CANNABIS AND CANNABINOIDS FOR THE TREATMENT OF MENTAL DISORDERS AND SYMPTOMS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction and Aims: The use of cannabinoids for medicinal purposes is increasing. Previous reviews on the effectiveness of cannabinoids have reached conflicting conclusions and have been limited in their coverage of mental health conditions. We examined evidence for cannabinoids in the treatment of depression, anxiety, ADHD, Tic/Tourette's disorder (TS), PTSD and psychosis.

Design and Methods: Databases and previous reviews were searched for experimental and observational studies published from 1980 that examined the effect of cannabinoids on depression-, anxiety-, ADHD-, TS-, PTSD-, or psychosis.

Results: There were few studies and the quality of evidence ranAged from very low-moderate. There were no significant difference within the RCTs in any of the depression (k=13), ADHD (k=1), TS (k=2) outcomes. Cannabinoids were associated with greater reduction in anxiety symptoms compared to control (SMD: -0.37, 95%CI: -0.63:-0.11; k=10). For PTSD (k=1), cannabinoids improved global functioning (SMD: -1.13, 95%CI: -0.48:-0.77) and decreased nightmare frequency (SMD: -1.11, 95%CI: -1.46:-0.76) versus control. Similarly, cannabinoids improved global functioning (SMD: -0.62, 95%CI: -1.14:-0.09) versus control within psychosis (k=1). Cannabinoids had more adverse events (OR: 1.80, 95%CI: 1.18:2.77), withdrawals (OR: 1.53, 95%CI: 1.06:2.21), and withdrawals due to adverse events (OR: 2.06, 95%CI: 1.12:3.77) compared to control. No other significant associations with any primary or secondary outcomes were observed.

Discussions and Conclusions: There is a lack of studies that indicate cannabinoids' beneficial effect for mental health conditions. The current very low-moderate quality of evidence prompts a need for higher-quality studies on the effectiveness of cannabinoids to inform patients' and clinicians' decisions about the use of cannabinoids.

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