



# Factors Limiting the Therapeutic Usage of Cannabidiol in Epilepsy

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## DESCRIPTION

In recent years, Cannabidiol (CBD) has achieved significant attention as a potential therapeutic agent for epilepsy. With potential results emerging from clinical studies, there is growing optimism about CBD's role in managing epilepsy. However, despite its potential, several factors constrain the widespread therapeutic usage of CBD in epilepsy treatment. Understanding these limitations is important for navigating the complexities of CBD therapy in epilepsy management.

### Regulatory impediments

One of the primary factors limiting the therapeutic usage of CBD in epilepsy is the regulatory landscape surrounding cannabis-derived products. While CBD is recognized for its potential therapeutic benefits, legal restrictions and varying regulations across different jurisdictions pose significant hurdles. In many regions, CBD remains classified as a Schedule I substance, imposing stringent regulations on its production, distribution, and prescription. Such regulatory ambiguity creates barriers for patients and healthcare providers seeking access to CBD-based therapies for epilepsy management.

**Lack of standardization:** Another critical challenge in utilizing CBD for epilepsy treatment is the lack of standardized formulations and dosing protocols. Unlike pharmaceutical medications, CBD products vary widely in their composition, potency, and purity. The absence of standardized formulations makes it challenging for healthcare professionals to prescribe precise doses customized to individual patient needs. Additionally, variability in product quality raises concerns about efficacy and safety, further complicating the therapeutic use of CBD in epilepsy.

**Limited clinical evidence:** Despite the growing interest in CBD as an antiepileptic agent, the clinical evidence supporting its efficacy and safety profile remains limited. While some studies have shown promising results, many of them are small-scale trials with heterogeneous patient populations and short follow-up periods. Additionally, the lack of large-scale Randomized

Controlled Trials (RCTs) hinders the establishment of robust evidence-based guidelines for CBD therapy in epilepsy. Without comprehensive clinical data, healthcare providers may hesitate to incorporate CBD into mainstream epilepsy treatment protocols, contributing to the limitations in its therapeutic usage.

**Drug interactions and adverse effects:** CBD's interaction with other medications commonly used in epilepsy management presents another challenge. CBD is metabolized by the same liver enzymes (CYP450 enzymes) responsible for metabolizing many Antiepileptic Drugs (AEDs), leading to potential drug interactions. Co-administration of CBD with certain AEDs may alter their plasma concentrations, raising concerns about efficacy and safety. Moreover, while CBD is generally well-tolerated, it can cause adverse effects such as fatigue, diarrhea, and changes in appetite, which may impact patient adherence and quality of life.

### Stigma and misconceptions:

The stigma surrounding cannabis-derived products, including CBD, persists as a significant barrier to their therapeutic usage in epilepsy management. Despite increasing public acceptance of medical cannabis, misconceptions and misinformation abound, leading to apprehension among patients and healthcare providers. Addressing the stigma associated with CBD requires comprehensive education and awareness campaigns to dispel myths and foster informed decision-making regarding its therapeutic potential in epilepsy.

While CBD as a potential adjunctive therapy for epilepsy, several factors limit its widespread therapeutic usage. Regulatory challenges, lack of standardization, limited clinical evidence, drug interactions, and stigma contribute to the complexities surrounding CBD therapy in epilepsy management. Overcoming these limitations requires concerted efforts from policymakers, researchers, healthcare providers, and patient advocacy groups. Establishing clear regulatory frameworks, conducting rigorous clinical trials, developing standardized formulations, and enhancing public education are essential steps toward unlocking the full therapeutic potential of CBD in epilepsy treatment. By

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**Received:** 19-Mar-2024; **Manuscript No.** CPECR-24-25685; **Editor assigned:** 21-Mar-2024; **PreQC.** No. CPECR-24-25685 (PQ); **Reviewed:** 04-Apr-2024; **QC.** No. CPECR-24-25685; **Revised:** 11-Apr-2024; **Manuscript No.** CPECR-24-25685 (R); **Published:** 19-Apr-2024, DOI: 10.35248/2161-1459.24.14.417

**Citation:** Matsunaga S (2024) Factors Limiting the Therapeutic Usage of Cannabidiol in Epilepsy. J Clin Exp Pharmacol. 14:417.

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addressing these challenges collaboratively, prepare for more effective and accessible CBD-based therapies for individuals living with epilepsy.