

Promise of Cannabinoid in Autism Spectrum Disorder

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Date of Submission: 02-01-2025

Date of acceptance: 13-01-2025

I. Case study

A 10 year old male presented with habitual dysphagia. His father is the head of an Emergency at a Hospital. This boy has been a diagnosed patient of autism since 4 years of age, however compliance with swallowing pills with a child in his condition is very difficult. The son has been given many alternative interventions without improvements.

Solution: The child is prescribed Hemp. It calmed him and then improved his coordination, concentration and speech.

This case study was performed in one of the Hospitals in United States with Special Education for Kids facility.

Hemp is a gentle brain stabilizer. This offers a unique combination of natural ingredients providing a specialized array of vital brain nutrients (1).

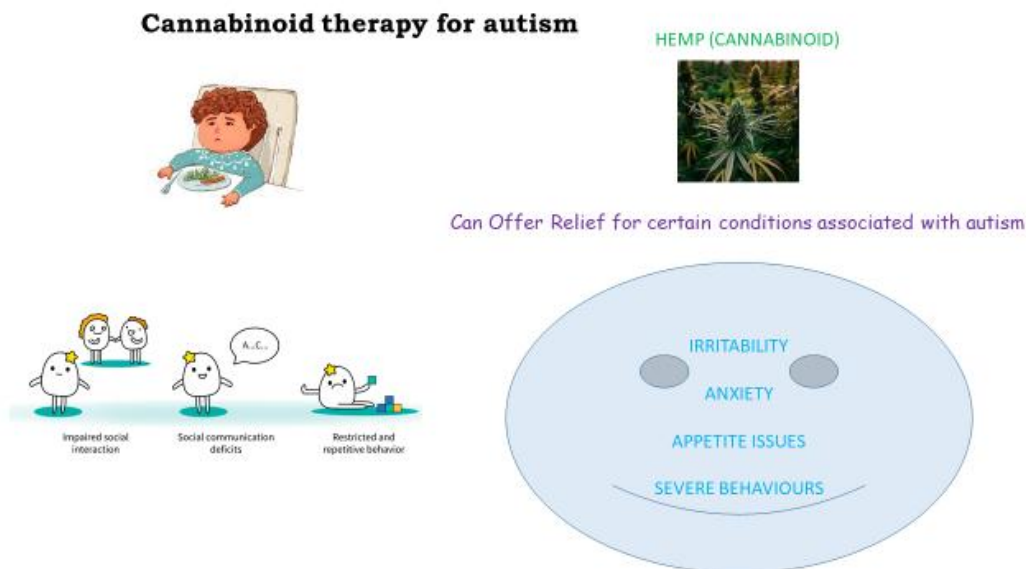


Figure 1: Cannabinoid therapy may have medicinal value to reduce disruptive behaviors linked to Autism Spectrum Disorder (ASD).

What is hemp used for?

Mild sedation, tranquilization Anxiety, panic, stress, obsessions Relaxation without alcohol or benzodiazepines such as Valium or Librium Withdrawl from benzodiazepine abuse and dependency Alcohol abuse recovery Protection against oxidative stresses Mood stabilizer for Bipolar and Unipolar disorder Mood elevator in melancholic depression Autism and Asperger's Involuntary muscle movement and spasticity Speech and swallowing difficulties Enlarged prostate with night time bladder control problems Irritable bowel syndrome

High blood pressure with anxiety (2).

The main ingredients of grounded Hemp are GABA, Creatine Monohydrate, and Inositol Nicotinate USP. The ingredients are listed below (3):

Gamma- aminobutyric acid(GABA) Creatine Monohydrate Inositol Nicotinate USP (Vitamin B-3 Niacin) Magnesium Ascorbate 6.5% (VitC) Taurine L-Glutamine FCC Glycine USP Magnesium Taurate 8% Methylsulfonylmethane (MSM) L-Carnosine Betaine anhydrous Inositol Hexaniacinate NF/FCC (Vitamin B-3 Niacin) Potassium Citrate Pyridoxine Crystalline HCL-(Vitamin B-6) Lithium Orotate 4% Zinc Methionate 20% Vitamin B12 (methyl cobalamin)

The recommended dosage of Hemp powder is half scoop to a full scoop once or twice daily depending on the severity of the condition, person's weight and age. Hemp protein powder has 12 grams of protein and 120 calories every 31-gram serving. There are roughly 15 grams of protein in a typical serving of 30 grams of hemp protein powder.

The body requires amino acids, which are abundant in hemp, to make protein and control the activity of the brain and nerve system (4).

Hemp in Indian scenario

India is home to over 8,000 species of medicinal plants. The Biological Diversity Act of 2002 was the first law in India to uphold the CBD nationally. The act established the National Biodiversity Authority to conserve biodiversity and share its benefits equitably across the country (5).

Although the growing of hemp has a long history in India, it has also been the subject of numerous legal disputes and conflicts. In India, hemp farming was permitted until 1985, when the Narcotic Drugs and Psychotropic Substances Act (NDPS Act) outlawed it. The NDPS Act categorized hemp, marijuana, and other substances as narcotic drugs. With the exception of medical and scientific uses, the NDPS Act forbade the production, possession, use, sale, and transportation of hemp (5,6).

In several areas where hemp has historically been produced or consumed, the NDPS Act did, however, permit some exceptions for its growth. These states are Madhya Pradesh, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Jammu & Kashmir, and Sikkim. These states have different laws and policies governing the production of hemp (7).

Uttarakhand was the first Indian state to authorize industrial hemp production in 2017. Growing for its fiber and seeds, industrial hemp is a type of hemp with extremely low THC levels (less than 0.3%). Products including textiles, paper, plastics, food, fuel, and cosmetics can all be made from industrial hemp (8).

2019 saw the legalization of industrial hemp farming in Uttar Pradesh under comparable circumstances as Uttarakhand. Legalizing industrial hemp farming is something that other states like Madhya Pradesh, Himachal Pradesh, and Jammu & Kashmir are also thinking about doing soon (9).

Challenges

In India, hemp farming continues to encounter numerous obstacles and difficulties. Among them are:

Insufficient knowledge and instruction regarding the advantages and applications of hemp
Insufficient investigation and advancement of hemp cultivars

Inadequate technology and infrastructure for processing hemp
Inadequate certification and quality standards for hemp products

Insufficient market accessibility and demand for hemp-based products
Lack of cooperation between many stakeholders and policy support

But Still Hemp can be an asset

Hemp farming in India has a lot of promise despite these obstacles. India may reap numerous economic, social, and environmental advantages from hemp cultivation, including (10):

Creating revenue and job opportunities for farmers cutting back on reliance on raw material imports
Encouragement of rural empowerment and development
Increasing biodiversity and soil health

Conserving energy and water resources
Lowering emissions of greenhouse gases
Increasing well-being and health

Therefore, society, business, academia, and the government should all promote and encourage the production of

hemp (11).

Final Say in Hemp opportunity

The growth of human civilization is intricately linked to the history and evolution of hemp production. Nowadays, interest in this priceless crop is rising again as more people become aware of its advantages for the environment and its adaptability. To optimize the advantages of this adaptable plant, we must keep researching its applications, encouraging sustainable methods, and making sure that regulations are appropriate while we embrace the history and promise of hemp agriculture.

Disclosures

Acknowledgement: William J Clinton Foundation, United States, Prayas, a Community Project associated with IIT Kanpur.

Funding: Nothing to declare

Conflicts of interest: The authors declare no conflicts of interest

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