

Free effects of alcohol on the brain, body and behavior research paper example

[Health & Medicine](#), [Alcoholism](#)



Introduction:

This paper throws a light on the effects of alcohol on the brain, body and behavior of a human being. Alcohol is the oldest drug that has been used by mankind. Likeness for alcohol originated 30 to 40 million years ago when people lived on diet of ripe fruits. At that time, alcoholic drinks were low in alcohol content, but now the content of alcohol has increased with the discovery of distillation. Alcohol has both positive and negative effects on the brain, body and behavior of a human being. It has been considered as a drug for medicinal purposes by doctors. But, if taken in excess, it can serve as toxic .

Effects of Alcohol on the Brain:

Alcohol affects the brain chemistry by changing the levels of neurotransmitters. It influences the chemical messengers that send the signals throughout the body, which in turn control the behavior and emotions of a person . The effects of alcohol can be damaging on the brain. Prominent after-effects of drinking alcohol are difficulty in walking, slow pace, blurred vision, impaired memory and slurred speech.

One cannot deny the effects that alcohol has over the brain . However, there are certain factors that determine how and to what extent the alcohol affects the brain.

Following are those factors: the quantity of drinking alcohol; the frequency of drinking alcohol; the age, education level, gender, background and family history of the alcoholic person; and whether he is at risk as a result of exposure to prenatal alcohol; his overall health status .

Blackouts and Memory Lapses:

A few drinks of alcohol can produce impairments on brain that are easily detectable. As the amount of alcohol increases, the degree of impairment of brain also increases. Alcohol, especially if taken on an empty stomach, can produce a blackout in which the person cannot recall the details of the events. Blackout is common among social drinkers .

Are women more prone to alcohol's effect on brain?

It is true that women are more sensitive to the damage caused by alcohol than men are. Alcoholic women have tendency to develop cirrhosis, cardiomyopathy which is the damage of heart, and nerve damage. Moreover, studies have shown that there has been brain shrinkage in men and women because of drinking alcohol. But, the only difference was that women had been drinking excessively for about half as long as men in these studies. This means that women's brains are more prone to alcohol-induced damage than men's .

Wernicke-Korsakoff Syndrome

It has been noted that up to 80 percent of alcoholics suffer from a deficiency in thiamine leading to a brain disorder called Wernicke-Korsakoff syndrome-WKS. This disease consists of two syndromes. One is a short-term condition called Wernicke's encephalopathy and the other is a long-term condition called Korsakoff's psychosis .

The symptoms of the short-term condition include difficulty in muscle and nerve coordination, mental confusion, and difficulty in nerves that help in moving eyes. The condition can so severe that a patient suffering from this

condition may not be able to find way out of his room or may not even be able to walk. Moreover, approximately 80 to 90 percent of alcoholics with the short-term condition are likely to develop the long-term condition called Korsakoff's psychosis. This syndrome is characterized by learning and memory problems. Such patients get frustrated quickly as they tend to forget a lot. They have difficult in walking and coordination. Such patients have the tendency to remember a certain event clearly. They can talk about it in detail for an hour. But, they can forget having this discussion the very next hour .

Liver Disease:

Most people are aware of the liver damage due to excess drinking of alcohol. But, they are seldom aware of the fact that the liver damage or liver cirrhosis can actually harm the brain in the long run. Such brain disorder is known as hepatic encephalopathy. This disease can bring changes in sleeping patterns, moods, personality, and increase anxiety and depression. This disease can also be fatal causing a person to go into a coma .

Today, science has proved that alcohol causes brain damage and other health problems. Much of the brain damage can be seen on the brain scan, MRI. The most evident change that alcohol consumption brings is linked with massive number of nerve fibers which are coated with a white insulation called myelin. Myelin is important for transmission of electrical signals. Consumption of alcohol damages the white insulated material. Damage to this white insulation means damage to information sent to the brain. Such damage will bring impairment in the function of transmission of messages

through the cables. Thus, it would result in loss of memory, impairment in problem-solving skills, slowed thinking, and impairment in decision-making process .

However, research reveals that there is another function of aerobic exercise towards a man's health. It not only builds muscles, but also builds brain tissue. New neurons are stimulated through aerobic exercise. Exercise prevents aging process. It helps in brain-related diseases such as Alzheimer's. Moreover, it also helps in strengthening the white insulated material .

Effects of Alcohol on Body:

Just as alcohol affects a person's brain, it also brings changes in a person's body. Following are physical effects of alcohol occurring on one's body especially in older adults :

Metabolic Effects:

Metabolic effects can lead to low blood sugar or acidity in the body. If vitamin D is not metabolized in an appropriate manner, chronic alcohol may lead to osteomalacia. Chronic alcohol may also result in liver complications. The liver disease is termed as cirrhosis .

Cardiovascular Effects:

Alcohol also leads to increased blood pressure, enlargement in heart and irregularity in a person's heartbeat. It increases chances of heart attack and artery disease .

Nervous System Effects:

Alcoholic patients commonly go through nervous system effects that include visual impairments, increase in depression, impairment in thinking and decision-making skills, slurred speech, probability of falling often, and increased confusion

Gastrointestinal Effects:

Alcoholic patients may undergo nausea, vomiting, anemia and other gastrointestinal effects leading to electrolyte imbalances .

Effects on the Fetus:

Alcohol has the tendency to come across placenta and damage the fetus. Even when a person is drinking alcohol in a moderate manner, the fetus can be damaged. Alcohol consumption can also lead to immediate abortion .

Effects of Alcohol on Behavior:

Alcohol expectancies can be either positive or negative on behavior. Positive effects of alcohol on behavior are improvements in moods and thoughts. It gives a boost in self-esteem of a person. It increases sociability. However, the negative effects of alcohol on one's behavior include decrease in self-control, nausea, aggressiveness and violent behavior .

Aggression:

Aggression is one of the symptoms that may occur when a person drinks a lot. This is due to the fact that alcohol is considered to be a disinhibitor. A person may have certain expectations leading to increase in aggression .

Psychological Effects:

There are different perceptions in different societies regarding drinking alcohol. For instance, the culture of Nigeria wants its people to remain sober even after drinking alcohol. Drinking too much alcohol in that society is considered out of norm. However, in other societies, people get drunk to a great extent and start displaying physical aggression and violent behavior. Alcohol affects one's emotions and psychological behavior to a great extent .

Violent Behavior:

Alcohol causes a person to be violent in behavior. There are increased chances of an alcoholic person to attempt murders, assaults, rape, burglaries and robberies .

Alcohol can ease out tensions and relax a person. However, it has a negative or inverse effect on task performance. When a person is under the drug's influence, he can go out of control and do acts which are inappropriate in character .

Conclusion:

Alcohol is like an addictive drug to the mankind since million years. Despite its short-term positive effects to the body, it has long-term effects on the brain, body and behavior of a person. Alcohol has also been used for medicinal purposes by doctors. However, drinking alcohol is now considered to be a social norm these days. Women should be more careful in consuming alcohol excessively. They are more sensitive and prone to damages than men.

Alcohol has pleasurable effects on human mind and body when taken in

moderation. However, when it is excessively used, negative effects on the human mind, body and brain starts building up such as depression, aggression, violence in behaviour, anxiety, loss of memory, slowed thinking and so on. It acts like a toxic if taken in excess. However, recent research reveals the fact that aerobic exercise may help in reducing the effects of alcohol on the human mind and body. Aerobic exercise not only helps in building up muscles, but it also helps in building up brain tissues and new neurons .

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