## INPLASY PROTOCOL

To cite: Köck et al. Cannabinoids as therapeutics for psychiatric disorders in the young: a systematic review of randomized controlled trials. Inplasy protocol 202330017. doi: 10.37766/inplasy2023.3.0017

Received: 05 March 2023

Published: 06 March 2023

### Corresponding author: Patrick Köck

phatrick@gmx.at

### **Author Affiliation:**

University Hospital of Child and Adolescent Psychiatry and Psychotherapy, Bern.

Support: None.

Review Stage at time of this submission: The review has not yet started.

**Conflicts of interest:** 

None declared.

# Cannabinoids as therapeutics for psychiatric disorders in the young: a systematic review of randomized controlled trials

Köck,  $P^1$ ; Badek,  $A^2$ ; Meyer,  $M^3$ ; Klaassen,  $AL^4$ ; Walter,  $M^5$ ; Kindler,  $J^6$ .

Review question / Objective: P = Children and adolescents with psychiatric disorders; I = Cannabinoids as therapeutic product / medication; C = if randomised controlled trial, placebo; O = Evaluation of psychiatric symptoms (BDI for depression, symptom severity scales in case of ADHD or Autism Spectrum Disorders); S = Randomized controlled trials, controlled trials, case studies.

Rationale: Cannabinoids especially THC and CBD have gained increasing scientific interest. Various studies have been published assessing the therapeutic applications of cannabinoids in psychiatry. Several systematic reviews have been published for application of cannabinoids in psychiatry for adults, however there is no recent systematic review assessing applications for child and adolescent psychiatry.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 06 March 2023 and was last updated on 04 August 2024 (registration number INPLASY202330017).

### INTRODUCTION

Review question / Objective: P = Children and adolescents with psychiatric disorders; I = Cannabinoids as therapeutic product / medication; C = if randomised controlled trial, placebo; O = Evaluation of psychiatric symptoms (BDI for depression, symptom

severity scales in case of ADHD or Autism Spectrum Disorders); S = Randomized controlled trials, case studies.

Rationale: Cannabinoids especially THC and CBD have gained increasing scientific interest. Various studies have been

published assessing the therapeutic applications of cannabinoids in psychiatry. Several systematic reviews have been published for application of cannabinoids in psychiatry for adults, however there is no recent systematic review assessing applications for child and adolescent psychiatry.

Condition being studied: This review will focus on depressive symptoms, ADHD and autism spectrum disorders.

### **METHODS**

Search strategy: PubMed and Embase will be used to perform literature search. Data will be assessed according the PRISMA guidelines.

Participant or population: Children, adolescents and emerging adults.

**Intervention:** Cannabinoids are applied as therapeutic intervention.

Comparator: Placebo treatment or treatment as usal.

Study designs to be included: Randomized controlled trials.

Eligibility criteria: Study populations include children, adolescents and emerging adults. Included will be studies with study participants a mean age up to 25 years of age.

Information sources: PubMed, Embase.

Main outcome(s): Symptom load respective of disorder, BDI (Beck Depression Inventory), SCL-90 (Symptom Check List).

Data management: Results of literature research will be documented (Date, MeSH-Terms, Results) in Excel Files Literature will be saved within Mendeley Screening of the literature and assessment for eligibility will be performed by two reviewers.

Quality assessment / Risk of bias analysis: PRISMA guidelines.

Strategy of data synthesis: All identified and included studies will be analysed; Drug / Medication will be specified (amount / time of application); Outcomes will be quantified; Descriptive tables will be produced.

Subgroup analysis: No subgroups have been planned at this stage.

Sensitivity analysis: If applicable fixedeffects (symptom reduction) and randomeffects will be analyzed.

Language restriction: English, german, spanish.

Country(ies) involved: Switzerland.

Keywords: cannabinoids, child and adolescent psychiatry, treatment, therapy.

Dissemination plans: Results will be published.

### Contributions of each author:

Author 1 - Patrick Köck - Author 2 drafts the manuscript; Author 2 will perform literature research.

Author 2 - Andrzej Badek.

Email: phatrick@gmx.at

Author 3 - Maximilian Meyer.

Author 4 - Arndt-Lukas Klaassen - The author will assess literature and provides statistical expertise.

Email: arndt.klaassen@upd.ch

Author 5 - Marc Walter

Author 6 - Jochen Kindler