase the risk of myocardial infarction, stroke and impaired consciousness [6]. Therefore, for the purpose of anti-relapse prevention, it is necessary to give preference to various methods of psychotherapy (cognitive-behavioral therapy, family therapy).

Given the urgency of the problem, there is a need to develop an effective strategy for the prevention of alcohol-related problems among older people. Studies have shown that older people are the least informed group of the population regarding safe limits for alcohol consumption [2]. In this regard, one of the preventive strategies is to provide older people with advice on the acceptable intake of alcohol. Due to the fact that the body's ability to metabolize alcohol decreases with age, as well as due to chronic somatic diseases, the sensitivity of older people to alcohol increases. Therefore, the standard alcohol consumption limits (no more than 21 drinks per week) are not applicable for the elderly. According to the recommendations of the US National Institute for the Study of Alcohol Problems (NIAAA), people over 65 years old should consume no more than one standard dose of alcohol per day (about 10 g in absolute alcohol terms) and 7 doses per week, with a single dose not exceeding 2 standard doses [1].

In conclusion, the available evidence suggests that, despite the growing prevalence of alcohol abuse and alcohol depen-

dence among the elderly in many countries of the world, not enough attention is paid to this problem. The implementation of a comprehensive program for the prevention and treatment of alcohol dependence in the elderly would improve the quality of life of this category of the population, as well as save significant funds that could be used to improve medical and social care for the elderly.

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