

Potential impact/effect of alcohol abuse on human development: a theoretical approach

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Abstract

A theoretical survey on the potential impact/effect of alcohol abuse on human development was carried-out. The impact of alcohol abuse on the victims has been proven negative, with consequences like health challenges, financial challenges including societal challenges being identified as factors dragging the society towards ruin.

Keywords: Alcohol Abuse; Health Challenges; Financial Challenges; Societal Ruin; Potential Effect.

1. Introduction

Over the years alcohol abuse has always been one of the factors contributing to: hustle behavior, high crime rate, increasing health challenges including incessant break-down of law and order which leads to societal unrest and economic ruin.

The cultural norms around drinking in many societies suggest that drinking at hazardous or harmful levels equals “unacceptable” drinking patterns of individuals has been surveyed to affect other people like family member including friends, presenting physical harm like Clothing or other belongings being ruined, experience of verbal abuse, fear of drunk person (in a public place) including being kept awake at night [1].

Alcohol abuse has an array of negative effects beyond personal networks of family members, friends, co-workers including strangers. These harms to society in a wide sense can include traffic accidents and violent crimes, treatment costs and work-related harms such as absenteeism, reduced productivity and unemployment. However, in our socially connected lives, no harms can be said to be exclusively personal or societal. A person’s illness, financial troubles or death are never only their personal concern: these will also affect the lives of those close to them and society as a whole.

1.1. Mental illness and problem drinking

“There is no one reason why people with mental illness are more prone than others to problem drinking or dependence on alcohol. Each person is unique, the result of a complex interaction between genetic and biological factors, personality and social environment. Nonetheless, a variety of theories have been advanced to explain the strong relationship between mental illness and problem drinking:

1.2. Predisposition

One theory concerns the particular personality traits, heredity, social factors and other characteristics of people with mental illness, which may predispose them to problem drinking or dependence on alcohol. Some experts even suggest that the neurological basis of mental illness may be very similar to that of alcohol dependence. For example, the malfunctioning of certain brain circuits associated with learning—specifically the one connecting the amygdala, hippocampus and cingulate cortex—might be a factor in both mood disorders and drinking problems. Other research has shown a relationship between psychotic disorders and drinking problems, based on common genes or brain abnormalities. More specifically, psychotic disorders and alcohol dependence may both arise from changes to the brain caused by glutamate. In fact, disruptions in the functioning of the brain’s dopaminergic systems appear to make people with schizophrenia more sensitive to alcohol.

According to the World Health Organization and Health Canada, this shared neurobiological basis means that the same treatment and prevention strategies could be used both to improve mental health and to reduce alcohol dependence. A combined therapeutic approach would treat the mental illness and the drinking problem at the same time. In addition to genetic predispositions, a number of environmental factors might also explain the strong relationship between mental illness and problem drinking. The secondary consequences of stress related to serious family problems during childhood, poor parental supervision or child abuse at a very young age could increase the risk not only of addiction problems, but also of mood, anxiety and personality disorders, particularly impulse-control disorders. Furthermore, people with drinking and those with mental illness often live in the same kind of social environment. Starting in adolescence, both are very often marginalized.

1.3. Sensitivity

Another theory holds that people with mental illness are more sensitive than others to the harmful effects of psychoactive sub-

stances. Thus, all other things being equal, the same amount of alcohol will have a stronger effect on a person with a mental illness.

1.4. Self-medication

The third main theory that seeks to explain the link between mental illness and alcohol dependence follows from the observation that people with mental illness sometimes drink alcohol for its soothing effects, in an attempt to feel better. This practice is known as self-medication. The self-medication theory suggests that people in distress take psychoactive substances to escape their illness, or at the very least to ease the symptoms. In other words, they do not self-medicate to cure a mental illness, but to combat the suffering, sadness, anger or agitation it causes. While self-medication is common among people with all kinds of mental illness, it is particularly prevalent among those with bipolar disorder during the manic phase, as well as among those with an anxiety disorder. Between 25% and 35% of people with generalized anxiety say that they use substances (drink alcohol or take other drugs) to ease their anxiety. Research has shown that, in the general population, 18.3% of people with generalized anxiety, 16.9% of those with social phobia and 15.0% of those with a specific phobia drink to calm their anxiety symptoms.

People with generalized anxiety disorder self-medicate more than those with a phobia because generalized anxiety comes from internal stimuli. This means the frequency with which they experience those anxiety-provoking stimuli is very high; as such avoiding the stimuli can be more difficult. Self-medication with alcohol provides immediate gratification that, in turn, leads to more drinking. However, it is counterproductive. A small amount of alcohol may bring short-term stress relief, but alcohol does not treat any of the causes of the stress. Over the long term, people who self-medicate need increasingly larger amounts of alcohol to obtain the required level of dopamine to feel the psychological benefits. This can create a habit, which could lead to increased drinking that could turn into dependence. A person with a mental illness who becomes dependent on alcohol is then caught in a vicious cycle in which each problem sustains and even aggravates the other. Physicians and other health professionals should talk to people with anxiety disorders and remind them that while alcohol may relieve their symptoms temporarily, drinking increases the risk of making the problem worse or even developing other mental illnesses. What's more, drinking can increase their risk of suicide.

1.5. Making things worse

Generally speaking, within any given population, there are people who have symptoms of anxiety, depression or psychosis who will not necessarily develop an anxiety, mood or psychotic disorder. Sometimes, they have close relatives with these disorders. Such people, although not certain to develop a mental illness, are predisposed to them.

Anyone who feels particularly anxious or depressed and is experiencing other symptoms, such as difficulty concentrating, reduced focus, sleep disturbances or a need to withdraw socially, should err on the side of caution and avoid alcohol completely. Alcohol can make people who are genetically predisposed to mental illness even more vulnerable. When people experiencing the warning signs of mental illness take psychoactive substances such as alcohol, they are at greater risk of developing a mental illness. In fact, alcohol can alter a number of neurotransmitters, including glutamate, which is involved in schizophrenia. Also, a genetic predisposition to certain personality disorders (such as impulse-control disorders or attention deficit disorder—with or without hyperactivity) may be exacerbated by prenatal exposure to alcohol. Thus, while mental illness can lead to problem drinking in some people, the opposite may also occur: problem drinking can contribute to the development of mental illness" [2].



Fig. 1: Source:

<https://www.albertahealthservices.ca/assets/info/hp/edu>

2. Research methodology

Numerous research literatures were surveyed and reviewed. Information contained in this article also came from various oral interviews and observation carried-out during the period of this work, which lasted for three months.

2.1. What is alcohol?

Alcohol is an organic compound containing an hydroxyl functional group (-OH), such as ethanol. Alcohol can also be looked at as an intoxicating beverage made by the fermentation of sugar containing materials.

Alcohol is a natural product made from grains, fruits and other types of ingredients. Its chemical formula is $\text{CH}_3\text{CH}_2\text{OH}$ (ethanol), this molecule is the same for beer, wine and spirits.

2.2. Other health challenges associated with alcohol abuse

- Alcohol is a depressant and therefore slows the nervous system down. [depressant : Are pharmacological substances which decreases neuronal or physiological activities]
- The amount of alcohol in the bloodstream, which is measured in terms of the “ Blood Alcohol concentration” or “ Blood Alcohol Content ” (BAC) if high or excess affects the speed at which you process information and judgment.
- Constant abuse of alcohol can lead to Anemia. Alcohol abuse can cause the number of oxygen-carrying red blood cells to be abnormally low. This condition, known as anemia can trigger a host of symptoms, including fatigue, shortness of breath, and lightheadedness.
- Cancer, “Habitual drinking increases the risk of cancer” says Jurgen Rehm, PhD., chairman of the University of Toronto’s Department of Addiction and Mental Health in his report Addiction and Mental Health [3]. The increase risk comes when the body converts alcohol into acetaldehyde – a potent carcinogen. The cancer sites link to alcohol use include: mouth, pharynx (throat), larynx (voice box), esophagus, liver, breast, and colorectal region.
- Cardiovascular disease: Alcohol abuse makes platelets more likely to clump together into blood clots which can lead to heart attack or stroke.
- Cirrhosis: Alcohol is toxic to liver cells, and many heavy drinkers develop cirrhosis, a sometimes-lethal condition in which the liver is so heavily scarred that it is unable to function.
- Dementia: Heavy drinking (Alcohol abuse) speeds the shrinkage of certain key regions in the brain, resulting in memory loss. Alcohol abuse can also lead to subtle but potentially debilitating deficit in the ability to plan, make judgments, solve problems, and perform other aspects of “executive function” which are “the higher-order abilities that allow us to maximize our function as human beings [4]; [5].

- Seizures: Heavy drinking can cause epilepsy and trigger seizures even in people who do not have epilepsy. It can also interfere with the action of the medications used to treat convulsions.
- Gout: A painful condition, gout is caused by the formation of uric acid crystal in the joints. Although some cases are largely hereditary, alcohol and other dietary factors seem to play a role.
- High Blood Pressure: Heavy drinking can cause blood pressure to rise, which may eventually lead to kidney diseases, heart disease including stroke.
- Infectious Disease: Heavy drinking suppresses the immune system, providing toehold for infections, including tuberculosis, pneumonia, HIV/AIDS, and other sexually transmitted diseases (including some that causes infertility).

2.3. Financial challenges associated with alcohol abuse

In the face of economic instability, rise in foreign exchange rate, including the monopolistic/constant rise in commodity price, alcohol abuse can lead to the following:

- Inadequate or Lack of Savings: Heavy drinking encourages spending, thereby putting the victim in financial dryness in regards to accomplishing true life goals which requires finance.
- Indebtedness: Heavy drinkers often get indebted, this is as a result of inability to think especially at the point of 'alcohol-overfeed'.

2.4. Societal challenges associated with alcohol abuse

- Unnecessary argument: It has been observed and experimented that heavy drinkers argue without direction, which ends up debasing/degrading the personality of the man when on his normal senses.
- Antagonistic/Hostility: Heavy drinkers behavior are often hostile, rude and often refuse corrections because of the influence of alcohol.
- Crime: Under the influence of alcohol, many crime have been recorded, of which ordinarily would have been avoided under the normal state of no alcohol.
- Increase rate of Immorality: Under the influence of alcohol abuse, the drunk can end-up in immoral acts, which may predispose the victim to HIV/AIDS or other deadly sexually transmitted diseases/infections.
- Loss of Social Status: Drinks are usually regarded as people of low value, no matter their academic, political, economic or marital status; they are seen as a problem to the society.



Fig. 2: Psychological Impact Associated with Heavy Drining.

Source: NCWS, Nordic Centre for Welfare & Social Issues, [1].

- Broken Home: At times alcohol abuse leads to broken homes, whereby a drunken partner maltreats the other and eventually leads to separation of both partners, usually leaving the children with emotional instability.

3. Conclusion

Alcohol is an intoxicating agent, its usage should be guided as its abuse poses a serious negative influence in human existence: ranging from medical, financial, spiritual including societal degradation. Hence complete abstinence is therefore concluded as a remedy to rescue addicts and to keep a healthy society.

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