Research-to-Practice Spotlight: Prevalence and Risk Factors for Suicidal Ideation in a Multiple Sclerosis Population

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Background
Suicide ranks among the top 10 causes of death in Canada. While often associated with mental disorders, suicide is also an issue on people suffering from physical conditions such as multiple sclerosis. In these situations, suicide is associated with depression, but also with many other factors. Studies have generally indicated that age and sex-adjusted rates of suicide are about twice as high in people with multiple sclerosis (MS) as in the general population. Suicide is a particularly tragic form of death since it is preventable. In addition to ending a life, it leaves a difficult legacy for family and friends of the victim. Suicide is a difficult problem to study in MS because it is relatively infrequent. Most existing studies have used large population databases, allowing access to data from thousands of patients. Unfortunately, these studies do not usually provide detailed information on other risk factors. An alternative is to study suicidal ideation, which is a strong predictor of suicide but is much more common and can be examined in smaller samples.

Methods
In this study, we examined data collected from a cohort of 188 respondents sampled from the University of Calgary MS Clinic. The Clinic keeps a database listing those patients who have provided permission to be contacted about research studies. A mailed letter of invitation and a consent form was sent out to a random sample of these patients and 188 provided their informed consent and participated in the study. Data were collected from this cohort every two weeks for the next six months using an internet-based data collection platform, mailed-in questionnaires or telephone interviews (according to each patient’s preferences). A rating scale
for depression was included at each time point, providing ratings on suicidal ideation and other depressive symptoms. A variety of factors potentially related to suicidal ideation were also assessed using validated ratings scales.

Results and Discussion
The frequency of suicidal ideation was surprisingly high. In their initial interview, 8.3% of the sample reported experiencing suicidal ideation. Over the entire sequence of 13 interviews a total of 22.1% reported suicidal ideation at least once. Sex was not associated with the occurrence of suicidal ideation, but a higher frequency was observed in the 65+ age group, where suicidal ideation was more than three times as common as in the younger participants. A higher frequency of completed suicide in people over the age of 65, especially among men, has been reported in the Canadian general population as well. Depression is a well-known and widely accepted risk factor for suicide, so we were most interested in risk factors for suicidal ideation that made an independent contribution above and beyond depressive symptoms. With adjustment for depression the effect of age > 65 became even stronger (a fourfold increase). This indicated that the association with age was negatively confounded with depression. This occurs because of a lower frequency of depression in older respondents such that the effect of age was partially masked. Another important variable was self-efficacy (one’s confidence in being able to deal with and overcome challenges). Even after adjustment for depression, low self-efficacy was associated with a three-fold increase in the prevalence of suicidal ideation. Task-oriented coping refers to doing things and solving problems to cope better with an illness whereas emotion-oriented coping refers to the use of coping strategies that are oriented towards diminishing unpleasant affects such as distress, sadness or anxiety. Generally, task-oriented coping strategies are considered more effective for coping with health conditions. Consistent with this idea, low levels of task-oriented coping and high levels of emotion-oriented coping were both associated with a doubling of suicidal ideation.

Some of the results were related to the illness itself. One particularly important symptom was the occurrence of bladder or bowel symptoms, which are common in MS. These symptoms, if not managed properly, can be damaging to social interactions and can contribute to social isolation and a sense of hopelessness. Some people with such symptoms consider them to be a threat to their personal dignity as well. This symptom was associated with three times the level of suicidal ideation seen in the respondents who did not report this symptom.

Another important symptom was difficulty with talking or swallowing. These are troubling symptoms for people who develop them, representing a serious threat to social functioning, physical health and independence. These symptoms were also strongly associated with the occurrence of suicidal ideation.

While some of the variables described above are related to one another (e.g. those over 65 years may be more likely to have some of the deficits such as bladder or bowel symptoms that are associated with suicidal ideation) their effects persisted,
independently from one another, in the study’s regression models.

A limitation of the study is its reliance on a single item from a depression scale called the PHQ-9 to assess suicidal ideation. The item in question refers to thoughts of death or thoughts that life is not worth living and not to specific plans or intent to kill oneself. However, the item has been shown to predict suicide. Furthermore, the frequency of endorsement of this item was more than three times more likely in this sample than was observed in prior community surveys conducted in Calgary.

One of the problems with suicide is that, like depression, it is stigmatized and is therefore is not discussed as openly as it should be in clinical settings. People who are struggling with suicidal ideation are usually grateful for an opportunity to discuss the issue, but they may not raise it spontaneously during clinic visits. When clinical staff notice that a person is depressed they are more likely to ask about suicidal thoughts, but these results show that there are other characteristics that can help to identify those at higher risk. Older individuals and those with severe and threatening symptoms, as well as those who are struggling to effectively cope with their illness, are at higher risk. In these situations, clear, direct and non-judgmental questions are most useful to initiate a discussion about suicide.

Health professionals are not immune to the stigma that is associated with suicide. Their own discomfort may sometimes cause them to be reticent to discuss this issue with patients. However, suicide is an important health issue and one that should not be ignored. Questions about suicide very rarely elicit a negative response from patients. Such questions do not increase the risk of suicide or “plant ideas.” On the contrary, they can save lives by bringing an often hidden issue closer to the surface.

In addition to drawing attention to sub-groups at high risk of suicide, the study also provides some directions for prevention. Due to the strong association of depression with suicide, recognition and management of depression is one important strategy. However, providing support and assistance with strategies for coping with serious and threatening symptoms appears to be important too. Generally speaking, these results provide support for the importance of efforts to enhance mental health (beyond the treatment of depression), including addressing issues of self-efficacy and effective problem solving, in people with MS.

Other Stories of Interest: Covering Suicide in the Canadian Media

Recently, Canadian journalists released a new guide to improving reporting and writing about mental health. Below is an excerpt from the guide. The entire guide can be found here.

“We agree there is stigma. We know media portrayal and misinformation feed into it. What does that mean in practice for a daily reporter?

Our suggestions:

• We need to help dispel the idea that people with mental illnesses are naturally dangerous, prone to random fits of violence.

• We need to seek out, listen to and relay the voices of people with mental illnesses, in order to portray their varied situations accurately and break down the false notion of a division between “us” and “them.”

• We need to make it clear that for people with mental illnesses, recovery is not only possible, but the norm.”

The guide also included a section on covering suicide in the media. The entire section on preventing suicide can be found here. Some of the highlights of this section are:
Journalists need to move away from the notion of not covering suicide. At one point advocates of suicide prevention propagated that the less that was said about suicide, the fewer there would be. However, when the media mostly stopped covering the topic of suicide, there was no drop in deaths by suicide.

Suicide experts consulted for the media guide want journalists to cover this topic as it requires further attention.

Journalists should realize that suicide is hardly ever straightforward and usually a chain of events leads to it. Mental illness is a factor in about 90% of the cases.

Liam Casey, a journalism student wrote a prize winning article on reporting on suicide for the Ryerson Journalism Review based on his own suicide attempt. He continued to write a series about problems in the mental health system.

Gemma Richardson, a doctoral student at Western University is studying the history of suicide reporting by some of Canada’s leading newspapers and is including newspapers from more than a century ago. Her Initial findings indicate that,

“Suicide was not always taboo in the media. In fact, the silencing and tip-toeing around reporting on suicide only began to occur in the mid-20th century. Once suicide became an untouchable subject in newsrooms the stigma became entrenched, making it hard to address in any meaningful way for decades.”

Journalism ethics journals have recently posed questions about the purpose of intrusion into a family’s grief after sudden deaths. The guide asks journalists to adopt a humane approach because of the extra damage that they may cause in a time when the family is often dealing with feelings of guilt.

Middle aged men are the biggest demographic in the suicide story and this is often not what we see in the news; a factual approach to covering suicide is therefore warranted.

Young people are particularly susceptible to the development of mental illness and thoughts of suicide and the media has highlighted this in recent years.

When parents face the shocking loss of a child, some withdraw while others use public campaigns as a forum against the supposed cause. Journalists then often provide sympathetic and uncritical coverage of this oversimplified message which can be troubling.

Recently, researchers at McMaster University conducted a study on the portrayal of youth suicide in Canadian News1. The researchers hypothesized that accountable media reporting of youth suicide would reduce the risk of self contagion and help accelerate help-seeking behavior. The authors conducted a content analysis of newspaper articles addressing Canadian youth suicide and then assessed and summarized the content into themes, age groups, populations and use of scientific evidence. Articles from the Canadian Periodical Index Quarterly were searched from 2008-2012 for full-text Canadian newspaper articles using the keywords “youth” and “suicide.” The top five most relevant articles were selected for every year for a total of 25 articles. The World Health Organization (WHO) guidelines for responsible media were used to assess the quality of the articles. Two independent reviewers completed the content analysis. All articles reported on death by suicide generally, rather than specifically. The rate of adhering to the WHO guidelines varied from 16% to 60%. The most common content theme was prevention and was addressed by 80% of the articles. Fifty two percent of the articles referred to help seeking but only 20% provided information on places to obtain help. Statistics were referenced 76% of the time while scientific research was referenced only 28% of the time. In conclusion, the Canadian media presents youth suicide as an issue for which optimism and assistance exists. Increasing the use of scientific evidence about the risk factors and information about prevention of suicide is recommended to help the translation of knowledge into improved health and reduced suicide risk among Canadian youth.

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Did You Know?

- Nearly 4,000 Canadians die by suicide each year, an average of more than 10 suicides a day\(^1\).
- After accidents, suicide is the second leading cause of death among youth accounting for about 25% of deaths among youth aged 15 to 24\(^1\).
- More than 75% of suicides involve men, but women attempt suicide 3 to 4 times more often\(^1,2\).
- First Nations youth die by suicide about 5 to 6 times more often than non-Aboriginal youth. Suicide rates for Inuit youth are among the highest in the world, at 11 times the national average\(^3\).
- A Canadian study conducted in New Brunswick estimated the average cost per suicide death in 1996 at $849,878\(^4\).

\(^3\) Health Canada (2012). First Nations & Inuit health – mental health and wellness.

Research Partnership Program Progress Update

Collaborative Research Grant Initiative: Mental Wellness in Seniors and Persons with Disabilities (CRGI)

Final Research Grant Reports

Several CRGI research grant recipients have completed their research and submitted a final report. Final reports highlight research findings and outline how findings may impact policy and practice. All final reports for research within the CRGI can be found here.

Operating Grants

Enhancing System Capacity to Improve the Quality and Continuity of Mental Health Care Dr. Colleen J. Maxwell (University of Calgary)

The main objectives of this research were to: examine the health, social needs and quality of care of older adults with Alzheimer's disease and related dementias and/or depression living in designated assisted living and long-term care facilities in Alberta; identify the mix of services provided to these residents, including assistance from family caregivers; and, examine health outcomes across settings (including admission to hospital and long-term care), taking resident and facility characteristics into account. Her final report can be found here.

Burden of Care on Elderly Parents of Adult Children and Mental Illness Dr. Scot Purdon (University of Alberta)

The purpose of this study was to identify and improve mental distress, physical limitations, and functional impairments among family members providing care to a dependent adult suffering from serious mental illness. His final report can be found here.

Seed/ Bridge Fund

Mental Health Training for Home Support Workers Dr. Candace Konnert (University of Calgary)

The general objective of this research was to assess the need for mental health training among home
support workers caring for older adults in the community. Her final report can be found here.

**Ideas Fund**
From Dependence to Empowerment Adam Heighes (Vantage Enterprises Ltd.)
The objective of this project was to evaluate a workshop where individuals with disabilities and their caregivers are taught about collaborative problem-solving and provided the opportunity to apply collaborative problem-solving concepts. His final report can be found here.

Community Re-integration of Forensic Clients with Persistent, Chronic Mental Illnesses: A Retrospective Evaluation of Life Skills Training Programs Provided Through the House Next Door Society Residential Services Dr. Elizabeth Taylor (University of Alberta)
The purpose of this project was to determine the efficacy of community reintegration/life-skills training programs offered by the House Next Door Society and their impact on outcome measures of the specific program dedicated to the forensic mental health client; and to identify current and future housing and resource needs of the House Next Door in providing services to this complex population. Her report can be accessed here.

**Upcoming Events**

**Alberta Psychiatric Association Annual Conference**
March 19, 2015- March 22, 2015
Banff, Alberta

**International Association of Eating Disorders Professionals Symposium 2015**
March 19, 2015- March 22, 2015
Phoenix, USA

**Alberta Gambling Research Institute's 14th Annual Conference**
March 27, 2015- March 28, 2015
Banff, Alberta

>> http://www.mentalhealthresearch.ca/news/Events/Pages/default.aspx

**Funding and Job Opportunities**

>> http://www.mentalhealthresearch.ca/news/Opportunities/Pages/default.aspx

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