

Cannabidiols and its Impact on Depression

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Abstract

This short communication discusses multiple aspects of Major Depressive Disease (MDD) and Brain Derived Neurotrophic Factor (BDNF) in terms of epigenetics and natural substances as treatment options for MDD and aims to put a proposal that the standard treatment protocols do not suffice to treat MDD and indicates that natural substances and cognitive enhancers should be considered for treatment options such as drugs, supplements, nutraceuticals and utilitarian foods and supplements that are implied to improve mental capacities, for example, insight, memory, knowledge, inspiration, focus and supporting and improving some important health conditions. As of today conventional medications come short in effective treatment MDD and unfortunately with diverse adverse effects. Cannabidiol seems a reliable option as an adjuvant treatment for MDD by increasing BDNF and with pleiotropic benefits.

Introduction

MDD is the main source of incapacity and 350 million individuals are affected around the world with wrecking side effects including depressed state of brain, loss of interest or happiness, daily life dysfunctions, psychomotor impediment, suicide ideation, and eating and sleep unsettling influences. Their quality of life decreases and even vanishes and QOL treatments mostly fail due insufficient effects. This sum up regarding the cannabidiol (CBD)'s effect in MDD patients mainly aims to contextualize the exogenous components as capable as increasing the BDNF levels in MDD patients which is found usually low. Psychiatrists and translational medicine experts should work together for MDD and other psychiatrist conditions and also focus on possible interactions due sharing the same pathways in P450 gene in the liver. Natural compound's neglected importance and their application in depression should be revisited.

Exogenous Cannabidiols as an Adjuvant Treatment Option

Cannabidiol (CBD) is a low tetrahydrocannabinol (THC) product manufactured from Cannabis sativa. CBD is popular for its medicinal benefits. After tetrahydrocannabinol (THC), CBD is the second-most-abundant component of cannabis. Cannabis has been used for psychiatric issues for almost thousand years. It is generally considered safe for application and in fact has been used for decades. Medicinally use of cannabis has history dating back centuries. The most abundant compound in cannabis, THC is also a cannabinoid and possesses negative psychoactive effects. A cannabis plant has different amounts of CBD and THC depending on the strain and thus provides different medicinal effects. Major Depressive Disease MDD, additionally referred to just as depression, is a psychological issue described by in any event of low state of mind that is seen across

most situations. It is regularly joined by low confidence, loss of interest for typically agreeable exercises, low vitality, and agony without an unmistakable cause. Those influenced may likewise at times have deceptions or see or hear things that others cannot. Some individuals have times of depression isolated by years in which they are ordinary, while others almost consistently have side effects present. MDD adversely influences an individual's very own life, work life, or instruction just as resting, dietary patterns, and general health. About 10% of MDD patients end their lives by suicide and suicidal thoughts and suicide attempts are also observed among them. Generalized Anxiety Disorder (GAD) is described by tenacious and inordinate stress over various things. GAD patients may envision tragedy and might be excessively worried about health, family, work, or different issues. GAD patients are afraid of losing control of themselves and in fact also losing control of their feelings about the object or event of their obsession. That makes them suspicious of almost everything carrying anxiety with themselves everywhere they go. They may stress more than seems justified over real occasions or may anticipate the most noticeably worst in any event, when there is no clear purpose behind concern. Presently, pharmacological and non-pharmacological medications have moderate viability for the current treatment of intense depression. These medications are absolutely not harmless as they cause multiple adverse and side effects which means immense extra burdens to patients such as Type 2 diabetes, osteoporosis, increased depressive symptoms, adverse effects on internal organs, headache, insomnia or excessive daytime sleepiness etc.

Cannabidiol and related compounds including specific terpenes offer promising treatment options. CBD indirectly affects the CB1 receptors by halting the enzymatic breakdown of anandamide, enhancing anandamide, permitting it to remain in the

system longer and provide medical benefits. Cannabidiol works through a variety of complex pharmacological actions, such as inhibition of endocannabinoid reuptake, transient receptor potential vanilloid 1 and G protein-coupled receptor 55 activation, and increasing the activity of serotonin 5-HT_{1A} receptors and cannabidiol's minimal agonism of the CB receptors likely accounts for its negligible psychoactivity when compared with THC. Despite the fact that reviews have exhibited the quieting, calming, and loosening up impacts of CBD, clinical information from real cases is insignificant. This contextual analysis offers a remarkable proof that CBD is viable as a sheltered elective treatment to conventional mental prescriptions for lessening MDD and GAD. BDNF gets increased as reflected in many studies regarding this issue. Cannabidiol doses up to 300 mg/d have been used safely for up to 6 months and doses of 1200 to 1500 mg/d were used in a study for up to 4 weeks. Therefore physicians should not disregard patients' interest in cannabidiol as treatment option and continue to educate both patients and themselves about alternative therapies with the assistance and guidance of translational medicine experts that combinations of CBD and exogenous/endogenous compounds are of utmost importance and needed as necessary as patient's unique medical conditions such as endocrinology, cardiology and other related health problems. By checking plasma BDNF levels most studies reflect that brain derived neurotrophic factor BDNF's increase and relief of depressive and stress factors.

Conclusion

The principle finding of studies and practices is that CBD alongside conventional prescriptions and enhancements can be a successful compound to diminish Major Depressive Dis-

ease and General Anxiety Disorder and other related issue as showed in a critical or analytical summing up especially of a medical case history of several patients. Further investigation should be directed to decide the permanency of patient's certain practices and to what extent they should keep taking the CBD. There is not a sensible establishment to suggest dosing from the logical writing. Be that as it may, in accordance of several studies and practices this enhancement given 30mg gradually increasing the doses up to 100 mg a day seems to appear to provide relief of key symptoms with minimal side effects. Almost none of the patients voice any complaints or discomfort from the utilization of CBD. Personally I believe in existential psychotherapy and that and further evaluations should continue as needed both by physicians and patients. In spite of the fact that CBD is viewed as commonly safe the drawn out impacts are yet to be considered. The ultimate goal is to gradually taper the use of conventional drugs and transition patients into CBD 10 to 100mg a day until symptoms are dissolved to an acceptable degree and patients should be encouraged lifelong coping strategies such as exercise, massage, yoga, meditation, and various other therapeutic activities such as skull acupuncture what patients can easily do at home. There is an urgent need that any psychiatrist should also collaborate with general physicians and especially translational medicine experts regarding patient's full medical evaluation and treatment options as needed. Last but not least cannabidiol in my experience needs to be calculated in accordance with patient's profile and a ratio of %80 of CBD to %10 THC and the rest other molecules and especially terpenes seem a logical choice. I do not want patients get high; on the contrary surefooted.