Podstawowe mechanizmy i teorie uzależnień Basic mechanisms and theories of addictions

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Abstract – Substance dependence is a complex disorder of the central nervous system, characterized by the loss of control over drug seeking and drug taking and by the risk of relapses even after long period of abstinence. The most important features of addictive drugs are: tolerance, sensitization and the ability to induce reinforcing and rewarding effects. There have been many theories and hypotheses regarding the mechanism of drug dependence. According to the incentive sensitization concepts by Robinson and Berridge (1993) the addiction may have its source in a sensitization of neuronal circuits of the reward system mediating the drug *liking*, i.e. appetitive reactions aimed at contact with an addictive substance. Repeated drug use acquires greater and greater incentive value and become more and more attractive, and finally, controls appetitive behavior. According to the *allostasis* theory of addiction (Koob and LeMoal, 2001), the disorder involves an allostatic mechanism defined as a process maintaining the function of the reward system beyond the physiological frames. According to Di Chiara (2001) excessive dopamine-dependent associative learning may result in undue control over behavior by addictive substances. We postulate that drug addiction may involve a change in the mechanism of drive satisfaction (Kostowski, 2002). Dysfunction of drive satisfaction leads to the sustained activation related to the current drug-related drive, which blocks the operation of other drives. In effect, uncontrolled compulsive appetitive behavior (drug seeking) is released and dominates over behavior.

Key words: addiction, theories of substance dependence, dopamine, drives, motivation