

EFFECTS RESULTING FROM THE RECREATIONAL AND THERAPEUTIC USE OF KETAMINE: a literature review

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INTRODUCTION: Ketamine, a drug developed in 1962 and derived from phencyclidine, is an NMDA receptor antagonist with anesthetic, analgesic, and sedative properties, widely used in medical and veterinary settings. In Brazil, ketamine has also become a recreational drug at night parties, being administered through various routes, such as injection, inhalation, ingestion in pill form, or smoking. At low doses, it causes effects such as hallucinations, illusions, impaired attention and memory, tachycardia, and flashbacks. Beyond its anesthetic use, ketamine has shown efficacy in new clinical indications, such as the treatment of treatment-resistant depression, traumatic brain injury, and alcohol withdrawal. However, the long-term side effects of both recreational and clinical use remain poorly understood and under-researched. **OBJECTIVE:** Thus, this study aims to review and discuss the effects of prolonged ketamine use in therapeutic patients and chronic users. **MATERIALS AND METHODS:** Based on a literature review conducted on PubMed, covering articles published between 2004 and 2024, 285 studies were identified. After applying inclusion and exclusion criteria, only six were selected for review. **RESULTS AND CONCLUSION:** The results showed that therapeutic patients experienced hepatotoxicity and elevated liver enzymes, while chronic abusers developed ketamine-induced cystitis, gastrointestinal disorders, and a reduction in both white and gray matter in the brain. Despite its undeniable therapeutic value and safety in hospital settings, long-term effects remain poorly understood, highlighting the need for further studies and regulatory strategies that balance the medical benefits of the substance with the risks of its inappropriate use.

Key-words: ketamine; illicit drugs; drug-related side effects and adverse reactions; psychotropic drugs; long term adverse effects.