



The Role of Cryptocurrency on Global Security and Health through Enabled Black Markets

Crypto markets are anonymous marketplaces that allow the illegal trade of goods and services, mostly for synthetic drugs through encrypted platforms accessible via the dark web. Transactions are typically conducted using cryptocurrencies such as Bitcoin, which ensure anonymous interactions between buyers and sellers. While these markets currently represent a small part of the registered global illegal drug trade, their expansion represents increasing challenges to international security and public health.

The growth of these markets will worsen drug-related harms, since effective regulation and global coordination remains limited. Particularly, synthetic drugs have severe neurological consequences like reduction in neural connectivity within the central nervous system, affecting brain regions, such as, the basal ganglia, hippocampus, parietal lobe, and others.

Nearly 97% of transactions involving illicit synthetic drugs happen through cryptocurrency payments. This technological anonymity prevents law enforcement efforts, promotes cross-border trafficking, and increases the global availability of harmful substances. Addressing this rising threat needs international collaboration, to improve cybercrime monitoring, and integrated approaches that consider both the technological and public health dimensions of online drug markets.