

ALCOHOLISM AS A SERIOUS SOCIAL AND MEDICAL PROBLEM IN THE WORLD AND THE EFFECT OF ALCOHOL ON THE BRAIN

Tilavov Tolibjon Bakhtiyor Ugli
Bukhara state medical institute

Toshpulatov Diyorbek Anvarjon ugli
Zarmed university

Abstract: The article provides a brief overview of the effects of alcohol on various organ systems. The analysis of the literature data on the causes of its use, its effects on the body and the consequences caused by its use is carried out. Data from previous studies on alcohol-related mortality have been analyzed. The statistical data on the decrease in the tendency to alcohol consumption by the Russian population are presented. The most frequently affected organ systems under the influence of alcohol are described in detail. The consequences of alcohol consumption and social aspects of the problem of alcoholism are considered. Visual aids of morphological changes in organs arising from excessive alcohol consumption are presented.

Keyword: alcoholism, anti - alcohol propaganda modern visual technology, changes in the organs, healthy lifestyle.

Alcoholism is a disease caused by the systematic use of alcoholic beverages, characterized by pathological attraction to them, the development of mental (irresistible attraction) and physical dependence (the appearance of withdrawal syndrome upon cessation of use) [4]. In cases of prolonged course, the disease is accompanied by persistent mental and somatic disorders [4]. Alcohol abuse is one of the urgent problems of our country. The previously recorded decrease in the incidence of chronic alcoholism has been replaced by its growth. [4] The widespread sale and advertising of alcoholic beverages, social, economic and psychological tension, disorganization of leisure and recreation contribute to the alcoholization of the population, including young people.

Causes and statistics of alcohol consumption.

To begin with, I would like to consider the reasons for alcohol consumption. The need for alcohol is not one of the natural life needs of a person, such as the need for oxygen or food, and therefore alcohol itself has no motivating force for a person. This need, like some other human "needs", appears because society, firstly, produces this product and, secondly, "reproduces" customs, forms, habits and prejudices associated with its consumption. An outstanding psychiatrist and public figure, a fighter against alcoholism, academician Vladimir Mikhailovich Bekhterev (1857-1927) described the psychological causes of drunkenness in this way: "The thing is that drunkenness is an age-old evil, it has taken deep roots in our everyday life and has given rise to a whole system of wild drinking customs. These customs require drinking and being treated with wine at all times." By doing so mental, and later physiological dependence on alcohol is developed[4]. Alcohol is included in the metabolic processes, deprivation of it leads to a painful disease – a hangover,

which is characterized by trembling hands, an anxious mood, heavy sleep with nightmares, unpleasant sensations from internal organs [10] According to VTSIOM, 180 liters of vodka are consumed annually for every Russian, including women and children. [9]. The main impetus for the increase in alcohol consumption and alcohol mortality in the 1990s was the liberalization of the alcohol industry and, as a result, the increased economic availability of strong alcoholic beverages and alcohol. On June 7, 1992, Boris Yeltsin abolished the state monopoly on vodka, as a result of which the relative price of vodka fell several times. As shown by Yu.V. Andrienko and A.V. Nemtsov, in Russia, as well as in other countries [19], consumption alcohol depends on the price of alcohol. However, the income of citizens is also an important factor in the consumption of alcoholic beverages. An analysis of the RMEZ data[16] showed that in Russia "the risk of being an alcohol consumer increases along with individual income." As Andrienko Yu.V. points out, the growth of incomes of Russians since 1999 has been a serious factor in alcoholization of the population [3]. According to WHO experts, the dangerous level of alcohol consumption per capita is the average consumption exceeding 8 liters of alcohol per capita per year. [20] According to WHO data for 2018, Russia ranks 16th out of 189 countries in terms of the amount of pure ethyl alcohol consumed per capita, aged 15 years and older[17]. Central European trends have also affected Russia. It can be stated that a period of excessive consumption growth has been passed beer, primarily due to the proportion of strong alcohol. The level of beer consumption in Russia can be estimated as average. Recently, there has been a tendency to increase the consumption of light drinks, wine remains a feminine or festive drink. In general, it can be stated that Russia is characterized by global trends in increasing consumption of light and more expensive spirits [15, 17].

The effect of alcohol on the brain.

Alcohol, like other drugs, affects the central nervous system to the greatest extent, inhibiting its activity. Mental disorders occupy the third place in the morbidity structure of people who abuse alcohol [13]. The brain is abundantly supplied with blood. The alcohol she delivers is greedily consumed fat-like substances contained in neurons. The lipid membranes of neurons are destroyed in this case[14]. Being a poison, alcohol causes changes in the protoplasm and nucleus of nerve cells. It also promotes the bonding of red blood cells (aggregation). Glued erythrocytes, clogging the lumen of the capillaries that bring blood to the cells the brain, disrupt their oxygen supply. 5-10 minutes of oxygen starvation is enough for the cells to die[14]. The destruction of several thousand nerve cells of the brain does not lead to visible changes in it, since the brain has from 14 to 17 billion cells. With excessive alcohol consumption, the number of dead cells can reach hundreds of millions. This leads to a pathological change in the structures of the brain. (Fig. 1).

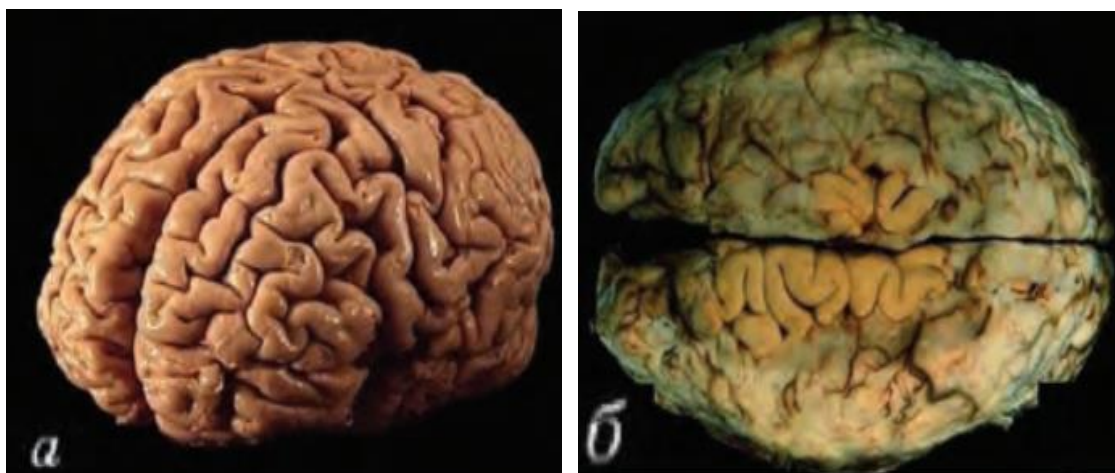


Figure 1. Relief of the cerebral cortex.

Natural anatomical preparations. Polymer embalming.

a) the norm b) destructive and inflammatory changes in severe alcoholism

The cerebral cortex is thinning, the ventricles of the brain expand, shrink, and the large hemispheres decrease in size. These organic changes inevitably lead to mental deviations from the norm, developing incrementally. The structures of the cerebral cortex are the very first to suffer from alcohol intoxication: the activity of the centers that control behavior is suppressed, and a person loses control over his actions[14]. With a blood alcohol content of about 0.3%, the structures of the midbrain and cerebellum are suppressed: a person completely loses orientation and the ability to move[14]. Alcohol is a narcotic poison and a depressant, not a stimulant. The biological consequences of alcoholism are progressive exhaustion of the nervous system. Psychopathies arise, a decrease in intelligence, up to dementia, a drop in creative abilities, various personality changes (loss of interests, narrowing of the circle of communication, distortion of moral beliefs), emotional and volitional disorders - degradation occurs personalities[14]. A drunk person has an overestimation of their strength, a loss of self-control, an unusually easy decision-making, but at the same time their performance decreases, which leads to rapid fatigue, distraction, difficulty in perception, and a noticeable weakening of the will. Last of all, the centers of the medulla oblongata are paralyzed, which are responsible for vital functions: blood circulation, respiration [14].

Consequences of alcohol consumption.

The consumption of alcoholic beverages is one of the first causes of accidents, injuries and deaths [6]. It has been established that with constant alcohol intoxication, there is an increased incidence of cancer of the oral cavity (except for the lips), as well as of the pharynx, larynx and esophagus. The risk of getting oral cancer in alcohol abusers is 10 times higher than in non-drinkers, and if the former also smoke, the risk increases 15 times. Total mortality from cancer of all localizations in patients alcoholism is 25% higher than the average population indicator. [14] Addiction to alcohol is the cause of various crimes. It is known that 50 percent of all crimes are related to alcohol consumption [4]. Among men, the number of deaths from accidental alcohol poisoning is 3.8 times higher than among women, and among the rural population - 5.5 times higher than among urban[7]. According to experts, alcohol is associated with about 70% of murders in Russia. [12]. Forensic medical examination data show that back in 1987, 61.4% of Russians were drunk at the time of the murder [11].

Modern technologies of scientific and educational work on the observance of a healthy lifestyle.

Alcoholism is the biggest social and medical problem. The harm of drinking alcoholic beverages is multi-organ, severe cases of alcoholism are irreversible. Even small doses of alcohol can cause great troubles or misfortunes: injuries, car accidents, disability, family breakdown, loss of spiritual needs and strong-willed traits by a person[10]. At the moment, there is a lot of literature, data and various illustrations on promoting a healthy lifestyle and the dangers of alcohol, but unfortunately, they are outdated and do not bear the proper result. In this regard, natural visual aids have been developed at the Department of Normal Anatomy of the Military Medical Academy, which demonstrate organs in comparison with normal and pronounced pathological changes in deceased alcoholics, which in turn leave a good impression about the dangers of alcohol and the positive aspects of maintaining a healthy lifestyle. These exhibits have been used at various anatomical exhibitions and have yielded positive results in in the form of motivation of people to follow a healthy lifestyle, this is proved by conducting a closed survey of these people.

References.

1. Алкогольная катастрофа и возможности государственной политики в преодолении алкогольной сверхсмертности в России. Ответственные редакторы Д.А.Халтурина, А.В.Коротаев М., ЛЕНАНД, 2008, 376 страниц.

2. Анатомия здорового и нездорового образа жизни / И.В. Гайворонский, П.К. Яблонский, Г.И. Ничипорук. – СПб. : СпецЛит, 2014. – 182 с.
3. Андриенко Ю. В., А. В. Немцов. Оценка индивидуального спроса на алкоголь. М.: EERC, 2005.
4. Валеология - Грибан В.Г К.: Центр учебной литературы, 2008. – 214 с
5. Вингерт В.В., Карпыева О.В. Анализ тенденций развития мирового рынка ликероводочной продукции // Экономика и предпринимательство. 2015. № 8 (1). С. 642 - 648.
6. Вирганская И.М. Внезапная смерть и алкоголь // Здравоохранение Российской Федерации. - 1991. - №6
7. Демографический ежегодник России 2018. - М.: Росстат, 2018
8. Информационное агентство ТАСС [Электронный ресурс]. Режим доступа: <http://tass.ru/info/3886567> (дата обращения 29.01.2017)
9. «Коварный враг» Л.Ф. Петренко, «Знание» (1981 г).
10. «Когда человек себе враг» Г.М. Энтин, «Знание» (1973 г)
11. Немцов А.В. Алкогольная история России: Новейший период. - М.: ЛИБРОКОМ, 2009 151
12. Немцов А.В. Алкогольная смертность в России 1980 - 90 - е годы. - М.: NALEX, 2001.
13. Огурцов П.П. Алкогольная ситуация в России и алкогользависимая патология // Врач. - 2003. - №11.
14. Профилактика наркотической зависимости у детей и молодежи З.В. Коробкина, Попов В.А. 2002 г
15. Регионы России. Социально - экономические показатели. 2015. Статистический сборник. М.: Росстат, 2015. С. 872 - 873.
16. РМЭЗ - это первое российское панельное обследование домохозяйств, проводимое на основе общенациональной выборки.
17. Российский статистический ежегодник. 2018. Статистический сборник. М.: Росстат, 2018. С. 70.
18. World Health Organization. Global Status Report on Alcohol and Health, 2014.
19. Österberg E. Do Alcohol Prices Affect Consumption and Related Harm? – В кн.: Alcohol and Public Policy. Oxford, New York, Toronto, Tokyo: Oxford University Press, 1995. P. 145–158.
20. Makela K., Room R. Single E., et al. A comparative study of alcohol control // Alcohol, Society, and the State. Toronto: Addiction Research Foundation. - 1981.