The Most Used (Illegal) Drug
According to the 2017 UN World Drug Report, 183 million people worldwide use cannabis and the trend is increasing. Cannabis is used in the form of marijuana (dried inflorescences and leaves), hashish (resin of flowers mixed with plant parts) or hashish oil (viscous extract from the resin). The age group with the highest consumption is young adults and adolescents; in Europe, 70% of people who take cannabis daily or almost daily are between 15 and 34 years old.

Cannabis, the biological name for the hemp plant, is generally perceived as a “soft drug” with negligible, reversible side effects that are non-addictive and do not pose a threat to others. What is more, cannabis is a potent medicinal herb that is said to work wonders for cancer, multiple sclerosis, pain, epilepsy, sleeping disorders and many other diseases and ailments. And while it is true that cannabis is a precious, versatile plant and definitely has medical potential, it is by no means harmless, in particular for the age group with the highest consumption—the youth—it can be dangerous.

Cannabis Affects the Nervous System
The cannabis plant contains several hundred chemical substances, at least 80 of which are so-called cannabinoids, of which tetrahydrocannabinol (THC) and cannabidiol (CBD) occur in the highest concentrations. Cannabinoids interact with the body’s own endocannabinoid system, which influences, among other things, relaxation, nutrition, sleep and memory. They penetrate the blood-brain barrier and act on the cannabinoid receptors in the human brain, thus directly interfering with the central nervous system.

While CBD is primarily responsible for the medical effects and is not intoxicating, THC ensures that you get “high”. THC and CBD are antagonists. They are formed from the same primordial substance and can balance or neutralize each other’s effects. When a few decades ago, the ratio of THC to CBD was approximately 10:1, with a THC content of less than 3%, the ratio in today’s cultures is 100:1, with the THC content now exceeding 30%. So today’s cannabis has lost its natural balance in terms of THC-CBD content and can therefore no longer be compared with the former remedy of the ancient Chinese or Egyptians or with the joint of the “flower power generation”.

So far, no lethal dose of cannabis is known, but there is a risk of overdose, especially if cannabis is not smoked or inhaled (which are the most common forms of consumption), but is taken orally, i.e. in food, by which its effect is delayed. It is a fact that so far we do not know anything about the effects of most substances in the cannabis plant.

Cannabis Smoke Alters DNA
Possible effects of cannabis are psychosis, schizophrenia, reduced brain development and loss of brain performance, memory and concentration disorders or learning problems, reduced performance, impaired circulation and immune system, impaired reproduction and reduced libido, an increased stroke and heart attack risk as well as lung diseases like COPD. Of course, a number of these diseases are directly related to the fact that mostly cannabis

Cannabis Can Cause Psychosis
Studies over the past 30 years have shown a direct correlation between the use of cannabis and the development of psychosis. Like all substances with addictive potential, cannabis acts on the reward center of the brain, where it stimulates the release of dopamine, a neurotransmitter that causes a feeling of happiness and is also responsible for motivation. For this reason it is claimed that cannabis increases well-being. Drug dopamine release is many times higher than natural dopamine release, which occurs through natural behaviour such as sex.

The intake of cannabis can increase the concentration of dopamine in the brain so much so that the brain metabolism gets out of balance. As a result, psychosis may occur, manifesting itself for example in hearing voices, hallucinations, paranoia or confusion. If the symptoms persist even after the body has metabolized its addictive substance, we talk of a chronic psychosis, also called schizophrenia. The higher the proportion of THC in cannabis, the greater the risk of developing a psychosis. The risk of developing schizophrenia increases by 37% due to cannabis use. It is true that this applies especially to people who have a corresponding genetic predisposition. But who knows whether he or she belongs to this population group or not?

Destroying Your Brain by Smoking Pot
Those who regularly consume cannabis for years or even decades run the risk of proactively destroying their brain because of smoking pot. People who start smoking weed in adolescence lose about 10% of their intelligence within 20 years. Because the brain starts to break down dopamine receptors in an effort to self-regulate when there is a constant excess of dopamine, up to the point that the brain cells die, there can be permanent losses in brain performance. Since brain maturation is not completed until around the age of 25, the risk of irreversible damage to the brain and its development through cannabis use is particularly high for adolescents. There is a direct correlation between the age of onset, duration and amount of use and brain damage. Or to put it a little boldly: The earlier and more often a person uses cannabis, the more dangerous it is for their health.
together with tobacco is rolled into and smoked as a cigarette, adding to cannabis the well-known effects of tobacco abuse. As cannabis burns at much higher temperatures than tobacco, even more toxins are produced.

The claim that smoking via a water pipe (bong) is less harmful because the water “purifies” the smoke is a myth. The smoke is only cooled down, which makes smoking easier. By contrast, a single pull on the hookah is almost the same as the smoke volume of a whole cigarette, which makes the hookah even more harmful. Taking cannabis via an evaporator or e-cigarette is by no means harmless since it also limits brain development and pollutes the body with toxins. Scientists also found DNA-altering and possibly cancer-promoting effects of the inhalation of cannabis smoke.

Incidentally, cannabis use also increases the risk of accidents. Cannabis stays in the body much longer than alcohol, which is why, for example, the risk of a fatal car accident is even higher than while under the influence of antidepressants or opioid-containing substances.

**Cannabis Can Create Dependence**

About 9% of people who experiment with marijuana become addicted. The proportion increases to one-in-six people when consumption starts in adolescence, and between 25 and 50% for daily consumption. More and more people have to undergo treatment due to a cannabis dependence. To our bodies differentiating between hard and soft drugs is irrelevant. Our brain does not distinguish what it is dependent on; a drug is a drug! However, quitting cannabis is particularly difficult, because cannabis is the drug with the most positive image and is considered harmless. Unlike alcohol, heroin or nicotine addicts, cannabis addicts do not see their drug as a problem and it is therefore often difficult to persuade them to remain completely abstinent.

Those who want to remain healthy and maintain the functional capability of their brain, should keep their hands off all drugs—including cannabis!

**“We should not consider marijuana as harmless given what we already know about its harm to adolescents until we can prove otherwise.”**

*Dr. Sharon Levy, Chair of the Drug Abuse Committee of the American Paediatrics Academy*