

A STUDY ON THE PSYCHOLOGICAL AND PHYSICAL EFFECTS OF ALCOHOL ADDICTION BETWEEN 2012-2017 AND 2018-2023 IN GOSTIVAR MUNICIPALITY

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ABSTRACT

Alcoholism is defined as a chronic condition of uncontrolled alcohol consumption that adversely affects an individual's physical, psychological, and social life. This condition is characterized by an inability to reduce or stop alcohol intake, an increase in tolerance, and the appearance of withdrawal symptoms when alcohol is absent. The development of alcoholism is significantly influenced by the interaction of genetic predisposition, environmental factors, psychological state, and socioeconomic conditions. Alcoholism not only leads to individual health problems but also contributes to the breakdown of family structures, a decrease in workforce productivity, and various societal issues. Its treatment is managed through multidisciplinary approaches including detoxification, pharmacological support, and psychotherapy.

The aim of this article is to compare the prevalence and effects of alcoholism in Gostivar during the periods 2012-2017 and 2018-2023. The necessary data for the article was obtained from the examination logs at Neuropsychiatric Clinics in Gostivar.

Keywords: *Alcohol, Addiction, Alcoholism*

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1. Introduction

Alcohol use is as old as human history. Archaeological findings show that the production of fermented beverages and alcohol dates back to the Neolithic period, when agriculture began, and according to some findings, about 10,000 years ago. For example, in the civilizations of ancient Mesopotamia, Egypt, China and India, fermented beverages are known to have been produced and consumed for social, religious and medicinal purposes (Liu, 2024). While the inscriptions in the Sumerian tablets describe the brewing techniques and its place in social life; In ancient Egypt, wine was also widely used, which was offered as an offering to the gods and was part of daily life. In this context, it can be said that alcohol is one of the oldest practices in human history and has played important social, ritual and economic roles in many cultures (Bozkurt, 2022). However, the reason why alcohol use has started to be considered as a disease is explained by the combination of multidimensional scientific, clinical and socio-cultural factors (McGovern, 2025)

The main reasons for this transformation are:

Development of Neurobiological Manifestations:

Brain Function and Structural Changes: Neuroscience research on alcohol dependence has shown that chronic alcohol use leads to structural and functional changes in the reward, learning, and memory centers of the brain. This situation has paved the way for alcohol addiction to be considered as a disease that leaves permanent traces on the brain (Koob, 2010).

Tolerance and Withdrawal Symptoms: Long-term alcohol use leads to the development of tolerance (more alcohol is needed to achieve the same effect) and withdrawal symptoms when alcohol consumption is stopped. These symptoms are clinical indicators that support the fact that the disease is chronic and biologically based (Gilpin, 2008).

Identification of Genetic and Molecular Factors:

Genetic Predisposition: Studies have shown that there are genetic components of alcohol addiction. It has been determined that familial predisposition and certain gene variants increase the susceptibility of individuals to alcohol use. This has shown that addiction is not just an individual weakness or a moral problem, but is part of a genetic disease phenomenon (Siomek-Gorecka, 2021).

Interactions at the Molecular Level: Neurotransmitter imbalances, synaptic plasticity changes, and other molecular effects induced by alcohol at the cellular level have elucidated the complex biological mechanisms of addiction (Zhou, 2024).

Development of Clinical Diagnostic Criteria:

Diagnostic Guidelines and Classifications: Diagnostic manuals such as the DSM (Diagnostic and Statistical Manual of Mental Disorders) published by the American Psychiatric Association (APA) defined alcohol dependence (now known as alcohol use disorder) as a disease and set forth certain clinical criteria (tolerance, withdrawal, loss of control, social, occupational or health adverse effects) (APA, 2013). The standardization of these criteria has made it possible to objectively assess addiction and develop treatment plans (Grant, 2015).

Evolution of Behavioral and Psychosocial Approach:

Alcohol Dependence Disease Model: In the past, alcohol addiction was often considered as moral collapse or weakness of willpower, but scientific advances and clinical observations have revealed that alcohol use disorder is a chronic, progressive and recurrent disease model (Ray, 2018). This model emphasizes the tendency of addiction to relapse and that treatment requires long-term, holistic approaches (MacKillop, 2019).

Social Stigma and Change in Perception: Seeing addiction as a disease has been accepted as an important step towards reducing the stigmatization of individuals as criminals or weak (Kelly J. F., 2021). This approach makes it easier for patients to be more open to treatment and seek support, allowing for more effective interventions in terms of public health (Schomerus, 2011).

Development of Multidisciplinary Treatment Approaches:

Holistic Treatment Models: Alcohol addiction has necessitated the development of multidisciplinary treatment strategies that include not only medical interventions but also psychological counseling, social support programs, rehabilitation and social awareness campaigns (Kelly T. M., 2013). These approaches take into account the complex nature of addiction and the environmental factors with which it interacts, allowing to address the disease in a holistic framework (Ghosh, 2022).

2. Evaluation Of Alcohol Addiction As A Disease

Alcohol addiction is shaped by a combination of neurobiological, genetic, clinical, behavioral and social factors. These developments have led to radical changes in treatment and intervention approaches, revealing that alcohol addiction is not a single personal choice or moral problem, but a chronic, recurrent and biologically based disease. Thus, it has become possible to develop more effective strategies in terms of both individual and community health (Kranzler, 2018).

In order for a person to be called an "alcohol addict", the diagnostic criteria for alcohol use disorder must be met in a certain number and intensity. Especially according to the criteria in the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, 5th edition) diagnostic manual of the American Psychiatric Association; The following conditions must be observed over a period of time and with a certain severity:

- **Loss of Control:** Severe difficulty in reducing or stopping alcohol use, the inability of the person to control their alcohol consumption.
- **Increased Tolerance:** Consuming a higher amount of alcohol over time in order to achieve the same effect, or not getting as much effect with the same amount of alcohol.
- **Withdrawal Symptoms:** Physical and psychological disorders such as tremors, anxiety, sweating, nausea that occur when alcohol consumption is reduced or stopped (Adnan Vraynko, 2025).
- **Alcohol Use Becoming a Priority:** Alcohol consumption gets in the way of important activities in social, professional or personal life; Neglect of other important activities for the sake of planning, obtaining, and using alcohol.
- **Negative Consequences Despite Continuous Use:** Continuing to use alcohol despite physical or psychological problems, deterioration of social and occupational functioning.
- **Continuing the Damages Caused by Alcohol Use:** Continuing to consume alcohol despite the problems that occur in family, social or business life as a result of alcohol use (APA, 2013).

According to the DSM-5, if a certain number of these criteria are met (for example, 2 to 3 are classified as mild, 4 to 5 are classified as moderate,

and 6 or more are classified as severe use disorder), the person can be called an alcohol addict (alcohol use disorder) (APA, 2013). These criteria focus not only on the individual's alcohol consumption habits, but also on its effects on quality of life, functioning, and psychological state (Donato S. e., 2023).

Alcohol, although initially producing a relaxing effect, disrupts the chemical balance of the brain. Prolonged alcohol consumption leads to decreased levels of serotonin and dopamine, which contributes to the emergence of depressive symptoms such as sadness, hopelessness, and lack of motivation. Furthermore, alcohol disrupts sleep patterns, increases anxiety, and impairs social and occupational functioning. These effects may cause individuals to experience feelings of worthlessness and increase their vulnerability to depression (Saban, 2024).

Rising Trends in Alcohol Use:

During the COVID-19 pandemic, social isolation measures, economic uncertainty, job and income losses, and heightened psychological stress levels adversely affected individuals' coping mechanisms. Consequently, there has been a global increase in the use of alcohol and other psychoactive substances. In particular, individuals with a history of substance use have exhibited a marked rise in consumption frequency. Factors such as increased free time, weakened social support systems, and elevated anxiety related to the pandemic have been identified as major risk factors contributing to the escalation of substance use (Baki, 2020).

The COVID-19 pandemic led to heightened levels of stress, anxiety, and uncertainty, which substantially undermined individuals' coping capacities and increased the likelihood of alcohol consumption as a maladaptive response to psychological distress. Social isolation, disruption of daily routines, and reduced access to social support networks further exacerbated this tendency, contributing to a global rise in alcohol use and related mental health problems (Semerci, 2022).

Depression and anxiety disorders in childhood may impair emotional regulation and increase vulnerability to alcohol use in later life. Early emotional disturbances negatively affect the development of adaptive coping mechanisms, leading individuals to use alcohol as a means of escape or emotional relief in adulthood. This suggests that childhood psychopathology may serve as a significant risk factor for the development of substance use disorders in later stages of life (Kahveci & Baki, 2023).

3. Alcohol Withdrawal Syndrome

Alcohol withdrawal syndrome is a set of physiological and psychological symptoms that occur as a result of sudden or rapid reduction or complete cessation of alcohol consumption following chronic and long-term alcohol use (Jesse, 2016). This syndrome is caused by the imbalances that occur in the absence of alcohol, the neurological and metabolic changes that occur as a result of the body's adaptation to the constant presence of alcohol (Bahji, 2022).

Major Features and Symptoms of Alcohol Withdrawal Syndrome:

Physical Symptoms	Psychological Symptoms
Tremor (especially hand tremor)	Anxiety and restlessness
Perspiration	Irritability
Nausea and vomiting	Depression
Headache	Difficulty concentrating
Rapid heartbeat (tachycardia)	Distraction
High blood pressure	Serious Conditions:
Numbness or muscle aches	Hallucinations (visual, auditory, or tactile)
	Confusion
	Irritability

In severe cases, alcoholic withdrawal syndrome can lead to epileptic seizures and delirium tremens (DT). Delirium tremens is the most severe form of alcohol withdrawal syndrome and carries a high risk of mortality (Amato, 2010).

TIMELINE:

First 6-12 Hours: Mild symptoms; Tremors, mild anxiety, nausea and slight sweating may begin (Maldonado, 2013).

12-24 Hours: Symptoms begin to intensify; alcoholic hallucinations and increased anxiety may be observed (Maldonado, 2013).

24-72 Hours: The most serious symptoms occur; The risk of confusion, severe hallucinations, seizures, and delirium tremens increases during this time (Wingerter, 2023).

After 72 Hours: Symptoms usually begin to subside; But in some cases, especially severe cases, the symptoms may persist for a longer period of time (Wingerter, 2023).

TREATMENT APPROACH:

- Medical Supervision: Alcohol withdrawal syndrome should be treated under medical supervision, especially in severe cases. In hospitals or addiction rehabilitation centers, it is essential to manage withdrawal syndrome in a controlled and safe environment (M. Amato, 2010).
- Supportive Treatment: Fluid and electrolyte support, nutritional support, and appropriate drug treatments (for example, benzodiazepines are commonly used to relieve withdrawal symptoms) are administered (Day, 2022).
- Follow-up and Follow-up: Close monitoring of patients' symptoms is important to prevent complications. Early diagnosis of serious complications, especially delirium tremens, plays a critical role in treatment success (Day, 2022).

Alcohol withdrawal syndrome is a serious clinical condition that includes both physical and psychological symptoms caused by adaptations that develop in the brain and body due to chronic alcohol use, imbalances that occur in the case of sudden cessation of alcohol. Early intervention and appropriate treatment reduce the severity of symptoms, minimize the risk of complications and contribute to a healthy recovery process of the patient (Kort, 2022).

Treatment of alcohol addiction is a process that is handled with multidisciplinary approaches and includes comprehensive strategies to meet the physiological, psychological and social needs of the individual. The treatment plan is determined individually according to the individual's addiction level, health status and living conditions (Rohn, 2018).

Basic Components of Treatment in Alcohol Addiction:

- Detoxification: To remove alcohol from the body and manage withdrawal symptoms (Maldonado, 2013).

- **Process:** It is usually carried out under medical supervision, in a controlled and safe environment. Supportive medications are used for withdrawal symptoms (tremors, anxiety, sweating, nausea) (Saitz, 2017).
- **Pharmacological Treatment:** Reducing alcohol cravings, preventing relapse and providing support against psychological dependence (Jonas, 2014).

Medications:

- **Disulfiram:** It is a drug that inhibits alcohol intake, leading to serious side effects when alcohol is consumed.
- **Naltrexone:** It aims to reduce cravings and consumption by reducing the effect of alcohol on the reward system in the brain.
- **Acamprosate:** It helps reduce the risk of relapse in individuals who stop using alcohol (Crowley, 2015).

Psychotherapy and Behavioral Interventions:

- **Individual and Group Therapy:** It is aimed for the individual to develop strategies for coping with alcohol, to address emotional problems and to create social support networks (Magill, 2019).
- **Cognitive Behavioral Therapy (CBT):** Focuses on changing the thought patterns and behaviors that lead to alcohol use.
- **Motivational Interviewing:** It is applied to increase the motivation for treatment and to strengthen the desire for change (Riper, 2013).

Rehabilitation Programs:

- **Inpatient and Outpatient Rehabilitation:** In cases that require long-term treatment, intensive and structured rehabilitation programs are applied (Reif, 2014).
- **Support Groups:** 12-step programs or similar community support mechanisms where individuals struggling with alcohol addiction can share their experiences and support each other are important (Kelly J. F., 2020).

Social and Psychological Support:

- **Family Therapy:** By including the family in the treatment process, communication and support systems within the family are strengthened (Kelly J. F., 2020).

- **Lifestyle Adjustments:** Stress management, healthy living habits, and social environment support are critical to the sustainability of treatment (T. Naren, 2020).

Long-Term Follow-up and Recurrence Prevention:

- **Regular Check-Ups:** After the end of the treatment process, check-ups and evaluations are made at regular intervals (Ulusoy Altınoklu, 2024).

- **Relapse Prevention Strategies:** The individual is encouraged to identify risk factors and develop individual strategies to prevent relapse (Menon, 2018).

Treatment of alcohol addiction is a holistic approach that starts with medical interventions and continues with psychological and social supports. Since the treatment process of each individual is shaped according to personal characteristics and the severity of addiction, it should be carried out in cooperation with a multidisciplinary team (Eşel, 2025) (Services, 2020).

4. Methodology Of The Research

Data analysis methods are discussed in the context of research methodology.

In this study, the prevalence of alcohol addiction between the 2012-2017 period and 2018-2023 will be evaluated in the light of socioeconomic, psychological and cultural factors that play a role in this trend, and the data obtained between the periods will be compared according to the demographic structure. In light of the current findings, the effectiveness of existing local policies and intervention programs for alcohol dependence will be evaluated; Areas that are missing and need to be strengthened will be identified.

In the concluding part of the study, in the light of the findings of this study, preventive strategies and intervention approaches that can be used in the fight against alcohol addiction in the Municipality of Gostivar will be proposed.

5. Materials And Methods

The data required for the article were obtained from hospital statistical materials (individual report for the person hospitalized), applications of patients with alcoholism submitted to the Public Health Center of the

Gostivar region, data obtained from the analysis of hospital morbidity registered in Gostivar, the patient protocol in the Department of Neuropsychiatry and the examination diaries of the Department of Neuropsychiatry in Gostivar.

6. Data

2012-2017 Demographic structure projected in Gostivar Municipality

In 2012, the population of the Municipality of Gostivar was around 81,042, and by 2017 this figure is projected to decline to the range of 60,000-65,000. These figures are estimates based on periodic data of the country's official statistical agencies and demographic analysis.

2012-2017 Period Alcohol addicted people identified in Gostivar Municipality

According to the data obtained from the records of the Neuropsychiatric Ambulance for the incidence of alcoholism (list of name, surname, year of birth and place of residence), it was recorded that in the period 2012-2017 there were a total of 27 alcohol-dependent people in the Municipality of Gostivar. Of these, 26 are men and 1 is female.

		15-24	20-34	35-44	45-54	55-64
General	27	2	11	8	4	2
Male	26	0	0	8	4	1
Female	1	0	0	0	0	1

Number of People with Alcohol Addiction Between 2012 and 2017

2018-2023 Demographic Structure Envisaged in Gostivar Municipality

As of 2018, the population of the Municipality of Gostivar is estimated at around 59,770. In recent years, there has been a slight decrease in the population due to factors such as economic factors and the migration of young adults for education and job opportunities. Forecasts for 2023 suggest that the population could hover around 55,000.

2018-2023 Period Alcohol Addicted Persons Detected in Gostivar Municipality

According to the data obtained from the records of the Neuropsychiatric Ambulance for the incidence of alcoholism (list of name, surname, year

of birth and place of residence), it was recorded that in the period 2018-2023 there were a total of 87 alcohol-addicted people in the municipality of Gostivar. Of these, 81 are men and 6 are women.

Number of people addicted to alcohol between 2018 and 2023

		15-19	20-34	35-44	45-54	55-64
General	87	17	26	24	9	11
Male	81	17	24	21	9	10
Female	6		2	3		1

Number of People Addicted to Alcohol Between 2018 and 2023

*The data for the above years show the people registered at the Emergency Center of the Gostivar General Hospital.

7. Conclusion

Of the 27 alcohol-dependent individuals registered in the 2012-2017 period, 26 were male and only 1 was female. On the other hand, in the 2018-2023 period, this number increased to a total of 87; During this period, 81 male and 6 female addicts were registered.

Inferences Drawn from This Data

Absolute and Proportional Dimension of Increase: Between the two periods, the number of individuals addicted to alcohol increased approximately threefold (from 27 to 87). Given that the population is decreasing, this rate of increase indicates that the prevalence of alcohol dependence within the community is even higher. That is, the increase in the number of addicted individuals despite the decrease in the population reveals that alcohol addiction is becoming an increasingly common problem in society.

Distribution by Gender: In the 2012-2017 period, 96% of alcohol-dependent individuals were male and 4% were female. In the 2018-2023 period, these rates were observed as 93% (male) and 7% (female), respectively. Although the proportion of men remained very high in both periods, there was a relative increase in the number of female addicts in the second period.

Assessment in the Context of Population Decline: If the overall population of the Municipality of Gostivar has decreased in the period 2018-2023, this increase in the number of dependent individuals indicates that the dependency ratio in the population is higher than expected. This is a serious warning sign for public health and reveals that local government and health policies should review their intervention strategies for alcohol addiction.

8. Recommendations

In the light of the data obtained on alcohol addiction in the Municipality of Gostivar in the periods 2012-2017 and 2018-2023, the recommendations that can be developed in response to the increase in the number of addicted individuals despite the decrease in the population are listed below:

Early Awareness and Education Programs: Comprehensive education programs on the harms of alcohol should be organized in schools and youth centers, and healthy living alternatives should be encouraged, emphasizing the risks of alcohol use, especially in adolescent and young adult groups.

Social Awareness Campaigns: In cooperation with local media, social platforms and non-governmental organizations, awareness-raising campaigns should be carried out about the social dimensions of alcohol addiction; stigma should be reduced and the process of seeking help for addicted individuals should be supported.

Gender-Specific Interventions: Specific intervention programs should be developed to address high rates of dependency in men, but also appropriate support groups and counselling services should be provided for women (e.g., in the case of increased female drinking).

Strengthening Access and Controls: Strict controls should be carried out on access to alcohol by minors and the entry of smuggled/homemade alcohol into the market, and points of sale should be checked regularly in cooperation with local police and the municipality.

Improving Treatment and Rehabilitation Services: Local health institutions should strengthen detoxification, psychotherapy and social rehabilitation services by adopting multidisciplinary approaches in the treatment of alcohol addiction. If necessary, supportive rehabilitation

centers for addicts should be established in the region or the capacity of existing services should be increased.

Economic and Social Support Programs: Since risk factors such as economic hardship and unemployment can trigger alcohol use, local governments should expand support programs for these groups through employment projects, social support networks and psychosocial counseling services.

Data Collection and Continuous Monitoring: Regular and up-to-date data collection systems on alcohol addiction should be established, population and demographic changes should be closely monitored, and policies and intervention strategies should be updated with scientific data.

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