
A Qualitative Analysis of Suicide Ideation among Manitoban Farmers Une analyse qualitative de l'idéation suicidaire chez les agriculteurs manitobains

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ABSTRACT

Canadian studies examining suicide among rural and farm populations remain scarce. To better understand this phenomenon, a qualitative research paradigm was used to analyze encounter forms of 29 individuals (24 men, 5 women) who called the Manitoban Farm and Rural Stress Line. Content analysis revealed 7 major themes: (a) coping mechanisms, (b) financial concerns, (c) health issues, (d) family salvation, (e) uncontrollable events, (f) family stress, and (g) farm culture. Consistent with previous research, it was noted that farmers appear to experience various stressful events, with finances being a key concern. Additionally, farmers report common characteristics not conducive to help-seeking behaviour. This research indicates a need for increased services specific to Manitoban farmers.

RÉSUMÉ

Les études canadiennes portant sur le suicide dans les populations rurales et agricoles demeurent rares. Pour mieux comprendre ce phénomène, un paradigme de recherche qualitative a été utilisé pour analyser les formulaires de rencontre de 29 individus qui ont appelé la ligne téléphonique de soutien psychologique pour les familles agricoles et rurales au Manitoba, la *Manitoba Farm and Rural Stress Line* (NdTr. Ligne téléphonique de soutien psychologique pour le Manitoba rural). L'analyse du contenu a révélé sept thèmes majeurs, dont les stratégies d'adaptation, les préoccupations financières, les problèmes de santé, la préservation de la famille, les événements incontrôlables, le stress familial, et la culture agricole. En accord avec les recherches antérieures, on y montre que les agriculteurs semblent vivre divers événements stressants, les finances étant une inquiétude clé. En outre, les agriculteurs rapportent des caractéristiques communes qui ne mène pas à un comportement de recherche d'aide. L'étude indique un besoin d'augmenter les services destinés spécifiquement aux agriculteurs manitobains.

Suicide is a leading cause of mortality worldwide (World Health Organization [WHO], 2008) and does not discern age, socio-economic class, or ethnicity (Dixon, Heppner, & Rudd, 1994). This phenomenon remains one of the most challenging clinical problems (Bonner, 1990; Rudd, Jobs, Joiner, & King, 1999), and most therapists will, at some point, work with clients who express suicidal ideation (Reeves & Seber, 2004). Moreover, it is estimated that more than 20%

of counselling psychology trainees will be exposed to at least one clinical situation involving suicide before completing their academic training (McAdams & Foster, 2000).

Extant suicide research addresses urban participants and data with little reference to rural populations (Beeson, 2000). Ironically, the rates of suicide are often higher in rural compared to urban areas (Hirsch, 2006; Stack, 1982). Fraser et al. (2005) report that farmers experience one of the highest rates of suicide of any industry, and there is growing evidence that those involved in farming are at higher risk of developing mental health problems. From an international perspective, higher rates of suicide within farming communities have also been found in Australia (Hossain, Eley, Coutts, & Gorman, 2008; Judd et al., 2006), the United Kingdom (Hawton et al., 1999), Japan (Nishimura et al., 2004), and the United States (Kposawa, 1999). Behere and Bhise (2009) provide an international analysis of suicide among farmers and assert that

[s]uicide among farmers is now a universal phenomenon. Studies across the globe have identified farming as one of the most dangerous industries. Farming environments are characterized by a broad and changeable range of physical, biological, and chemical hazards that are similar across all cultures. Thus, it is important to view the issue of farmers' suicide from a global perspective. (p. 242)

Given the demographic diversity of Canada, a number of populations fall outside the usual scope of study. As of 2001, rural communities represent more than 9,000,000 Canadians, or 30.4% of the population (Beshiri & Bollman, 2001). According to Statistics Canada (2009), *rural populations* include people who live outside urban areas and *urban populations* include people living in a continuously built-up area having a population concentration of 1,000 or more and a population density of 400 or more per square kilometre.

Within this large population, Canadian farmers constitute an important and well-established subculture. In fact, in 2006, Statistics Canada reported 229,373 operating farms across Canada (Statistics Canada, 2007). It follows that a significant portion of the Canadian population may be statistically at higher risk of suicide, but remains underrepresented in the research. In an effort to reverse this trend, this article discusses research that explored suicide ideation among Manitoban farmers who called a rural crisis line. In addition to reviewing prevalent themes, the issue of stigma, barriers to treatment, and factors contributing to stress among Manitoban farmers are addressed.

LITERATURE REVIEW

In 2004 approximately 3,600 Canadians took their lives, an average of about 10 suicides per day (Statistics Canada, 2008). Given that approximately one-third of the Canadian population lives in rural areas, it is important to examine suicide within this population. Hirsch (2006) speculates that the rural context may have created geographic, socio-cultural, and psychological barriers to treatment that are unique to the present-day situation. He further argues that rural suicide rates are

higher than urban rates possibly due to culturally based external risk factors (e.g., geographic isolation, demands of rural life, economic and political factors) and culturally-based internal risk factors (e.g., adoption of rural ideals, subjectivity of interpersonal isolation), both of which may moderate the relationship between traditional risk factors and suicidal thoughts and behaviours.

In addition, deaths are often less likely to be classified as suicides in rural areas due to stigma (Beeson, 2000). Suicides may be portrayed by family members or loved ones as accidents to avoid public scrutiny, thus suggesting that a number of farm deaths classified as accidents may actually have been suicides, and that farm suicide rates may be higher than indicated by current research (Standing Senate Committee on Agriculture and Forestry, 1993). Beeson (2000) posits that a reliance on urban community participants and data skews our understanding of suicide and reduces its applicability to rural populations.

Farm Suicide

Suicide among working people, such as farmers, is the outcome of a complex interaction between worker vulnerabilities (e.g., mental health problems), stressful working conditions, and living conditions (social and/or environmental stressors) (WHO, 2006). In a detailed report, the WHO cited farming as one of the most stressful occupations, and job stress as a frequent precursor to mental health problems that in turn represents a major risk factor for suicide. This organization also identified a number of risk factors for suicide among farmers, such as higher rates of depression, hazardous work environments, easy access to pesticides, reduced access to emergency services, high job stress, and social isolation. To date, only the provinces of Manitoba, Nova Scotia, Saskatchewan, and Ontario have crisis lines devoted to farm and rural populations. Currently, in-person counselling is limited to the provinces of Ontario and Prince Edward Island. A Manitoba study indicates that mental health care providers recognize the scarcity of available, appropriate, and acceptable mental health services for rural citizens (Ryan-Nicholls, Racher, & Robinson, 2003).

Only two studies have explored the differences in suicide rates between urban and farm samples in Canada. Pickett and Brison (1993) examined suicide rates on Ontario farms from 1980 to 1989 and Pickett, King, et al. (1999) explored the suicide rates for Canadian farm operators via an epidemiologic study. Both studies report lower than average suicide rates among Canadian male farm operators. Interestingly, Pickett, Hartling, Brison, and Guernsey (1999) through their descriptive, epidemiological analysis found that suicide rates increased over time, indicating higher rates near the end of the period studied than in the beginning. Additional studies have not been conducted to replicate and confirm these findings (Centre for Suicide Prevention, 2002).

Farm Stress

Farming has historically been ranked as one of the more stressful occupations (Canadian Agriculture Safety Association [CASA], 2005; Heffernan, 1986; Keat-

ing, 1987; WHO, 2006). Although farm stressors are multifaceted and fall into a number of categories, research indicates that stress is most frequently linked to unstable and adverse economic conditions (Standing Senate Committee on Agriculture and Forestry, 1993). The additional occupational stressors related to off-farm employment, including long working hours and role overload, are confirmed in the high levels of stress found in a number of Canadian men and women who engage in off-farm employment (WHO, 2006).

Researchers have identified a number of factors that appear to be related to farm suicide in Canada, including plummeting farm revenues, lack of social recognition, the bovine spongiform encephalopathy (BSE) scare, stress, and hesitancy to seek mental health services (CASA, 2005; Hirsch, 2006). Recent fluctuations in economic conditions, as well as the BSE crisis, are cause for concern. In 2005, the CASA surveyed 1,100 agricultural producers across Canada regarding personal stress. It was determined that the greatest sources of stress stemmed from financial concerns related to commodity prices, the BSE crisis, and general farm finances.

Help-Seeking Behaviour

According to Reese (2002), multiple factors may negatively impact farmers' help-seeking behaviour, including greater isolation due to a growing distance between farms, increased competition and less cooperation among farmers because of the changing global economy, and fragmentation of existing rural communities as more people are moving off farms and into urban areas. Finally, increased reliance on technology has decreased the need for close contact with other farmers. Reese speculated that due to the increased competition and further separation, farmers have lost the primary support of fellow farmers.

Farm families typically participate less than the general public in human service programs. Despite the availability of mental health services, rural families have lower rates of service utilization than their urban counterparts, and they typically rely on physicians or religious leaders for support (Hirsch, 2006; Meystadt, 1984). This is especially true for rural males. Among Canadian farmers, pride, independence, lack of awareness of community resources, and perceptions of health care providers' knowledge about agriculture were found to be the most important factors that negatively influence help-seeking behaviours (CASA, 2005).

Mental Health Outcomes

Job stress is often a precursor to mental health problems, which in turn are considered a major risk factor for suicide (WHO, 2006). Findings suggest that the combination of high stress and the tendency not to seek support has detrimental effects on farmers' psychological and physical well-being. It is well documented that enduring occupational stress is linked to musculoskeletal disorders, burnout, injuries, depression, violence, and suicide (WHO, 2006). Moreover, Ortega, Johnson, Beeson, and Craft (1994) report that studies conducted in the 1980s and early 1990s found that the impact of farm stress and economic hardship triggered personal problems, including high levels of stress-related illnesses, hypertension,

psychiatric disorders, depression, diminished life satisfaction, marital discord, alcoholism, and death by suicide. Consistent with this finding, the WHO (2006) lists farming as one of the occupations with a high risk of suicide.

Research on farm families and issues around suicide and accessing crisis services is especially limited in Canada. For reasons that are not clear, the results of the limited research on suicide rates among Canadian farmers seems at odds with findings about their international counterparts. It is known that individual factors and characteristics influence how people experience and deal with stress, but further exploration of factors involving farm suicide is necessary to understand the phenomenon of farm suicide in Canada.

METHODOLOGY

Research Design

Conventional content analysis is a popular qualitative orientation in health care studies and is used for “the subjective interpretation of the content of text data through a systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005, p. 1278). Hsieh and Shannon (2005) posit that the use of conventional content analysis is useful in gaining direct information without imposing preconceived categories or theoretical perspectives and in cases where there is limited theory or research literature regarding a specific phenomenon. In essence, within this orientation, researchers “immerse themselves in the data to allow new insights to emerge” (Hsieh & Shannon, 2005, p. 1279).

Data Collection and Analysis

Data for this study were gathered from encounter forms (see Appendix A) collected by the Manitoba Farm and Rural Stress Line (MFRSL) over a 5-year period (2003–2008). The sample for this study comprised encounter forms relating to 29 people (24 men, 5 women) who called the Farm and Rural Stress Line and identified themselves as persons involved in farming with concerns around suicide. Sixteen of the callers were currently experiencing suicide ideation, 8 had experienced past ideation, and 5 were third-party callers. Fourteen of the callers did not identify their ages, 12 identified as being between the ages of 36 and 50, and 3 were between the ages 51 and 61. Nine of the callers were married, 4 were separated, 3 were single, 1 widowed, and 12 were unspecified. The majority of the callers (18) were new to the stress line, while 11 of the callers had called before.

Encounter forms are printed on legal-size paper and contain data on front and back. The forms are part of the assessment process and contain field notes on particular client calls. Each time a caller makes contact, an encounter form is completed by a counsellor taking the call. When calls contain suicide-related content, counsellors fill out suicide-risk forms and append these to the encounter forms (see Appendix B). The encounter forms that were analyzed contained written accounts of the calls received, not verbatim reports from the callers. In essence,

counsellors record their account of the presenting problem, relevant history, focus of contact, and outcome.

Ethical considerations were dictated by the research paradigm. For example, formal consent was not required since the retrospective data were used in such a way that the callers' identity could never be recognized. Further, the data were analyzed collectively and no identifying information was retained. Confidentiality and anonymity of the participants' identity were maintained in accordance with MFRSL policy.

A six-phase analysis model proposed by Braun and Clarke (2006) was used to organize and describe the main themes in the data. According to these authors, this model is appropriate when exploring underresearched topic areas. The steps involved in the analysis process include (a) becoming familiar with the data, (b) generating initial codes, (c) searching for themes, (d) reviewing themes, (e) defining and naming themes, and (e) producing the report.

The first step in the analysis process involved sorting through each encounter form that had been completed and filed over the aforementioned 5-year period. Forms are typically discarded if they contain no identifying information or suicide content. Forms that contained suicide content were gathered and organized according to whether individuals were calling from an urban area, rural area, or farm area. After the forms had been sorted, the farm calls with suicide content were further categorized depending on whether they had current suicide ideation, had past ideation, or were calling about someone else (third-party calls).

All encounter forms were numbered and categorized according to ideation (past, present, or third-party). Next, all forms were photocopied and the original forms were placed back into storage. The photocopied forms became working forms for the purposes of this study.

The actual analysis commenced by reading and re-reading each form to gain a general idea of their content. Ideas were noted and brief field notes were made in the left margins or, depending on content, on a separate sheet of paper. Key phrases or quotes for future reference were boxed off to stand apart from the rest. Following this process, the data were again reviewed for content pertinent to the experience of a farmer calling a crisis line. Code words or phrases were noted in the right margins to accurately describe a text segment when a new concept emerged. For example, the term *crop failure* was used as one of the codes for a poor harvest during the year the call was made. These codes were then re-examined and condensed into larger categories. This involved, for example, clustering similar codes together and renaming redundant codes. This process served to reduce the overall number of codes. At this point, all of the codes, field notes, quotes, and other markings were transcribed into a Microsoft Excel spreadsheet for ease of analysis. Each code was typed onto a separate sheet each time it occurred.

Next, the codes were rearranged into groups according to similarity or relevance. Major themes were identified by the number codes that were grouped together and given titles that represented the underlying concepts that were emerging. For example, *crop failure* was grouped with *machine breakdown* and *drought* in

the theme that became *uncontrollable event*. The entire text was then re-read to identify any themes that could have been missed or codes that could have better fit under another theme.

RESULTS

The data analysis resulted in the emergence of seven distinct but interrelated themes: (a) coping mechanisms, (b) financial concerns, (c) health issues, (d) family salvation, (e) uncontrollable events, (f) family stress, and (g) farm culture. Health issues contained two minor themes: mental health and physical health. Each theme is discussed below.

Coping Mechanisms

The theme of coping mechanisms describes callers' typical behavioural responses to the challenges of farm life. This includes phrases that referred to how individuals were reacting to the various stressors in their lives and addressing mental health concerns. By definition, coping mechanisms are important protective factors in suicide risk assessment and general mental health. Taken together, callers appeared to have a limited repertoire of coping abilities, with many citing none at all. The most commonly reported way that callers used to cope was through psychotropic (mood) medication (21%). Some callers reported not knowing what to do and/or engaging in negative behaviours, such as continually not sleeping or eating, while others reported using alcohol, drugs, or both. A few callers reported various self-care activities including reading, talking with someone, writing, napping, walking the dog, or attending self-help meetings.

According to Swisher, Elder, Frederick, and Rand (1998), farm youth have developed resilience to stress from their role on the farm. This comes from family cohesion, connection to community institutions, social comparisons, and productive roles fostered within the farm culture. However, those who are not coping well are of particular cause for concern. The finding that mood medications were the most commonly used means of coping may reflect the tendency for rural people to consult a general medical practitioner for help rather than a mental health professional (e.g., Meystadt, 1984).

Finally, the finding that some farmers rely on alcohol as a means to cope does not appear frequently in the literature. Some evidence suggests, however, that alcohol consumption is often involved when there are high rates of work-related stress (CASA, 2005).

Financial Concern

Financial concern was a prevalent theme among callers. This theme consisted of issues of monetary constraint and loss. Over half of the callers (55%) cited finances as directly related to their call to the crisis line. Conversations centred on debt load, financial loss, and continual financial uncertainty. Callers made statements indicating that they could not buy fertilizer or that they were overdrawn

on their bank account most of the time. Notably, those who directly mentioned financial concerns often appeared to also experience strained family relationships, and spoke primarily of feelings of sadness and anger. In one case, finances were directly blamed for poor interfamilial communication. A number of others (17%) spoke of finances indirectly and made reference to selling their farms. Some spoke of the feeling of being stuck in situations where they wanted to sell, but were unable to for various reasons.

Previous research is consistent with the finding that financial concerns are a problem among farmers (CASA, 2005). As discussed in a recent large-scale survey, financial concerns were ranked as the top stressor for Canadian farmers (CASA, 2005). Financial concerns were frequently shared on the crisis line, not surprisingly given the prevalence of unpredictable events such as the recent BSE crisis and unfavourable market conditions. In fact, most callers who spoke of an unpredictable event also had financial concerns. It is important to consider the implications for increased occupational health and safety risks, which are often associated with financial hardship (Keating, 1987; WHO, 2006). For example, Canadian farmers may be at increased risk for farm accidents, mental health concerns, and suicide due to the increased stress caused by financial hardship.

Health Issues

Health issues, comprising both physical and mental health, were commonly reported by callers. Eight callers (28% of the sample) reported a variety of physical health problems, but most interesting from a research point of view were reports of ongoing fatigue, high blood pressure, and stress-related physical illness. Mental health references were delineated into feelings, overt expression of feelings, and statements regarding general state of mind. Ten callers (34%) made reference to previous mental health issues and commonly cited diagnostic terms including, and primarily, depression and anxiety. Callers described their feelings using terms such as anger, stress, guilt, sadness, shame, loneliness, worry, helplessness, and being overwhelmed. Some (14%) claimed that they had recently expressed their feelings through crying, along with thoughts of grief and loss. Other comments described feelings of irritability, lethargy, and poor concentration and problem-solving.

The finding that a large portion of farmers in the sample experienced physical and/or mental health concerns is consistent with expectations and previous literature. It is known that farming is a high-stress occupation and that this stress often manifests as physical and mental health problems (WHO, 2006). It is also possible that mental health problems could lead to more accidental injuries and death. Farmers made reference to depression, anxiety, fatigue, difficulty problem solving, and difficulty concentrating, all of which indicate reduced cognitive ability. When working with heavy machinery such as farm equipment, mental acuity is particularly important, as accidents may cause serious injury or death. This is also consistent with the 2006 Canadian Census of Agriculture, which revealed 13,801 farm-related injuries within the previous 12 months (Statistics Canada, 2007).

Family Salvation

Family salvation appeared to be an important protective factor noted among callers. Family salvation refers to instances in which callers mentioned family support or family members as a reason for not going through with suicide. When callers were speaking of their reasons to live, family was cited almost exclusively. Eleven callers (38%) named some form of either family tie or family support as something to live for. Six of these 11 callers claimed to have great support from at least one family member, while the other 5 directly cited a certain family member or members, regardless of support, as a reason for living. For example, 1 farmer stated, "I just keep going because I think someday my son will need me." Another stated he could not follow through because he wanted to see his nieces and nephews grow up. Notably, life partners were not often cited as a form of support. Of the 11 callers, only 2 (18%) cited their spouses or significant others as positive forms of support. Instead, family support was perceived primarily from a variety of extended family members such as brothers, children, nieces, nephews, and brother-in-laws.

The finding that family support was a substantial protective factor for farmers calling the crisis line was consistent with expectations. Family and community support are well-documented protective factors for suicide (U.S. Department of Health and Human Services, 2001). It was interesting that few farmers named spouses as a reason for living. It is possible that spouses were not mentioned due to strain and tension in the marital relationship.

Uncontrollable Events

Uncontrollable events were commonly cited and denote a theme that represents an external or environmental event that has caused significant stress or financial loss. Seventeen of the callers (59%) reported an uncontrollable event that related to their crisis call. Four callers (14%) reported bad weather conditions such as rain, drought, flooding, and tornadoes as events that caused concern. Eight callers (28%) spoke of problems with livestock, including death or seizure, with 5 of the 8 citing BSE. Other events included machinery breakdown, crop failure, loss of a loved one, and frustration with government programs.

Past research substantiates findings that uncontrollable events are common stressors (CASA, 2005; Keating, 1987). Interestingly, every uncontrollable event appears to relate to farm yield and ultimately finances, excepting the one mention of a lost loved one. Weather-related phenomena, such as drought, correspond with crop yield and subsequent income, whereas livestock-related issues correspond with the ability to sell in the market.

Family Stress

Family stress was an additional source of concern for callers. The family stress theme includes distress associated with immediate family members, such as partners and children. A large component and significant concern (cited by 41%

of callers) was marital problems. These problems involved talk of separation or divorce and general relational difficulties. Additionally, many spoke of lack of communication, lack of appreciation, isolation, financial strain, and increasing stress as contributors to marital difficulties.

Notably, financial strain was labelled by callers as one of the few direct causes of an intimate relationship breakdown and the possibility of divorce. Only finances and general stress were labelled as direct causes of an intimate relationship breakdown, with finances addressed twice and general stress just once. Five callers mentioned physical abuse or domestic violence, and 1 spoke of verbal abuse. A number of callers also mentioned the strain between themselves and their children, including relationship strain, problems with communication (including yelling), and isolation.

Considering the high stress that some farmers experience, it is not surprising that intimate relationships and family life can be negatively affected. Additionally, farm men are typically socialized to be independent and emotionally removed, leaving them reluctant to speak with close family members about their problems. In light of research that addresses rural help-seeking behaviour in men compared to women (Weigel, 2003), one might expect women to be more likely to utilize the service to address their own crises. However, most of the suicide calls made by farm women in this study were concerning someone other than themselves.

In contrast to the sample studied, 3 out of 4 of the third-party callers were female. Notably, the women were calling with concern about their spouses even though they were often experiencing significant stress themselves and were contemplating leaving the relationship. Perceived changes in their spouses' behaviour appeared to be a primary concern, while other concerns about spouses included depressed mood and isolating behaviour. Interestingly, financial concerns and thoughts of selling the farm were mentioned in 3 out of the 4 third-party calls. It is not entirely clear as to what these results suggest, apart from confirming that farm women are also under considerable stress.

Farm Culture

It appears that farmers identify themselves with a unique culture that separates them from the general public. Farm culture was a dominant theme among calls, and can be described as a collective set of values that generally inhibit help-seeking behaviours while often promoting more stressful reactions. The theme included characteristics related to farming values and the overt expression of these values. For example, 4 callers cited pride as an esteemed value, one that prevents them from talking to people about their problems. In fact, 1 caller stated that his partner was afraid that others would learn about his personal problems. Further, geographical and/or social isolation may play a role. Three callers expressed feelings of physical and/or social isolation, and 1 caller actually commented that he had no supports.

Even when supports are available and pride is not an issue, farmers appeared not to want to use professional supports for a variety of reasons. A typical response,

given by 4 callers, was that *outside people* or people outside of the immediate family/community would not understand. Others indicated a preference to keep their emotions private. For example, 1 caller stated that he even felt misunderstood by his counsellor, while another refused to explain his situation to his agriculture representative as *they just would not understand*.

In terms of expressing oneself, some callers felt they were unable to find the words to describe their emotions or were nervous about receiving help. One caller remarked that he was uninterested in receiving help.

Finally, some callers reported apprehension regarding their established reputation or the way community members would react if it were known that they were seeking professional help. Interestingly, off-farm employment is a common necessity that becomes an exaggerated stressor due to the farm culture. Rather than seek help, and sacrifice their pride by selling part of their land, some farmers prefer to continue to work an unprofitable farm and supplement their income with off-farm employment. For obvious reasons, callers often cite off-farm employment as a source of stress and resentment. Notably, some callers spoke about their ambivalence toward farming. One caller stated that he wanted to walk away but experienced a sense of humiliation.

DISCUSSION

The results of this study suggest that farmers experience a number of stressful events, with finances as a primary concern. In fact, almost all reports involving uncontrollable events were related to finances. The uncontrollable events discussed could be considered stressful in and of themselves (e.g., flooding), but it is not surprising that, with financial repercussions, so many farmers report high stress levels.

Financial hardship and stress among farmers is evident, but help-seeking behaviour appears limited. It appears that the farm culture can inhibit help-seeking behaviour, with many subjects citing pride, reputation, and lack of understanding as reasons for not seeking help. The coping mechanism of most farmers was limited to the use of medication, with some resorting to alcohol abuse. Several farmers reported turmoil within the family and a number of physical/mental health complaints, all of which may reasonably be linked to high stress levels and no effective way of moderating these intense feelings. One hopeful finding was that family support appears to be a preventative factor in farm suicide, at least among Manitoban male farmers.

A number of questions generated by the findings presented in this study provide direction for future research. While the current study confirms earlier findings on the factors involved in farm suicide in other countries, it would seem counter-intuitive when considering the previous epidemiological studies on suicide rates among the Canadian farmer (Pickett, King, et al., 1999). Since similar factors exist in Canada, how can the differences in suicide rates be accounted for? Although it is possible that rates of suicide are lower among Canadian farmers than urban Canadians, it is also possible that past research may not be representative of the

contemporary farm population. Future research is needed to confirm the rate of suicide among Canadian farmers, and to draw comparisons with studies conducted in other countries.

In addition, further research is required to determine the effects of farm stressors on women and children on farms. Health risks and suicide rates among women and children on the farm are not well understood (Pickett, King, et al., 1999). Public reports suggest that young children and adolescents are often concerned and preoccupied about their parents' situations and subsequently experience high levels of stress (Standing Senate Committee on Agriculture and Forestry, 1993).

Study results further indicate that relative to male farmers in the Manitoban Farm and Rural Stress Line catchment area, farm women are not often calling stress lines with suicide concerns, and when they do, it is often regarding concerns about someone else. This can be interpreted in a number of ways. It could be that farm women are experiencing less stress than farm men, or that they have more effective coping strategies and use alternate support systems. It could also be that farm women are indeed experiencing the stress, perhaps more so as they are also concerned about their partners, but are not expressing it.

To our knowledge this is the first qualitative study involving farm suicide in Canada. The present study begins to address the previous research results and the limited understanding in Canada, highlighting a need for more research on suicide and the Canadian farmer. As such, it provides much needed research in an underresearched topic area and a foundation for further research.

This research has the potential to benefit counsellors and health care providers who work with suicidal clients among rural and farm populations. Counsellors need to be aware of the unique nature of concerns presented by the Canadian farmer and of the potentially elevated suicide rates. Counsellors are likely to encounter suicidal clients and most have limited training in this area; even fewer have training with a specific population like the Canadian farmer. Given that over 30% of Canadians live in rural areas, it is important for mental health professionals to be aware of mental health concerns specific to this population. This research provides information regarding the complex factors surrounding suicide ideation among the Manitoba farm population.

Finally, counsellors working on farm and rural crisis lines may benefit from expanding their knowledge of the experience of the Manitoban farmer. By doing so, these counsellors may be better equipped to develop rapport with clients and create safety plans. In sum, the results of this research may assist counsellors in the assessment and treatment of suicidal clients who have farm backgrounds in Manitoba, and potentially extend across Canada.

Limitations

A number of limitations are evident in the present study. First, the study provided an in-depth examination of male farmers who called a rural stress line in a specific province in the Canadian prairies, and thus is limited in applicability to the general population. Second, the sample consisted of a small ($N = 29$), primarily

middle-aged, male population. Future studies would benefit from a larger and more diverse sample, containing an even number of male and female subjects of all ages. Third, the sample used retrospective data that was completed for suicide assessment purposes, which limited the scope of information available. Additionally, the data were limited to the content contained on the encounter forms and would have been much richer had actual interviews taken place with farmers who had at one time felt suicidal. Additionally, the telephone counsellors may not have filled out the forms consistently or included all relevant information. It is probable that potentially helpful and meaningful information was lost through inconsistent documentation by the different counsellors.

Researcher bias represents a potential problem in any research study, but perhaps more so within a qualitative paradigm due to its subjective nature. The first author volunteered for the Manitoban Farm and Rural Stress Line for two years; consequently, it is possible that past knowledge, judgement, or experience has affected the results of this study.

Recommendations

Finally, the present study has identified a number of stressors faced by Manitoban farmers, but how these factors relate to each other and to suicide remains speculative. A need for additional research around stressors as they relate to the changing context of farming in Canada has been identified by the Standing Committee on Agriculture and Forestry (1993). It is recommended that future research address the complex interplay between environmental stressors and suicide.

CONCLUSION

The results of this study are consistent with existing research and provide additional information regarding the experience of Manitoban farmers who call a telephone crisis line. Although rural crisis lines represent a first step toward addressing the issue of suicide ideation, increased effort is required to specifically address the needs of the Canadian farmer. It is hoped that the preceding findings can inform counsellors and assist them in serving the farm population.

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Appendix A
Blank MFRSL Encounter Form Page 1

DATE _____ SHEET NO. _____
 Yr. Mo. Day REFER TO: _____
 TIME OF CONTACT: _____ hrs. WORKER: _____
 DURATION OF CONTACT: _____ min. SUPERVISOR: _____

<i>Sector:</i>	<i>Contact Category:</i>	<i>Type of Contact:</i>	<i>Level of Contact:</i>
Farming	Information	New	Information
Rural	Caller about self	Previous	Support
Urban (Wpg./Bdn.)	3rd Party	Follow-up	Counselling
Unknown		E-mail	Intervention

<i>Client Information:</i>	<i>Gender:</i>	<i>Age:</i>
Name _____	Male	Under 12 36–50
Address _____	Female	13–17 51–64
Phone # _____	Unknown	18–26 65 & over
E-mail: _____	Transgender	27–35 Unknown

Relationship Status: _____ Living Arrangements: _____

Problem Area: (√ all applicable areas)

Alcohol/Drugs	Information	Sexual Assault	<i>Farm related issues -</i>
Anger	Isolation/Loneliness	Sexuality	BSE PMU
Child Welfare	Job	Suicide	Exit Financial
Domestic Abuse	Loss/Grief	Threats to Others (form)	Gov. Programs/Policies
Financial	Medical	Other: _____	Information
Housing	Relationship		Off-farm Employment
Mental Health: Depression, Anxiety, other _____			Relationship Transfer
			Excess Moisture
			Weather Drought
			Other: _____

Suicide Ideation: Yes No 3rd Party *If yes, fill out "Threat to Self/Other" form*
Past Ideation: Yes No 3rd Party *If yes, fill out "Threat to Self/Other" form*
Homicide Ideation: Yes No 3rd Party *If yes, fill out "Threat to Self/Other" form*

Region Calling From:

Assiniboine	Brandon	Burntwood	Central	Churchill
Interlake	Nor-Man	N.Eastman	Parkland	S.Eastman
Winnipeg	First Nation	Out of Country	Out of Province	Unknown

Heard about MFRSL: Clinic Radio TV Newspaper Referral Phone book Pamphlet/poster
 Other _____

Consultation: (For follow-up calls use encounter form)

Date: _____ Time: _____ Duration: _____ Done by: _____

Outcome: _____

OUTCOME: CONTRACT/REFERRALS

PRESENTING PROBLEM(S)/PRESENTATION/FEELINGS –

RELEVANT HISTORY

FOCUS OF CONTACT/ASSESSMENT (i.e., Safety, Lethality, Child Welfare, Coping Abilities, Client Goals, Supports)

Appendix B
Blank MFRSL Threat to Self or Others Form

DATE _____ Sheet No. _____
 Yr. Mo. Day Worker _____
 Supervisor _____

SUICIDE RISK ASSESSMENT

Third party assessment: Yes No

Level of Emotions Distress: "How bad is the pain?" "How bearable is the pain":
 Mild Moderate Severe

Caller's Description and/or Presence of:

<i>Depression</i>	Mild	Moderate	Severe	<i>Anxiety</i>	Mild	Moderate	Severe
<i>Anger</i>	Mild	Moderate	Severe	<i>Hopelessness</i>	Mild	Moderate	Severe
<i>Hostility</i>	Mild	Moderate	Severe				

SUICIDE IDEATION

<i>CURRENT:</i>	<i>METHOD:</i> (✓ as applicable):	<i>MEANS AVAILABLE:</i>
None	Will not specify	Carbon Monoxide Yes
Some	Does not know	Vehicle Collision No
Frequent	Firearms	Hanging Would not specify
Persistent	Jumping	Overdose - Call not asked
Threatening Suicide	Slashing	Firearms
	_____	Immediate access; Can access
	<i>Type/dosage/quantity</i>	

<i>HAS A PLAN:</i>	Vague	Detailed	None			
HISTORY OF ATTEMPTS:	OTHER FACTORS (√ as applicable):			TIMING OF ATTEMPT:		
No	Alcohol/Drugs involved at time of call			Currently in progress		
Yes	Alone			Immediate		
When _____	Isolated			Within 24 hours		
How _____	History of mental health issues			Within 24-48 hours		
Received:	Current mental health issues			After 48 hours		
Medical Attention	diagnosis _____			specify _____		
Other Intervention	Medication _____			Would not specify		
_____	Significant Loss _____			Caller not asked		
Last Attempt	Hx of suicide by a significant other:					
Low Risk	who _____			WHERE ATTEMPT		
Medium Risk	when _____			WILL OCCUR:		
				Callers home		
High Risk	Physical health problems _____			Other (specify) _____		
	Significant life changes _____					
	Other factors _____					
INTERVENTION REQUIRED:		INTERVENTION COMPLETED:				
No	Yes	Not Possible	No	Yes	Not Possible	
CALL TRACED:		No	Yes	time: _____ hrs.		
HOMICIDE IDEATION:		No	Yes	(If yes, use Threat to Other form)		
PAST:		PLAN:		MEANS AVAILABLE:		
None		None		Yes		
History of Violence		Vague		No		
History of Incarceration		Specific		Unknown		
CURRENT:		METHOD:		TIMING:		
None		Unspecified		In Progress		
Isolated Thoughts		Stabbing		Immediate		
Frequent Thoughts		Assault		Within 24 hrs.		
Threatening		Firearms		After 24 hrs.		
		Other		Unspecified		
OTHER FACTORS:		INTERVENTION REQUIRED:			CALL TRACED:	
Alcohol		Yes No Not Possible			No Yes	
Drugs					Time: _____ hr.	
INCIDENT NUMBER: _____						

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