

## Clinical Characteristics and Outcome of Emergency Department Referrals for Suicidal First Nation Children and Adolescents from Northern Ontario: Preliminary Report

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### Abstract

**Background:** Global concern about high rates of suicidal behaviours and completed suicides amongst Indigenous and First Nations youth has led to concerted efforts in many countries to generate and implement culturally sensitive identification and prevention strategies. In Canada effort have been directed policy and clinical and Social level to address this issue, however there has been a surge of referrals for suicidal risk assessment of children and youth in the wake a publicized suicide crisis in remote Northern Ontario' First Nations communities, 2 -3 hours by air from nearest psychiatric services. This case series describes demographic, clinical and psychosocial characteristic and outcome.

**Method:** This is a naturistic descriptive case series of First Nation children and adolescents who were referred by the Emergency Department Physicians for suicidal behaviours and were assessed by a hospital based child and adolescent urgent psychiatric consult clinic over a 3 month period in 2016. Results: 17 children and adolescents were assessed, there were 83% (n=14) females and 17% (n=3) males, the mean age was 14 years and 23.5% lived with a birth parent. All were referred for suicide related behaviours and 23.5% (n=4) met criteria for Depression and or Anxiety. Less than a quarter were at grade level. Forty-one percent of patients reported substance/alcohol use/abuse and 23.5% admitted to sexual abuse. Child protection agency was involved in 50%. Forty seven percent required short admission for crisis stabilization

**Conclusion:** In addition to previously known factors, lack of adequate supervision confers significant risk for Emergency department visits for suicide related behaviours, especially in younger females.

**Keywords:** Suicidality; First nations; Children and adolescents; Emergency

### Implications

This case series shows that media attention to suicidal behaviors in the absence of age appropriate supervision and support of children in the affected community may contribute to, an avoidable, sharp increase in suicidal behaviors. The results will inform the development of a larger study to examine psychosocial interventions to reduce the chance of repetition of this phenomenon.

### Introduction

First Nations/Indigenous children and adolescents across the world have higher rates of suicidal behaviors and completed suicide compared to any other group of youth [1-3]. The concerns raised by these high rates have led to review of governmental policy and recommendation on suicide prevention [4] and research focused on the causal factors and prevention of suicide amongst this population. A study of Australian aboriginal youth found that 23% admitted to suicidal ideation and 24% to suicide attempt and associated factors were social distress, emotional distress, behavioural factors whereas cultural connectivity was a protective factor [3]. Study of American Indian and Alaskan youth found that suicide attempts were associated

with attempts or completion by friends or family; physical or sexual abuse; health concerns; using alcohol, marijuana, or other drugs; a history of being in a special education class; treatment for emotional problems and gun availability. Connectedness to family and emotional health were protective against suicide attempts [5]. In Canada the rate of suicide completion amongst First Nations youth remains 5-7 times higher than other populations [6,7]. A study of First Nations adolescents from the province of Manitoba, found an association between suicidality and being a female, substance abuse, abuse or fear of abuse, depressed mood and hospital stay. Community caring was a protective factor [8]. A study of four First Nation Villages in the province of Quebec found that 2/3 of thirty completed suicides had suffered childhood neglect, severe parental abuse and childhood adversity [8,9].

This is a preliminary report on the characteristic of children and adolescents referred by emergency departments (ED) to a child and adolescent psychiatric urgent clinics over a 12 week (April to July 2016) period of time following a publicized mental health crisis in that region.

### Method

This is a naturistic descriptive case series of First Nations children and adolescents referred to a child and adolescent psychiatric Urgent

consult clinic for suicide risk assessment by the Emergency Physicians from 4 remote communities in Northern Ontario within a 12 week period. The Child and adolescent urgent consult clinic uses, direct interviews and Telemedicine network, to conduct assessment with 48 hours of referral. Data is gathered on all referrals to the clinic for demographic information including, living arrangements and clinical variables; presenting complaints, H/O past mental health problems, developmental history, physical abuse, sexual abuse, drug or alcohol use/abuse, family history and outcome at assessment. Due to the small sample we did not conduct detailed statistical analysis rather present results in percentages. Queens University research ethics board has granted approval for this study as part of a larger study of children seen by the clinic.

## Results

There was a sudden sharp rise in ED visits for suicidal behaviors by children under 18 years of age. There were 17 referrals for suicidal ideation/behaviors. Girls (83%) outnumbered boys (17%). The Average age was 12.3 years for girls, 15.6 years for boys (range 10 to 17 years). Seventy-seven percent were not living with biological parents and details of developmental history were sparse. Twenty three percent (n=4) of the girls were below 12 years of age. 82.5% were born to mothers below 18 years of age and fetal alcohol and drug exposure was confirmed or suspected in almost all of these. Family history was positive for antisocial disorders and alcohol/drug abuse in all and 17% had comorbid mood disorders. Self-reported history of Substance abuse was present in 41% (n=7) and sexual abuse in 23.5% (n=4) girls, no boy reported sexual abuse. 17.8% (n=3) had a previous direct inpatient admission for suicidal threat/attempt. Fifty three percent (n=9 all females) did not meet criteria for any diagnosis. Major depressive disorder was present in 1 male and 1 female, 2 males had anxiety disorder and 4 females had polysubstance abuse. A review of outcome showed that 82.3% were referred to CMHA for culturally supportive counselling and child management training for parents and guardians. 23.5% (3 males, 1 female) were provided combination of Brief Crisis intervention and medication. 47% were admitted for 3-5 days for further assessment and stabilization. The presentation to the ED occurred primarily in the evenings and on the weekends, there was no parental supervision for the 4 girls under 12 who were in a group with an older peers each denied any intent to kill themselves and blamed the older peer for daring them. The older adolescent girls reported being "high" or "drunk" at the time of making the threat or attempt. These children and adolescents had little emotional support, little routine, little prosocial extracurricular age appropriate activities to structure their day and were vulnerable to negative peer influences. Examining data for direct admission during this period found there were no high intent, high lethality suicide attempts and no completed suicides for this age group during the study period. Recommendations to connect with much needed support and family intervention from the local Children's mental health agency met with significant resistance, partly around concerns about confidentiality, from youth and caretakers.

## Discussion

This case series presents characteristic of children under 18 years of age who presented to Emergency Department of remote northern communities. One of these communities had been in the national news in mid-April due to a large number of suicidal attempts by adults in one day [10,11] Some of our results are consistent with previous

studies such as, female gender, substance abuse, abuse and the lack of protective attribute of community caring and connectedness [8,9]. Our results differed in that there was a total absence of males under 12 years of age, one explanation maybe that developmentally pre-pubertal boys maybe less aware and less susceptible to emotionally charged information and display more aggressive behaviors that do not cause concern to caretakers or community. Another result and one that caused concerns was the lack of supervision for children for extended periods of time, parents and guardians were unaware of their where about or who they were with leaving them vulnerable to negative peers influences. Neglect and lack of connectedness is a reported risk factor for suicidal behaviors, it has been suggested that involving the community in providing protection for the youth would reduce need for placement [9]. Previous research has identified potential targets for intervention which include improving coping skills, reducing stigma of mental health services and building community infrastructure [12]. First Nation communities in Northern Ontario need the collaboration of the Band councils, Children's mental health services, educators, police and health professional to target the above mentioned and child and adolescent specific interventions, adding care manager for mental health would assist this as well as better outcome. The positive impact of care managers on patient outcome has been reported for other medical conditions [13], we have started the process of requesting funding for a mental health social worker to act as care manager in the Emergency department as this is the main point of access for the community in this remote region.

## References

1. Kimayer LJ, Brass GM, Holton T (2007) Suicide in Aboriginal people in Canada.
2. Rutman S, Park A, Castor M, Tualii M, Forquera R (2008) Urban American Indian and Alaska Native youth: youth risk behavior survey 1997-2003. *Matern Child Health J* 1: 76-81.
3. Luke JN, Anderson IP, Gee GJ, Thorpe R, Rowley KG, et al. (2013) Suicide ideation and attempt in a community cohort of urban Aboriginal youth: a cross-sectional study. *Crisis: The Journal of Crisis Intervention and Suicide Prevention* 34: 251.
4. Morin T (2013) Suicide ideation and attempt in a community cohort of urban Aboriginal youth: a cross-sectional study. *Crisis* 34: 251-261.
5. Borowsky IW, Resnick MD, Ireland M, Blum RW (1999) Suicide attempts among American Indian and Alaska Native youth: risk and protective factors. *Arch Pediatr Adolesc Med*. 153: 573-80
6. Banerji A (2012) Canadian Paediatric Society, First Nations, Inuit and Métis Health Committee Preventing unintentional injuries in Indigenous children and youth in Canada. *Paediatr Child Health* 17: 393-4.
7. Harrop AR, Brant RE, Ghali WA, Macarthur C (2007) Injury mortality rates in Native and non-Native children: a population-based study. *Public Health Rep*. 122: 339-46.
8. Mota N, Elias B, Tefft B, Medved M, Munro G, et al. (2012) Correlates of suicidality: investigation of a representative sample of Manitoba First Nations adolescents. *Am J Public Health*. 102: 1353-1361.
9. Tousignant M, Vitenti L, Morin N (2013) Aboriginal youth suicide in Quebec: the contribution of public policy for prevention. *Int J Law Psychiatry*. 36: 399-405.
10. Ben S (2016) <https://www.thestar.com/news/canada/2016/04/11/crisis-team-sent-to-attawapiskat-after-it-declares-state-of-emergency-over-teen-suicide-attempts.html>.
11. Philpott J (2016) <http://www.cbc.ca/news/politics/attawapiskat-afn-jane-philpott-1.3530042>
12. May PA, Serna P, Hurt L, Debruyne LM (2005) Outcome evaluation of a public health approach to suicide prevention in an American Indian tribal nation 95: 1238-1244.

13. Ciccone MM, Aquilino A, Cortese F, Scicchitano P, Sassara M, et al. (2010) Feasibility and effectiveness of a disease and care management model in the primary health care system for patients with heart failure and diabetes (Project Leonardo). *Vasc Health Risk Manag* 6: 297-305.