Article details: 2020	-0212
Title	Family attitudes and experiences with medicinal cannabis in pediatrics: an exploratory qualitative study
Authors	Marissa Gibbard BSc, Dawn Mount BA ECE, Shahrad R. Rassekh MD MHSc, Harold (Hal) Siden MD MHSc
Reviewer 1	Dr. Michael Rieder
Institution	Department of Clinical Pharmacology, Children's Hospital of Western Ontario
General comments (author response in bold)	This manuscript reports a small study exploring how parents perceive the use of medicinal cannabis in their children and the advantages/disadvantages/barriers they identify.
	The authors themselves acknowledge a key limitation of this manuscript, small sample size and limitation to a single centre. That being said, this is the only Canadian study of this nature to date and as such does point to directions in future research.
	One question as to Table 1 was the primary reason for use. "Cancer and chemotherapy side effect" are actually two reasons. Given that i) the parents acknowledge their health care providers lack knowledge, ii) cannabis has no demonstrated in vivo efficacy against cancer and iii) despite this there is a persisting urban myth that some types of CNS cancer respond to cannabis, did any of the four families whose children were living with cancer believe that medicinal cannabis was a potential cancer therapy as opposed to dealing with the side effects of conventional chemotherapy?
	Thank you for your comments. Two out of four parents of children with cancer were hopeful for these anti-tumor effects in addition to impacts on pain, nausea and appetite. We have added details in our Findings, Participants section (page 5/6), and clarified our language in Table 1.
	Cost is cited as an issue. Can the authors at least ball park what these might be for example for a month?
	We have now included Canadian dollar amounts in text and in the quotations in Table 3.
	As part of the discussion it might be worth considering the large amount of disinformation available on the 'net as to the efficacy and safety of cannabis and the very real issue of conflict of interest when information is obtained from cannabis retailers. We regulate cigarette and pharmaceutical advertising, after all, for a reason and there is no basis to suspect that cannabis companies are any less capable of creative marketing than tobacco or drug companies.
	This is a very important point and we have further emphasized this context in our interpretation section (page 10 and 11).
Reviewer 2	Dr. Fuchsia Howard,
Institution	University of British Columbia
General comments (author response in bold)	Thank you for the opportunity to review this interesting, novel, and important research. While some of the findings are interesting, I have concerns as follows:

1. Introduction: Please provide a greater description of what a dispensary is. For international readers, they might equate this with a pharmacy.

We have added clarification of a dispensary to our introduction.

2. My main concern is the claim that an Interpretive Description approach was used as the guiding methodology. The intent to generate clinically relevant knowledge aligns with this methodology, but other study aspects do not, including the smaller sample, limited attention to striving for maximal variation, mention of data saturation, and limited emphasis on interpretation/as opposed to description. There is also the false claim that thematic analysis was performed following an Interpretive Description framework. This methodology provides no such framework. Rather than state that this was an Interpretive Description study, I encourage the authors to describe what they did in greater detail and use terminology that aligns. It is not clear but was it a descriptive qualitative study? Or something else?

Thank you very much for your valuable insight and expertise regarding these qualitative methods. We have reconsidered our approach and agree that our methods are more in alignment with a qualitative descriptive approach rather than Interpretive Description. We have revised our methods section accordingly and added more detailed description of each step in the analyses (page 5). We have clarified that recruitment was intended to fill a sample size quota.

3. Sample: Since the participants were actually the parents, then parent demographic information is important to be able to understand how the study might provide insight in relation to other parents.

We have added parent information to Table 1, and included anonymous identities to link with quotations in Table 3. This provides some insight of the parent's demographic in regards to quotes.

4. Data Collection and analysis: Please provide greater detail.

We have updated these sections accordingly (page 5) to provide context of how interviews were conducted and individual steps/reasoning for analyses. We have also detailed additional interpretive steps to address your comments below.

- 5. My second main concern is the form of the findings: The findings offered some important insights but could be greatly improved through further analysis and organization of the data.
- •The findings are not necessarily explicitly tied to the study stated objective. I suggest that the authors orient their findings to align with the stated objective, especially in the 1st paragraph of the findings. Moreover, the theme headings do not really offer interpretations that speak to the study objective. For example, how does child and family context (theme 1) provide insight into the attitudes and experiences of parents? Similarly, how does decision process (theme 2) fit in with attitudes and experiences? Perhaps a reframing of the themes and re-orientation

of the findings to re-framed themes would help to ensure the study research questions were adequately answered.

Thank you for this insightful comment. We have reorganized our findings to perform an additional interpretation step as suggested in your comment below. Our themes have been restructured with reframed headings to more meaningfully represent family experiences in relation to our objective. Theme 1 was very important as it conveyed family desperation and reasoning for pursuing cannabis. This has been clarified in the theme name (Child and Family context/cannabis as a last resort) and text (page 6/7). This theme was restructured to include sub themes of condition severity, social acceptance and stigma, and parental love and responsibility. This provides a richer description of individual contextual factors leading parents to pursue cannabis as a last resort.

We have also restructured our second theme (previously called Decision Process), to clarify the focus on information (or lack thereof) that informed parental decision making, and to highlight the complex and often uncertain environment in which decisions were made (page 7). This restructured theme is now titled "Varied information sources informed decision making" and encompasses communications with suppliers, advocates, and health care providers, parental expertise, and desire for research.

•Overall, the findings provide beginning descriptions of parent's use of cannabis for their children but are lacking in rich detail and interpretation. The table, while helping to understand the ideas presented in the paper take away from a more nuanced, detailed description of what the experience is really like for parents. I suggest the authors undertake a further interpretive step in the analysis to try to describe in greater detail the findings.

We appreciate your expertise and, as such, have furthered our interpretation of the data. This involved reorganizing sub-themes to reframe richer overarching themes that directly reflect participant experiences. Our theme headings of Perceived Effects, and Cannabis as an ambiguous medicine have remained unchanged. We have described our full methodology including additional interpretation in the manuscript (page 5).

6. Interpretation: There are some data presented in the interpretation (1st paragraph) that is better suited to the findings section.

This was incorporated into Findings section, theme 1 (page 7) when restructuring our themes.

Reviewer 3 Institution General comments

Lauren Kellv

Thank-you for the opportunity to review "Family attitudes and experiences with medicinal cannabis in pediatrics: An exploratory qualitative study" which conducted semi-structured interviews with 10 parents in Vancouver who were either attended the oncology clinic or hospice and reported using cannabis for medical purposes. This study begins to shed light on some important barriers to safe and effective pharmacotherapy with cannabinoids such as a perception of natural + safe, lack of

University of Manitoba Faculty of Health Sciences, Pediatrics and Child Health

information from health care providers and products of uncertain quality.

Page 3 Line 17-19 – "We use the term medicinal cannabis for any combination of CBD and THC." requires clarity – is the definition based on intended use or based on receiving an authorization from a health care provider, thus accessing Medical Cannabis? Or health products containing cannabis (pharmaceutical grade)? Or all of the above?

Page 3 Line 24 – pain is the most commonly reported use of cannabinoids in adults, and a recent systematic review and meta-analysis supported benefit of THC containing products over placebo (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7031792/#bibr64-1179544120906461)

Page 3, Line 49 – cannabis purchased from dispensaries often come with detailed information on product contents. The term artisanal should be defined. Individuals with authorizations can also delegate someone else to grow for them. Recreationally available cannabis is regulated.

Page 4, Line 15 "Initiative to use cannabis for children without clear efficacy and safety data, along with increasing access in Canada, compels a better understanding of family perspectives" should be re-worded. Initiative from whom? Where is there referenced data of increasing interest?

Methods and analysis

- Purpose and research question were clearly stated.
- Selection and demographics of participants was described and sampling was purposive.
- How was the interview guide validated to ensure it was meaningful/sensitive to families?
- Details on the analysis of qualitative data should be strengthened, e.g. how was the rigour, credibility, validity and trustworthiness of the qualitative analysis maintained?
- Assumptions and biases of researcher team was not stated (neutrality of research team)
- Was member checking performed to improve credibility? (e.g. sharing themes with participants post-analysis and asking was this what you meant?)
- Decision trail of how themes were derived was missing including the rules for transcribing the data into codes

Results

While table 1 presents the patient demographics and reason for use, it would be helpful for the reader to frame the reporting by explicitly stating that there were four parents of children with cancer and six parents of children with neurological or neurogenetic conditions using cannabis for epilepsy.

Page 11-line 31 – What are illegal sources? are recreational products considered "illegal" in this context? As they are not by law permitted to be sold to children. Cannabis products from dispensaries are subject to quality inspections and labelling standards.

	Limitations An additional limitation is evaluating the social and cultural context and bias around cannabis use which may further have contributed to selection bias.
--	---