Adolescent Inpatients with a History of Child Maltreatment

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Adolescent inpatients with substance use disorder (SUD) and a history of child maltreatment (CM) present a vulnerable population at considerable risk of poor health and social outcomes. Addressing their specific clinical and psychosocial vulnerabilities through comprehensive treatment and discharge plans may reduce readmission and improve quality of life.

Keywords: inpatients ; substance use disorder ; child maltreatment ; length of stay ; readmissions

1. Introduction

Children who experience maltreatment are among the most vulnerable in Canada, and their mental health is a major concern. Currently, child maltreatment includes physical abuse, emotional abuse, neglect, and sexual abuse, and through Bill 251, Combating Human Trafficking Act 2021, exploitation for child sex trafficking was added [1][2]. Global attention has also recently been on youth who are being trafficked or exploited which, as noted by The World Health Organization [3], indicated child maltreatment.

The precise etiology of psychiatric disorders is still unclear though much progress has been made in determining the genetic [4][5] contributions. Many of the environmental contributions to psychiatric illness are similar to the risk factors associated with child maltreatment. Multiple risk domains have been shown to be associated with both the onset of psychiatric illness and child maltreatment; however, parent-related risk factors such as parental psychiatric illness (current or history) or substance use and a history of child abuse are especially important [6].

Child maltreatment has been associated with several types of psychiatric illnesses, substance misuse, suicide ideation and attempts, obesity, poor physical health, poor spousal and family relationships, poor educational and occupational outcomes, criminal behavior, risky sexual behaviors, and sexually transmitted infections [7][8][9][10][11]; and adversely affects psychological development [12], functional and structural changes in the brain [13] and can be fatal [14].

Children who experience child maltreatment are at increased risk for hospitalization for trauma or psychiatric illness. Readmissions for patients experiencing maltreatment is common [15][16]. Moreover, a significant proportion of children admitted for intensive treatment for mental illness have child welfare involvement and present with worse functioning than children living with biological parents [17][18]. In particular, there has been recent attention to the vulnerabilities related to substance use disorder in youth involved in child welfare [19][20][21] and of particular relevance is the prevalence of substance use disorder in adolescent patients accessing urgent psychiatric care [22]. However, adolescents with substance use disorder also present with complex histories similar to those of adolescents who experienced child maltreatment, such as a family history of substance use and mental illness, family dysfunction, and difficulty with interpersonal relationships [23][24], so distinguishing characteristics associated with child maltreatment by reviewing medical charts may prove useful.

2. Findings of Patients with a History of Child Maltreatment

Of the 126 patients with substance use disorder, 80 (63.3%) had at least one characteristic of child maltreatment entered into the medical chart. In comparison to patients for whom there was no recording of any aspect of child maltreatment or exploitation (n = 46), there were no statistically significant differences in age (15.8; SD 1.1), but a greater proportion of youth who experienced maltreatment identified as female than male, had a greater number of admissions, and longer lengths of stay than youth for whom child maltreatment was not entered into the charts (**Table 1**). The most common psychiatric diagnosis for all patients was mood disorders. Patients with a history of child maltreatment had a statistically

higher proportion of trauma/stress-related and eating disorders, self-harming behaviors, histories of physical and sexual assault, and experiencing homelessness or being precariously housed, than patients without a history of child maltreatment (**Table 2**).

Table 1. Characteristics of Patients.

Characteristic	Maltreatment (*n* = 80)	No Maltreatment (*n* = 46)	*p* Value
Age, m (SD)	**15.7(1.1)**	**15.9(1.1)**	**0.410**
Gender, *n* (%) [1]			
Female	**57 (72)**	**24 (51)**	**0.024**
Male	**21 (27)**	**23 (49)**	
Number of Admissions, m (SD)	**2.2 (1.6)**	**1.6 (1.4)**	**0.044**
Length of 1st stay days, m (SD)	**10.6 (7.6)**	**8.1 (3.1)**	**0.029**

[1] One youth who identified as transgender was removed for this analysis.

Table 2. Clinical and Psychosocial Characteristics.

Characteristic	Maltreatment (*n* = 80)	No Maltreatment (*n* = 46)	*p* Value	Odds Ratio (95% CI) [1]
Psychiatric Diagnoses, *n* (%)				
Mood disorder	**52 (65.0)**	**28 (61.0)**	**0.643**	**0.934 (0.39–2.23)**
Trauma/stress disorder	**47 (58.8)**	**18 (39.1)**	**0.034**	**2.001 (0.88–4.55)**
Anxiety	**39 (48.8)**	**21 (45.7)**	**0.737**	**0.689 (0.84–0.37)**
Personality disorder	**11 (13.8)**	**7 (15.2)**	**0.820**	**0.172 (0.04–0.75)**
Parent–child conflict	**10 (12.5)**	**4 (8.7)**	**0.513**	**0.942 (0.19–4.73)**
Eating disorder	**7 (8.8)**	**0 (0)**	**0.047**	**-**
Trauma Histories, *n* (%)				
Parent with MI/SUD [2]	**64 (80)**	**27 (59)**	**0.011**	**1.685 (0.62–4.58)**
Self-harm behaviors	**60 (75)**	**22 (47.8)**	**0.002**	**2.847 (1.09–7.43)**
Suicidal behaviors	**50 (62.5)**	**24 (52.2)**	**0.257**	**0.674 (0.26–1.77)**
Sexual assault	**44 (55.0)**	**10 (21.7)**	**0.0003**	**2.882 (0.98–8.45)**
Physical assault	**43 (53.8)**	**11 (23.9)**	**0.001**	**2.645 (1.39–7.53)**
Victim of bullying	**38 (47.5)**	**18 (39.1)**	**0.362**	**0.998 (0.40–2.50)**
Homeless or precariously housed	**22 (31.3)**	**3 (6.5)**	**0.001**	**3.486 (0.82–14.79)**
Death of someone close	**21 (26.3)**	**10 (21.7)**	**0.571**	**0.887 (0.31–2.55)**

[1] CI = Confidence Interval [2] MI/SUD = mental illness and or substance use disorder.

3. Current Insights

It was found that the inpatients with substance use disorder and histories of child maltreatment were more commonly female, had longer lengths of stay, a greater number of readmissions, and a greater proportion were diagnosed with trauma/stress-related and eating disorders than inpatients with substance use disorder but no history of child maltreatment recorded in their medical charts. The higher proportion of female patients is consistent with similar reports [22] and may reflect the notion that male youth may be less likely than female youth to report maltreatment.

The longer lengths of stay and greater number of readmissions for these inpatients with substance use disorder and a history of child maltreatment is a considerable concern. At this regional hospital, there are not enough acute care beds (i.e., 13) in the child and adolescent psychiatric inpatient unit to manage the demands for service. For every day one youth is in the unit, another youth has to wait in the emergency department or community for an opening. Therefore, these findings suggest that these adolescents would benefit from the funding of programs for intensive outpatient or community support quickly available after the first admission to help reduce the length of stay and avoid repeat admissions.

The inpatients with a history of child maltreatment reported significantly higher levels of assaults, both physical and sexual, than patients without a history of child maltreatment. The connection between adverse childhood experiences (ACEs), child maltreatment, and substance use has been well-documented [8][25][26]. Substance use in youth is strongly associated with having experienced physical and sexual abuse and parental substance use [25], with significant negative impacts on emotional well-being and health. The stress of ACEs has been shown to have enduring effects and impair multiple brain structures and functions [25]. A history of child maltreatment has been shown to increase the risk for adverse clinical and developmental outcomes such as internalizing and externalizing disorders, post-traumatic stress symptoms, difficulties with attachments and interpersonal relationships [27][28], and a significant increase in the risk of developing a substance use disorder [29]. Both child maltreatment and substance use disorder are linked to borderline personality disorder [27][30] and, while there may be some genetic involvement, the co-occurrence is largely considered to stem from common environmental risk factors [27]. These common risks include parental substance use disorder, parental history of psychiatric illness, low family socioeconomic status, problematic family behaviors, and parental histories of abuse [6][27][30]. It has also been noted that PTSD may mediate this link between child maltreatment and substance use disorder [31]. Maltreatment ranks among the most stressful and adverse experiences children can have; it stems from a pathological relationship with a caregiver or relationship of power, responsibility or trust and increases the probability of psychopathology [29]. Specialized care is needed to promote optimal healing for youth with these complex histories, especially for children who experienced maltreatment.

Particular foci for youth hospitalized for psychiatric illness include strong collaboration between health care providers and between health care and child welfare providers and stakeholders from other child-serving systems, screening and assessment for trauma exposure and youth functioning in various domains, reliance on trauma-informed and culturally informed approaches, advocacy for nurturing placements, access to appropriate psychosocial treatment after discharge, and the maintenance of supportive relationships [32][33]. There is sound evidence for specialized interventions, such as trauma-focused cognitive-behavioral therapy for maltreatment, and burgeoning support, especially for youth at risk of substance use disorder for relational interventions [29]. Specialty care is needed to treat the effects of disrupted attachments and the complex psychosocial traumas that often include exploitations, instability, and violence.

4. Conclusions

A significant number (63.3%) of youth admitted to psychiatric care with substance use disorder were shown to have a history of child maltreatment recorded in their medical record. These patients also had a greater reporting of histories of physical and sexual assault, longer lengths of stay, higher rate of readmission, and were more likely to be diagnosed with trauma/stress-related and eating disorders than patients with substance use disorder but no history of child maltreatment indicated in their charts. Enhanced and specialized outpatient and community care may reduce readmissions and lead to better outcomes for these vulnerable youth.

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