

Effects of Alcohol, Illegal Drugs, and Smoking on the Overall Health of a Person

Introduction

Every individual has their own vices whether they are the most common ones or the seemingly harmless ones. The most common vices the people consume are alcohol, drugs, and smoking. These vices are not only the most prevalent but also shows the leading risk factors for disability and of course death. Another thing to keep in mind is that these vices are consumed by our own will knowing the consequences that may happen. These vices can affect not only the physical but also the mental of the person consuming these vices. Based on an article, Americans spent \$946 on vices in 2020 where 22% of people spent more on alcohol and 17% people spent on cigarettes or vape pens while there is only 10% on drugs (Delfino, 2021). Delfino stated that vices consumption in today's generation is becoming overwhelmingly fast and can cause major health problems in our body that may lead to disability or even death when not stopped. The purpose of this research is to know the leading effects of these vices in our overall physiological health physically and mentally and what really happens inside the human's body after these vices were consumed.

One of the most common vices not only in the United States but even around the world is alcohol. Consumption of large quantities of alcohol can lead to gut problems and can lead to serious problems when not taken moderately. Alcohol does not only affect the gut of a person but also attacks the entire immune system. These alcoholic beverages can lead to disturbances in the

intestinal absorption of nutrients which includes several vitamins that can lead to malnutrition of the body. Based on the article, alcohol prevents water and sodium absorption in the gut that contributes to the person to develop diarrhea (Bode, 2003). The major component of alcohol is ethanol and drinking an excessive amount and even just a small amount of this can cause duodenal erosions. Alcohol also can cause mucosal damage that can increase the permeability of the gut to macromolecules. It makes it possible that the translocation of endotoxin and some other bacterial toxins from the gut's lumen to the portal blood which increases the vulnerability of the liver to the toxins that can lead to liver injury or even liver failure. Another part of the body that affects alcohol is the nervous system. Drinking heavy amounts of alcohol can have serious and damaging problems for the functioning of the nervous system, especially the brain. The following effects include changes in personality and emotions, learning, memory, and impaired perception even on daily life activities. There is evidence found that alcohol directly affects the brain abnormalities such as shrinking of the brain and deteriorating of the cells in the brain. Not only that, but alcohol also interferes with the action of the gamma-aminobutyric acid, glutamate, and neurotransmitters which are very important factors in the brain.

Illegal drugs are also one of the most prevalent vices all over the country. Based on an article, numerous studies were found to describe and interpret the effects of illegal drugs on the electrical activity of subcortical and cortical area of the brain. There are many kinds of illegal drugs but one of the most used illegal drugs in the world after cannabis is cocaine. Cocaine hydrochloride is psychoactive matter gathered from the leaves of plants called *Erythroxylum coca*. It is proved by the researchers that this drug can have a significant change of the sympathetic nervous system and can cause changes in the structure of the heart, brain, kidneys, lungs, and liver. It is also proved that this drug can cause alterations to the endocrine system. It is

found that there is a possibility that cocaine can cause brain cells to cannibalize themselves.

Another famous illegal drug is cannabis. Cannabis or also known as marijuana is a psychoactive drug that came from the cannabis plant. It is native to Central or South Asia and has been used for both recreational use and traditional medicines. When cannabis is taken via smoking or adding it to food that people consume, it enters the bloodstream and then deploy the side effects on the body in the use of interaction with the endogenous receptors. Just like other illegal drugs, cannabis affects almost every important system of the body especially respiratory, cardiovascular, and our immune system. This drug has an allover negative impact to a person including their general health and oral health. Cannabis users are known to have poorer oral health than those people who does not use cannabis. The usage of this drug can increase the risk of dental caries and periodontal diseases. Since cannabis smoke acts as a carcinogen and related with changes in dysplasia and pre-malignant lesions within the oral mucosa, users are prone to have oral infections because of the immunosuppressive effects.

One of the rising vices in today's modern world is smoking. Smoking can be in a traditional way or using E-cigarettes which are more popular today, but both have ways have nicotine in them. There are a lot of harmful effects of nicotine in the body and the immune system. It is proved that nicotine promotes breast cancer because smoking has a major impact on tumor immunity. This substance plays a critical role in the formation of the pre-metastatic function in the lungs by inducing pro-tumor N2-neutrophils. Because of promotion of the pre-metastatic niche, STAT3 activated lipocalin 2 gets released. It is a secretory glycoprotein which is a part of N2-neutrophils which induces mesenchymal epithelial transition of tumor cells. The result of this is metastatic growth and colonization of bad cells on the good cells. It was found out that the elevated levels of serum and urine LCN2 is elevated in the early stage of breast

cancer and cancer-free females with a history of smoking suggests that LCN2 serves as prognostic biomarker for predicting increased risk of metastatic disease in female smokers.

Conclusion

In conclusion, vices are self-inflicting factors where we know they have long lasting effect in our body or even death. All these vices also have a major impact to our overall health, immune system, and our brain. Drinking heavy amounts of alcohol can have serious and damaging problems for the functioning of the nervous system, especially the brain which alters the perception of how we see things and how we act. On the other hand, when illegal drugs are taken via smoking or adding it to food that people consume, it enters the bloodstream and then deploy the side effects on the body in the use of interaction with the endogenous receptors. This can cause the immune system to deteriorate slowly and might kill anyone at any time. Lastly, smoking has a substance called nicotine that promotes breast cancer for the females and affect the immune system of a person,

References

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