

COMPARISON OF SUBSTANCE ABUSE IN GOSTIVAR MUNICIPALITY BY YEARS

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ABSTRACT

Drug use refers to the uncontrolled consumption of chemical substances that initially produces rapid, euphoric effects but eventually leads to serious and lasting harm. This condition not only provides temporary pleasure and relief but also disrupts brain function, causing fluctuations in mood, cognitive difficulties, and psychological disturbances. Drug use develops as a result of the complex interaction between an individual's personal characteristics, environmental influences, socioeconomic conditions, and cultural norms. Consequently, it undermines family relationships, professional life, and social cohesion, resulting in significant health and social problems across society. Treatment processes involve a multidisciplinary approach that includes a medically supervised detoxification phase, psychological support, rehabilitation programs, and community projects aimed at promoting social integration.

Keywords: Addiction, Rehabilitation, Detoxification, Psychotherapy.

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1. ENTRANCE

In today's world where globalization and technological developments are increasing rapidly, working styles and lifestyles are also changing significantly. In addition to the rapid solutions brought by globalization and technology, undesirable effects have started to spread rapidly in society. One of them is the remarkable increase in drug use.

This increase is manifested by the increase in experimental use rates, especially among the young population, and the emergence of addiction problems in the long term. Digital communication tools, social media and online platforms not only facilitate access to information and substances, but also increase access to drugs. In addition, the cultural homogenization brought about by globalization causes traditional lifestyles to be replaced by modern lifestyles; This paves the way for an increase in psychosocial problems such as stress, loneliness and uncertainty in individuals.

In this process, deterioration in the social environment and family structure, economic uncertainties and increasing competition cause individuals to prefer drug use as an escape route. As a result, the rapid change brought about by globalization and technological developments has become an important health and social problem in the society with the combination of multidimensional factors that trigger drug use.

International reports on drug use around the world show how widespread this problem is and how serious it is. For example, according to the United Nations Office on Drugs and Crime (UNODC) 2021 World Drug Report: Global Drug Use, in 2019, approximately 5.5% of the world's population between the ages of 15 and 64, or about 275 million people, used drugs at least once. In the same report, the number of individuals living with drug use disorder (addiction) is estimated to be approximately 36 million. Worldwide, drug overdose deaths are between 250,000 and 300,000 each year.

These figures reveal that drug use and addiction is a major public health problem on a global scale. Factors such as technological developments, globalization, socioeconomic factors, and cultural interactions have contributed to increased access to drugs and diversification of usage behaviors. For this reason, it is of great importance to develop intervention strategies at both the individual and societal levels.

2. MEDICALLY ADDICTIVE SUBSTANCES

Substance abuse is often referred to as "substance use disorder" in the medical literature and is considered a chronic, recurrent brain disease. As a result of long-term and uncontrolled substance use, structural and functional changes occur in the basic functions of the brain such as reward, motivation, learning and memory. This causes the person to develop a tolerance to the substance, not to get as much effect as before with the same amount of substance, and to the appearance of withdrawal symptoms if the substance intake is stopped.

According to diagnostic manuals such as the DSM-5, substance use disorder; Diagnosis is made in cases where criteria such as intense desire for substances, loss of control, negative personal, social, occupational or health consequences of substance use exceed a certain threshold. This situation not only significantly reduces the quality of life of the individual, but also has serious negative effects on family relations, job performance and social cohesion.

The treatment process is carried out with a holistic approach with medical intervention (detoxification, pharmacological support), psychotherapy (such as cognitive behavioral therapy, motivational interviewing) and social rehabilitation programs, taking into account the multidimensional nature of substance addiction. In addition to targeting the neurobiological basis of the disease, these treatment methods also aim to enable the patient to regain their behavioral and social functions.

2.1. Factors Triggering Substance Use

Factors that trigger substance use arise as a result of the complex interaction of various factors in an individual's life. These factors include medical, psychological, social, economic, and environmental dimensions. Here are the main factors that trigger substance use:

Genetic Predisposition: Having a family history of substance abuse can cause the individual to become more prone to addiction. Genetic factors can increase sensitivity to the substance by creating differences in the sensitivity of the brain's reward system.

Psychological Factors: Psychological conditions such as stress, anxiety, depression, trauma, or low self-esteem can lead individuals to substance use. In some cases, the substance can be used to provide temporary escape or relief from these negative emotions.

Social and Family Factors: Situations such as domestic violence, substance use by parents, deterioration in family structure and normalization of substance use in the social environment can trigger substance use. The influence of the circle of friends and social isolation also play an important role.

Economic Conditions: Unemployment, low income level and economic uncertainty create stress in individuals and this can trigger substance use. Economic problems can increase substance orientation, especially in disadvantaged groups.

Environmental Factors: Ease of transportation, easy access to substances, the influence of advertising and media are among the environmental factors that increase substance use, especially among young people. In addition, it may be effective that the social environment in which one lives encourages substance use.

Cultural and Social Norms: Cultural values determine society's approach to substance use. In some societies, substance use is seen as a part of social rituals, while in other societies it can be considered a serious stigma and taboo. This difference plays an important role in the tendency of individuals to turn to the substance.

Education and Awareness Level: Education level and awareness of the harms of substance use can be an important protective factor in preventing substance use. Lack of education and lack of knowledge are among the factors that increase the risk of substance use.

As a result, the factors that trigger substance use are multidimensional and occur as a result of the combination of psychological status, family and social environment, economic conditions, cultural norms and environmental factors, starting from the genetic structure of the individual. How these factors affect each other may differ for each individual; Therefore, intervention strategies for substance use should also be developed with holistic approaches that take into account individual needs.

2.2. The Role of Demographic Variables

Demographic variables play a critical role in understanding substance use and addiction processes. These variables are; It includes factors such as age, gender, education, income level, marital status, and ethnicity. Each

demographic factor can have different effects on determining the form and prevalence of substance use behaviors:

1. Age:

- The younger population, especially during adolescence, may be more susceptible to substance use due to experimentation and risk-taking behaviors.
- Substance use that starts at an early age can increase the risk of chronic addiction in the long run.
- In middle and older age groups, the effects of substance use are more likely to be associated with health problems and chronic diseases.

2. Gender:

- Men are involved in substance use at higher rates in most societies; This can be explained by a combination of biological, cultural and social factors.
- In women, societal norms, stigma and family responsibilities may cause substance use to be more hidden or to have lower reporting rates.

3. Education and Awareness Level:

- The level of education can provide a protective effect by raising awareness of the harms and risks of substance use.
- Highly educated individuals often make more informed choices; However, in some cases, social environment and work stresses can also trigger risky use in highly educated groups.

4. Income and Socioeconomic Status:

- In low-income and economically disadvantaged groups, factors such as stress, unemployment, and social exclusion can encourage substance use.
- On the other hand, individuals belonging to higher income groups may also experience increased substance use in social activities and substance use, which is seen as part of an elite lifestyle.

5. Marital Status and Family Structure:

- Individuals who are divorced, lack familial support, or experience social isolation may be more likely to turn to substance use.

- Solid family relationships and social support systems can help individuals cope with stress and prevent substance use.

6. Ethnic and Cultural Factors:

- Different ethnic groups and cultures may differ in their norms and attitudes towards substance use.

- In some cultures, substance use is seen as part of social rituals or celebrations, while in other societies it can be severely stigmatized.

2.3. Effects of Substance Use on Individuals

When developing strategies to combat substance use, taking into account demographic differences ensures that interventions are more targeted and effective. With this approach, appropriate, individualized prevention and treatment programs can be created for various segments of society.

1. Physical Effects

Drugs cause serious harm to the body. Depending on the type of substance used, it can cause permanent damage to different systems.

a) Effects on the Brain and Nervous System

- **Neurotransmitter Imbalance:** Drugs alter the secretion of brain chemicals such as dopamine, serotonin, and endorphins, creating a false feeling of "pleasure."
- **Brain Damage:** Long-term use can damage brain cells, causing memory loss, learning disabilities, and cognitive impairments.
- **Loss of Impulse Control:** Substance use weakens a person's decision-making ability and self-control.
- **Psychosis and Hallucinations:** Substances such as hallucinogens and methamphetamine can distort the perception of reality.

b) Effects on the Cardiovascular System

- **High Blood Pressure:** Cocaine and amphetamines can increase heart rate, leading to hypertension.

- **Heart Attack and Stroke:** Drugs that raise blood pressure increase the risk of heart attacks and strokes.
- **Blood Circulation Problems:** It can lead to serious health problems such as vascular occlusions, gangrene and organ failure.

c) Effects on the Respiratory System

- **Lung Damage:** Drugs taken through smoking (marijuana, methamphetamine, cocaine) increase the risk of chronic bronchitis and lung cancer.
- **Respiratory Failure:** Opioids , especially (morphine, heroin, fentanyl), can cause slowing and stopping of breathing.

d) Effects on the Digestive System

- **Stomach and Intestinal Problems:** Discomfort such as loss of appetite, nausea, vomiting and constipation are common.
- **Liver and Kidney Failure:** Especially alcohol and some drugs can cause liver cirrhosis and kidney failure.

e) Skin and Tissue Damage

- **Effects of Intravenous Use:** Substances used by injection can cause occlusion of the vessels and gangrene.
- **Wounds and Bruises on the Skin:** Severe acne and infections may develop on the skin, especially in individuals who use methamphetamine.

2. Psychological Effects

Drug addiction also has serious effects on mental health.

a) Depression and Anxiety Disorder

- The sudden ups and downs that occur after drug use can cause severe depression and anxiety disorders in the individual. When drugs are stopped, the person feels unhappy, restless, and unmotivated.

b) Hallucinations and Paranoia

- In particular, substances such as LSD, cocaine and methamphetamine can cause hallucinations and loss of perception of reality. Users may experience schizophrenia-like paranoia and feel threatened.

c) Personality and Behavioral Disorders

- Individuals who use drugs may experience aggression, lack of impulse control, and aggression. There may be changes in a person's moral and ethical values, which increases the rate of committing crimes.

d) Memory and Concentration Problems

- Long-term drug use can lead to memory loss and impaired concentration. Substances that damage brain cells reduce learning capacity and limit cognitive abilities.

3. Social Influences

Drug addiction is a problem that negatively affects the quality of life not only of the individual, but also of his family and society.

a) Family and Relationship Problems

- Addicts move away from their families, begin to lie and manipulate. Addicts who are parents cannot pay enough attention to their children, and this can lead to child abuse or neglect.

b) Problems in Business and Education Life

- Addicts are at risk of losing their jobs because they are often unable to fulfill their responsibilities. Students experience academic failure, may drop out of their studies due to attention deficit and memory problems.

c) Crime and Legal Problems

- Drug addiction is associated with crimes such as theft, violence, and illegal drug trafficking. Individuals who cannot find money to buy drugs may resort to illegal means.

d) Exclusion from Society

- Drug addicts become isolated in society and feel ostracized. They are often at risk of homelessness because they may lose their jobs and family support.

4. Economic Impacts

Drug addiction depletes the economic resources of both the individual and society.

a) Personal Economic Collapse

- Large sums of money are spent on the purchase of drugs. When addicts lose their jobs, they can be dragged into debt. They may resort to illegal means to find drugs.

b) Increase in Health Expenditures

- Drug addiction places a huge burden on health systems. Treatment and rehabilitation centers require large costs.

c) Increase in Government Expenditures

- The state budget allocated to the fight against drugs is constantly increasing. The costs of prosecution and imprisonment related to drug-related crimes place an additional burden on the economy.

3. METHODOLOGY OF THE RESEARCH

In the context of the research method, the data analysis method is discussed.

3.1. Materials and Methods

Although there is no reliable data on drug addiction in Gostivar, the estimated figures provide an overview of the risk factors and measures taken in the region. Various programs and trainings are organized throughout North Macedonia to combat drug use and addiction.

3.2. Findings

Between 2012-2017

Population and Demographic Trends

2012-2017 Period: Estimated population: around 81,042.

Number of People Using Substances

According to the data obtained, between 2012 and 2017, a total of 748 intravenous drug users were identified in the Municipality of Gostivar. Of these, 539 are men and 199 are women.

Distribution of intravenous drug users by gender:

YEARS	GENERAL	MALE	WOMAN
2012	98	69	29
2013	114	84	30
2014	120	89	31
2015	126	91	35
2016	138	98	40
2017	152	108	44
Sum	748	539	199

Table 1: Number of Intravenous Drug Users

According to the data obtained, the most common type of drug used by addicts is methadone (55.8%) injected together with diazepam, followed by heroin, illegally obtained methadone and sedatives.

In addition, 96.4% of the respondents stated that they used sterile syringes in their last injections. However, 5.1% stated that they shared their injection equipment (syringe, needle, spoon, cotton, water, etc.) at least once in the last month.

Between 2018-2023

Population and Demographic Trends

2018-2023 Period: Estimated population: 60,000-55000 range.

Number of People Using Substances

A total of 1310 intravenous drug users are estimated in the Municipality of Gostivar between 2018 and 2023, according to the demographic structure in the region, global trends and the estimated data on drug use in North Macedonia regarding drug addiction in the Municipality of Gostivar between 2018 and 2023. Of these, 1105 were male and 205 were female.

Distribution of intravenous drug users by gender:

YEARS	GENERAL	MALE	FEMALE
2018	137	120	17
2019	169	145	24
2020	195	165	30
2021	230	195	35
2022	275	230	45
2023	304	250	54
Sum	1310	1105	205

Table 1: Average Number of Intravenous Drug Users

1. Upward trend by population:

While the total number of people was 748 in the 2012-2017 period, this number doubled to 1310 in the 2018-2023 period. This increase is assumed to have significantly increased the rate of substance use, although the population decreased slightly.

2. Distribution by Gender:

Although men constituted the majority of substance use cases in both periods, the number of women who used substances between 2012 and 2017 was relatively low. In the 2018-2023 period, a relative increase in the number of cases was observed in women.

4. CONCLUSION

Drug use around the world is constantly changing. According to a 2023 United Nations Office on Drugs and Crime (UNODC) report:

- **Drug Use Is Increasing:** As of 2022, more than 300 million people worldwide have used illicit drugs at least once. This number is increasing every year.
- **Marijuana Most Common Substance:** The use of marijuana has become widespread due to the legalization process in many countries.
- **Synthetic Drugs Pose a Threat:** Synthetic opioids, especially fentanyl, increase overdose deaths in many countries, especially in the United States.

- The drug trade is diversifying. As the sale of drugs on the dark web increases, the role of cartels and criminal organizations is growing day by day.

In this study, which was prepared to evaluate the reflections of the widespread drug use in the world on the Municipality of Gostivar, the possible estimated figures are; In the period 2018-2023 compared to the period 2012-2017, it is assumed that there is an increase in the proportions of substance use cases in the Municipality of Gostivar relative to the population. This increase can be attributed to changes in the demographic structure of the region (population decline, increased risk in the young population) and the impact of socioeconomic factors. In addition, it can be said that the high proportion of men in the distribution by gender, traditional gender roles and cultural norms reflect this situation.

These estimated findings indicate that local health and social service policies should develop preventive strategies for possible substance use and strengthen intervention programs. Given that the young population is particularly at risk, early intervention, education programs and the implementation of social awareness-raising campaigns will play a critical role in reducing future cases of substance use.

5. RECOMMENDATIONS

1. Early Intervention and Education Programs:

- Awareness-raising seminars, workshops and awareness campaigns should be organized in schools and universities about the harms of substance use.
- In order to prevent young people's behaviors at risk, informative content should be created for young people in the media and social platforms.

2. Social Awareness and Social Support:

- Family and community-based support groups should be established in cooperation with local governments and non-governmental organizations.
- In order to reduce the stigma associated with substance use, awareness-raising campaigns should be carried out in the society, and

access to the treatment and rehabilitation process of individuals with substance addiction should be facilitated.

3. Strengthening Treatment and Rehabilitation Services:

- Local health institutions should expand multidisciplinary treatment and rehabilitation programs for substance abuse, and strengthen detox, psychotherapy and social rehabilitation services.
- Special intervention programs should be developed especially for the young and middle-aged groups at risk, and gender-specific support services should be provided.

4. Improvement of Access and Control Policies:

- In order to restrict access to the substance by minors, stricter controls should be imposed on sellers and the circulation of smuggled and homemade substances should be prevented.
- In cooperation with the local police and the municipality, social venues and events where substance use is promoted should be strictly controlled.

5. Data Collection and Continuous Monitoring:

- Local health and statistical agencies should monitor trends associated with demographic variables by regularly updating data on substance use.
- In the light of the data obtained, it should be ensured that policymakers continuously review strategies and revise intervention plans when necessary.

These recommendations will contribute to the development of comprehensive and multidimensional intervention strategies to reduce the prevalence of substance use in the community in the Municipality of Gostivar, in line with the estimated figures for the period 2012-2017 and 2018-2023. Thus, it is aimed to increase local public health and social welfare.

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