Exploring parental perceptions of psychosocial screening in paediatric emergency departments

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Abstract

Objective: To explore parental perceptions of psychosocial screening in the paediatric emergency department and identify post-screening barriers to accessing mental health care.

Methods: We conducted a qualitative study during the 30-day follow-up period of a larger prospective cohort study. Eligible youth and their accompanying parent/guardian first completed psychosocial self/proxy-screening using the MyHEARTSMAP tool and then received a standardized clinical mental health assessment. If the MyHEARTSMAP assessment provided youth with mental health resources recommendations, their parents were invited to a follow-up session. Thirty days (±5 days) after their ED visit, parents participated in a virtual interview to reflect and share their attitudes, perceptions and thoughts around the screening and mental health care-seeking process.

Results: Of the 171 participants who received resource recommendations during their ED visit, 124 parents (72.5%; 95% CI 65.2–79.1%) completed the follow-up interview. Most parents endorsed positive perceptions of the screening process, describing it as an 'eye-opening' process that 'sparked conversation'. Most participants (74.2%; 95% CI 65.6–81.6) agreed with the resource recommendations they received. In terms of resources-seeking, only 41 participants (33.1%; 95% CI 24.9–42.1) attempted to access recommended supports. Families generally felt identified concerns were mild and 'not serious enough' to warrant resource-seeking, though many expressed an intention to seek care if concerns escalated.

Conclusion: Perceptions of psychosocial screening in the ED were favourable and encouraging among participating parents of youth screened positive for psychosocial issues. Despite positive attitudes, only a fraction of the families invited to follow-up attempted to access care. Mental health may be perceived as low priority for many families, signifying the need for improved education and awareness building on the importance of early intervention.

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Introduction

Universal screening of psychological and social (psychosocial) issues in youth can support early identification and management of mental health concerns (Biros et al., 2008; Scott et al., 2006). Given the sizable proportion of youth presenting to the emergency department (ED) with physical or medical complaints who also have underlying, unidentified psychosocial concerns (Downey et al., 2012; Grupp-phelan et al., 2007; Kelly et al., 2003; Virk et al., 2020), the ED may serve as an opportune access point for mental health screening (Downey et al., 2012).

In particular, self-/proxy-screening addresses common barriers associated with clinician-administered screening (e.g. personnel/resource/time constraints) (Chun et al., 2013; Cronholm et al., 2010; Lavigne et al., 2016). Self-screening can also increase disclosure by providing patients more privacy and time to articulate their concerns (Bradford & Rickwood, 2015a; 2015b). MyHEARTSMAP is a recently developed digital self-administered psychosocial screening tool that maximizes these advantages (Virk et al., 2019). MyHEARTSMAP has previously been evaluated for its content validity and psychometric properties in community and clinical youth populations. Among youth and guardians presenting with non-mental health-related complaints to the ED, MyHEARTSMAP displayed 92.7% and 93.1% sensitivity in detecting psychiatric concerns, and 98.5% and 98.9% specificity, respectively, in detecting youth with no or only mild issues (Doan et al., 2020). High sensitivity (99.5%) was also reported among youth explicitly seeking mental health care in the ED (Li et al., 2021).

In order for psychosocial screening in the ED to be truly advantageous, it should improve both detection of mental health concerns and downstream resource-seeking behaviours to fulfil identified needs. For most youth, parent or primary caregivers play a central role in determining their access to care. Thus, parental perceptions of the acceptability of psychosocial screening may be a critical predictor of their intention to engage with universal screening and subsequently seek mental health care (Sekhon et al., 2017). It remains unclear how acceptable parents perceive psychosocial self-screening in the ED environment and receiving mental health support recommendations to follow-up with. This understanding may be crucial to further refining screening intervention efforts and families' engagement with mental health care.[24] The current study aims to explore parental perceptions around the acceptability of completing universal psychosocial screening during their child's ED visit and their subsequent experience seeking mental health resources.

Methods

Study design

We conducted a qualitative study during the one-month follow-up period of a two-centre, prospective cohort study aimed at evaluating the utility of ED-based universal psychosocial screening (Doan et al., 2020). Ethics approval was granted by our institutions behavioural research ethics board. Written informed consent from a parent/legal guardian and assent from the participating youth was obtained prior to study enrolment.

Outcome measures

Our primary outcome was to assess parents' perceived acceptability of ED-based psychosocial screening. We gauge acceptability by broadly exploring parents' perceptions and attitudes towards

screening with MyHEARTSMAP (e.g. cognitive and emotional responses) and any subsequent mental health care-seeking.

Study setting and population

The cohort study was conducted at two paediatric emergency departments at quaternary care-level medical centres between December 2017 and February 2019. We included all youth aged 10–17 years and their parents, presenting to the ED with a non-mental health-related complaint, during a study shift. Patients were excluded if they presented with critical care needs or severe physical and/or cognitive disability (e.g. dependent on others for activities of daily living), were unable to communicate (e.g. consent, assent) in English, did not have a parent present to provide consent, or the parent would be unavailable to complete 30-day follow-up. Additional study population and demographic information have been previously published (Doan et al., 2020). The study population of the current qualitative component included caregivers of youth aged 10–17 years who presented to the ED with a non-mental health-related complaint, screened positive for a psychosocial issue, and were provided psychosocial resource recommendations by the MyHEARTSMAP tool.

Study procedure

Enrolled youth and/or guardians completed a psychosocial self-/proxy-assessment using My-HEARTSMAP. After completing the self-administered portion, a research clinician blinded to the participants' MyHEARTSMAP results, conducted a clinical psychosocial interview. If the clinician's assessment revealed acute or severe psychiatric issues, the patient's treating physician was notified for immediate management in the emergency department. Otherwise, families of youth who screened positive for psychosocial concerns received their screening report, which included a resource information pamphlet to support them in accessing MyHEARTSMAP-recommend services. The research clinician was briefly available to address parents' questions about accessing care, however, no further counselling or therapeutic intervention was introduced by the clinician.

Within 30 days (±5 days) of their ED visit, parents who received psychosocial resource recommendations for their child participated in a semi-structured telephone interview. During this interview, a research clinician probed the screening and care-seeking experience. Parents were also asked whether they had attempted or successfully accessed recommended care. Interviews typically lasted approximately 25–30 minutes. To ensure accessibility and responsiveness, parents also had the option to complete an emailed questionnaire instead of the telephone interview.

Analytic approach

We qualitatively assessed acceptability based on parents' interaction with the screening tool/process. An abductive approach was taken to qualitative content analysis (Assarroudi et al., 2018). Our initial exploration, understanding, and coding of the interview data was inductive and rooted entirely in the raw interview data. All participant responses were coded into an initial set of low-level categories with minimal abstraction. After deriving an initial coding scheme, we noted many of our low-level categories (e.g. specific parent-reported barriers to care, screening concerns) situated themselves well within Sekhon et al.'s Theoretical Framework of Acceptability (TAF).

The TAF outlines that intervention acceptability consists of seven components: affective attitudes, self-efficacy, burden, ethicality, coherence, perceived effectiveness and opportunity costs associated with the intervention (Sekhon et al., 2017). We applied the TAF to our initial coding

structure and analysed participant responses in relation to these theory-based categories. However, we only retained TAF constructs aligned with participant responses, to ensure we maintained proximity to our initial, data-driven codes. For each construct, we provide representative quotes, followed by a non-descriptive identification number unique to each parent participant (e.g. _P1_). Demographic data was summarized using descriptive statistics. We report frequencies and categorical variables as proportion with 95% confidence intervals. Qualitative analyses were conducted in NVivo 12.0.

Results

Of the 760-participating youth and families who presented to the ED with a non-mental health-related complaint, 276 (36.3%) had an underlying psychosocial issue. Of these youth, 105 (38.0%) already had psychosocial resources in place to support them. Caregivers of the remaining 171 youth (22.5%) were provided with new resources and invited to participate in a one-month follow-up interview to discuss their thoughts on screening and post-screening experiences of accessing care. Of the invited families, 47 (27.5%) were lost to follow-up. Additional details on participant flow are reported in Figure 1. Demographic information is summarized in Table 1.

Parental attitudes towards screening

Parents generally held positive attitudes towards screening with MyHEARTSMAP. Many described it as an _'eye-opening'_ experience that initiated _'open communication'_ and _'sparked conversation'_ around mental health. One parent described screening as:

> _"A very nice conversation starter for our daughter and I, as well as my husband…We realized there were quite a few spots of missing communication as well as lacking communication. Which we all know, is key to helping the family gel together."_ [P1]

Many also felt _'surprised'_ by the issues that were identified through screening and felt My-HEARTSMAP helped them realize _'the bigger issues'_ behind particular symptoms. For example, some parents were previously unaware their child was being _'severe[ly] bullied',_ _'did not have friends at school'_ or that they had _'thoughts on suicide'._

A few disagreeing parents had issues with the assessment process, indicating either a lack of rapport and trust to gain accurate assessment or they misunderstood questions. One parent expressed screening-related issues, indicating they _'came to ED for [a] physical problem [and] don't see why there were any mental health concerns identified'._

Despite these difficulties, parents largely maintained positive views around screening with MyHEARTSMAP in the paediatric ED, describing it as _'helpful for families'_ as many parents _'are still too embarrassed to address them'_ without a formalized screening process.

Perceived effectiveness of screening

Most parents (74.2%) agreed with the support recommendations they received, describing them as relevant and useful. While 22.6% of parents formally scored as disagreeing with service recommendations, a majority still felt the services themselves were helpful but were simply not applicable for their child at this time. These parents indicated the resource information may be useful in the future. One mother described that:
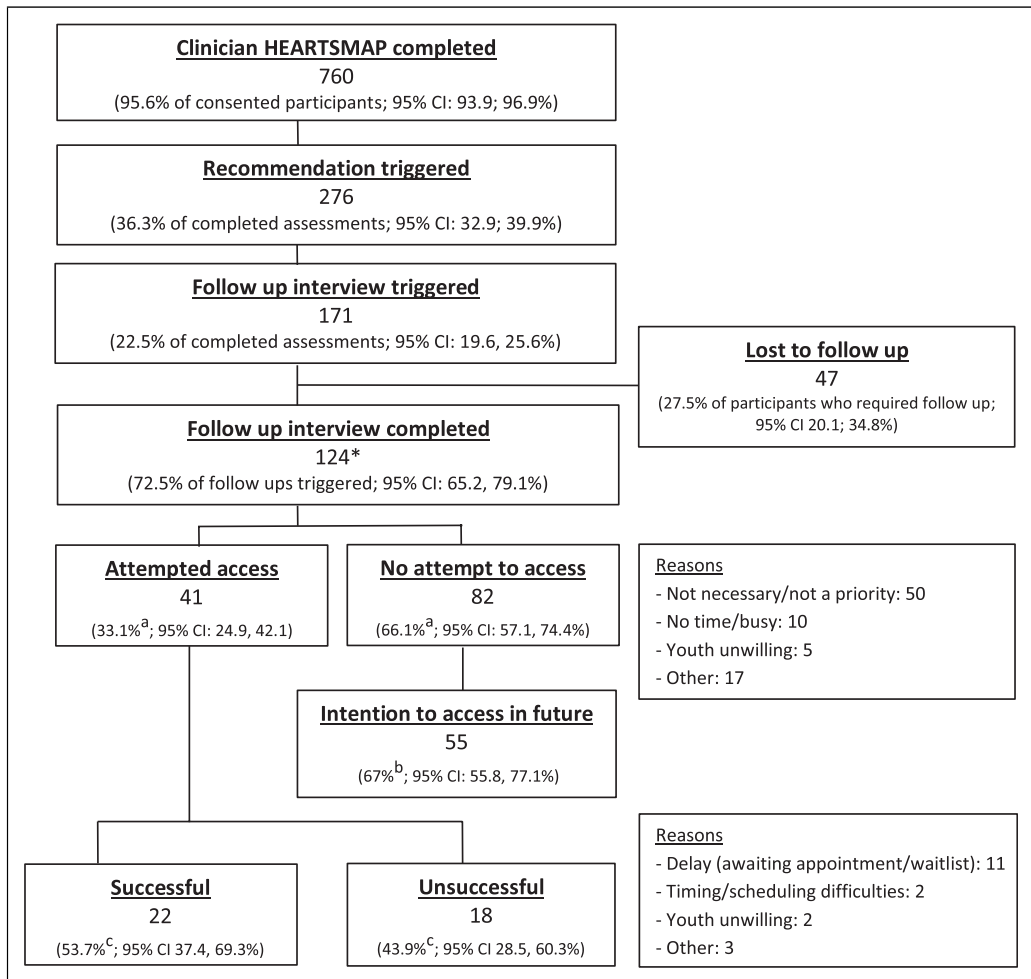
Figure 1. Participant flow and service access experiences at 1-month follow-up. *One participant completed follow-up, however, it was unclear from their survey responses whether they attempted to access care. (a) Percentage of those who completed follow-up sessions (*N* = 124). (b) Percentage of those who did not attempt to access tool recommended supports (*N* = 82). (c) Percentage of those who did attempt to access tool recommended supports (*N* = 41).

> *"[She] can see how the recommendations were triggered, but at the same time, [she] feels [her] daughter is not struggling right now and does not really need help through community youth mental health team[s]. [She] also feels that [her daughter] has come a long way with the struggles." [P5]*

One third of participants who received support recommendations attempted to access care, over half of whom were ultimately successful in accessing services within one month (Figure 1). Those that accessed care generally involved their primary care provider(s) (e.g. family doctor, paediatrician), who they found to be receptive, *'actively listen',* and facilitate care referrals.

Table 1. Patient demographic characteristics of youth whose parent/guardian took part in a 1-month follow-up structured interview following mental health screening in the emergency department.

Demographic characteristics	Participants[a] N (%)
Total	124
Study site	
1	26 (21.0)
2	98 (79.0)
Complaint category	
Medical	87 (70.0)
Injury/Trauma	37 (30.0)
Age (years)	
10–13	61 (49.0)
14–17	63 (51.0)
Gender	
Female	71 (57.0)
Male	53 (43.0)
Ethnicity	
European descent	71 (57.0)
Multi-ethnic	17 (13.7)
Chinese	7 (11.6)
South Asian	6 (5.0)
Aboriginal	6 (5.0)
Other	17 (13.7)
Acuity of presentation (CTAS)[b]	
Resuscitation	1 (0.8)
Emergent	17 (13.7)
Urgent	64 (51.6)
Less urgent	41 (33.0)
Non-urgent	1 (0.8)
Average annual income[c] (person/year)	
Quartile 1	38 (30.6)
Quartile 2	21 (16.9)
Quartile 3	37 (29.8)
Quartile 4	28 (22.6)

[a]Study participant who completed one-month follow-up and participated in a structured interview.
[b]CTAS, Canadian Triage and Acuity Score.
[c]Annual individual income based on the participant's postal code categorized by quartiles. Site 1) Q1: < $51 860.25; Q2: $51 860.26–$63 820.50; Q3: $63 820.51–$75 055.25; Q4: > $75 055.25. Site 2) Q1: < $41 186.83; Q2: $41 186.84–$47 298.85; Q3: $47 298.86–$54 898.88; Q4: > $54 898.88.

Perceived barriers with screening

Attempting to access care. Nearly 66% of youth and parents who triggered recommendations did not attempt to access care. The most common reason parents did not attempt to access MyHEARTSMAP-recommended resources was the perception that care was not needed. For example, several parents felt the supports were *'not necessary at this time',* or that the concerns are not *'serious enough that they warrant [primary care provider] intervention'.* Other reported reasons included the child was not ready to access care and *'not in the right frame of mind for it to*

work', and the medical issues related to families' ED visits 'take precedence' over mental health concerns.

Despite this, nearly half of all parents expressed an intention to access care in the future, with a handful in the process of accessing care 'as soon as possible'. A common notion was that My-HEARTSMAP had helped them become familiar with available resources that they could access 'if and when [they] feel [the child] needs it'. Most intend to initiate resource-seeking 'when necessary' and 'if things escalate/worsen/ become more severe' for their child's mental health.

Accessing care

Among the 41 participants who attempted to access care, 18 (43.9%) were unsuccessful. These caregivers described several individual- and system-level barriers that hindered their attempts. The most common system-level barrier was waiting to be seen by a health-care provider. Many parents expressed frustration with 'lengthy wait times' for mental health services, characterizing these as the 'uphill battle' after screening, despite positive views of the services and providers in question. Common, individual-level barriers to care included time constraints and conflicting schedules. Rarely did parents indicate finances (4%) and transportation (3%) as barriers.

Discussion

Our study demonstrates multi-faceted evidence of caregivers' acceptability for universal psychosocial screening in the Canadian paediatric acute care setting. Participating parents held a positive affect towards screening, finding it sparked family communication and dialogue around mental health and heightened awareness of their child's mental health needs. Most caregivers agreed the support recommendations they received during the screening process were relevant and would be useful, but only a third of families attempted to access care. Many did not initiate help-seeking as they felt their child's situation was mild and non-concerning or their child was not ready to seek help. Only a fraction (20%) of families managed to access care; most who were unsuccessful in their attempts cited long wait-times and lengthy waitlists as a key barrier. At follow-up, nearly three-quarters of caregivers felt screening equipped them with the mental health resource knowledge to confidently access appropriate care if and when their child needed it.

Caregivers' positive perception towards screening seen in the current study are comparable to results of previous work (Pailler et al., 2009; Williams et al., 2011). Pailler et al. found that caregivers were generally supportive of universal depression screening in the ED, but perceived logistical barriers to accessing support (e.g. transportation, insurance and operational hours). However, our participants rarely endorsed transportation and finances as barriers, possibly because of increasingly low-cost or cost-free community mental health resources. Another explanation for this discrepant finding is the emergence of digital mental health care which has vastly improved accessibility since the previous study was published. Additionally, participants of the previous study did not complete any screening intervention, which would make it difficult for a general ED-visiting sample of families to situate themselves in the help-seeking context and report on barriers. The current study provides an account of individual- and system-level barriers parents experienced after completing ED-based psychosocial screening for their child and having psychosocial resource needs identified.

In a similar study, Williams et al. evaluated the acceptability of mental health screening in the paediatric ED by administering screening to parent-child dyads ($n = 394$) and measuring self-reported satisfaction using a brief scale. The authors found screening to be acceptable among most

youth and parents, but less so among those who screened positive for mental health concerns. This previous study did not include qualitative description, which would have offered a more wholesome understanding of their quantitative findings and the reported relationship between positive screening and reduced acceptability. Therefore, it remains unclear what aspects of screening or how the identification of mental health needs could have impacted youth and parent perceptions of acceptability. The current study benefits from the richness of qualitative data, which has allowed us to describe various dimension of acceptability through our participants' voices.

The general consensus in the literature is that parents who perceive that a problem exists and think that the problem has a negative impact on family life are more likely to seek help and access mental health services for their children than those who do not recognize a problem or its negative impact (Sayal et al., 2010; Teagle, 2002). Our findings are consistent with past work, as many caregivers who did not attempt to access care felt their child's concerns were not severe enough or noticeably impairing their functioning. We make note that parents recognized the value of early screening but felt care-seeking ought to be initiated after their child is showing signs of psychological distress, rather than seeking ongoing support in a preventative capacity. This incongruence may reflect the persisting view that mental health holds low priority, with concerns having to exceed a considerably high threshold of visible impairment before prompting action.

Previous paediatric studies on mental health help-seeking also demonstrated negative perceptions of mental health services (Logan & King, 2001), and perceived stigma associated with mental health problems (Dempster et al., 2015; Gronholm et al., 2015), are associated with reduced help-seeking behaviour. Interestingly, when probed, only one participating parent perceived stigma around accessing care, particularly the embarrassment of running into family/friends. Additionally, most parents held mental health services in high regard, instead their frustrations focused on challenges accessing these services. Our observations may reflect the impact of national anti-stigma campaigns and improved social openness around mental health in the last 10–15 years (Henderson et al., 2017).

Our findings and the extant literature supporting paediatric mental health screening acceptability in the ED by clinicians, young people and caregivers, advances the case for implementing universal screening in the ED setting. Indeed, parents' high degree of resource access literacy derived from screening and their expressed intention to seek care if/when necessary, captures the impression and impact screening had on caregivers whose child's mental health concerns may have otherwise gone undetected and unaddressed. Our work is strengthened by the use of a multi-dimensional theoretical framework to evaluating perceived screening acceptability. Traditionally, screening studies have narrowly operationalized acceptability with little justification or consideration to existing theory. Indeed, careful attention must be given to how acceptability is defined, given claims of acceptability can serve as the basis of intervention implementation and scale-up (Sekhon et al., 2017).

Limitations of this work include restricting post-screening follow-up to one month. A longer time frame may have captured a wider range of interactions families had with the mental health care system, offering a richer account of facilitators and barriers. Additionally, our study was limited to the caregivers of youth who screened positive for mental health issues. Evaluating acceptability among those who screened negative would have allowed us to assess whether acceptability depends on screening outcome (positive/negative). For negative-screening participants, analyses of perceived effectiveness, and self-efficacy could focus solely on their interaction with the screening tool and any perceived burdens, had they screened positive. Finally, we recognize that while the research clinician did not provide therapeutic intervention, the clinical assessment itself could have contributed to parents' experience of the screening process. For example, the additional assessment could have been assuring for some families or potentially made them feel uncertain about their MyHEARTSMAP screening results. To minimize the impact this had on parents' perception of

screening and subsequent help-seeking, the research clinician was instructed to limit any interaction with families unrelated to the clinical assessment. If families had resource-related questions based on their MyHEARTSMAP recommendations report, the clinician directed them to the appropriate section of their report where they could find necessary details.

Universal psychosocial screening in the paediatric ED using MyHEARTSMAP was found to be acceptable by interviewed parents of youth who had screened positive for psychosocial challenges. Exploring youth perspectives on acceptability and observing longer-term help-seeking processes are necessary to build a robust acceptability argument for downstream screening implementation in the emergency department.

Declaration of conflicting interests

Funding

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