

## **The neuroprotective properties, functions and roles of cannabis sativa in selected diseases related to the nervous system**

### **ABSTRACT**

**Background:** Cannabis and its extracts are now being explored due to their huge health benefits. Although, the effect they elicit, whether on humans or rodents, may vary based on the age of the animal/subject and or the time in which the extract is administered. However, several debates exist concerning the various medical applications of these compounds. Nonetheless, their applicability as therapeutics should not be clouded based on their perceived negative biological actions. **Methods:** Articles from reliable databases such as Science Direct, PubMed, Google Scholar, Scopus, and Ovid were searched. Specific search methods were employed using multiple keywords: "Medicinal Cannabis; endocannabinoid system; cannabinoids receptors; cannabinoids and cognition; brain disorders; neurodegenerative diseases". For the inclusion/exclusion criteria, only relevant articles related to medicinal Cannabis and its various compounds were considered. **Results:** The current review highlights the role, effects, and involvement of Cannabis, cannabinoids, and endocannabinoids in preventing selected neurodegenerative diseases and possible amelioration of cognitive impairments. Furthermore, it also focuses on Cannabis utilization in many disease conditions such as Alzheimer's and Parkinson's disease among others. **Conclusion:** In conclusion, the usage of Cannabis should be further explored as accumulating evidence suggests that it could be effective and somewhat safe, especially when adhered to the recommended dosage. Furthermore, in-depth studies should be conducted in order to unravel the specific mechanism underpinning the involvement of cannabinoids at the cellular level and their therapeutic applications.

**Keyword:** Medicinal cannabis; Brain disorders; Cannabinoids and cognition; Cannabinoids receptors; Endocannabinoid system; Neurodegenerative diseases.