

Changing Patterns of Suicide in Children and Youth: A Population-Based Study

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Background

Suicide is the leading cause of injury death for Manitobans. For children and youth 10-19 years of age it is the second leading cause of injury death.

Manitoba's College of Physicians and Surgeons has conducted in-depth reviews of all suicides among children and youth since the mid-1980s.

Reviews in recent years have raised concerns regarding changing patterns of suicide, including increasing incidence, decreasing age, more off-reserve suicides, and more females completing suicide. This study was performed to document and evaluate these trends.

Objective

To describe recent epidemiology of suicide involving children and youth in our province (population 1.2 million).



Methods

Sample

All suicides of children and youth less than 18 years of age were examined for 2003-2005.

Data Sources

Data sources included medical records for the incident and the preceding two years, obtained through physician claims searches; and police, child welfare, medical examiner, and autopsy reports. All had complete autopsies including toxicology studies.

Variables

- Age, sex, place of residence
- First Nations treaty status
- Location of suicide (on- vs. off-reserve)
- Method
- Toxicology
- Medical and mental health care
- Medications
- Previous attempts
- Recent losses/suicides
- Outstanding criminal charges
- Child welfare involvement

Data Analysis

Differences were analyzed using Fisher's exact test, Chi-square, and ANOVA.

Results

- Suicides increased from 13 (2003) to 25 (2005) while the population remained stable.
- The mean age was 14.9 years (SD 0.3, range 8-17 years), and was lowest in 2005 ($p < 0.03$).
- Gender, First Nations status and the proportion of suicides off-reserve did not change significantly.
- 75% had not sought medical care. Nine had received mental health services, and three were on psychiatric medications.

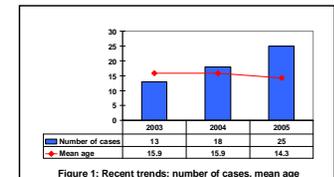
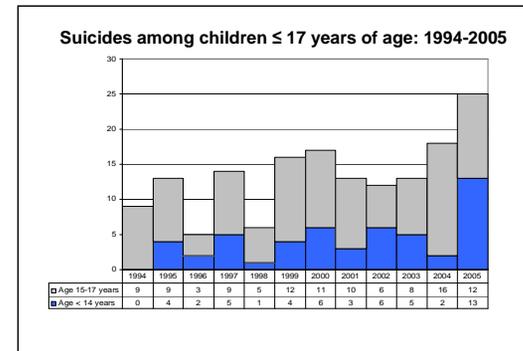


Figure 1: Recent trends: number of cases, mean age

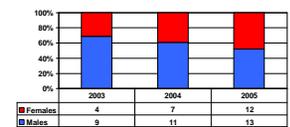


Figure 2: Recent trends: gender distribution

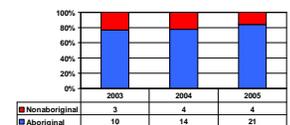


Figure 3: Recent trends: First Nations status

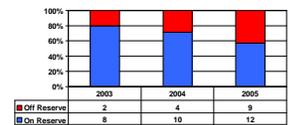


Figure 4: Recent trends: First Nations, on- and off-reserve

Conclusions

Our data document a dramatic increase in suicides in recent years, with a significant increase among children ≤ 14 years of age. Most children had not sought any medical or mental health care prior to the event. These findings have implications for planning of suicide prevention and assessment services.