



RESEARCH ARTICLE

Family and Youth Mental Health Needs and Outcomes in a Navigation Service: A Retrospective Chart Review

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Abstract

Objective. The process of patient navigation involves system resource experts matching patients to the most appropriate services. Patient navigation within the mental health and/or addictions (MHA) system is only a recent development and has not undergone extensive research. This study examines trends regarding clients of a family navigation service in Toronto, Canada, which supports families of youth ages 13-26 with MHA concerns. **Method.** A retrospective chart review was conducted using a sample of 200 cases from the first 989 clients of the navigation service. Descriptive statistics were performed to examine the general characteristics and demographics of navigation clients, the MHA profiles of navigation clients, and the characteristics of navigation. To predict the service needs and goals of navigation clients, four forward likelihood ratio multinomial logistic regression analyses were performed. **Results.** Female caregivers were the most frequent point of contact, and families most commonly requested psychiatric assessments, counselling services, and parent support programs. Families who were seeking help for a female youth were less likely to request psychiatric treatment compared to families seeking help for a male youth ($p = .04$) and families with a youth who already had a formal psychiatric diagnosis were more likely to request a counselling or therapy referral ($p = .04$) compared to families with a youth who had not received a formal psychiatric diagnosis. **Conclusion.** The findings contribute to an understanding of family navigation within the MHA field, and may support the development of targeted navigation programs that meet youth and families' needs.

Key Words: mental health, addiction, navigation, youth, retrospective chart review

Résumé

Objectif: Le processus de navigation des patients demande que des experts en ressources du système jumellent les patients aux services les plus appropriés. La navigation des patients au sein du système de santé mentale et/ou des dépendances (SMD) est un développement tout récent et n'a pas encore fait l'objet de beaucoup de recherche. La présente étude examine les tendances relativement aux clients d'un service de navigation familiale de Toronto, Canada, qui soutient les familles d'adolescents âgés de 13 à 26 ans ayant des problèmes de SMD. **Méthode:** Un examen de dossiers rétrospectif a été mené à l'aide d'un échantillon de 200 cas tirés des 989 clients du service de navigation. Des statistiques descriptives ont été réalisées pour examiner les caractéristiques générales et les données démographiques des clients de la navigation, les profils de SMD des clients de la navigation, et les caractéristiques de la navigation. Pour prédire les besoins de service et les buts des clients de la navigation, quatre analyses de régression logistique multinomiale par rapport de vraisemblance directe ont été exécutées. **Résultats:** Les soignantes féminines constituaient le point de contact le plus fréquent, et les familles demandaient le plus souvent des évaluations psychiatriques, des services de consultation, et des programmes de soutien des parents. Les familles cherchant de l'aide pour une jeune fille étaient moins susceptibles de demander un traitement psychiatrique comparativement aux familles demandant de l'aide pour un jeune homme ($p = .04$) et les familles dont le jeune avait déjà un diagnostic psychiatrique officiel étaient plus enclines à demander une référence en consultation ou en thérapie ($p = .04$) comparativement aux familles d'un adolescent qui n'avait pas reçu de

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diagnostic psychiatrique officiel. **Conclusion:** Les résultats contribuent à une compréhension de la navigation familiale au sein du domaine de la SMD, et peuvent soutenir l'élaboration de programmes de navigation ciblés qui répondent aux besoins des jeunes et des familles.

Mots clés: santé mentale, dépendance, navigation, adolescents, examen de dossiers rétrospectif

Introduction

Timely access to appropriate and specialized care can have significant implications for treatment outcomes in youth with mental health and/or addictions (MHA) issues (Schwartz et al., 2009). However, of the estimated 500 000 children and youth experiencing at least one MHA concern in, for example, Ontario, Canada, fewer than one-third will receive appropriate treatment for these issues (MCYS, 2013; Offord et al., 1989; Waddell et al., 2005). Furthermore, when youth do access needed care, the care provided has been reported as not optimal, and wait times can exceed one year (Manion, 2010; CMHO, 2015). Caregivers often spend substantial amounts of time and effort in seeking help for their dependents and face numerous logistic, social, and systemic barriers to finding the necessary care (Shanley, Reid, & Evans, 2008; Boydell, 2006). One reason for spending this amount of time is that caregivers of youth with MHA concerns may be compelled to take on tasks that replace mental healthcare services (Slaunwhite et al., 2017). This increased responsibility creates an increased risk of depression for these caregivers, compared to caregivers of persons with other conditions (Slaunwhite et al., 2017). Along with the caregiver burden created, youth MHA issues can create strain on the entire family (Logan, 2004). For example, it has been demonstrated that a brother's or sister's MHA concern impacts their siblings to the same extent as a parent's MHA concern (Greenberg et al., 1997). Given the many implications of inaccessible and complex service systems, supporting families in finding care for youth with MHA concerns is essential.

The process of patient navigation has been developed to assist in accessing specialized care in many areas of the health-care system, such as cancer and HIV treatment (Freeman, 2006, Bradford, Coleman, & Cunningham, 2007). Such navigation services provide individuals with a "navigator" who takes on a multifaceted role that includes case management, advocacy, and patient education. Findings from studies investigating for these patient groups has found it to be an effective strategy for alleviating health care disparities and ensuring that individuals have equitable access to timely, quality care (Fischer, Sauaia, & Kutner, 2007). Recently, the utility of navigation services for individuals

seeking MHA resources has been increasingly recognized (Bieling, 2013; Myers, 2015). However, there is little information available on the characteristics of navigation programs working with families of youth with MHA issues and their clients. Understanding the nature of the client base of a family-focused navigation is important in understanding potential gaps and complexities of the youth MHA system.

In response to the growing demand on the youth mental health service system, the Family Navigation Project (FNP) at Sunnybrook Health Sciences Centre was created. The service is staffed by clinically-trained navigators who actively engage with families over the phone and through email to match the specific service needs of their youth (ages 13-26), while supporting the whole family throughout the navigation process. The FNP does not provide treatment, but rather aids families by working with them to identify their specific needs and goals and creating an individualized navigation pathway for each family, and advocating for the families' needs at all levels of the mental health system. FNP Navigators can work with family members even when the youth in need of care is not engaged in help-seeking. Even when working with a caregiver or family member, navigators ask to speak with the youth in all cases to gain their perspectives, and are able to do so approximately one-quarter of the time. The navigators at the FNP obtain consent to participate in the service from each member of the family that the program works with. Additionally, the FNP maintains and upholds confidentiality between family members, as well as when sharing information with service providers, as per each client's wish. Families have indicated that support found through the FNP has been beneficial, giving them a sense of hope and alleviating their frustrations with the mental health system (Markoulakis, Weingust, Foot, & Levitt, 2016; Fishman, Levitt, Markoulakis, & Weingust, 2018). Navigation differs from other modes of support, such as the Choice and Partnership Approach (CAPA) or centralized intake services. For instance, while the goal of CAPA is to provide client-centered service while managing capacity and demand on the mental health system (Robotham, 2010), this is a model that is often provided by a treating clinician within a service being sought. CAPA clinicians can refer clients out to other services should that be the client's preference, but do not base the entire

focus of their work with a youth or family on helping them navigate the system (CAMHS Network, 2013). Navigation differs in that navigators are focused solely on finding and connecting families with the most appropriate services, and do not provide interventions themselves (Luke, Doucet, & Azar, 2018; Markoulakis et al., 2016). Although there are also similarities between navigation and centralized intake, in that one point of contact can help direct patients to one or more of many available services, a key difference is that centralized intake services function as a single access point for patients to enter the services that are connected with that particular centralized intake hub (Cloutier, Cappelli, Glennie, Charron, & Thatte, 2010). Navigators instead look across all services available in the MHA system, public or private, to help match families to resources based on their preferences and goals. Furthermore, while centralized intake focuses on streamlining service access (Williams, Latta, & Conversano, 2008), navigators remain connected with the family even after connection to services, providing psychoeducation, care coordination, and advocacy as needed (Markoulakis et al., 2016).

The guiding research objective of the current study was to examine the characteristics of clients of a MHA-specific navigation program. The following research questions guided this chart review:

- 1) What are the demographic characteristics and MHA profiles of clients of a navigation service?;
- 2) What predicts the MHA service needs and goals of clients of a navigation service?; and
- 3) What are the common outcomes for youth and families connected to a navigation service?

Method

Design and Materials

Steps proposed by Gearing and colleagues (2006) for retrospective chart reviews in child and adolescent psychiatry informed the design and procedure of this retrospective chart review.

Client files. FNP client information was stored in individual charts located within a health data management software database. Within each client chart, information was extracted from the form created by the navigator during the initial client intake, as well as from the subsequent client communications with the navigator (via email and phone calls) that were recorded in client charts. Additional information that was stored in the charts included team meeting notes

from reviewing the case with the FNP team (including other navigators, a Psychiatrist, and the Administrative Director). As such, information available in client files represents the perspective of the primary contact/client. The client who is the primary contact with the navigator is most commonly a parent of the youth, but can also be the youth themselves, a friend, guardian, or other family member.

Extraction database. The extraction database included 189 variables, that reflected the information gathered by navigators to generate and implement a navigation plan: demographic information, youth behaviour, MHA information, substance use behaviour, health and family history, requested service options, service information, nature of communication with the FNP, and referred service outcomes.

Charts. To access charts, a list of all clients who had completed an episode of navigation with the FNP was generated. For the purpose of this study, an “episode of navigation” is defined as the time from when a person becomes an active client of the FNP (time of intake) to the time when the client chart is “deactivated” due to completed navigation to resources or lack of contact. In some cases, a client will return to the FNP for another episode of navigation, but this study examined only the first episode of navigation. Of a total of 1523 client charts, 989 unique charts were eligible. A systematic quota sample was obtained by selecting every third client chart of the chronological list until reaching the a priori target of 200 charts.

Procedure

The extraction database was created and the first 10 of 200 charts were extracted and analyzed. The pilot run examined the consistency of data extraction, and the accuracy of the guiding codebook to ensure representation of all extracted information. Two members of the research team (KB & RM) examined five of the piloted extractions to ensure that all entries were identical. The two members of the research team then discussed any differences between the two extractions to ensure consistency. The other 5 charts were then extracted with the updated template. As there was no difference between the two piloted extractions, no further adjustments to the extraction form were deemed necessary. In instances where distinguishing between missing and unavailable data was necessary, the research staff coded each piece of information with the option, “Unknown” if the information was unknown to the client, or alternatively “Information Not Available” if the specific information was not present in the client chart. Following the extraction of the complete 200 charts, the database was then imported into SPSS 24 (IBM, 2016) for analysis.

Analysis

The data were analyzed using IBM SPSS v.24 (IBM, 2016). Descriptive statistics were performed to examine the general characteristics and demographics of navigation clients, the MHA profiles of navigation clients, and the characteristics of navigation. To predict the service needs and goals of navigation clients, four forward likelihood ratio multinomial logistic regression analyses were performed. This analysis was chosen as it is used to predict a nominal dependent variable with multiple independent variables. The dependent variables (yes vs. no) were whether or not the primary contact for navigation requested navigation support in connecting with 1. a counselling/therapy referral, 2. a psychiatric assessment, 3. psychiatric treatment, or 4. residential treatment. The independent variables included youth age, youth sex, the number of past MHA services used, whether the youth had a psychiatric diagnosis, and the predominant concern of the youth (as expressed by the caregiver or the youth themselves, depending on who was the primary contact). These variables were chosen for their theoretical potential to influence service requirements and whether a sufficient number of responses allowed for meaningful analyses.

Results

1. What are the characteristics and demographics of navigation clients? (Table 1)

Age and sex. Of the 200 youth in the sample, 82 (41%) were female, 116 (58%) were male, and 2 (1%) were transgender/gender non-conforming. The average age of youth at the time of intake was 19.1 years old (SD= 3.7, min= 12, max= 29), and 19.5 years old at the end of the episode of navigation (SD= 3.7, min= 13, max= 29). Although the age range for the FNP is stated as 13 to 26 years old, there have been a few clients who have been older or younger which have been accepted as clients for numerous reasons. These reasons may include if a youth has been involved in the program at an earlier time when the youth fit within the stated age range and then returns to (reactivates with) the program at a later date, or if a 12-year-old is turning 13 years old in the near future.

Location and living arrangements. Youth were living in the city of Toronto (n= 132; 66%) or outside the city centre (other locations in the Greater Toronto Area) (n= 68; 34%). Most often, the youth lived at home with their family (n= 160; 80%); other living arrangements included independent living (n= 11; 6%), living with friends or a partner (n= 8;

4%), psychiatric hospitals (n= 5; 3%), long-term care facilities (n= 2; 1%), and other (n= 4; 2%).

Education. The majority of youth were pursuing education (n= 147; 74%), including university (n= 41; 21%), secondary school (n= 89; 45%), elementary school (n= 7; 4%), college (n= 7; 4%), or a General Education Development certificate (n= 3, 2%). Additionally, 34 youth had withdrawn from formal education (17%).

Point of contact. Most frequently, female parents were the first person to contact the FNP on behalf of their youth, (n= 149; 75%). Other individuals who contacted the FNP included male parents (n= 17; 9%), youth for themselves (n= 16; 8%), siblings of the youth (n= 5; 3%), aunts or uncles (n= 4; 2%), other caregivers or guardians (n= 1; <1%), and grandparents (n= 1; <1%). All data presented herein are from the perspective of the primary contact/client, whether that is the caregiver, the youth themselves, or another individual connected to the youth.

Predominant concern. The predominant MHA concern of youth was “mental health only” (n= 112; 56%), “substance use concerns only” (n= 3; 2%), “concurrent mental health and substance use” (n= 83; 42%), and other (n= 2; 1%). Both cases of “other” concerns were instances of Autism Spectrum Disorder. The average age of onset of the predominant concern was 12.9 (SD= 5.2, min= 1, max= 23) years.

Target symptoms. The average number of symptoms/problematic behaviours that youth were reported to be experiencing was 4.6 (median= 4.0, SD= 2.1, min= 1, max= 11). The five most common symptoms were “low or sad mood” (n= 105; 53%), “worrying constantly” (n= 99; 50%), “having difficulties with academics” (n= 79; 40%), “drinking a lot of alcohol and/or using drugs” (n= 72; 36%), and “having outbursts of anger and rage” (n= 61; 31%). Twenty-one youth (11%) had at least one suicide attempt before the time of intake. For youth who had a suicide attempt, the average number of suicide attempts was 2 (SD= 1.41, median= 1, min= 1, max= 6). Thirty-five youth (18%) were reported to have had self-harmed using methods such as cutting (n= 31; 16%), burning (n= 1; <1%), and/or impact with objects (n= 1; <1%).

Diagnoses. The most common diagnoses that were reported for the youth included Generalized Anxiety Disorder (n= 39; 20%); Major Depression (n= 33; 17%), Attention Deficit Disorder (n= 31; 16%), and Obsessive Compulsive Disorder (n= 11; 6%).

Table 1. Demographic Information of Navigation Clients		
Sex	n	Proportion of sample (%)
Female	82	41%
Male	116	58%
Transgendered/gender non-conforming	2	1%
Age	Mean	SD, min, max
Time of intake	19.09	3.74, 12, 29
Time of deactivation	19.46	3.74, 13, 29
Youth location	n	Proportion of sample (%)
Toronto	132	66%
Outside Toronto/Greater Toronto Area (GTA)	68	34%
City of Toronto	132	66%
York (Location within GTA)	31	15.5%
Peel (Location within GTA)	9	4.5%
Durham (Location within GTA)	7	3.5%
Outside the Greater Toronto Area	21	10.5%
Caregiver location	n	Proportion of sample (%)
Toronto	132	66%
Outside Toronto/Greater Toronto Area (GTA)	61	30.5%
City of Toronto	132	66%
York (Location within GTA)	32	16%
Peel (Location within GTA)	11	5.5%
Durham (Location within GTA)	7	3.5%
South Simcoe (Location within GTA)	1	0.5%
Outside the Greater Toronto Area	10	5%
Living arrangements of youth	n	Proportion of sample (%)
At home with family	160	80%
Independent living	11	5.5%
Independent living with friends or a partner	8	4%
Psychiatric hospital	5	2.5%
Long-term care facility	2	1%
No fixed address	2	1%
Shelter	1	0.5%
Supportive housing	1	0
Youth education	n	Proportion of sample (%)
Actively pursuing a form of education	147	73.5%
University	41	20.5%
College	7	3.5%
Secondary school	89	44.5%
Elementary school	7	3.5%
Dropped out of university	13	6.5%
Dropped out of college	11	5.5%
Dropped out of secondary school	10	5%
Completing their GED	3	1.5%

continued

Table 1. continued		
Point of contact	n	Proportion of sample (%)
Mother	149	74.5%
Father	17	8.5%
Youth, for themselves	16	8%
Sibling	5	2.5%
Aunt/Uncle	4	2%
Caregiver/guardian	1	0.5%
Grandparents	1	0.5%

Psychiatric medications. At the time of intake, 79 youth (40%) were taking prescribed psychiatric medication, most commonly anti-depressants (n= 63; 32%), anti-anxiety medication (n= 14; 7%), and psychostimulants (n= 12; 6%).

Substance use. The majority of youth were using substances, (n= 110; 55%). Substances used included cannabis (n= 81; 41%), alcohol (n= 60; 30%), stimulants (n= 17; 9%), non-prescription opioids (n= 9; 5%), others (n= 9; 5%), club drugs (n= 7; 4%), and hallucinogens (n= 3; 2%). Of the 81 youth who were reported to be using cannabis, 38 (47%) were using daily or multiple times per day.

Past mental health and/or addictions service use. The majority of youth had accessed other mental health and/or addiction services prior to engaging with Navigation (n= 174; 87%). For youth who had previous contact with the MHA service system, the average age of first contact was 13.6 years (SD= 5.1). Just over half of the youth had a psychiatric assessment completed in the past (n= 108; 54%), and approximately one quarter of the youth had past inpatient stays at hospitals for psychiatric reasons (n= 48; 24%). The average number of services that youth had accessed in the past were 1.7 services (median= 2, SD= 1.5, min= 0, max= 9, mode = 2), and the average number of services that youth were accessing at intake were 0.7 services (median= 1, SD= .9, min= 0, max= 5, mode = 0). These services were commonly psychiatrists (n= 39; 20%), counselling/therapy services (n= 30; 15%), and/or psychologists (n= 11; 6%).

2. Why did clients contact Navigation services?

Types of services of interest to clients. The most common services requested were psychiatric assessments (n= 63; 32%), counselling/therapy services (n= 63; 32%), parent support (n= 52; 26%), advice (n= 51; 26%), psychiatric treatment (n= 29; 15%), and residential MHA treatment (n= 29; 15%).

Predictors of MHA service use requests (Table 2). The independent variables that might predict the likelihood of primary contacts requesting specific services included youth age, youth sex, the number of past MHA services used, whether the youth had a psychiatric diagnosis, and the predominant concern of the youth.

Predictors of requesting a psychiatric assessment referral. The logistic regression model was statistically significant and explained 12% of the variance ($\chi^2(2) = 16.51, p < .001, R^2 = .12$) (Table 2). The only independent variable that was significant was whether or not the youth had a psychiatric diagnosis at the time of intake; that is, as expected, primary contacts who contacted the FNP for help with a youth who did not have a psychiatric diagnosis were significantly more likely to request a psychiatric assessment compared to primary contacts of youth without a psychiatric diagnosis ($\beta = -1.57, SE = .28, p < .001, OR = 3.81, CI = 1.03-7.50$).

Predictors of requesting a psychiatric treatment referral. The logistic regression model was statistically significant and explained 4% of the variance of requesting psychiatric treatment ($\chi^2(2) = 4.46, p = .04, R^2 = .04$). Only gender was a significant independent predictor, such that primary contacts of a female youth were significantly less likely to request psychiatric treatment compared to primary contacts of a male youth ($\beta = -.90, SE = .43, p = .04, OR = .41, CI = .17-.95$).

Predictors of requesting counselling/therapy services referral. The logistic regression model was statistically significant and explained 6% of the variance of requesting counselling/therapy referrals ($\chi^2(2) = 12.43, p = .002, R^2 = .06$). Two variables were significant independent predictors: first, the primary contact of a youth struggling with “concurrent substance use” concerns compared to “mental health only” concerns were significantly more likely to request a counselling/therapy referral ($\beta = .93, SE = .34, p = .011, OR = 2.52, CI = 1.23-4.90$). Second, primary contacts

Table 2. Predictors of MHA service use requests

Dependent variable (Referral request)	Independent variables	β	SE	Sig	OR	CI (95%)
Psychiatric assessment	Presence of diagnosis	-1.57	.28	.00	3.81	1.93-7.50
Psychiatric treatment	Sex (male as reference)	-.90	.43	.04	.41	.17-.95
Counselling/therapy	Predominant issue ^a	.93	.34	.01	2.52	1.23-4.90
	Presence of diagnosis	.68	.33	.04	1.98	1.04-3.76
Residential treatment	Presence of diagnosis	-1.22	.48	.01	.30	.12-.76
	Predominant issue ^a	-.94	.46	.04	.39	.16-.96

^aMental health only compared to concurrent (mental health only as reference)
Note. Only variables that significantly contribute to equation are listed.

of a youth who had a psychiatric diagnosis were significantly more likely to request a counselling/therapy referral ($\beta = .68$, $SE = .33$, $p = .04$, $OR = 1.98$, $CI = 1.04-3.76$) than primary contact of a youth with no known diagnosis.

Predictors of requesting a residential treatment referral.

The logistic regression model was statistically significant and explained 6% of the variance of requesting a residential treatment referral ($\chi^2(2) = 11.55$, $p = .003$, $R^2 = .06$). Two variables were significant predictors: first, the primary contacts of youth struggling with “concurrent substance use” compared to “mental health only” were significantly less likely to request a residential treatment referral ($\beta = -.94$, $SE = .46$, $p = .047$, $OR = .39$, $CI = .16-.96$). Second, primary contacts supporting youth, where the youth did not have a psychiatric diagnosis were significantly less likely to request a residential treatment referral as compared with primary contacts of youth who did have a psychiatric diagnosis ($\beta = -1.22$, $SE = .48$, $p = .01$, $OR = .30$, $CI = .12-.76$).

What are the characteristics of navigation services provided to clients?

Course of Episode of Navigation. The average duration of time that youth remained clients with the FNP for an episode of navigation was 138 days ($SD = 101$ days, $min = 2$ days, $max = 509$ days). The entirety of the sample was comprised of navigation clients who were no longer active with the FNP.

Communications with Navigator. During the time as a client of the FNP, families communicated with their navigator either by phone or email. The average number of total communications via phone was 1.91 ($SD = 1.88$, $median = 1$, $min = 0$, $max = 9$) and via email was 6.16 ($SD = 5.54$, $median = 5$, $min = 0$, $max = 30$). The average number of communications from a navigator to a primary caregiver was 2.09 via phone, and 3.87 via email. The average number of

communications from a navigator to a youth was 1.50 via phone, and 3.81 via email. The average number of communications from a primary caregiver to a navigator were 1.83 via phone, and 3.23 via email. The average number of communications from a youth to a navigator were .67 via phone, and 2.75 via email.

Referrals. The most common referrals offered to families were family support programs ($n = 101$; 51%), counselling/therapy services ($n = 91$; 46%), and psychiatric assessments ($n = 51$; 26%).

Service matching. The majority of clients were referred to services in which they originally had expressed interest ($n = 161$, 80.5%). The remainder were connected to services for which they had not initially expressed interest but that arose as an appropriate referral over the course of navigation ($n = 11$; 5.5%) or disengaged from Navigation prior to a service referral could be made ($n = 11$; 5.5%). A portion of clients did not receive a referral ($n = 17$; 8.5%). Reasons for a client not receiving a referral included if a client withdrew from Navigation partway through the process, if another agency or worker assumed responsibilities for connecting clients with resources/supports, or if a family member or youth found an alternative and successful referral prior to a referral being given by a navigator.

Discussion

The key findings of this retrospective chart review provide a greater understanding of navigation services within the youth MHA service system. There is a paucity of information on Navigation programs in MHA, and particularly for youth and families, despite the fact that numerous such programs are emerging and growing. These findings provide important information for new and existing Navigation

services for the purposes of program planning and anticipating their clientele and needs.

Demographic Characteristics and MHA Profiles of Navigation Clients

The majority of youth involved with navigation were male. In adolescence, gender differences emerge regarding how youth view mental health, specifically their process of reaching out for support (Chandra & Minkovitz, 2006). Girls are more likely to reach out to a friend for support regarding their MHA concerns, compared to their family members. Conversely, boys are more likely to first reach out to a close family member for support (Chandra & Minkovitz, 2006). In addition, it is recognized that girls are more likely than boys to experience internalizing disorders while boys are more likely than girls to experience externalizing disorders (Cauffman, Lexcen, Goldweber, Shulman, & Grisso, 2007). It is possible that there are more male youth involved in navigation compared to female youth, as family members are more likely to become aware of and seek support for externalizing behaviours compared to internalizing behaviours. It is of importance that navigation programs consider the varying presentation and needs of youth with MHA concerns for whom family members may be seeking support. This will not only inform navigation planning and options for services, but also can inform youth outreach and engagement activities, in order to involve and empower youth in their navigation planning and to motivate them to participate in MHA care.

Most frequently, and not surprisingly, it was the female parents of the youth who were the first person to contact the FNP, compared to other members of the youth's support circle. Existing literature has found that mothers spend between 65 and 80 percent more time in direct one-to-one interaction with children, compared to fathers (Parke et al., 2005). As mothers have been found to be more intimately involved with a child's struggle with MHA concerns (Bornstein, 2013), this explains the observed high proportion of maternal contact. New or existing MHA navigation services must ensure they are responsive to the needs of female caregivers, but may also include specific outreach to male caregivers who may not be as likely to access these services but who may find themselves in a primary caregiver role for a youth with a MHA concern.

Cannabis was the most frequently-used substance by youth, and almost half of the cannabis users were using daily or multiple times per day. There is an association between cannabis use and depression and anxiety, and this relationship is strongest during adolescence, and studies have found that approximately half of adolescents in outpatient

mental health settings self-report using cannabis (Patton et al., 2002; Copeland, Rooke, & Swift, 2012; Holzer et al., 2014).

Predictors of MHA Service Needs and Goals of Navigation Clients

When families contacted the FNP, the most frequent referrals requested were for psychiatric assessments, counselling/therapy services, parent support programs, and general advice from the navigator due to being uncertainty regarding available treatment options. It was assumed that psychiatric assessment requests would be common, as frustration exists regarding the difficulty of accessing MHA treatment and resources if a youth does not have a formal psychiatric diagnosis (Wright, Jorm, & Mackinnon, 2011). Undergoing an assessment to diagnose a mental health concern is associated with negative stigmatization, but is also considered to be an important step of the help-seeking process (Wright, Jorm, & Mackinnon, 2011; Biddle, Donovan, Sharp, & Gunnell, 2007). It is logical that families of youth without a psychiatric diagnosis are interested in accessing a psychiatric assessment for the purpose of entering the treatment system. Navigation services may thus wish to consider forming partnerships with psychiatric services, which could arrange timely assessments for clients. However, the FNP has no such arrangements or understandings, and operates on the principles of trying to make the mental health and addictions service system more efficient, rather than replacing or filling gaps within the system. Furthermore, as there are a finite number of psychiatric service providers available, developing a formal relationship between a navigation service and one or more psychiatrists may only remove potential psychiatric availability from the system as a whole, resulting in decreased availability for youth not involved in a navigation service.

Parent support programs and general advice were also frequently requested by FNP clients. Caregiving for a child with MHA concerns is a time consuming and emotionally draining experience (Slaunwhite et al., 2017; World Health Organization, 2003). The frustration of trying to understand the complex MHA system while simultaneously advocating for a child can be overwhelming when unassisted. This feeling of being overwhelmed is mirrored through the substantial proportion of parents and caregivers who specifically asked for support for themselves (26%), and the frequency of parents and caregivers who asked generally for any advice that navigators could provide (coincidentally, also 26%). New or developing navigation programs may wish to include parent support as a feature of navigation supports, contribute to the development of external parent

support programming, and/or develop catalogues of existing available parent supports to which navigators may refer, in order to effectively serve families in this regard.

Primary contacts of youth who did not have a psychiatric diagnosis were more likely to request a psychiatric assessment and less likely to request residential treatment, compared to primary contacts of youth with a psychiatric diagnosis. Many primary contacts of youth were interested in pursuing psychiatric assessment to gain a diagnosis, most likely to be able to access treatment that requires a formal diagnosis (Wright, Jorm, & Mackinnon, 2011). As residential treatment is a type of MHA treatment that is often utilized once all other options have been explored, this may explain why youth without a psychiatric diagnosis do not request residential treatment. The absence of a psychiatric diagnosis may also be a proxy measure reflecting youth who are in the earliest stages of a family accessing services for a youth's MHA concerns. In the Canadian healthcare system, the route to psychiatric assessment is typically through the family doctor. In the future, new and developing navigation services may wish to direct clients seeking this kind of support to their family doctors, in order to reserve more extensive navigation planning for complex needs requiring assistance in identifying appropriate pathways to support. In healthcare systems where the route to psychiatric assessment is more complicated, navigation may be warranted.

As compared to families of youth with only mental health concerns, families with youth with concurrent disorders were more likely to request counselling/therapy referrals, and less likely to request residential treatment. There are multiple potential reasons why this association exists, as it is likely that differing levels of severity and service use history influence preference of referral requests. Nonetheless, there is a shared general belief that counselling is a positive and effective intervention for young people who are struggling with MHA concerns (Pattison & Harris, 2006). Youth struggling with concurrent MHA issues are at a higher risk for having poorer treatment outcomes and higher costs to their lifestyle and relationships (Godley, Dennis, Funk, & Passetti, 2007). This complexity may be why the primary contact of youth who are struggling with concurrent concerns was more likely to request counselling services. Another reason could be that these youth with concurrent concerns had previously been involved in a residential treatment option that was unsuccessful. However, information regarding severity of symptoms was not assessed with a quantifiable measure, and information regarding prior residential treatment was not available in sufficient cases to allow for more in-depth exploration as part of this study. In order to effectively support youth experiencing concurrent

disorders, it is important that a broad range of therapy options be available. Navigation services for youth with MHA and their families might consider developing specific catalogues of programs and therapists with expertise in concurrent disorders, in order to be able to best assist families in finding this much-needed and specialized support.

Common Outcomes for Youth and Families Supported by Navigation

The most frequent requests by families were for family support programs, counselling/therapy services, and psychiatric assessments. These initial requests are mirrored by the referrals that navigators eventually made for families. In order to best inform the navigation program in the current study as well as other existing and developing MHA navigation supports, future work might explore relationships between these outcomes and the youth and/or family's degree of satisfaction with the match to service, the outcomes of connection to the referred service (e.g., in terms of youth symptoms and functioning, family functioning, health-related quality of life, etc.), as well as features of the navigation supports themselves that contributed to a good match to service and good outcomes for youth and families.

Implications

Several important considerations arise for navigation services in general from this chart review. As navigation continues to grow within the MHA care system, it is important to note that these navigation services, although directed for youth, are predominantly being accessed by family members, especially mothers of youth. There are, therefore, attendant ethical and logistical considerations in the design of a navigation service to be sure that there are clear and transparent confidentiality and privacy rules to protect all clients, regardless of whether the client is the caregiver or the youth who is struggling with the MHA concern.

During 2016, the year of data collection, the GTA consisted of approximately six million people. Navigators were able to simultaneously support numerous clients living across multiple locations of a sprawling city, even though the FNP is located in a single geographic location. Communication over telephone and email increases accessibility for clients located at a distance, which allows navigators to attend to a higher number of client needs and access a broad range of options for care quickly. Additionally, having the navigation service in a single location rather than having navigators travelling across the city to meet clients affords more time for navigators to find well-suited referrals and provide quality care for clients. As the mental health and addictions

service system can be experienced as inaccessible for youth and their families, the need for navigation services may very well increase. Our data suggest that caregivers and youth who do use a navigation services can access a wide range of services relatively quickly, and therefore future expansion of navigation service may improve accessibility to the system in general.

Limitations

There are several possible limitations of the data available. Charts consisted of navigators' notes from their email and phone conversations with clients. Although detailed, it is possible that information, germane to this analysis, was left out of charts regarding a client's history and process with the program, as the notes were solely representations of the conversations between navigator and client. In addition, the navigator was most frequently conversing with the female parent of the youth. It is possible that in some circumstances, the female parent was not fully aware of the youth's MHA history or other important details. For example, it is probable that substance use was underreported. Furthermore, primary contacts in this study were clients of one navigation service in a large Canadian metropolitan area, and so these findings may not be generalizable beyond that context. Nonetheless, the purpose of navigation services is to reduce barriers to care and to help match the needs of families and youth to the best or most appropriate services. As such, these data and results may have relevance to mental health navigation services elsewhere and to families and caregivers of youth with MHA issues in other jurisdictions who tend to face similar issues regardless of geography or health system differences.

Service-level data available at the time of this chart review did not include assessments of symptoms and functioning, and as such, evaluation of match between services requested, service referrals, and level of need were not made. As program evaluation efforts in MHA navigation services become more prevalent, future work may include evaluations of youth clinical needs with respect to observed outcomes, including, but not limited to improvements in youth, caregiver, and family functioning; satisfaction with navigation services and referred services; and appropriateness of service matches.

Conclusion

Supporting families in finding care for youth with mental health and/or addictions concerns is potentially valuable and could be an important part of the MHA care system. As patient navigation is becoming an increasingly popular

strategy to deal with a fragmented and complicated mental health and addictions care system, it is important to understand who uses navigation, why people use navigation, and what happens during navigation. These findings can inform service development, the creation of more purposeful tracking of outcomes, and the future refinement of navigation programs.

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Conflicts of Interest

The authors have no financial relationships to disclose.

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