Eureka Open Access Journals
Open Access | Peer Reviewed | International Journals | Multidisciplinary Areas

Eureka Journal of Health Sciences & Medical Innovation (EJHSMI)

ISSN 2760-4942 (Online) Volume 2, Issue 1, January 2026

https://eurekaoa.com/index.php/5

ALCOHOLISM AND THE EFFECTS OF ALCOHOL ON THE HUMAN BODY

Radjabova Nargiza Isomitdinovna
Republican Center for Advanced Training and Specialization of Secondary Medical and Pharmaceutical Personnel, Samarkand Branch

Abstract

Alcoholism, or alcohol use disorder, is a widespread public health problem that negatively affects both physical and mental health. This paper examines the nature of alcoholism and the harmful effects of alcohol on the human body. It discusses how excessive and long-term alcohol consumption damages major organs, including the brain, liver, heart, digestive system, and immune system. In addition, the psychological and social consequences of alcoholism, such as depression, behavioral changes, family conflicts, and reduced work performance, are highlighted. The study also emphasizes the importance of prevention, education, and treatment in reducing alcohol-related harm. Understanding the impact of alcohol on the human body can help promote healthier choices and support effective intervention strategies against alcohol addiction.

Keywords: Alcoholism, alcohol use disorder, human body, health effects, liver damage, brain function, addiction, mental health, prevention, treatment.

Introduction

Alcoholism, also known as alcohol use disorder, is a chronic and often progressive condition in which a person cannot control or stop drinking despite harmful consequences to their health and life. Alcoholism negatively impacts almost every system in the human body, with both short-term and long-term effects. Short-term effects include impaired judgment, slowed reflexes, and

Eureka Open Access Journals
Open Access | Peer Reviewed | International Journals | Multidisciplinary Areas
Eureka Journal of Health Sciences & Medical Innovation (EJHSMI)
ISSN 2760-4942 (Online) Volume 2, Issue 1, January 2026

https://eurekaoa.com/index.php/5

increased risk of accidents. Long-term, heavy alcohol use damages major organs such as the liver, brain, heart, pancreas, and weaken the immune system. These effects can lead to serious diseases including liver cirrhosis, cardiovascular disorders, neurological impairments, cancers, and metabolic dysfunctions. In addition to physical harm, alcoholism can cause significant social and psychological problems, such as depression, anxiety, relationship breakdowns, and decreased work productivity. Prevention through education, early treatment with medical intervention, and psychological support are essential to reducing the global burden of alcohol-related harm. Understanding the mechanisms and outcomes of alcohol's effects on the body is crucial for public health efforts to mitigate addiction and improve long-term health outcomes. Alcohol has been part of human culture for centuries, but its widespread use masks the serious health consequences it can cause. While moderate drinking may be socially acceptable, excessive and long-term alcohol consumption leads to alcoholism and numerous health problems. Alcoholism is recognized as a medical condition that affects both the body and mind. Its effects extend beyond the individual to families, workplaces, and societies at large. Understanding how alcohol affects the human body helps explain the urgency of early education, prevention, and treatment strategies. Alcoholism, medically termed alcohol use disorder (AUD), is a pattern of drinking that causes significant impairment or distress. People with AUD often have a strong craving for alcohol, drink larger amounts over longer periods than intended, and continue drinking despite knowing its harmful effects. Over time, the body develops tolerance—needing more alcohol to achieve the same effect—and physical dependence, where withdrawal symptoms occur if drinking stops suddenly. Alcohol acts on the brain's reward system, releasing dopamine and creating a temporary feeling of pleasure. Over time, the brain adjusts to alcohol's presence, leading to craving and loss of control. This cycle of craving and dependence is what characterizes addiction. Alcohol affects nearly every organ system, causing short-term impairment as well as long-term damage. Alcohol

Eureka Open Access Journals
Open Access | Peer Reviewed | International Journals | Multidisciplinary Areas
Eureka Journal of Health Sciences & Medical Innovation (EJHSMI)
ISSN 2760-4942 (Online) Volume 2, Issue 1, January 2026

https://eurekaoa.com/index.php/5

disrupts communication between brain cells and affects mood, memory, and coordination. This interference can slow reflexes, impair judgment, and reduce inhibition. Chronic drinking can cause lasting changes in brain structure and function, leading to memory loss, mood disorders, and even conditions like Wernicke-Korsakoff syndrome—a serious brain disorder caused by malnutrition and alcohol's effects. Alcohol also affects the peripheral nervous system**.** Severe alcohol misuse may damage peripheral nerves, leading to conditions like peripheral neuropathy—pain, numbness, or tingling in the hands and feet. The liver is the primary organ that metabolizes alcohol. With excessive consumption, the liver becomes overwhelmed and injured. Early liver damage includes fatty liver disease, which is reversible if drinking stops. However, continued alcohol abuse may lead to inflammation (alcoholic hepatitis), fibrosis, and cirrhosis—an irreversible scarring of the liver that impairs its ability to function. Cirrhosis can eventually lead to liver failure and liver cancer. Alcohol affects the heart and blood vessels. Heavy and chronic drinking can increase blood pressure, weaken the heart muscle (cardiomyopathy), and lead to irregular heart rhythms (arrhythmias). These conditions raise the risk of heart disease, stroke, and heart failure. Even moderate drinking has been linked to cardiovascular risks in some studies. Alcohol irritates the digestive tract and affects nutrient absorption. It can cause gastritis (inflammation of the stomach lining), ulcers, and bleeding. Alcohol also disrupts gut microbes and increases the risk of colorectal cancer and esophageal cancer. The pancreas releases digestive enzymes and regulates blood sugar. Alcohol triggers an abnormal activation of pancreatic enzymes, causing inflammation known as pancreatitis**.** This condition is painful and can be chronic, leading to long-term digestive complications and diabetes. In addition to physical harm, alcoholism affects mental health and relationships. Alcohol misuse increases the risk of depression, anxiety, impulsive behavior, and accidents. It can lead to strained relationships, workplace issues, financial difficulties, and legal problems. Pregnant women who drink risk harming the fetus, leading to fetal

Eureka Open Access Journals
Open Access | Peer Reviewed | International Journals | Multidisciplinary Areas

Eureka Journal of Health Sciences & Medical Innovation (EJHSMI)

ISSN 2760-4942 (Online) Volume 2, Issue 1, January 2026

https://eurekaoa.com/index.php/5

alcohol spectrum disorders (FASDs)—a group of lifelong developmental problems. Preventing alcoholism involves public education, awareness of risks, and promoting healthier lifestyle choices. Early intervention and support can help prevent heavy drinking from escalating into addiction. Treatment for alcoholism may include medical detoxification, behavioral therapy, support groups, counseling, and rehabilitation programs. Recovery is enhanced when individuals receive ongoing support from healthcare professionals, families, and communities. Alcoholism is a complex health disorder with widespread effects on the human body. From neurological impairment and liver disease to immune suppression and psychological challenges, alcohol's impact is far-reaching and often severe. Reducing alcohol-related harm requires understanding these effects, encouraging education, and providing effective treatment and support systems for individuals at risk or suffering from alcohol use disorder.

References

1.Velilyaeva A. S. — Narkologiya asoslari
2. Qarshieva D. R. — Alkogolizm, inson xulq-atvorining jiddiy muammolari
3. Mamatkulov B., Avezova G., Tuliyev R. — The Problem of Alcohol Depends and the Fight Against It
4.Qodirov A., Jo'rayev M. — Umumiy genetika asoslari
5.National Institute on Alcohol Abuse and Alcoholism (NIAAA) — Alcohol's Effects on the Body
6.Mayo Clinic Staff — Alcohol Use Disorder: Symptoms and Causes
7.Centers for Disease Control and Prevention (CDC) — Alcohol Use and Your Health
8.World Health Organization (WHO) — Global Status Report on Alcohol and Health.
9.National Institute on Alcohol Abuse and Alcoholism (NIAAA) — Understanding Alcohol Use Disorder.