

ПУТИ РЕШЕНИЯ СОХРАНЕНИЯ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ ЖЕНЩИН АЛКОГОЛИЗМ СРЕДИ ЖЕНЩИН

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ПУТИ РЕШЕНИЯ СОХРАНЕНИЯ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ ЖЕНЩИН- АЛКОГОЛИЗМ СРЕДИ ЖЕНЩИН. ЖКМП.-2023.-Т.1-№1.-С

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Аннотация: В этой статье приводится пример определения этилового спирта методом газохроматографии (аппарат ЛХМ-8МД-3). В настоящее время известно, что лица, употребляющие алкоголь, стараются найти более дешёвый, низкокачественный, суррогатный алкоголь. Поэтому отравления этиловым спиртом и его суррогатами встречается довольно часто. А работа на современных аппаратах, даст возможность разработке новых методов их определения.

Ключевые слова: Газохроматография, хроматограф, сорбент, динохром, колонка, трихлоруксусная кислота, метиловый спирт, пропиловый спирт.

АЁЛЛАР РЕПРОДУКТИВ САЛОМАТЛИГИНИ САҚЛАШ ЙЎЛИДАГИ МУАММОЛАР- АЁЛЛАР ОРАСИДА АЛКОГОЛИЗМ

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Аннотация: Ушбу мақолада этил спиртини аниқлашнинг Газ хроматография аппарати (ЛХМ-8 МД-3) да текшириш усули келтирилган. Ҳозирги кунда бизга маълум бўлган этил спиртини истеъмол қилувчи шахслар фақатгина этил спиртинигина эмас, балки уларнинг ўрнини босувчи арзон, кўп учрайдиган, топиш осон бўлган бошқа спиртли ичимликларни истеъмол қилиш ҳолатлари ҳам кузатилмоқда. Унинг оқибатида этил спирти ва унинг суррогатларидан заҳарланиш ҳолатлари кузатилганлиги сабабли, замонавий аппаратларда текшириш усулини ишлаб чиқиш имконини беради.

Калит сўзлар: Газ хроматографияси, хроматограф, сорбент, динохром, колонка, учхлорсирка кислота, метил спирти, пропиол спирти.

PROBLEMS ON THE WAY TO MAINTAINING WOMEN'S REPRODUCTIVE HEALTH-CARE ALCOHOLISM AMONG WOMEN

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Abstract: This article gives an example of the determination of ethyl alcohol by gas chromatography (LKhM-8MD-3 apparatus). It is now known that drinkers are trying to find cheaper, lower quality, surrogate alcohol. Therefore, poisoning with ethyl alcohol and its surrogates is quite common. And work on modern devices will make it possible to develop new methods for their determination.

Key words: Gas chromatography, chromatograph, sorbent, dinochrome, column, trichloroacetic acid, methyl alcohol, propyl alcohol.

Availability: Alcoholic beverages are among the products containing ethyl alcohol. Ethyl alcohol has the following definition that is often used: It is a flammable, pungent-smelling, colorless liquid that first excites the nervous system and then paralyzes it. For a person weighing 70 kg, 560 grams of alcohol is a lethal dose. At the 28th session of the World Health Organization in 1975, ethyl alcohol was listed as a weak narcotic. Deep changes occur in the central nervous system and nerve fibers of a person who has chronically consumed alcoholic beverages. Cells in the central nervous system are extremely sensitive to the toxic effects of alcohol.

It is known that the central nervous system plays a leading role in human life. It has now been established that there is no safe amount of alcohol consumption and that any amount of alcohol has a depleting effect on many groups of brain cells, causing irreversible changes. After each drink, a certain number of nerve cells die. There are approximately 17 billion nerve cells in the human brain. The constant death of cells will lead to a gradual decline in mental capacity and memory. In Switzerland at the beginning of the last century, during the population census, attention was paid to one fact: it was found that there were about 9,000 people with mental retardation in the country. It turns out that they all appeared in the mother's womb on the days of grape harvest and holidays. At such times, a lot of drinking was observed among the population. Fetuses born in the summer months, when alcohol consumption is low, gave birth to normally developed children.

There is a disease called microcephaly in medicine. It is derived from the Greek word meaning "little brain". Children born with such a disease have a weak mind, the reason is the direct effect of alcohol on the pink cells.

According to research conducted by students of the University of Washington, Bill and Melind Gates, the world's largest drinkers are: among men, citizens of Romania, Luxembourg and Portugal; among women, it was found that they are citizens of Ukraine, Andorra, Belarus and Luxembourg. Also the least consumers are: Pakistan among men; showed that the Iranian countries among women. According to statistical studies, the number of drinkers among citizens of the Republic of Uzbekistan is 40-60% among women and 60-80% among men (this is taken in relation to those who have tasted alcohol even once in their lifetime). 13.5 million men and almost 10 million women have tasted it at least once a year. Also, the number of regular alcoholic drinkers is 2-3% of men and 1-2% of women. Table 1 shows the number of people in Central Asia who died in 2016 due to road accidents caused by the influence of alcohol. According to it, 20.7% of those who died in road accidents in Uzbekistan are men, 14.5% are women. Table 2 shows the number of people who died

from liver cirrhosis in 2016 due to the influence of alcohol. According to it, 58.6% of the people who died from cirrhosis of the liver of the population of Uzbekistan were men, 29.2% were women.

Table 1. Mortality from road traffic accident (%) attributable to alcohol consumption, 2016

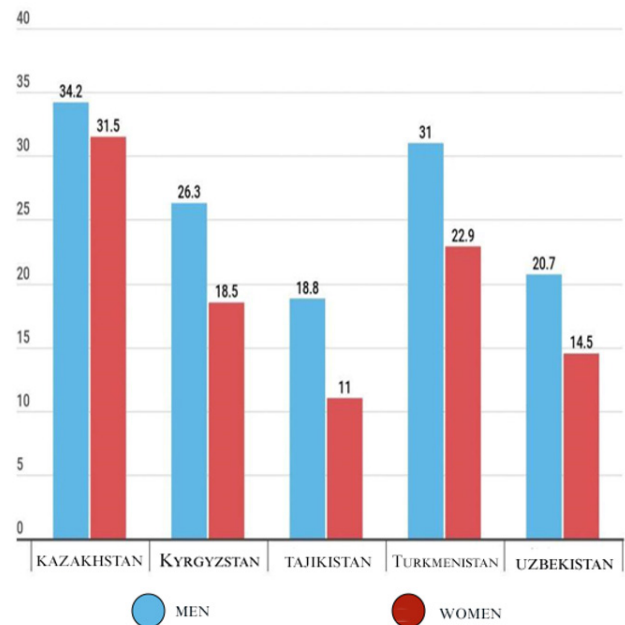
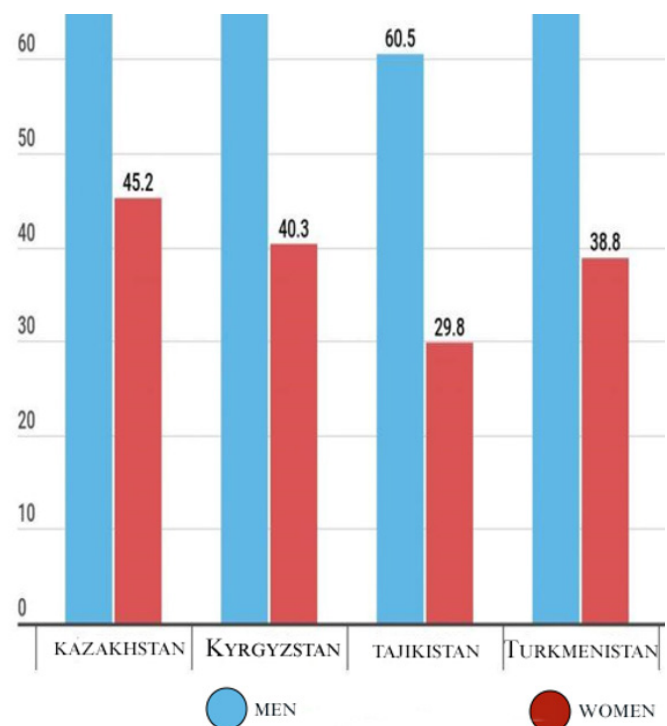


Table 2. Mortality of cirrhosis of the liver % of the population with consumption of alcohol, 2016



Similarly, when looking at the statistics of women who consume alcohol among the population in Fergana region, according to the statistics of the drug dispensary of Fergana region, it was observed that in 2021, the number of patients treated was around 2000, and 50 of them (2.5%) were women. In 2022,

this indicator has increased, i.e., 2,300 patients will be treated, of which 70 (3%) will be women. According to the statistics of the Fergana branch of the Republican Forensic Scientific and Practical Center, the number of those who died in 2021 who consumed alcohol was 241, of which 5 (2%) were women. Among those who died in 2022, the number of those who consumed alcohol was 234, and 14 of them (6%) were women.

Purpose: Reduction of cases of alcohol consumption among citizens of the Republic of Uzbekistan.

Material and methods: In the Republic of Uzbekistan, the method used by V.F.Ponomaryov: it is determined by gas chromatography.

Conditions for gas chromatographic separation: chromatograph LXM-8 MD-3, column 200x0.3 cm, sorbent-dinochrome: N treated with 15% paraffin and 3% PPG. The volume of nitrogen gas passing through the column is adjusted to 1.8 liters per hour. The temperature of the column is 75 0 C. 0.5 ml of a 50% solution of trichloroacetic acid is placed in an empty penicillin container, and 1-2 drops of a solution of methyl alcohol prepared in a ratio of 1:400 and 0.5 ml of a blood or urine sample taken as a biological object are added to it. After the vessel is placed in the fixative, 0.3 ml of a 30% solution of sodium nitrite is injected into it using a syringe and shaken for one minute. Then, a 1 ml vapor sample is taken from the container using a syringe and quickly sent to the chromatograph. In the chromatogram, a peak corresponding to methyl nitrite (retention time 8 seconds) and a peak corresponding to ethyl nitrite (retention time 33 seconds) are formed. After that, 2 ml of empty penicillin from the blood or urine sample taken as a biological object is put into a container and mixed with 2 ml of 0.4% propyl alcohol. Take 1 ml of this mixture and put it in another empty penicillin container containing 0.5 ml of 50% trichloroacetic acid and place the container in the fixer and close it tightly. Then, using a syringe, 0.3 ml of 30% sodium nitrite solution is sent to it and shaken for one minute. Then, a 2 ml vapor sample is taken from the container using a syringe and quickly sent to the chromatograph. The height of peaks characteristic for ethylnitrite and propylnitrite in the chromatogram of blood or urine is measured in millimeters. This

process is repeated twice. Aqueous solutions of 1, 3, 6 % ethyl alcohol are used to make a calculation graph. The height of the peaks is calculated using the formula:

$$\frac{N_1 \text{ ethylnitrite}}{N_1 \text{ propylnitrite}} : \frac{N_2 \text{ ethylnitrite}}{N_2 \text{ propylnitrite}} = \frac{N \text{ ethylnitrite}}{N \text{ propylnitrite}} * 100$$

$$K_{\text{the blood}} = 0,95 \quad K_{\text{the urine}} = 1,05$$

The obtained result is put on the calculation graph and the determined size is multiplied by K=0.95 in the case of blood and K=1.05 in the case of urine. The conclusion: Alcohol consumption is one of the harmful habits of a person, and alcohol consumption has negative consequences for the human body. Consequently, the consumption of alcohol by women of reproductive age will lead to the birth of disabled and sick children or to total infertility. This has a negative impact on the development of the country. Therefore, it is one of the urgent tasks of every medical worker to constantly promote the consumption of alcohol among citizens that is harmful to a person and a healthy lifestyle.

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