ABSTRACT

INTRODUCTION: The current study investigated providers’ perceived barriers, supports, and need for adopting a screening, brief intervention, and referral to treatment model (SBIRT) intervention related to cannabis reduction into their community based primary care clinics.

METHODS: Eleven pediatric primary care providers from regional community-based clinics participated in focus groups discussing a proposed adolescent cannabis use SBIRT reduction intervention, perceived need, and potential barriers to implementation within their clinic.

RESULTS: Seven primary themes emerged regarding barriers to implementing a cannabis reduction SBIRT in primary care including provider ambivalence to adolescent cannabis use.

CONCLUSION: Further research is needed to understand evolving provider perceptions of adolescent cannabis use and how these views impact the adoption of SBIRT for the reduction of cannabis use among their adolescent patients.

KEYWORDS: SBIRT, cannabis, marijuana, provider ambivalence, primary care, adolescents

Introduction

As medical and recreational cannabis use has become legalized in much of the United States, acceptance of cannabis use has increased and perceptions of cannabis’ associated risks and harm have decreased among adults and adolescents.1,2 These shifting norms and attitudes toward cannabis have been identified as an underlying cause of increases in adolescent cannabis use2 and the decreasing cannabis disorder treatment utilization and perceived treatment need during the past decade.3 Pediatric medical providers can play an important role in the prevention of adolescent cannabis use since substance use during adolescence has been linked to altered brain development, heightened risk behaviors, and increased likelihood of developing later substance use disorders.4,5 The American Academy of Pediatrics recommends that pediatric providers screen for alcohol, tobacco, and other drugs, including cannabis, during adolescent well visits.6 Screening, brief intervention, and referral to treatment (SBIRT) is a model used by providers for addressing substance use behavior that shows promise for adolescent patients,7 although pediatric providers’ use of SBIRT has been underutilized and inconsistent.8,9

Prior research on barriers to SBIRT implementation in pediatric healthcare have identified patient confidentiality, limited time with youth, lack of knowledge of substance use screening tools and treatment, and reimbursement concerns as barriers to SBIRT adoption.8 Few studies have investigated providers’ perceptions of treatment need even though need is an integral part of the service adoption framework outlined in the Anderson Behavioral Model of Health Services, a theoretical framework developed to evaluate the use of health services. This theory posits that utilization of health services is driven by 3 primary components: enabling factors (eg, time availability), predisposing factors (eg, attitudes and cultural norms), and need factors (eg, perceived need, evaluated need, and population need).10 The current study investigated providers’ perceived barriers, supports, and need for adopting SBIRT related to adolescent cannabis reduction in their clinical settings.

Method

Pediatric providers from regional community-based clinics were invited to participate in focus groups discussing a cannabis use reduction SBIRT intervention and potential barriers to implementation within their clinic. We recruited providers from the Seattle Children’s Care Network (SCCN), a diverse network of independent regional pediatric primary care centers, aiming for a suggested sample of 12 providers to achieve saturation.11 A study flier was emailed to clinic leaders inviting all patient-engaged providers and staff (eg, pediatricians, nurses, and clinic managers) to participate. Three virtual 1-hour focus groups took place, with 7 pediatricians, 2 pediatric nurse practitioners, 1 registered nurse, and 1 practice manager, representing 3 different...
clincs. Participants were compensated $50 for their time. Guiding questions were used in semi-structured interview format (led by authors CM and DW) following a brief presentation of the cannabis SBIRT intervention. Interviewer questions included “Can you tell us about how adolescent marijuana use shows up in your daily practice?” “Do you see a need for this intervention among your patients?” and “Do you currently encounter or foresee any obstacles to implementing SBIRT interventions within your practice?”

An inductive thematic content analysis was used to identify themes within the data using an iterative process. Focus group transcripts were generated through the virtual chat room and reviewed for accuracy by author AKV before being coded. Initial codes were developed by 3 authors based on themes from prior research. The authors met to review and reconcile coded transcripts and to ensure consistency and agreement on code interpretation. Any question regarding coding was discussed as a team until consensus was reached. Once coding was complete codes were consolidated into thematic groupings. This study was approved by the Institutional Review Board of Seattle Children’s Research Institute.

Results
Seven themes emerged regarding barriers to implementing a cannabis reduction SBIRT in primary care: time limitations; billing/reimbursement; confidentiality issues; resource constraints & training needs; more concern for other substances; patient/parent ambivalence to cannabis use; and provider ambivalence toward cannabis use. The theme of time limitations was characterized by provider’s noting the lack of time to engage with youth about additional topics and the limited time allocated for well checks within their organization as barriers to adopting the intervention. Barriers also appeared in the form of billing and reimbursement roadblocks with providers expressing a lack of clarity of how to bill for SBIRT and provider concern for how billing may breach adolescent patient confidentiality. Providers identified confidentiality issues with billing and logistical barriers (eg, transportation) with scheduling confidential follow up visits. The first 3 themes, time limitations, billing/reimbursement issues, and patient confidentiality concerns most aligned with Anderson’s concept of enabling factors.

More consistent with Anderson’s predisposing factors were themes of resource constraints and training needs. Providers noted the lack of both internal (to their organization) and external (in their community) resources for adolescents in need of further treatment once screening had identified an issue. The lack of available resources and insufficient training in interventions like motivational interviewing were hallmarks of this barrier.

Lastly, reflective of Anderson’s need-based factors we noted 3 areas of ambivalence toward needing a cannabis intervention captured by themes of providers’ prioritization of other substances, patient-parent ambivalence to cannabis use, and providers’ own lack of motivation to address adolescent cannabis use in practice. These themes were captured by sentiments noting that parental use and acceptance lowered providers’ own motivation to address adolescent cannabis use, the lack of colleagues interested in participating in the current study due lack of general concern about adolescent cannabis use or feelings that they could not impact it, and statements that captured a minimization of the impact of cannabis use on the adolescents’ daily life. Table 1 presents example excerpts of thematic provider identified barriers.

Discussion
Themes of time limitations, billing/reimbursement issues, confidentiality concerns, resource constraints, and concern for other substances echo those found in other literature on noted barriers to SBIRT implementation. The replication of these findings underscore the need to address these core issues to promote SBIRT adoption into pediatric health care settings. The themes highlighting patient/parent and provider ambivalence toward adolescent cannabis use reflects a barrier for SBIRT implementation in primary care settings that has not previously been described and point to potentially new barriers to SBIRT adoption that require further study.

Despite the rapidly evolving changes to cannabis use treatment utilization, decreasing perceptions of cannabis related risks and harm, and increasing acceptance of cannabis use in the general population, little attention has been given to primary care providers’ view of adolescent cannabis use and their perceived need for treatments that address this issue. One study from France found that general practitioners working with adolescents were largely ambivalent to their patient’s cannabis use and similar provider ambivalence has been found among obstetricians’ views of their patient’s perinatal cannabis use suggesting that, like the general population, health care providers’ perceptions of cannabis use may be becoming more accepting. More investigation is needed to understand evolving provider perceptions of cannabis use and how these views impact assessment and treatment provision for their adolescent patients.

Our study is among the first to investigate provider perceived need for cannabis treatment as a potential barrier to SBIRT implementation in a pediatric health care setting. The study is limited by a small sample size (n = 11), although even with this sample size we were able to achieve data saturation, replicating previously identified thematic barriers, and inductive thematic saturation identifying cannabis ambivalence as a new barrier. Findings from the current study, from a state with legalized retail cannabis, highlight that pediatric provider ambivalence toward adolescent cannabis use may be a barrier to SBIRT implementation in primary care that is often overlooked and understudied, and further research is needed.
Table 1. Barriers to implementation of cannabis focused SBIRT in primary care clinics.

| THEME | EXAMPLE EXCERPTS |
|-------|------------------|
| **Enabling factors** | |
| 1. Time limitations | “It’s hard to, I’ll be honest, in the well child check, we do these screening tests and it’s hard to spend a large amount of time asking about it (marijuana). . .but it’s hard to do sort of ad hoc in the middle of a well child check when they want their sports form filled out and they have a knee pain and they want acne treated and they want their birth control.” “Uh, I don’t think the conversation even starts because people don’t have time to deal with it (marijuana) and we don’t know who to refer to and how you are going to tell the parents.” |
| 2. Billing/ reimbursement | “It’s not like we have extreme financial pressure clinic, but we’re supposed to bill the time that we use. So, time just gets eaten up, there’s no reimbursement for it, or incentive to do it. So, it’s just like out of your own desire to help. Which I mean, hopefully we all have. But there’s yeah, there’s not much incentive to do it.” “We’re going to be billing for it, and so then, what does that billing look like? How? What are the parents going to be seeing on their statements? How I mean, we would treat it like any other teen confidential appointment. But then what if the kid doesn’t want their insurance getting billed for the visit? Do we have a cash price and will that make it?” “So, I think that if you can get people to care about it (marijuana use), if you can help us bill for it, if you can figure out a way for us to confidentially bill for it. Some way that doesn’t label it as marijuana use disorder, but maybe labels it as like you know, risk reduction counseling or something like that. And then we just say oh, we counsel our teens about this stuff.” |
| 3. Confidentiality issues | “A lot of this stuff is confidential from the parents. So then how do you label this appointment as a marijuana reduction appointment when the parents don’t even know they’re smoking marijuana?” “. . .you just can’t guarantee confidentiality the minute you start billing insurance.” “They’re also the confidentiality piece right there. I don’t know why I didn’t think about that, but like you have a kid who divulges this information to you, they don’t really want to talk about it with their parents and so then trying to figure out how to get them back to do some motivational interviewing intervention would be difficult.” |
| **Predisposing factors** | |
| 4. Resource constraints & training needs | “The other thing, that sort of, in the current time, I think of is resources. I mean, we can’t get kids who are in really bad shape into therapy in a 6 to 8 week time window, and so to say that we’re providing resources that don’t exist feels disingenuous.” “We’re not using any sort of screening tool. It’s sort of this built into our templates for the teen talk with the parents out of the room.” “I can always use refreshers and motivational interviewing.” |
| **Need factors** | |
| 5. Concern for other substances | “I definitely have kids admit to me more about alcohol and vaping than marijuana. It could also be they’re, just not really telling us. . .if they’re vaping and drinking alcohol they’re doing marijuana too.” “Probably alcohol would be the bigger one that they’re using.” “I’ve had more teens, kind of, I think, concerned about marijuana use, and although less so in the last year. . .” |
| 6. Patient/Parent ambivalence to cannabis use | “Parents do (use marijuana) so I think sometimes parents don’t see their own behaviors as being triggering event for their children.” “So, we’re just caught between such a rock and a hard place where nobody cares, like the parents don’t.” “We screen for it (marijuana), but then I think there’s a big disconnect between whether it’s a problem or not, so they’re (the patient) really ambivalent in their use. They think it’s legal. It’s totally fine. I’m gonna be honest, there’s a lot of adults and parents here who do it a lot, and I think that the more likely your parents are doing marijuana, the more likely or ambivalent about doing it (the teen is).” |
| 7. Provider ambivalence | “Like if we can’t bill for this (marijuana reduction SBIRT intervention), there’s really low incentive in primary care in general, outside of an academic setting, for people to even care about this intervention. Like I wish that everyone cared about marijuana use, and I care about it, and XXX cares about it, which is why we’re here, but you’ll notice that no other doctors are here.” “I mean, maybe it’s our role to say this (adolescent marijuana use) isn’t a good idea, but I don’t know? I guess I generally haven’t passed judgment unless it’s really interfering with their, you know, school, life or personal life.” “A lot of kids don’t consider it (marijuana use) a problem, and for many kids it (marijuana use) isn’t a problem.” |

All text in (parenthesis) added by study personnel for clarity. Locations and individual names redacted as XXX to ensure participant confidentiality.

**Author Contributions**

All authors contributed to the study conception and design. Material preparation and data collection were performed by AKV, CM, and DW. Analysis was conducted by AKV, CM, and DW. The first draft of the manuscript was written by AKV and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

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