

REVIEW

DRUG ADDICTION. *PART I*. PSYCHOACTIVE SUBSTANCES IN THE PAST AND PRESENCE

Jerzy Vetulani

Institute of Pharmacology, Polish Academy of Sciences, Smętna 12, PL 31-343 Kraków, Poland

Drug addiction. Part I. Psychoactive substances in the past and presence. J. VETULANI. Pol. J. Pharmacol., 2001, 53, 201–214.

Substances capable of changing the functions of the central nervous system are widely distributed in plant kingdom, and many of them were discovered by ancient food-gatherers at the dawn of humanity. In the Old World only a few substances producing euphoria or altered states of consciousness and having habit-forming properties are still widely used. They are the products of poppy (opium, morphine), hemp (hashish, marijuana), and of fermentation of various organic materials alcohol. This list has recently been joined by the psilocybin-containing mushrooms. The addiction-forming compounds originated in the New World and widely spread are tobacco (nicotine) and cocaine. In the 19th and 20th, century the development of medicinal chemistry resulted in several synthetic compounds, originally proposed as therapeutics, such as barbiturates, benzodiazepines and amphetamines. Due to legal problems, to avoid production of the substances already prohibited, many designer drugs were manufactured. In addition, several compounds were synthesized as recreational drugs. Also some compounds that were not regarded as drugs, such as aromatic hydrocarbons and other cleansing agents, as well as steroids were found to have properties of dangerous, habit-forming agents.

The attitude of society and the pattern of use of psychoactive substances have changed with time, particularly in the last decades. The active principles are now more addictive because of concentration, purification, chemical modifications and the way of ingestion, which now favors most rapid transport to the central nervous system. The substance abuse approaches the level of global epidemics, and the recent usage of drugs of addition is also reviewed.

Key words: addiction, substance abuse, morphine, cocaine, nicotine, Cannabis, hallucinogens, review