JOURNAL
OF THE CANADIAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY / DE L'ACADÉMIE CANADIENNE DE PSYCHIATRIE DE L'ENFANT ET DE L'ADOLESCENT

CLINICAL ROUNDS

Community physician perceptions of managing complex child and adolescent psychiatric patients: a self-determination theory perspective

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Abstract

Children and adolescents with complex mental health needs often require a level of care that is unsustainable in tertiary settings. Yet, the psychological impact of this on community physicians, who are tasked with providing quality care to this population, is not well understood. Grounded in Self-Determination Theory (SDT), the present study explores how the challenges of caring for these patients is affecting community physicians' basic psychological needs (autonomy, competence, and relatedness) and intrinsic motivation. Participants from Calgary, Alberta, Canada, were invited to complete an anonymous online survey containing questions about managing complex child and adolescent psychiatric patients. We used SDT's needs-based framework and 22-item Intrinsic Motivation Inventory as a component of our pilot study, to explore and understand their ideas. Community physicians reported moderate-high interest/enjoyment and moderate perceived competence in managing complex child and adolescent patients, but little perceived choice and high tension/pressure in carrying out this task. Physician remarks provided meaningful insights into how these clinical experiences are impacting them, psychologically, and where opportunities may exist for interventions to support them and their patients. Findings from this study suggest that the participating community physicians feel interested and adequately skilled to manage complex child and adolescent psychiatric patients, but that systemic barriers are hindering their basic psychological needs and intrinsic motivation to do so. Potential explanations and implications for these findings are discussed.

Key Words: *complex mental health, complex child & adolescent psychiatric patients, physician perceptions, basic psychological needs, intrinsic motivation*

Résumé

Les enfants et les adolescents dont les besoins de santé mentale sont complexes nécessitent souvent un niveau de soins insoutenable dans les milieux tertiaires. Et pourtant, l'impact psychologique de ce fait sur les médecins communautaires, qui sont chargés de procurer des soins de qualité à cette population, n'est pas bien compris. Ancrée dans la théorie de l'autodétermination (TAD), la présente étude explore comment les difficultés de soigner ces patients affectent les

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Submitted: June 20, 2022; Accepted: March 20, 2023

besoins psychologiques de base des médecins communautaires (autonomie, compétence, et interaction) et la motivation intrinsèque. Les participants de Calgary, Alberta, Canada, ont été invités à remplir un sondage anonyme en ligne contenant des questions sur la prise en charge de patients complexes enfants et adolescents. Nous avons utilisé un cadre TAD basé sur les besoins et 22 items d'inventaire de motivation intrinsèque comme élément de notre étude pilote, afin d'explorer et de comprendre leurs idées. Les médecins communautaires déclaraient un intérêt-plaisir modéré-élevé et une compétence perçue modérée dans la prise en charge des patients enfants et adolescents complexes, mais peu percevaient un choix et une pression/tension élevée en s'acquittant de cette tâche. Les remarques des médecins ont fourni des idées intéressantes sur la manière dont ces expériences cliniques influaient sur eux, psychologiquement, et où il pouvait se trouver des interventions pour soutenir eux et leurs patients. Les résultats de cette étude suggèrent que les médecins communautaires participants se sentent intéressés et adéquatement compétents pour prendre en charge des enfants et adolescents patients psychiatriques complexes, mais que des barrières systémiques entravent leurs besoins psychologiques et leur motivation intrinsèque de ce faire. Des explications et implications potentielles de ces résultats sont discutées.

Mots clés: *santé mentale complexe, patients psychiatriques complexes enfants et adolescents, perceptions du médecin, besoins psychologiques de base, motivation intrinsèque*

Introduction

Many children and adolescents with complex mental health needs present to primary care (1, 2). However, they often require much more care than what community physicians can manage, owing largely to systemic barriers, such as lack of resources and access to specialists and allied health workers (3, 4). At the same time, psychiatrists working in both inpatient and outpatient specialty settings are faced with pressures to discharge these patients to create capacity for others, who are often waiting months to years to be seen (5). Thus, an inherent tension exists between the needs of patients, community physicians, and specialists working in hospitals and speciality outpatient-based mental health services. Grounded in Self-Determination Theory (6), the present study explores how this tension is impacting the motivation of community physicians. Examining this issue is important because it can shed new light on how community physicians are dealing with the challenges of supporting child and adolescent psychiatric patients, and where opportunities may exist to support them.

Researchers have investigated the pressures that primary care physicians face in managing complex child and adolescent psychiatric patients. Loeb et al. (7) identified that type and severity of mental illness, acuity of presentation, and communication style (e.g., having a personality disorder, a confrontational manner, and/or use of abusive language) were main patient factors, while level of clinical training was a strong determinant of physician comfort in managing these patients. There are also serious concerns raised by physicians, however, about the state of the mental healthcare system and the urgent need for interventions that promote better integration of care and collaboration between primary care providers and mental health specialists (4, 7). In other words, primary care physician efforts alone are unlikely to meet the needs of these complex patients, and effective systems solutions need to be considered (8, 9, 10). That said, one gap in addressing this conundrum is the lack of application of a sound psychological framework. Such an approach would help us to better understand how community physicians are managing, psychologically, and how best to support them and the quality of their patient care.

A Brief Overview of Self-Determination Theory (SDT)

SDT is a well-supported theory of human motivation, development, and wellness (6). It posits that people universally require satisfaction of three basic psychological needs to function optimally and thrive – autonomy (sense of volition), competence (sense of efficacy), and relatedness (sense of belongingness). Thus, environments which support these needs (e.g., work settings) will promote engagement, performance, and well-being, while environments that hinder these needs will promote disengagement, stress, and maladjustment (6).

Research in healthcare supports these principles. For example, studies have shown that satisfaction of practicing physicians' basic psychological needs was associated with more autonomous (and less controlled) motivation for work and lifelong learning (11), higher life satisfaction and work engagement, lower work exhaustion, and greater professional well-being (12). Studies have also shown that intrinsically motivating factors (e.g., sense of professional calling, personally rewarding work hours, and meaningful relationships with patients) were strong predictors of physician well-being, whereas extrinsic factors (e.g., salary and work environment), which are more often studied and

discussed in the literature, tend not to be (13). According to SDT, this is because motivation and goals that are more intrinsic (e.g., personal growth, good health, community service, and relationships) are inherently need satisfying, whereas motivation and goals that are more extrinsic and superficial (e.g., wealth, social status, and fame) will only indirectly satisfy, if not perpetually frustrate, one's basic psychological needs (14).

Importantly, meeting the psychological needs of physicians, in turn, influences the motivation of their patients. Studies show that when primary care physicians provide their patients with more autonomy support (by being warm and non-judgmental, adopting a positive and unconditional regard, taking their perspective, offering meaningful rationales, and providing them with choices), it stimulates their intrinsic motivation and promotes a host of beneficial health and wellness outcomes. Examples include but are not limited to: improved weight loss and maintenance (15), better glycemic control and dietary changes in diabetes (16), higher success rates with smoking cessation and abstinence (17), and better adherence to medication prescriptions (18). While these studies came from adult populations and similar work would need to be conducted with pediatric populations to compare outcomes, results point to the importance of physician motivation in promoting not only their own engagement and well-being but also that of their psychiatric patients.

SDT outlines different dimensions of intrinsic motivation, four of which are most relevant in this study: interest/enjoyment, perceived competence, perceived choice, and pressure/tension (6). Interest/enjoyment (interest and pleasure in performing an activity), perceived competence (sense of being able to learn, master, and apply certain skills) and perceived choice (sense of having decision-making flexibility and opportunities to choose what to do) are positive predictors of intrinsic motivation, and felt pressure/tension (pressure to succeed in an activity) is a negative predictor of intrinsic motivation (6).

Current Study

Having a better understanding of the quality of motivation and needs-based experiences of community physicians is key for guiding interventions that support them and their patients. The present study therefore collected preliminary data on this, to explore: 1) the degree that Calgary-based family physicians and pediatricians are intrinsically motivated towards managing these patients in the community, 2) how they feel that current healthcare system barriers are negatively impacting them and their ability to provide quality patient care, and 3) what aspects they think could be improved to facilitate a better patient-doctor relationship. Using SDT as a lens, we hypothesize that aspects of community physicians' intrinsic motivation towards managing complex child and adolescent psychiatric patients will be hindered (with increased tension/pressure, reduced perceived choice and perceived competence, etc.), due to the aforementioned challenges they face in performing this task. And, these hindrances will ultimately reflect frustrations of basic psychological needs, which will be reflected in the community physicians' responses to our open-ended questions.

Method

Procedure

Community family physicians and pediatricians were invited to complete an online survey, containing one scale and three open-ended questions (see Measures). Invitations were sent via two list-serves: one through the Department of Family Medicine, to approx. 1,000 family physicians affiliated with the University of Calgary, and the other through the Department of Pediatrics, to approx. 200 pediatricians with the same affiliation. To maintain confidentiality and minimize response bias, survey responses were anonymous. Participants received a brief email invitation, an consent form containing information about the study, and a link to the online survey tool. All were advised that their participation implied their free and informed consent. This study was approved by the University of Calgary Human Research Ethics Board (REB # 21-1321).

Participants

In total, 41 physicians participated in the survey. However, 7 surveys were excluded from analysis due to being < 50% complete, which left 34 full responses: 11 by family doctors (31%) and 23 by pediatricians (69%). All participants practiced in an urban setting, except one family doctor who practiced rurally.

Measures

The electronic survey asked about speciality ("family medicine" or "pediatrics") and primary work setting ("Calgary" or "Rural"). No other demographic information was collected. Participants then completed the Intrinsic Motivation Inventory, which is freely available online, before answering three questions designed by the authors (see below).

Intrinsic Motivation

Intrinsic Motivation Inventory (IMI): The 22-item IMI measures peoples' intrinsic motivation towards performing a specific task. It has shown convergent validity in studies on motivation in healthcare (19, 20, 21). It has four

Table 1. Descriptive statistics and Pearson correlations based on the Intrinsic Motivation

	Inventory subscales			
Variables	1	2	3	4
1. INT/ENJ	(.92)			
2. P-COMP	.35*	(.90)		
3. P-CHOICE	.60**	.24	(.86)	
4. TEN/PRE	-.55**	-.18	-.64**	(.80)

INT/ENJ, interest/enjoyment; P-COMP, perceived competence; P-CHOICE, perceived choice; TEN/PRE, tension/pressure. Cronbach's alphas along the diagonal.

* $p < .05$ and ** $p < .01$

subscales: interest/enjoyment, perceived competence, perceived choice, and pressure/tension. We adapted the wording of the scale to measure physician motivation towards "caring for complex child and adolescent psychiatric patients and their unique needs in the community". Participants responded to items on a scale from 1 (*not true at all)* to 7 (*very true*), based on their experiences. Examples were: *"I found the task very interesting"* (interest/enjoyment), *"I think I am pretty good at this task"* (perceived competence), *"I didn't really have a choice about doing this task"* (perceived choice), and "*I felt pressured while doing this task"* (pressure/tension). We calculated mean scores for each subscale, where higher scores indicate stronger perceptions of that type.

Needs-Based Experiences

To enrich the quantitative data, we developed and included three open-ended questions: 1) *In your experience, what are the main issues you see in managing the care of complex child and adolescent psychiatric patients in the community?* 2) *How do you think these issues or barriers might affect you personally and/or the quality of care you can provide to these patients?* 3) *What, if anything, do you wish existed that could improve care for complex psychiatric patients in the community, and/or alleviate constraints on the patient-doctor relationship?* We designed these items based on our professional experiences in seeing and managing complex child and adolescent psychiatric patients in the community, and our knowledge of SDT and related hypotheses.

Statistical Analyses

The software SPSS version 25.0 (SPSS Inc, Chicago, IL) was used for statistical analyses for the quantitative data. All variables were checked for normal distribution and linearity of relationships. Cronbach's alpha coefficients were computed for all scales (see Table 1). Descriptive statistics (mean and standard deviation) were computed for each IMI subscale and variable relationships were then assessed with Pearson correlation. Open-ended responses were examined, and quotes that best captured the physicians' overall sentiments and experiences were selected and presented (see Tables 2, 3, and 4).

Results / Discussion

Sample Characteristics and Variable Relationships

We first assessed the mean scores and Cronbach alpha reliability values for each IMI subscale, which were determined to be satisfactory (see Table 1). Family physicians reported moderate interest/enjoyment ($M = 4.1$, $SD = 1.2$), tension/pressure ($M = 3.9$, $SD = 1.4$), and perceived competence ($M = 4.4$, $SD = .5$), and low perceived choice ($M = 2.6$, $SD = 1.3$). Pediatricians reported low to moderate interest/enjoyment ($M = 3.2$, $SD = 1.3$), moderate tension/pressure ($M = 4.4$, $SD = .6$) and perceived competence ($M = 4.3$, $SD = .9$), and very low perceived choice ($M = 2.2$, $SD = .9$).

As seen in Table 1, there was a positive association between the physicians' interest/enjoyment, perceived competence, and perceived choice, in managing complex child and adolescent psychiatric patients in the community. Conversely, there was a negative association between their tension/pressure, interest/enjoyment, and perceived choice, in

Table 2. Physician responses to survey Q1 (selected): What are the main issues in managing complex psychiatric patients?
"…these patients are often quite complex, and while they may be discharged as stable with a plan, there is limited access to supports if this plan does not go well. Often if patients decompensate, we have very few resources. Our own practices are also full, so we have limited availability to accept more patients as we struggle to follow up on those we already have, especially with the increase in mental health struggles among children during the pandemic." (Family Physician #1)
"I find it particularly challenging to support patients who had multidisciplinary care in the past but no longer have it. When complex patients are discharged from a team, including psychiatry, often [we] are left trying to manage them with no additional supports, which is usually not successful." (Pediatrician #1)
"Complex psychiatry patients require multi-disciplinary services like social work, family and individual counselling, psycho-educational assessments, school liaisons, etc., that I don't have access to in the community. This leaves a constant feeling of not doing well enough for the patient and their family, as the scope of their problem is beyond what I can support with medication, online resources, and advice." (Pediatrician #2)
"Case management in the community is difficult. It is rare that anyone contacts the community provider to discuss or collaborate regarding patients. Lack of support. Lack of consultation from psychiatry while patient is admitted, to ask community providers for their involvement and how collaboration can occur. Community providers can provide their expertise to help with this patient population, but community providers are very rarely included in discharge planning but rather told what the plan will be. If community providers were included in collaborative care of this patient population, it would be very beneficial. (Family Physician #2)
"Time ... a lack of time. There are so many complex psychiatric patients these days. And a lack of quick supports (therapists, access to pharmacists, funding for meds). Often, I feel children/families spin in the system. It should be "seamless" to discharge a patient, quick to get them in, find all the supports, provide meds and when "well" to discharge but then just as quickly get them back in when things don't go well. I think that ongoing (for years) supportive care is necessary. It isn't like an arm fracture that heals, and you never see the Orthopedic Surgeon again. Child/Adolescent health care is chronic. It should be set up like Oncology ... with streamlined, fast, multi-disciplinary care for years." (Pediatrician #3)

performing this task. The strength and direction of these relationships are in line with the SDT literature (22, 23). Together, results suggest that with more perceived choice and competence in carrying out this work, community physicians' intrinsic motivation will increase. Conversely, with greater pressure/tension in performing their job, their sense of agency and interest/enjoyment will decrease. That there was no direct relation between pressure/tension and perceived competence makes sense, since feeling pressured does not reduce one's knowledge or skills – only one's intrinsic motivation and mental energy to use them.

Physician Responses to Open-Ended Questions

For question #1 (*In your experience, what are the main issues you see in managing the care of complex child and & adolescent psychiatric patients in the community?),* most physicians focused on the detrimental lack of resources and supports (e.g., access to timely care and allied health services), fragmented care and lack of collaboration between those working in community and hospital (e.g., with lack of continuity and disconnected care), and inevitable pressures it places on them as community physicians (see Table 2). The overarching sentiment was that they felt deeply frustrated, overwhelmed, and unable to perform their jobs effectively (competence), disconnected, unsupported, and alone (relatedness), and essentially helpless, resentful, and burned out in being forced to assume these unsustainable responsibilities (autonomy).

For question #2 (*How do you think these issues or barriers might affect you personally and/or the quality of care you can provide to these patients?*), almost all the physicians described feeling helpless, alone, and finding the work exhausting and unrewarding, due to lack of supports and system inadequacies (see Table 3). Many also described feeling impaired in their ability to help their patients, who need far more access to timely, comprehensive, outpatient supports than what Alberta Health Services (AHS; provincial health care authority in Alberta) is providing.

Regarding question #3 (*What, if anything, do you wish existed that could improve care for complex psychiatric patients in the community, and/or alleviate constraints on the patient-doctor relationship?*), responses largely centered around the need for greater access to psychiatric care and outpatient supports (see Table 4). However, most also emphasized the need for better closed-loop communication (e.g., timely, clear, accessible discharge summaries), better collaboration between community physicians, allied

Table 3. Physician responses to survey Q2 (selected): *How do you feel these issues are affecting you and the quality of your patient care?*
"I am feeling overwhelmed with the volume and intensity of patients and their needs. There is just not enough time in the day to see and help them. I feel alone as a sole practitioner and wish I had more interaction with the therapists that the kids are seeing. Waiting for therapy or help upon discharge can take a long time. There is also always a sense of urgency when the child/teen is discharged, and the parents can be very insistent and desperate when they call for an appointment." (Pediatrician #3)
"It is impossible to know what happened during an inpatient stay without a discharge summary. It is not abnormal to see a patient after a hospital admission and have no idea which medications they are on, yet we are expected to provide refills. This causes stress for me, and the families, and it results in extra work for office staff. Having to tell parents that supports are not available for 6+ months, or that we can offer only short term supports through AHS (Alberta Health Service; provincial health care authority in Alberta), and they will need to fund the rest, is very hard." (Family Physician #3)
"I was not trained to do this quantity or depth of psychiatric care and it is one reason that I do not plan on staying in this field long term." (Family Physician #4)
"I have done some extra training because of the difficulties accessing resources. However, sometimes I am stuck and would like a consult with a psychiatrist. I find that access to mental health often does not follow my requests when I make referrals and I find it infuriating." (Family Physician #5)
"These patients require a lot of time. You may have to contact social workers, group homes, parents if they are involved, teachers, school counsellors. In addition to psychiatric care, they may need housing, food. A lot to accomplish in a 15 minute GP visit." (Family Physician #6)
"It's stressful for me. I fit in a ton of mental health patients into my over-filled schedule. Financially if it's done over the phone, I don't feel it is adequate compensation for what I do as I often spend 30 minutes with these patients over the phone. If I had more psychiatric help, it would feel like there was less pressure on me to keep these kids alive!" (Pediatrician #4)
"Leads to significant burnout. Feelings that you cannot control the outcome because this isn't an area that I was trained in. At times, difficult to be compassionate when a lot of the issues are parent/child relationships and chaotic families." (Pediatrician #5)

Table 4. Physician responses to survey Q3 (selected): What do you feel could be improved to facilitate better patient care and promote the patient-doctor relationship?
"…a central website with available resources that patients can access, as this would streamline attention to appropriately defined issues for the complex adolescent psychiatric patient and strengthen the doctor patient relationship." (Family Physician #7)
"…improved counselling, psychology follow up, and provision of neuropsychiatric testing are needed, as so many of our patients have neurocognitive deficits and learning disorders which greatly compound their mental health. … In many circumstances, we also see patients at a fiscal loss to our practice. For example, a 45-minute visit with a suicidal teenager, who just showed up at the office, results in the pediatrician spending more money to see the patient than what they bring in through billing." (Pediatrician #6)
"We already follow many of these children with limited supports. Community practices generally do a lot of mental health care but having limited access to counseling, and other supports for these patients is difficult (very long waitlists, especially for funded options) and access to specialty support is incredibly limited (very long wait lists for Peds Psych support if needed and then usually discharged back to us after one visit). Generally, it is hard because we feel quite unsupported. It's not that we're not following these children - we already are. There is just so much need right now that everyone's resources are strained." (Pediatrician #7)
"Case management. Better communication from psychiatry to community providers. Better documentation from psychiatry to community providers. Psychiatry contacting community providers to discuss a plan and use the expertise of community providers. Longitudinal access to psychiatry. Analysis of what recommendations there are for management of this population and striving to implement this. Less barriers in community pediatricians being able to access care for their patients." (Pediatrician #4)
"It would be nice to have more "bodies" (more Psychiatrists, Psychologists, Therapists) ... but that's not going to happen anytime soon. I would like more communication, especially with the "therapy" team. I really like the CanReach model. Empowering our Primary Care Physicians to help manage psychiatric patients really helps." (Family Physician #6)

services, and psychiatrists, and the need for better transition services, to support patients and their families.

Conclusions, Limitations, and Future Directions

This pilot study explored the motivation and unique challenges community family physicians and pediatricians face in managing complex psychiatric child and adolescent patients.

Both groups of physicians reported moderate to high interest/enjoyment and perceived competence in managing complex child and adolescent psychiatric patients. In line with hypotheses, however, they also reported little perceived choice and high tension/pressure when performing this task. This suggests that while community physicians may be interested in and capable of managing these patients, the current system is creating stress and hindering their intrinsic motivation to do so. These findings point to the potential benefit of interventions that support the basic psychological needs and intrinsic motivation of community physicians (24). Research shows that professional culture tends to undermine these things by prioritizing extrinsic (e.g., pay for performance) over intrinsic (e.g., competence, values, and interest) motivators (25).

In terms of limitations, this was a pilot study, and the survey response rate was low. There were also more pediatricians than family physicians in the study. Both of these limitations reduce the generalizability of our findings. Additionally, the survey was electronic and based on self-report data, which precludes a specific response rate, and creates potential for response bias. And, there is typically only a moderate correlation between self-report and behavioural measures of intrinsic motivation. Results should thus be interpreted with caution. Nonetheless, preliminary findings shed new light on community physicians' intrinsic motivation towards managing complex child and adolescent patients. They also raise new and important questions about how this task is hindering community physicians' basic psychological needs for self-determination and well-being, and where opportunities might exist to support them, in an evidence-informed way.

From a SDT perspective, the physicians' responses appear to indicate frustration of autonomy (i.e., in perceiving little choice and feeling forced to assume responsibilities beyond their time availability and scope of practice), competence (i.e., in feeling ill-prepared, pressured, and unable to do a good job by their patients), and relatedness (i.e., in feeling disconnected, alone, and resentful about systemic barriers and injustices). Future studies ought to test these hypotheses and explore how basic psychological need frustrations, in trying to manage complex child and adolescent psychiatric patients, relates to community physicians' job satisfaction and risk for burnout and career change. Studies could also explore whether added training would improve their work-related need satisfaction, since results from this study suggest that a focus on systems (and not individuals) would be more fruitful for community physicians and their well-being.

Importantly, the majority of community physicians discussed the inadequate availability and access to community resources and supports for their patients, the need for better prevention-focused resources, and how the current medical system relies on processes that lend to fragmented care and poor communication between inpatient and outpatient providers. Additionally, many emphasized the lack of structured guidance and support they receive when re-assuming care for their patients following a hospital admission – for example, due to unavailable discharge summaries and care plans. For example, some identified being unaware of which medications had been discontinued and started, yet they would be expected to take over the management. These issues highlight the potential benefit of quality improvement studies and interventions that focus on creating successful transitions from inpatient to outpatient settings, and vice versa, that directly involve the full medical care team, the child/adolescent, and their parents (26, 27, 28).

Conflict of Interest

The authors have no financial relationships to disclose.

Contributions

Nneka Orakwue-Ononye and Adam Neufeld designed the research project, and she and Abdul Rahman facilitated departmental and ethical approval. Nneka Orakwue-Ononye and Adam Neufeld were each involved in the data collection phase. Adam Neufeld handled the statistical analysis and wrote the first draft of the manuscript. All authors reviewed initial and subsequent versions, including the final submission.

Ethical Considerations

All research participants provided informed consent prior to taking part. The authors of the present study have no conflicts of interest or financial interests in the research.

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