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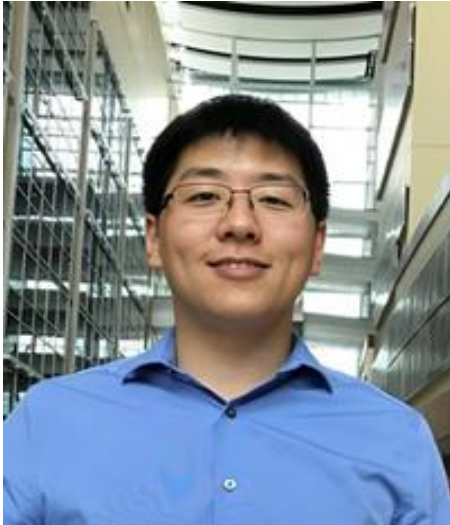
MENTAL HEALTH AND ADDICTION SERVICES

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Suicides of Elderly Patients Connected to Mental Health Services from 1999-2024



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Risk factors and methods in suicides of elderly patients connected to mental health services from 1999–2024

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Faculty/Presenter Disclosure

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Aims

Analyzed data collected by the quality assurance (QAR) team

- Looked at suicides occurring in older adult patients connected to the Calgary Addiction and Mental Health Program at the time of death
- Identify which factors are most common
- Inform approaches to suicide prevention within AMH program



Why This Matters

- Older men are one of the groups with the highest rates of suicide.¹
 - 85 to 89 had the highest rate of suicide in 2019 (27.7 per 100,000 population)
 - 90 years+ had the highest rate in 2020 (20.3 per 100,000 population)
- A study of suicide in the U.S. say a significant increase in suicides only in the population aged 75 or older.²
- More than 30% of older women and more than 20% of older men who died from suicide had prior involvement with mental health services.^{3,4}

1. Statistics Canada . Table 13–10-0392–01 Deaths and age-specific mortality rates, by selected grouped causes. doi: 10.25318/1310039201

2. Garnett MF, Curtin SC. Suicide mortality in the United States, 2001–2021. NCHS Data Brief, no 464. Hyattsville, MD: Natl Center Health Stat. (2023). doi: 10.15620/cdc:125705

3. Schmutte TJ, Wilkinson ST. Suicide in older adults with and without known mental illness: results from the national violent death reporting system, 2003–2016. *Am J Prev Med.* (2020) 58:584–90. doi: 10.1016/j.amepre.2019.11.001

4. Choi NG, Marti CN. Depression in older women who died by suicide: associations with other suicide contributors and suicide methods. *J Women Aging.* (2023). doi: 10.1080/08952841.2023.2292164

Why This Matters

Contact with mental health services is an opportunity to assess for and address factors contributing to suicide risk.

Contributors to suicide risk



Psychiatric symptoms

Mood - severity, changes
Neurovegetative symptoms
Social withdrawal
Psychosis, esp. presence and
character of command
hallucinations



Risk factors

Stressors
Sociodemographic (marital
status, employment, housing,
special populations), historical
(family history suicide) and
comorbid factors (part of routine
psych assessment)
Access to means



Protective factors

Individual strengths and supports
Should not supercede warning
signs, but can help with
instillation of hope, foster self-
worth and identify reasons for
living

Methods – Data

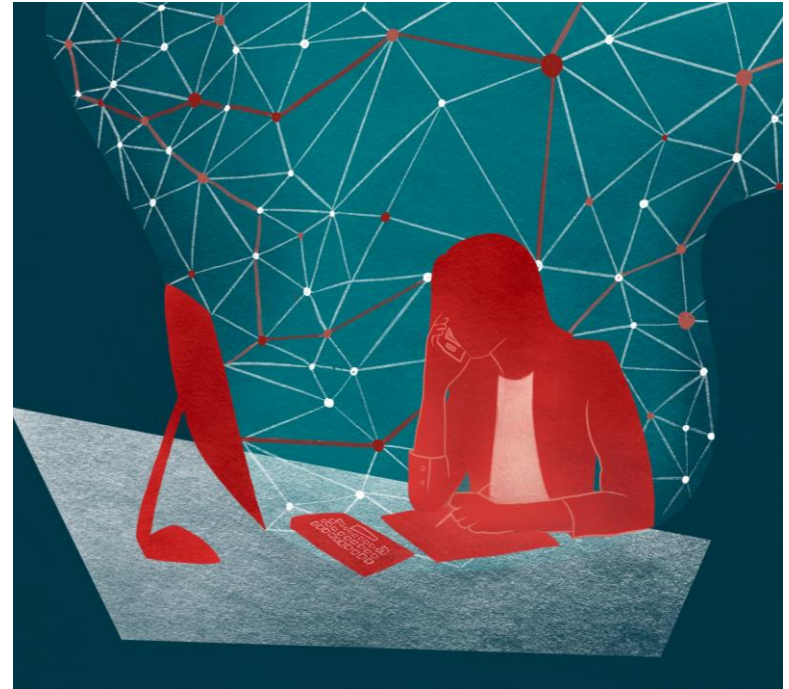
- Data from March 1999 to February 2024
 - Patients aged 60 years or older
 - Receiving care from Calgary AMH:
 - While followed by an outpatient addiction and mental health program.
 - While on a waitlist for an outpatient addiction and mental health program.
 - Seen by a psychiatric emergency services team in the emergency department in the 72 hours prior to death.
 - While admitted to a psychiatric unit.
 - In the month following a psychiatric admission.
 - After being seen by the psychiatric consultation liaison team while admitted to another medical service within the 30 days prior to death.
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Methods – Data

- Data from March 1999 to February 2024
 - The following data was collected for each event:
 - Date of death
 - Clinical service most recently involved in individual's care
 - Gender
 - Age
 - Ethnicity
 - Marital status
 - Employment status
 - Psychiatric diagnosis
 - History of substance use
 - History of suicide attempts and self-harm
 - Social isolation
 - Stressful events prior to suicide
 - Method of suicide
-

Methods – Analysis

- Using IBM SPSS version 29.0.0.0
- Fisher's exact test used to determine if association between gender and other factors examined was present.



Results

- 48 deaths from suicide identified
- No statistically significant association between gender and variables (partially due to small sample sizes).
- Greater proportion of females (58%) than males (38%) were married at time of death

Table 1. Demographic Factors

	n (%)
Total	48
Gender	
Female	19 (40%)
Male	29 (60%)
Age at time of death (years)	
60 - 69	34 (71%)
70 - 79	9 (19%)
80 - 89	3 (6%)
90 +	2 (4%)
Ethnicity	
Caucasian	44 (91.7%)
Hispanic	1 (2.1%)
Southeast Asian	1 (2.1%)
East Asian	1 (2.1%)
Jewish	1 (2.1%)
Marital status	
Married	22 (46%)
Single	7 (15%)
Divorced	10 (21%)
Separated	3 (6%)
Widowed	6 (13%)
Employment status	
Unemployed	13 (27%)
Unemployed with disability income	4 (8%)
Partially employed with disability income	1 (2%)
Employed	3 (6%)
Retired	24 (50%)
Unknown	3 (6%)

Table 2. Treatment Setting and Suicide Method

	n (%)
Total	48
Most recent treatment setting	
Outpatient psychiatric management	27 (56%)
On waitlist for outpatient treatment	1 (2%)
Psychiatric inpatient	
Discharged by treatment team	2 (4%)
Discharged against medical advice	1 (2%)
On psychiatric unit	2 (4%)
Off-unit while admitted	1 (2%)
On weekend/overnight pass during admission	6 (13%)
Seen by consultation liaison team	1 (2%)
Assessed and discharged from ED	2 (4%)
Continuing care facility	1 (2%)
Addiction program	4 (8%)
Method	
Unknown	7 (15%)
Laceration	1 (2%)
Drowning	4 (8%)
Overdose	15 (31%)
Firearm	2 (4%)
Hanging	15 (31%)
Carbon Monoxide	1 (2%)
Fall from Height	2 (4%)
Asphyxiation	1 (2%)

Hanging

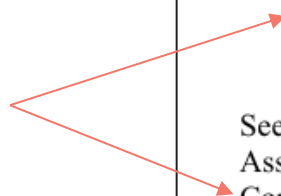


Table 3. Adverse Life Events in 6 Months Preceding Death

	n (%)
Total	45
Type of adverse life event in preceding 6 months	
Any adverse life event in preceding 6 months	32 (71%)
New medical issue	10 (22%)
Illness or death in loved one	6 (13%)
Loss of important social support for other reasons	5 (11%)
Loss of housing	6 (13%)
Financial stress	3 (7%)
Social conflict	1 (2%)

Table 4. Psychiatric History

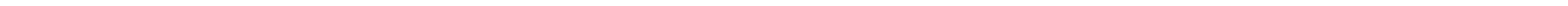
	n (%)
Total	48
Primary diagnosis	
Depression	23 (48%)
Bipolar disorder	3 (6%)
Adjustment disorder	3 (6%)
Schizophrenia or other psychotic disorder	4 (9%)
Anxiety	5 (11%)
Substance-related disorder	5 (11%)
Grief	2 (4%)
Cluster B personality disorder	1 (2%)
Dementia	1 (2%)
Somatoform disorder	1 (2%)
All diagnoses	
Depression	29 (60%)
Bipolar disorder	5 (10%)
Adjustment disorder	6 (13%)
Schizophrenia or other psychotic disorder	5 (10%)
Anxiety	9 (19%)
Substance-related disorder	8 (17%)
Grief	3 (6%)
Cluster B personality disorder	8 (17%)
Cluster C personality disorder	3 (6%)
Unspecified personality disorder	2 (4%)
Post-traumatic stress disorder	1 (2%)
Dementia	1 (2%)
Somatoform disorder	1 (2%)
Substance Use Disorder	
No	32 (67%)
Yes	14 (29%)
Unknown	2 (4%)
Previous Self-harm or Suicide Attempt	
No	21 (44%)
Within 3 months prior to death	12 (25%)
More than 3 months prior to death	9 (19%)
Yes, timeline unknown	2 (4%)
Unknown	4 (8%)

Discussion

- Findings generally consistent with other data on suicide in elderly and suicide in patients receiving mental health services.
- Greater proportion of males compared to females (60% males), but smaller proportion compared to studies of suicide in older adults in general (73-83%)
 - Suggests lower proportion of men dying from suicide had contact with mental health services
 - Efforts to improve suicide prevention for older women in mental healthcare system
 - Efforts to improve engagement of older men with mental health system before suicide

Discussion

- Cases were predominantly Caucasian
 - No cases of Indigenous population in this study despite high rate of suicide in this population in general
 - Possibly related to previous bad experiences of mental health services or public services in general
 - May be related to mental health services' colonial roots
 - Participants may have been reluctant to identify as Indigenous

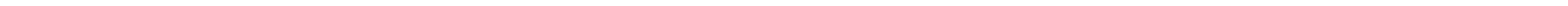


Discussion

- Hanging and overdose were the primary methods identified
 - Only two deaths from firearms
 - Studies from US and Italy identified firearms as a common suicide method
 - Possibly related to culture and access to firearms
 - May be related to assessment of access to means in mental healthcare settings
 - Notably general population data on suicides from Stats Canada have firearms as the third most commonly used method (16%).

Discussion

- Inpatient suicides
 - Hanging
 - All suicides occurring in inpatient settings due to hanging
 - Limiting access to potential ligatures and fixtures are important
 - Suicide of current or recent inpatients while on pass or recently discharged
 - Importance of assessing suicide risk prior to pass or discharge
 - *Note that it's important to balance suicide prevention measures with personal autonomy and experience of receiving mental healthcare overall.*
 - Overly restrictive or uncomfortable measures (ex. Very uncomfortable sheets/blankets that can't be tied into ligature) can decrease willingness to engage with care or reinforce self-stigma



Discussion

- Adverse life events prior to death
 - Of cases with data, 71% had an adverse life event in the 6 months preceding death
 - New medical issue was the most common, but a wide range of events were identified
 - Psychiatric history
 - 60% had a diagnosis of depression
 - Ability to provide treatment for depression and address psychological and social contributors to risk is important
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Summary

- These data support current best practices in suicide prevention
 - Minimizing ligatures and anchor points in inpatient psych settings
 - Assessing for and restricting access to means in at-risk patients
 - Assessing suicide risk in hospitalized patients prior to passes and discharge
 - Ensuring sufficient resources (psychotherapy, psychopharmacology) is important to help decrease drivers of suicide risk



QUESTIONS

Thanks for your attention!

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