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Can Smoking be Safe? A Philosophical Controversial Study

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Abstract

This is a controversial study that aimed to change some basic concepts about smoking. Although smoking is a global health problem, and it is associated with mortality, cancer, heart, and other problems, quitting smoking strategies are not able to end smoking phenomenon. According to this context, the author interestingly postulated that if smoking can be safe, why not to have this challenge? Based on experimental studies on animals who were exposed to smoking, smoking induced pathologic changes based on chemical and histological levels. These changes were reversed by using several treatments such as Vitamin C, allicin, and Ammi visnaga. Indicators included AST, ALT, and LDH. In addition to immunohistochemical studies and electron microscopic studies. The results clearly showed the possibility of having safe smoking. Taken together, this controversial study showed that harmful impacts of smoking can be reversed, and smoking can be safe.

Keywords: smoking; controversial; safe; amelioration; AST; ALT; LDH

Introduction

Despite overall prevalence drops in some countries, significant trends in tobacco use among young and in lower-income nations, notably Sub-Saharan Africa, are emerging (WHO, 2019). To avoid an increase in tobacco-related harm, governments must enact stricter tobacco control legislation (WHO, 2019). Smoking is currently practiced by 942 million men and 175 million women aged 15 and up over the world. Nearly three-quarters of male daily smokers live in countries with a human development index (HDI) of medium to high, whereas half of female daily smokers live in countries with an HDI of very high. Male smoking prevalence has increased significantly in most medium- to very high-HDI countries during the last century, however this occurred earlier in very high-HDI countries (the first half vs. second half of the 20th century). Female smoking prevalence in very high-HDI countries peaked a few decades later than the peak in male smoking, but it has remained relatively low or had a moderate increase thus far in other countries (tobaccoatlas.org, 2021).

Why do we smoke?

Most tobacco users begin when they are in their adolescent or young adult years. There are a variety of reasons why people begin to smoke (Barrington-Trimis et al., 2020). It is a way for some teenagers to defy their parents. Other teenagers may be influenced by their peers (peer pressure) to start smoking to appear "cool." (lung.org/quit smoking, 2021). Some people believe it is a technique to relieve tension or boredom, while others say it is a way to emulate a parent's or sibling's conduct. Even if you do not intend to continue smoking, the nicotine included in all tobacco products makes it very easy to become "hooked" or addicted (lung.org/quit smoking, 2021).

You must continue to obtain nicotine if you are reliant on (addicted to) it. Your body relies on it to feel comfortable, and if you do not receive enough of it or do not get it often enough, you will experience unpleasant sensations. When you do not get enough nicotine, you'll experience withdrawal symptoms. Addiction to the nicotine in tobacco can develop quickly, even after only a few cigarettes or a short period of smoking. The good news is that nicotine addiction can be overcome. Learning more about the science behind nicotine addiction may make it simpler for you to quit using tobacco

(lung.org/quit smoking, 2021).

The fundamental basics:

Nicotine is a substance found in all types of tobacco. Nicotine can also be found in electronic cigarettes and ENDS liquid (electronic nicotine delivery systems). Nicotine has a significant potential for addiction. Nicotine enters the body and activates nicotine receptors in the brain when a person consumes tobacco, whether by smoking cigarettes, chewing tobacco, or using another kind of tobacco. The higher the addictive effect of nicotine on the brain, the faster it is delivered to your body. Cigarettes are designed to quickly deliver significant doses of nicotine to the brain. Nicotine just takes six to ten seconds to reach your brain when you smoke a cigarette. As a result, smoking tobacco is highly addicting and difficult to quit. Nicotine smoked from cigarette smoke is swiftly absorbed into the bloodstream and delivered to the heart and brain. Nicotine causes the brain to release chemicals that mimic the effects of amphetamines ("speed") and cocaine on a person's mood. Nicotine is a stimulant that boosts a person's attention and focus while also speeding up their reaction time. Many smokers claim that the ritual of smoking is enjoyable to them. They also claim that smoking is pleasurable for them. Nicotine withdrawal symptoms are relieved by smoking. Smokers experience a negative mood shift shortly after finishing their final cigarette. The smoker feels uneasy because of this "withdrawal" from the chemical nicotine. When people stop smoking, they often feel worried, angry, and restless. This is because they are not receiving the nutrients that the brain believes it requires to function properly. Smokers frequently feel better as soon as they start smoking again, use other tobacco products, or take nicotine replacement medications (www.who.int/health-topics/tobacco, 2021).

Nicotine Addiction's Influence

Nicotine addiction affects people in different ways. Some people may be afflicted with a minor addiction. Others may develop a severe addiction quickly. A craving occurs when a person has a strong desire to smoke that is difficult to ignore. A scale can be used by healthcare experts to assess your level of nicotine addiction (Jackson et al., 2015; NIDA., 2021).

Nicotine dependence is complex, and many tools have been used to assess the severity of nicotine addiction (Moolchan et al., 2002; Hudmon et al., 2003; Meneses-Gaya et al., 2009). The Fagerström Test for Nicotine Dependence, a standard tool for evaluating physical addiction to nicotine, includes questions about the time of the first cigarette, the number of cigarettes smoked per day, the difficulty of quitting smoking, the type of cigarette that is difficult to quit, and the daily smoking frequency (Fagerstrom et al., 1989; Heatherton et al., 1991; Rudasingwa et al., 2021).

Apart from the physical addiction, many habitual smokers say that smoking is a part of their daily lives. A person's typical schedule must be altered, which can be difficult. You can, nevertheless, be successful. Consider how often you smoke and what you do when you smoke. Try something new or something that does not remind you of smoking. If you always smoke after a dinner, for example, consider doing something else, such as clearing and washing the dishes or going for a stroll. It is recommended to speak with your doctor about the safest and most effective ways to quit smoking and using other nicotine-containing products (Baumeister, 2017).

Natural sources of nicotine

A cigarette is well known for being more than a tiny roll of finely chopped tobacco securely wrapped in paper. This cigarette allows a drug (nicotine) to be delivered into the body. Furthermore, tobacco was important in the early days of the New World, and the evolution of the tobacco industry reflects the civilization and, eventually, industrialization of most of the Americas. Tobacco was present long before any European adventurer set foot on the soil of the fabled New World (www.fda.gov, 2021).

Tobacco crops could be found from Brazil to the St. Lawrence River, and the plant thrived across much of the Americas (Wagner 2003). The leaves of the tobacco plant can be dried and crushed. Tobacco was chewed or smoked in pipes in northern latitudes; for Native Americans in North America, the so-called "peace pipe" was a revered artefact. Tobacco leaves were more typically bundled together or wrapped around maize husks and smoked as a form of cigar in tropical climes (Rajan et al., 2021).

Nicotine is an extremely poisonous alkaloid (C10H14N2, with pyridine and pyrrolidine rings). It is a colorless liquid that does not become brown until it's ignited (Shoji et al. 2010). Doctors in the mid-twentieth century begun to make the connection between smoking and an elevated risk of cancer. According to the National Cancer Institute, a person who smokes 20 cigarettes a day is ten times more likely than a nonsmoker to develop lung cancer (Wagner 2003).

Is nicotine a contaminant that can be found in plant foods?

Plants have evolved the ability to synthesis a vast array of structurally varied secondary metabolites to adapt to changing surroundings (Shoji et al. 2010). Among these secondary metabolites, nitrogen-containing low molecular weight molecules known as alkaloids are known to help plants fight herbivores, pathogens, and abiotic stress chemically. Because of the popularity and long history of smoking, nicotine is undoubtedly the most popular alkaloid. Smoking nicotine-containing tobacco leaf products dates to 5000 BC, when it was used as part of religious rites (Shoji et al. 2010).

Nicotine was identified in low percentages in various crops from the Solanaceae family, such as tomatoes, auberges, peppers, and potatoes. Nicotine binds to nicotinic acetylcholine receptors in the autonomic nervous system, the adrenal cortex, neuromuscular synapses, and the brain in a stereo-selective manner. Nicotine has insecticidal properties due to its function as an agonist of nicotine acetylcholine receptors, and the molecule has been employed as an active ingredient in plant protection products. As a result, it can be concluded that there are three nicotine sources for plant contamination: the first source belongs to plants that synthesize endogenous nicotine under certain conditions (e.g. stress), the second source represents nicotine contamination caused by smokers (cigarette smoke / nicotine residues on harvesters' fingers), and finally nicotine. The illicit use of nicotine in insecticides was not included in these prior sources for nicotine contamination of plants (Andersson et al., 2003).

Can smoke be safe?

This is the main section in the present study because it raises a very important question. Adversely health effects of smoking are varied including early death of smokers by10 years on average compared with non-smokers, carcinogenicity, and it can harm every organ in the body such as the lungs, heart, blood vessels, reproductive organs, mouth, skin, eyes, and bones (www.cancer.org, 2021).

We have conducted a large study on smoking using animal smoking models that revealed adversely health impacts of smoking in liver, trachea, lung, and heart. Various techniques were used including biochemical assays such as liver function tests, histology, immunohistochemistry, and electron microscopy. All these techniques showed the harmful impacts of smoking. On the other hand, we used different treatments to ameliorate the harmful impacts of smoking including Vitamin C, allicin, and Ammi visnaga. These treatments showed that harmful impacts of smoking can ameliorate harmful aspects of smoking. In other words, it is possible to hypothesized that if smoking can not be quitted, let it be safe. Smoking producing companies can take these assumptions and produce safe smoking products. Or pharmaceutical companies can produce anti-smoking therapies to make smoking safe. Furthermore, governmental legislations can take serious measures to making smoking as safe as possible.

Conclusions: Although smoking is still a global serious health problem, it can be safe by using some therapeutic products.

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