

Successful authorised therapy of treatment resistant adult ADHD with Cannabis: experience from a medical practice with 30 patients

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In Germany, the knowledge of medical benefits from Cannabis and Cannabinoids in a wide range of indications is mainly based on its illegal usage. This is especially true for patients with ADHD. Constantly fearing forensic consequences and social stigmatisation, they hide their self-medication. Since 2008 the German Health ministry has given approval to 500 patients with accompanying doctors to buy Cannabis flowers or extracts in a pharmacy. The official request must show that guideline-therapy with methylphenidate, amphetamine derivatives and atomoxetine had too many side effects or were not effective enough to treat key symptoms.

Good clinical evidence, but missing of controlled studies

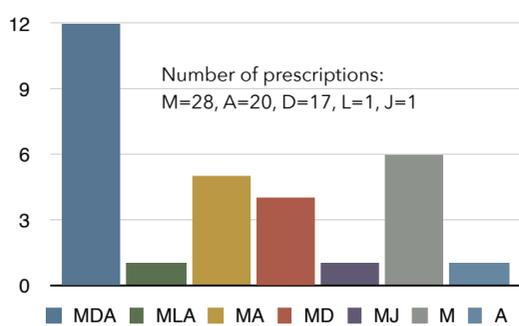
In most cases of ADHD, the consumption of Cannabis is seen as a comorbidity and interpreted as a treatment complicating factor in scientific studies. Beneficial aspects of „Medical Marijuana“ were seen in children with ADHD and autism spectrum disorders¹. Loflin et al.² showed that self-medication with Cannabis is more prevalent in the ADHD subtype with hyperactive-impulsive behaviour. This could indicate a role of cannabinoids in the regulation system.

Early symptomatic, late diagnosed patients

The medical certificates of 30 patients with adult ADHD, who were granted approval by the German Health Ministry to use cannabis flowers between 2012 and 2014 were analysed with regard to course of disease, previous treatment efforts and effects of self-medication with cannabis or therapy with cannabis-based medications. Mean age of patients (28 male, 2 female) at first visit was 30 years (range 21 to 51) with a mean of 4.6 additional diagnoses. ADHD-typical symptoms were in 80% noticeable at the age of 12. In 63% of cases ADHD was diagnosed only during adulthood.

Compliance despite intolerable side effects

All patients had a history of ADHD-medication, in particular all patients diagnosed in childhood [between 6 and 13 years of age] had previously been treated with **methylphenidate (M)**. Further pharmacological treatment was with **atomoxetine (A)**, **dexamphetamine (D)**, **lisdexamphetamine (L)**, **amphetamine juice (J)**.

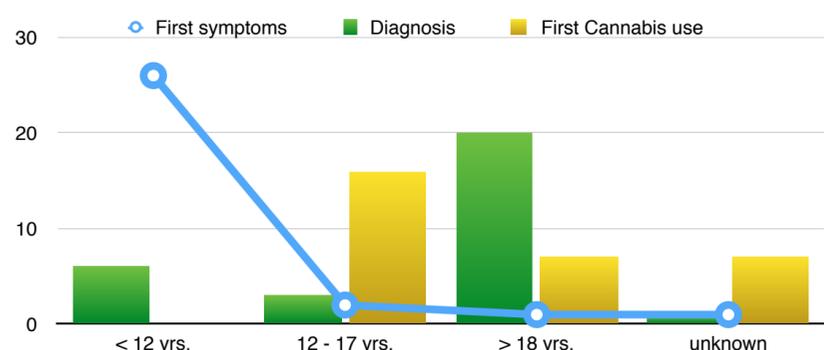


13 patients received three different substances, ten a combination of two and only seven had tried only one. Medication

was usually discontinued by doctors due to severe adverse effects and often ineffectiveness, a quarter of patients stopped unauthorised. Eight patients continued to take stimulants and combined them with cannabis, 22 patients used Cannabis only. Reasons for discontinuation were agitation, aggressiveness, depression, insomnia and severe loss of weight. Mostly mentioned negative aspect was a feeling of „being not oneself“ with the medication.

Cannabis as an afflicting helper

Although most of patients had consumed Cannabis as teenagers, it only appeared in 17% of cases in a context of polyvalent drug misuse. Alcohol was described as stimulus for aggression.



Five patients experienced a positive effect from Dronabinol. Cannabinoid medication is about 50 times more expensive than illegally bought Cannabis. Medical insurances covered in no case the costs.

Under Monotherapy with Cannabis, 73% of patients reached a ADHD-symptom level that allowed them to participate in working and social life. In 47% of cases, an improvement of concentration abilities were mentioned explicitly. Especially helpful appeared the reduction of agitation and impulsiveness. Nevertheless, the consumption of an illegal substance promoted anxiety. All individuals in this retrospective case study had longer periods of Cannabis abstinence and experienced a significant increase of symptoms.

Acceptance, clinical studies and meeting of costs

Asking their doctors about the treatment option Cannabis, only 27% of patients gained acceptance, whereas 57% of main attachment figures (37% parents) documented the benefits for the approval request. The anamnestic data from adult ADHD patients indicate that Cannabis use is not a result from a prolonged misuse beginning in teenage, but rather a re-, un- or lately discovered self-medication.

Being illegal is struggling, but avoidable through an official request. Catamnestic investigation and controlled studies are reasonable and necessary in the field of ADHD and Cannabis. The German Health ministry has planned to announce a law concerning the financial coverage in 2016.

¹ Hadland SE et al. in J Dev Behav Pediatr 2015 Feb-Mar;36(2):115-23

² Loflin M et al. in Subst Use Misuse 2014 Mar;49(4):427-34