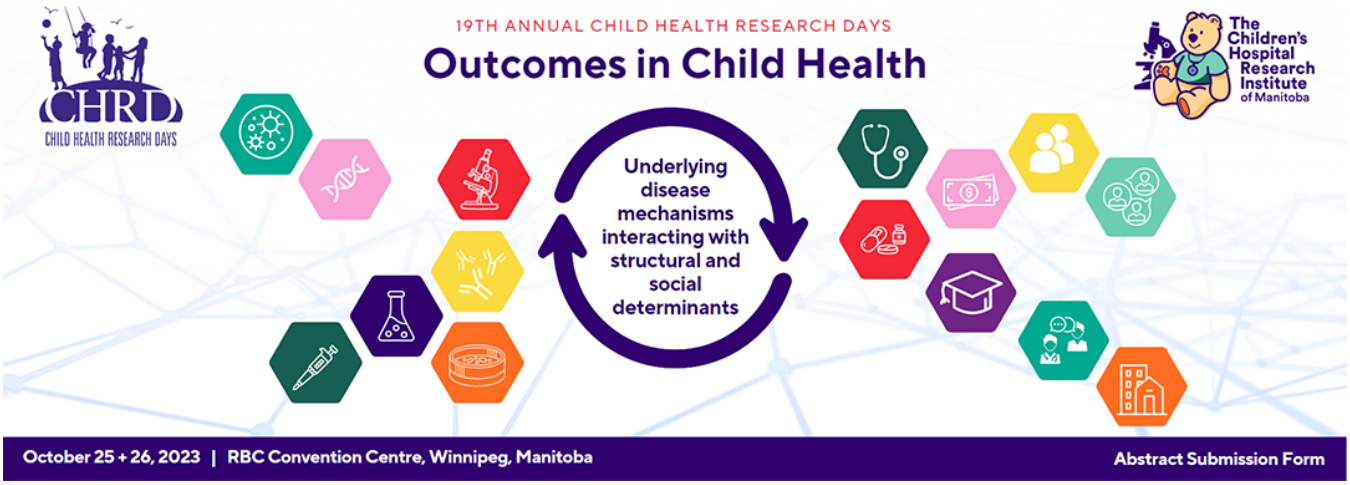


# CHRD 2023: Abstract Submission Form

**Submitter Name**
Manik Chhabra

**Presenter Name**
Manik Chhabra

**Presenter Status**
PhD Student

**Research Category**
Clinical

**Role in the project**
Design
Perform Experiments
Analyze Data
Write Abstract

**Title**
Cannabis products used for medical purposes by children: A living systematic review

**Background**
Cannabinoids used for medical purposes are gaining popularity in children because of their wide therapeutic applications.

**Objective**
We aimed to conduct a living systematic review (LSR) to map changing evidence related to cannabinoids continually used for medical purposes in children.

**Methods**
We searched four databases: MEDLINE, Embase, PsychInfo, and the Cochrane Library from inception to June 20, 2020 (with updates run on June 17, 2021, April 27, 2022, and April 24, 2023). Abstracts, full-text screening, and data extraction were performed in duplicates. Data on types of cannabis products, doses, formulations, frequency, routes of administration, indications, clinical, demographical details, and cannabis-related adverse events were extracted.

**Results**
Of 37,189 identified citations, 276 unique studies were included: 84 interventional studies, 131 observational studies, and 61 survey reports. In interventional and observational studies, common indications for cannabis-based products in children were refractory epilepsy (31%, n=26 and 31.3%, n=41, respectively), followed by cancer and cancer symptom management (11.9%, n=10, and 19.8%, n=26,

respectively), and dravet syndrome (7.1%, n=6 and 5.3%, n=7, respectively). The most common cannabinoids used in included studies were cannabidiol (61%, n=58) with a dose range of 2-50 mg/kg/day and tetrahydrocannabinol (5%, n=5) with a dose range of 2.5 mg/day to 10 mg/day. The withdrawal of study participants receiving cannabinoids was reported in more than half of interventional (59.5%, n=50). The most common cannabinoid-related adverse events reported by interventional and observational studies were somnolence (47.6%, n=40 and 13.7%, n=18, respectively), diarrhea (46.4%, n=39 and 10.7%, n=14, respectively), and elevated transaminases levels (16.7%, n=14 and 7.6%, n=10, respectively).

**Conclusion**
Our LSR provides comprehensive and regularly updated evidence regarding using cannabis-based products in children with different indications. Our findings will inform healthcare providers, policymakers, and parents about the potential risks and benefits of cannabinoid use in children.

# Authors


| Name | Email | Role | Profession |
|---|---|---|---|
| Manik Chhabra | chhabram@myumanitoba.ca | Presenting Author | Graduate |
| Mohamed Ben-Eltriki | Mohamed.BenEltriki@umanitoba.ca | Co Author | Graduate |
| Arun Paul | paulap@myumanitoba.ca | Co Author | Graduate |
| Omaymah Abulannaz | abulanno@myumanitoba.ca | Co Author | Graduate |
| Mê-Linh Lê | Me-Linh.Le@umanitoba.ca | Co Author | Other |
| Lauren E Kelly | Lauren.kelly@umanitoba.ca | Co Author | Associate Professor |