

UNIVERSITY OF CALGARY

A QUALITATIVE EXAMINATION OF FARM CALLERS
WHO CALL A RURAL CRISIS LINE

BY

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A Final Project submitted to the
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Faculty of Graduate Studies and Research

The undersigned certifies that she or he has read and recommends to the Faculty of Graduate Studies and Research for acceptance, a final project entitled A Qualitative Examination of Farm Callers Who Call a Rural Crisis Line, submitted by Ryan Sturgeon in partial fulfillment of the requirements for the degree of Master of Counselling.

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ABSTRACT

Despite findings of high rates of suicide among rural and farm populations, few Canadian studies on farm suicide exist. To gain a better understanding of suicide among Canadian farm populations, a qualitative research methodology was used to analyze encounter forms of 29 individuals who called the Manitoban Farm & Rural Stress Line. Thematic analysis revealed seven major themes: coping mechanisms, financial concerns, health issues, family salvation, uncontrollable events, family stress, and farm culture. Consistent with previous research, farmers appear to experience a multitude of stressful events with finances as a key concern. Additionally, farmers report a number of common characteristics not conducive to help-seeking behavior. This research indicates a need for increased services specific to the Manitoban farmer.

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CHAPTER I

Introduction

Suicide is a complex behavior with biological, social, and psychological components. It can be seen in every culture across the globe and can occur in any individual or family, regardless of age, socio-economic class, or ethnicity (Dixon, Heppner, & Rudd, 1994). Suicide is a major social problem and a leading cause of mortality worldwide (World Health Organization [WHO], 2008). For people who work in the mental health profession, it is not a question of whether or not they will encounter suicide; it is a question of when.

Health care professionals, and counsellors in particular, are sure to come across suicide in their careers. Research indicates that suicidal statements and gestures occur often in psychotherapy practice (Bonner, 1990; Deutsch, 1984, Reeves & Seber, 2004). Reeves and Seber note that most therapists will, at some point, work with a client that expresses suicide ideation. In fact, recent research estimates that more than 20% of counselling psychology trainees will be exposed to at least one clinical situation involving suicide before they have finished school (McAdams & Foster, 2000). Further, research suggests that suicide remains one of the most difficult therapeutic issues faced by therapists in their professional lifetimes (Bonner; Rudd, Jobes, Joiner & King, 1999). This makes the factors associated with suicide prevention and differences in various populations important considerations for counsellors. To compound the problem, often suicide is not openly addressed. According to the WHO (2008), suicide prevention has not been adequately dealt with due to a general lack of awareness and reluctance to talk openly about it, and very few countries have included suicide prevention among their priorities. Although many studies have been completed and suicide prevention standards are

continually being developed, the WHO continues to call for higher standards in suicide programming and reporting.

Most existing suicide research addresses urban participants and data, with little reference to rural populations (Beeson, 2000). Studies of rural populations, however, often find a marked difference in suicide rates (Hirsch, 2006). A number of researchers have found rural suicide rates to be higher than those of the general population (Hirsch). 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 million Canadians, or 30.4 percent of the population (Beshiri & Bollman, 2001). 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 is at a statistically higher risk of suicide, but remains under-represented in the research.

Counsellors in practice in rural Canada are likely to experience a clinical situation involving suicide. The limited research on rural suicide in Canada is alarming. In fact, research on suicide rates in Canada is limited to two epidemiological studies done by Pickett and colleagues on data from the late 1970s and mid-1980s (Pickett & Brison, 1993; Pickett, King, Faelker, & Bienefeld, 1999). Ever since these two Canadian studies, which found lower than average suicide rates among Canadian male farm operators, research has almost come to a halt; no additional studies have been conducted to replicate and confirm these findings to date (Centre for Suicide Prevention, 2002).

In other parts of the world, employment in agriculture-related occupations such as farming appears to be a risk factor in rural suicide. While international research on farm suicide

rates is similarly limited, the few completed studies often document higher suicide rates than those of the general population. Higher suicide rates among farmers have been documented in the United States (Gunderson et al., 1993); Scotland and the United Kingdom (Stark et al., 2006); England and Wales (Hawton et al., 1999; Kelly & Bunting, 1998); and Australia (Miller & Burns, 2008; Page & Fragar, 2002). The authors of these studies often highlight the lack of rural suicide research and implore that more research be undertaken.

The purpose of the present study is to gain a better understanding of farm suicide by examining the experience of Manitoban farmers who call a rural crisis line. Evidence suggests farming in Canada is a stressful occupation (Canadian Agriculture Safety Association [CASA], 2005; Heffernan, 1986; Pipke, Svenson, & Drieger, 1987; Scallon, 2007; WHO, 2006; Walker & Walker, 1987), and that a rural culture exists which often deters farmers from seeking help (CASA; Hirsch, 2006; Jackson et al., 2007; Judd et al., 2006; Martinez-Brawley & Blundall, 1989; Reese, 2002). It is thought that help-seeking behaviors and protective factors (i.e., factors that serve to prevent suicide) in rural areas differ significantly from those among the urban population (Hirsch, 2006; Weigel, 2003). The research question guiding the present study is: What is the experience of a Manitoban farmer who calls a rural crisis line? It is hoped that the findings of this research will result in a better understanding of the phenomenon of suicide among Manitoban farmers, and promote further research across Canada.

This study will commence with a detailed review of the literature on suicide rates as a means of highlighting the importance of suicide research. The literature review will begin as a general examination of the global prevalence of suicide, become more specific to the Canadian population, followed by the rural population, and finally the farm population. Then farm stress will be examined specifically, followed by farm culture, help-seeking behavior, and telephone

crisis services. After reviewing the suicide literature, I introduce my methodology, followed by a general thematic analysis conducted on 29 encounter forms completed by staff at the Manitoba Farm & Rural Stress Line (MFRSL). The themes are then compared to existing research findings. The project concludes with a discussion of the implications of my findings along with recommendations for future research.

This research is the first qualitative study suicide ideation among farmers in Canada. It is hoped that the findings will bring increased understanding to the experience of suicide among Canadian farmers, and lead to improvements in the prevention of suicide among this neglected population by providing a starting point for future research.

CHAPTER II

Literature Review

Global Suicide Prevalence

Suicide is a serious global problem affecting people from all walks of life. According to the WHO (2008), in the year 2000, nearly one million people died from suicide. This is equivalent to one death every 40 seconds.

WHO (2008) statistics further put these numbers into perspective. Suicide accounts for more deaths than homicides and wars combined. The death toll is continually rising: in the past 45 years, suicide rates have increased by 60% worldwide. Globally, suicide is among the three leading causes of death among those aged 15 to 44 years. These numbers are thought to be inaccurately low due to under-reporting, and do not include suicide attempts which are 20 times more frequent than completed suicides. On average, a person attempts to die every 3 seconds; approximately 10 percent of people who attempt suicide eventually succeed. Suicide directly affects a significant number of lives, but indirectly it touches many more. The WHO estimated that for every completed suicide at least six other people are seriously affected. Therefore, the psychological, social, and financial impact of suicide on the family and community is immense.

Suicide Prevalence in Canada

Most people are uncomfortable talking about suicide. Although the subject is often omitted from the social milieu, it continues to exist in the shadows. The truth is, suicide in Canada is more common than we might want to believe. In 2004 approximately 3,600 Canadians took their lives, an average of about 10 suicides per day (Statistics Canada, 2008). According to Langlois and Morrison (2002), statistics indicate that between 1993 and 1998 more people died from suicide than from motor vehicle accidents, accounting for more deaths than many other

causes. In 1998, suicide was the leading cause of death for men aged 25 to 29 and 40 to 44, and for women aged 30 to 34. Further, it was the second-leading cause of death for both sexes aged 10 to 24, surpassed only by motor vehicle accidents (Statistics Canada, 2001). Langlois and Morrison also report that Canadians are seven times more likely to die from suicide than to be the victim of a homicide, and that from adolescence to middle age, suicide remains one of the leading causes of death for both men and women. These findings indicate that suicide is a major concern for Canadian health care providers.

A large portion of the Canadian population is rural. In 2001 more than 9 million, or 30.4% of Canadians, lived in rural areas (Beshiri & Bollman, 2001). For this research the term "rural populations" follows the definition given by Statistics Canada (2003): people living outside urban areas, where "urban populations" refers to 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. Given that approximately one-third of the Canadian population lives in rural areas, it is important to examine suicide within this population.

Rural Suicide

Suicide is a major cause of mortality worldwide, and the rates of suicide are often higher in rural compared to urban areas (Stack, 1982; Hirsch, 2006). Differences in rates of suicide exist between urban and rural areas; however, little research has examined the phenomenon of rural suicide. In one study Hirsch reviewed existing international research on differences between rural and urban suicide. This comprehensive review included all empirical and epidemiological studies of rural suicide. While results were mixed, Hirsch concluded that rural suicide rates are generally higher than rates in urban areas. These studies support statistics compiled by the WHO in 2008.

In addition, deaths are often less likely to be classified as a suicide in rural areas due to stigma (Beeson, 2000). Suicides may be portrayed by family members or loved ones as accidents to avoid public scrutiny. This suggests 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 & Forestry, 1993).

The finding that rural suicide is typically higher than that of the urban population raises some important questions. It has been speculated that the rural context may have created geographic, sociocultural, and psychological barriers to treatment that are unique to the present-day situation (Hirsch, 2006). Hirsch has argued 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 behaviors. It follows that a better understanding of rural suicide is not only necessary, but critical. Additionally, according to Beeson (2000), the research to date has relied on urban subjects, resulting in an understanding of suicide that may not generalize to rural individuals.

Why Farm Suicide?

As noted, current research suggests that suicide rates are typically higher among rural populations. Among Canada's rural population, farming remains important as an occupation and as a way of life. In 2006, Statistics Canada reported 229,373 operating farms across Canada (Statistics Canada, 2007). In general, suicide among working people, such as farmers, is the outcome of a complex interaction between worker vulnerabilities (i.e., 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 which in turn represent a major risk factor for suicide. The 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.

Researchers have identified a number of factors that appear to be related to farm suicide in Canada. First, a significant part of the farming community and agricultural producers have to deal with a multitude of common stress factors such as plummeting farm revenues, lack of social recognition, and the Bovine Spongiform Encephalopathy (BSE) scare (Scallon, 2007). Second, Canadian research indicates that farmers are under considerable stress and that this stress is leading to various health concerns including suicide (CASA, 2005; Heffernan, 1986; Pipke, Svenson, & Drieger, 1987; Scallon, 2007; Walker & Walker, 1987; WHO, 2006). Third, it appears that farmers continue to refrain from seeking mental health services for many reasons (CASA; Hirsch, 2006) which will be discussed later in this review.

As previously noted, suicide research to date has primarily focused on urban populations. Beeson (2000) posited that heavy reliance on urban community participants and data skews our understanding of suicide and reduces its applicability to rural populations. It follows that an exploration of suicide, as it relates to the unique geographic, socioeconomic, political, and cultural characteristics of the Canadian farmer, is of particular importance.

Farm Suicide

Among the few North American studies completed on farm suicide, Gunderson et al. (1993) found that during times of economic uncertainty, suicide rates were higher among farmers

and ranchers compared to the general population. Their study of suicide, which included five north-central states, reported that the rate of suicide among farm residents and workers ranged from 42 to 58 suicides per 100,000, comparatively twice as high as the general population. These rates were consistent with the results from other more recent studies of suicide in England and Wales (Charlton, 1995; Hawton et al., 1999), Scotland and the United Kingdom (Stark et al., 2006), and Australia (Miller & Burns, 2008; Page & Fragar, 2002). Results suggest that suicide rates among farmers are higher than the general population in other countries even in times of relative prosperity.

While research on farm suicide is limited, studies of Canadian farmers and the rural population in Canada are even more scarce. I found only two studies which examined differences in suicide rates between urban and farm samples in Canada. The first study examined suicide rates on Ontario farms from 1980 to 1989 (Pickett & Brison, 1993). In this study, the authors conducted a computer search of vital records. Their statistical analysis of the data indicated that suicide rates were no higher among Ontario farmers than among the general population. Although the results were contrary to expectations, they provided a starting point for Pickett and others for future research on rural suicide in Canada.

A second study conducted by Pickett and colleagues explored the suicide rates for Canadian farm operators (Pickett et al., 1999). The researchers examined male farm operators from the Canadian Farm Operator Cohort (CFOC) database. A total of 1,457 cases of suicide were identified from the database between the years 1971 and 1987. Again, contrary to expectations, the researchers found that provincial suicide rates among farm operators were either equivalent to or lower than those of urban populations. The divergent results were explored by Pickett and colleagues to better understand why the results were contrary to previous

findings. Pickett et al. speculated that the study may have yielded different results had women and minors been included, and that the study's 17-year time frame may have limited applicability to other time periods. They also suggested that, when compared to the urban population, farmers in most parts of Canada belong to communities that are exceptionally supportive in times of need. In contrast, Martinez-Brawley and Blundall (1989) described a farm culture characterized by many factors that prevent farmers from seeking the support of the community.

Interestingly, Pickett et al. (1999) found that suicide rates increased over time, indicating higher rates near the end of the period studied than in the beginning. In an attempt to explain this finding, the authors suggested that farmers may have been affected by the “healthy workers effect,” whereby members of a working cohort are more likely to be healthy than are members of the general population, some of whom are not working. Additional research conducted in the United States also suggests that suicide among farmers is rising (Singh & Siahpush, 2002). Singh and Siahpush analyzed 28 years of data and found that while suicide rates fell or remained static for most groups, they rose substantially for rural and farm men.

Consistent with Singh and Siahpush (2000), it is reasonable to assume that recent stressors specific to the farming community have increased suicide risk among Canadian farmers. Notably, with the outbreak of BSE (also known as mad cow disease) dairy and cattle farmers likely experience a significantly higher level of environmental stress. Since the first case was reported outside of the United Kingdom in 1989, millions of cattle have been slaughtered and international trade has greatly suffered (WHO, 2002). It is not surprising that this put considerable financial strain on farmers, many of whom were already struggling to maintain their farms. In fact, according to CASA (2005), financial concerns and BSE are two of the most significant farm stressors. A related study (Hartley, 2001) found that the suicide rate among

livestock and dairy farmers increased sharply in Great Britain during a recent outbreak of BSE. It can be reasoned that since 1989 cattle farmers, in particular, have experienced increased levels of stress and are therefore at greater risks for stress-related problems.

It is clear that one of the most significant stressors facing farmers is finances (CASA, 2005; Walker & Walker, 1987), but the relationship between finances and suicide is not entirely clear. For example, in one study depressive symptoms were the strongest correlates of suicidal ideation (Turvey, Stromquist, Kelly, Zwerling, & Merchant, 2002). However, in their multivariate analysis of the rural sample, Turvey et al. unexpectedly found that financial loss, rather than low income, remained a significant correlate of suicidal ideation – after controlling for depression. This suggests two things: first, that change in financial status rather than chronic poverty poses a risk for suicidal ideation, and second, that even after accounting for depression (or mental health), financial loss still appears to be a significant risk factor for farm suicide.

Farm Stress

Farming has historically been ranked as one of the more stressful occupations (Keating, 1987). Walker and Walker (1987) concluded that farmers are under an enormous amount of stress and pressure as they continually try to balance farm and off-farm work, while struggling to have the farm support itself. Consistent with this research, the National Institute for Occupational Safety and Health in the United States ranks farming in the upper 10% in terms of stress levels of all occupations (Heffernan, 1986). In more recent research, the WHO (2006) ranks farming as one of the world's most stressful occupations. Additionally, recent literature indicates that between two thirds (CASA, 2005) and three quarters (Scallon, 2007) of farmers feel stressed on a regular basis.

Although stress is not unique to the farming industry, it has become a big problem because of increasing economic pressures from low market prices, high interest rates, and poor growing conditions (Pipke, Svenson, & Drieger, 1987). According to Pipke, Svenson, and Drieger, economic pressures endured by prairie farmers have produced significant uncertainty in the lives of farm families, and have resulted in growing stress felt by all family members. Similarly, Walker and Walker (1987) administered the Farm Stress Inventory to 1,200 Canadian farmers and found that financial stressors are rated at the top of the list of the most stressful aspects of farming, followed by work pressures, and weather. More recently, CASA (2005) found that financial concerns are among the top stressors for Canadian farmers. Pay equity and commodity prices are salient problems for most farmers, as there is no equal pay or set rates for farmers, and because regulatory restrictions on prices are limited (Walker & Walker). Financial hardship has been described as an extremely difficult stressor for farmers (Conger & Elder, 1994); it has been associated with occupational health and safety risks (Keating, 1987).

In addition to ongoing economic difficulties, farmers experience other factors that influence their stress levels, including unpredictable weather, long work hours, isolation, and the challenge of managing multiple work roles both on and off the farm (Keating, 1987). Two large-scale surveys on farm stressors completed over a 20-year time span are indicative of the stress experienced by farmers. In the first survey, Walker and Walker (1987) found that the primary concerns of farmers included: financial, weather, workload, social issues, hassle, and worry. In the second, the Canadian Agricultural Safety Association (2005) surveyed 1,100 farmers and similarly found the most commonly reported stressors included: unfavourable economic conditions, unstable weather, balancing long working hours with family obligations, and the need for off-farm employment to supplement farm income. 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 & Forestry, 1993).

As noted above, a stressor identified by many farmers is off-farm employment. In a recent survey by Statistics Canada nearly half (48.4%) of Canadian farm operators reported off-farm employment in 2006 (Statistics Canada, 2007). It was found that farmers, independent of age or farm type, are especially prone to high stress levels if they hold other jobs and/or experience financial hardship (Walker & Walker, 1987). 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 report working off of the farm (WHO, 2006).

Farm stress is not limited to external or environmental factors: individual and contextual factors must also be considered. For example, Walker and Walker (1987) found stress was higher among farmers under 50, farmers with mixed and dairy farms, farmers holding off-farm jobs, and farm women. These findings highlight the complexity of interaction between stress, the environment, and the individual.

Today, the farming landscape is changing. Recent fluctuations in economic conditions, as well as the BSE crisis, are cause for concern. In 2005, the CASA commissioned Western Opinion Research Inc. to survey 1,100 agricultural producers across Canada regarding stress on the farm (CASA, 2005). This large-scale survey, administered in both official languages, sought to identify the main stressors experienced by farmers, who they would turn to in times of stress, and what types of services they use when stressed. The results, which were claimed to be accurate +/- 3%, 19 times out of 20, revealed that almost two-thirds of Canadian farmers feel

stressed, with one in five feeling “very stressed”. The greatest sources of stress were financial concerns related to commodity prices, the BSE crisis, and general farm finances.

To summarize, it is reasonable to conclude that farmers in Canada have worked under stressful conditions on an ongoing basis from at least the 1970s (Walker & Walker, 1987) until the present day (CASA, 2005; Scallon, 2007). Financial concerns are consistently cited as high stressors, as markets characterized by decreasing market prices and volatile interest rates compound stress experienced by farmers and their families (Standing Senate Committee On Agriculture and Forestry, 1993). Moreover, the results of the recent (2005) survey completed by CASA indicated that many of these concerns go unaddressed. The survey found that only 2 in 10 farmers across Canada report having spoken with a health care professional about stress and mental health. It would appear that farmers are reticent to seek help. This finding is concerning given the high degrees of stress experienced by Canadian farmers.

Rural Help-Seeking Behavior

Ever-changing rural lifestyles appear to negatively impact the already low levels of help-seeking behaviors among farmers (Reese, 2002). According to Reese, a multitude of factors possibly impact farmers’ help-seeking behavior. First, farmers are experiencing greater isolation due to a growing distance between farms. Second, there is greater competition and less cooperation among farmers because of the changing global economy. Third, there is considerable fragmentation of existing rural communities as more people are moving off farms and into the city. 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 one of their primary supports: other farmers. To make matters worse, political support has declined leaving farmers with less government support including access to public

services (Reese). Even when mental health services are available, rural families have lower rates of service utilization than their urban counterparts, and may turn to physicians or religious leaders instead (Hirsch, 2006; Meystadt, 1984).

It has been found that farm families participate less than the general public in human service programs. Martinez-Brawley and Blundall (1989) interviewed 44 farm families in Iowa and Pennsylvania to find out what prevents them from seeking help. According to Martinez-Brawley and Blundall, farm families' perceptions of obstacles to seeking help included: concerns about their reputation in the community, lack of understanding about what services do and how they work, having grown up with the idea that seeking help from social agencies is a negative thing, lack of money, feeling that one must solve one's own problems, fear of being perceived as lazy, fear of being perceived as mentally ill, distrust of helping professionals, and pride. Researchers have also observed that mental disorders are often stigmatized among rural populations, thus decreasing the likelihood that individuals will seek treatment when needed (Hoyt, Conger, Valde, & Weihs, 1997).

Among Canadian farmers, pride and independence were found to be the most important factors that negatively influence help-seeking behaviors (CASA, 2005). Lack of awareness of community resources also represented a significant barrier. In their survey, CASA found that less than one-half of farmers strongly agreed that they were aware of resources they could turn to for help in managing stress and mental health. CASA also found that anonymity was important to farmers when seeking help for stress and mental health issues. Finally, perceptions about helping professionals' knowledge about agriculture were found to be a critical factor in help-seeking behavior. Approximately 9 out of 10 Canadian farmers felt it to be of utmost importance for the person they are dealing with to be knowledgeable about agriculture.

In a more general study, Judd, et al. (2006) surveyed a sample of 467 rural residents, assessing current levels of symptoms, disability, perceived stigma, self-efficacy, stoicism, and attitudes towards and experience of help seeking for psychological problems. Consistent with their expectations, more women than men reported help-seeking behaviour. Female gender, higher levels of distress, positive attitudes towards seeking professional help for psychological problems, and lower scores on a measure of stoicism were positively associated with greater help-seeking behavior.

In a related study, Jackson et al. (2007) reviewed results from 20 different studies on help-seeking behavior to investigate the demographic, attitudinal, and psychological factors that impact rural and urban residents. As expected, the review indicated that people living in rural regions expressed greater concern about stigma than those living in urban areas, and that this was associated with less willingness to seek formal help in the future. Jackson et. al suggested that people may be more concerned about the lack of privacy and news getting out about their problems in rural settings. Notably, male rural subjects were less likely to seek help for mental health problems than were their urban counterparts. The comparisons also indicated that males held more negative attitudes towards help-seeking, were more concerned about stigma, and possessed less awareness and confidence in dealing with mental health issues than did their female counterparts. The evidence also supported the proposition that sociodemographic and attitudinal constructs such as stoicism, self-efficacy, and stigma have significant impact on help-seeking and service utilization in both urban and rural contexts. However, Jackson et al. claimed that these constructs have been under-researched and that the effects of location remain unclear. It is possible that the impact of attitudinal variables vary with location.

To summarize, the research on rural help-seeking behavior indicates a clear distinction between urban and rural residents. It appears that rural people are less likely to seek help compared to their urban counterparts, and that this is especially true for rural males. A number of demographic factors involving isolation, economic situation, and lack of social support impact the ability and frequency of farmers' help-seeking behavior. Further, evidence suggests that stigma, self-efficacy, lack of understanding, stoicism, and cherished rural values of pride, independence and privacy decrease help-seeking behaviors. The help-seeker's perceptions of health care providers' ability to understand their concerns, as indicated by their knowledge about agriculture also influences a farmer's decision to use mental health services. Such factors are thought to differ from rural to urban contexts, and to possibly have varying effects across locations.

Mental Health Outcomes

Findings suggest that the combination of high stress and the tendency to not 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 1990s found that the impact of farm stress and economic hardship triggered personal problems, including high levels of stress-related illnesses, hypertension and psychiatric disorders, depression, diminished life satisfaction, marital discord, alcoholism, and death by suicide. It is safe to assume that as stress accumulates, so too does the risk for subsequent physical and psychological problems which in turn, increase the risk for suicide.

Consistent with the idea that psychological illness is a precursor to suicide, the International Association for Suicide Prevention (1999) completed a large-scale study of over 5500 individuals who completed suicide. The results suggested that almost 98% of the people studied either had been diagnosed with, or showed symptoms indicative of, a mental disorder. Overall, stressful life events are listed among the top factors increasing risk of suicide (Moscicki, 1997). Job stress is often a precursor to mental health problems, which in turn are considered a major risk factor for suicide (WHO, 2006). Therefore, research indicates that farmers experience a significant amount of stress and that this predisposes them to a higher risk of mental health problems and subsequently, to a higher risk of suicide. Consistent with this finding, the WHO lists farming as one of the occupations with a high risk of suicide. Given the elevated risks for suicide and low levels of help-seeking behavior, alternative services such as telephone counselling may be a good option for farmers.

Telephone Counselling

Telephone counselling first appeared in the 1960s and quickly became widely used by suicide prevention and crisis intervention services (Lester, 2002). Despite its popularity, the telephone was labelled by many as an inferior service medium for counselling (Lester) until recent years which have seen an increased acceptance and use by service providers (Barnett & Scheetz, 2003). In fact, since the 1960s the telephone has become an established medium for provision of counselling and mental health services with a successful history of use in treatment of schizophrenia (Beebe & Tian, 2004), depression (Tutty, Simon, & Ludman, 2000), crisis intervention (King et al., 2003), and smoking cessation (Lipkus et al., 2004). According to Lester, telephone counselling has been used for successfully providing information and counselling to a wide variety of clientele with a number of benefits over in-person counselling.

Telephone counselling has cost and access benefits when compared with face-to-face counselling and has high client acceptance (Reese, Conoley, & Brossart, 2002). According to a recent study more than half of clients (58%) who had experienced both in-person and telephone counselling preferred telephone counselling (Reese, 2006). Additionally, the benefits of telephone counselling correspond particularly well with suicidal and highly dependent clients that like to know that support is close at hand (Lester, 2002). The telephone might also be the venue of choice for youth and for clients whose work involves frequent travel or family relocation (Lester).

Although crisis hotlines are common in the United States and Canada, much of the past research failed to show that they reduce the incidence of suicide (Bleach & Clairborn, 1974; Apsler & Hodas, 1976; Miller et al., 1984; Shaffer et al., 1990). In fact, up until recently definitive evidence for crisis line effectiveness did not exist. Past research was criticized for the inability to measure the effectiveness of crisis lines (Mishara et al. 2007). Previous methodology focused on three types of outcome measures: changes in suicide rates in target populations, satisfaction with services, and follow-up or repeated use of services and referrals, none of which provide a definitive measure of effectiveness (Mishara et al.).

In recognition of the need for definitive outcome measures two large scale studies were published in 2007 that provide evidence for the use of crisis lines. First, Mishara et al. (2007) used a silent monitoring technique to monitor caller characteristics, helper behaviours, and changes among 2,611 calls from 14 call centers. They found that empathy and respect, as well as a supportive approach, good contact, and collaborative problem solving were significantly related to positive outcomes (i.e., more hopeful, confident, resourceful). In a second study, Gould, Kalafat, Munfakh, and Kleinman (2007) examined 1,085 suicide calls to eight centers in

the United States. Outcomes were measured by changes in suicide state according to callers' self-rating from the beginning to the end of their calls and again within 3 weeks. They found significant decreases in suicide ideation during the course of the telephone session, with continuing decreases in hopelessness and psychological pain in the following weeks. A caller's intent to die at the end of the call was found to be the most potent predictor of subsequent suicide risk. Additionally, Gould et al. found that contrary to their expectations, seriously suicidal individuals reached out to telephone crisis services.

The results from recent studies solidify that crisis lines are effective service mediums in general, but there has been no studies documenting the effectiveness of crisis counselling among rural populations. Research on rural crisis lines is sparse, and the few studies that exist are descriptive by nature and merely serve to substantiate the need for their existence (Rosmann, 2005; Rosmann 2008). For example, the Rosmann studies describe the farm context for which help is needed and go on to articulate a rural initiative involving rural telephone services, but involve no research specifically on the crisis lines.

As already noted, there is a significant gap in services aimed at meeting the specific mental health needs of farmers and their families. Additionally, there are a number of factors that reduce the likelihood that farmers will seek mental health services in their own communities. Considering the social changes to the Canadian farm landscape (fragmentation) and the perceptions around receiving help, it is not surprising that many farmers do not seek professional services. However, these same factors may make farmers more likely to use alternative services such as telephone crisis lines or internet counselling.

Currently, Manitoba, Nova Scotia, Saskatchewan, and Ontario all have crisis lines devoted to farm and rural populations. Moreover, Ontario and PEI provide in-person counselling

for the farm and rural community. In the United States farm crisis help lines and direct services are now being offered throughout a seven state region as a large scale agricultural wellness initiative (Rosmann, 2005; Rosmann, 2008). The existence of rural crisis lines in other countries is not well documented, and aside from North America the popularity of farm lines is unclear. However, given that farmers are concerned about the stigma attached to seeking mental health services, and place high value on anonymity, it would seem that telephone counselling could offer a viable alternative to traditional mental health delivery. Telephone-based counselling services could also make it easier for farmers to seek help in the face of a changing rural landscape, by offering access from the comfort of their own home.

Telephone counselling appears to have substantial potential for the Canadian farmer, but, according to a survey done by CASA (2005), only 35% of farmers expressed interest in discussing stress with a professional over the phone. Farm stress lines are just beginning to appear across the country. To better serve Canadian farmers under stress, more research needs to be conducted on factors that influence uptake of services like telephone-based counselling and crisis lines, as well as in-depth analysis of the breadth of issues discussed by farmers on crisis lines.

CHAPTER III

Summary

To date, there is very limited research on farm families and issues around suicide and accessing crisis services, especially in Canada. It is argued that farm families make up a unique Canadian culture that share many common stressors as well as factors that prevent them from seeking help. Current research indicates that farm families generally cope with substantial stress, are at a higher risk of mental health problems (including suicide ideation), and may feel less able to seek help than their urban counterparts. Research indicates that the most salient stressor is finances. It is noted that while declines in financial status and commodity prices are particularly distressing, individual experiences of financial stress vary widely and are influenced by many variables.

A number of factors influence the help-seeking behaviour of Canadian farmers. Farm men were found to hold values that conflict with accessing traditional counselling, and thus tend not to seek help when faced with personal problems. Farm families are especially concerned about their reputation, and often fear being perceived as lazy or mentally ill if they go to a counsellor. Rural farmers often do not have the means of receiving discreet mental health services within their communities, both because of cost and limited local services. Another significant barrier is the lack of understanding about mental health services within rural areas, as well as personal values such as independence and pride. These values are socialized within farm families, and as such, play a pivotal role in help-seeking behavior.

Globally, suicide rates among rural populations (including farmers) are significantly higher than their urban counterparts. It follows that increased levels of stress-related illness and suicide are probable in Canada among the farm population, but current research is sparse. The

only two studies on the prevalence of suicide behavior among Canadian farm operators have found that suicide rates were comparable and perhaps even lower than those of the general public. However, since the time of the studies (1971 to 1987) many changes have taken place in the farming community, including the BSE crisis and significant changes in the economy. Additionally, because recent research suggests a trend of increasing suicide rates among rural residents, it may well be that the rates among Canadian farmers have now surpassed urban suicide rates.

The existing studies have primarily consisted of quantitative research on farm populations outside of Canada. Much of what has been found on the factors involved in suicide among the farm population has been limited to research done through surveys. This inevitably lacks the richness of actual interviews or first hand accounts, and is limited to those that choose to complete them. Studies completed involving the incidence of suicide among farm operators in Canada is limited to two studies completed by the same author using a pre-existing database containing only males. Further, information gathered in other countries may not be applicable to Canadian farmers. In fact, Pickett and colleagues suggest that the social support system among Canadian farmers may moderate the past suicide rates (Pickett et al. 1999) highlighting a difference from other countries. It is clear that suicide among the Canadian farmer is an under researched topic and that more needs to be learned about this population to better serve their needs. Through the current research I hope to bring greater understanding to the experience of suicide among Canadian farmers, and to set my findings along side previous research. It is hoped that the current research will spawn greater interest in the research of suicide within the Canadian rural and farm population.

The Present Study

For reasons which are not yet clear, the limited research on suicide rates among Canadian farmers seem to be 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.

Despite the high risk of suicide within rural populations, little research exists in this area. The purpose of the current research is to conduct an exploratory analysis of suicidal ideation and behavior among a specific rural population that has not received much attention in the literature: the Canadian farmer. A qualitative methodology is used for this research. Data consists of the call sheets filled out by counsellors at a rural telephone crisis service. The research question guiding the project is, What is the experience of rural Manitoban farmers who call crisis support lines? Specifically, in this study I use information gathered from the Manitoba Farm & Rural Stress Line to explore the themes and factors involved in suicide calls made by Manitoban farmers, with a view to enhancing health care providers' understanding of suicide among this population.

CHAPTER IV

Description of Procedures

Conducting the Literature Review

This research project began with a comprehensive literature review. This involved consulting with various professionals in the field of suicide to obtain a better idea of research needs and key authors. Consulted professionals included program managers for the Manitoba suicide line, farm and rural stress line, and crisis stabilization unit, and a board member of the Canadian Association for Suicide Prevention. These professionals helped guide the literature review by recommending numerous documents and journal articles.

Having confirmed that farm suicide is indeed a topic of growing concern among professionals, I then undertook focused internet research with the help of Google and Yahoo search engines. I obtained a background in the topic of farm suicide by reviewing information sourced from sites such as Statistics Canada, the World Health Organization, the Manitoba Farm & Rural Stress Line, the Standing Senate Committee on Agriculture & Forestry, and the Canadian Agriculture Safety Association.

This was followed by a search of databases through the University of Calgary library, including primarily PsychINFO and the Psychology and Behavioral Sciences Collection. Much of the research was done within the confines of these databases, with a secondary search that explored the sociology databases and ERIC. Search words used included: suicide, suicide ideation, rural suicide, farm suicide, Canadian suicide, suicide prevalence, rural help-seeking behavior, crisis counselling, telephone counselling, rural stress line, and farm stress. In several instances, the ancestry method was used to track significant primary sources from the reference pages of journal articles and papers. In addition, Professor Pickett from Queens University was

consulted as one of the leading researchers in Canadian farm suicide and violence. He briefly provided some direction regarding areas of research need, and helped highlight the existing gaps in literature. Cumulatively, the research conducted in the literature review lead to the development of a research question and the present study.

Methodology

Qualitative Research. A qualitative thematic analysis was used to answer the question: What is the experience of Canadian farmers who call a rural crisis line? The qualitative paradigm was chosen for this research as a means to gain a deeper understanding of the experience of suicidal behaviors among farmers through the production of rich, descriptive accounts of the phenomenon under investigation.

Qualitative research is widely used in social science research (Eisner, 2003). According to Eisner, qualitative research has evolved from the need to understand the phenomena of the human condition from a contextual vantage point that examines how people feel and behave. In comparison to quantitative research, which primarily involves numerical descriptions with respect to magnitude, qualitative research describes the phenomenon in question through the use of descriptive language and the meanings associated with such language (Eisner).

More specifically, qualitative research consists of collecting, analyzing, and interpreting data by observing what people do and say, often involving the meanings, concepts, definitions, characteristics, metaphors, symbols, and descriptions of things (Trochim, 2006). It is thought that in qualitative research the researcher learns most about a situation by participating and being immersed in it. Typically, small numbers of people are studied in depth. The nature of this type of research is exploratory and open-ended, without hypothesizing at the outset. Quantitative research, on the other hand, involves measurement and control, and by definition, measurement

must be objective, quantitative, and statistically valid (Trochim, 2006). In quantitative research the researcher is viewed as an objective observer that neither participates in nor influences what is being studied. It typically involves the use of structured questions where the response options have been predetermined and a large number of respondents are involved. Most quantitative research requires a hypothesis before research can begin. Hence, a key difference in research paradigms is the means researchers use to describe the information they seek to generate. In quantitative research the emphasis is on building theory through testable hypotheses; in qualitative research the emphasis is on generating rich, holistic descriptions of experience (Eisner, 2003).

Subjects. All subject data for this study was gathered from encounter forms collected by the Manitoba Farm & Rural Stress Line (MFRSL) over the past five years. The MFRSL was established in December 2000 to provide free & confidential information, support, counselling and referrals to farm families and other rural Manitobans (MFRSL, 2007). The MFRSL's core service is its toll-free telephone counselling line that operates Monday to Friday, 10 a.m. to 9 p.m., and Saturdays 12 noon to 5 p.m. To meet the unique needs and concerns of farm and rural people, it is staffed by paid and volunteer professional counsellors with farm/rural backgrounds. All counsellors have certification as a crisis worker through the Canadian Association of Suicide Prevention and educational background in counselling. The MFRSL is located in Brandon and funded by Manitoba Health, in cooperation with Manitoba Agriculture, Food & Rural Initiatives (MAFRI). It is administered by Klinik Community Health Centre and is one of several counselling programs.

Since its inception, the MFRSL has been maintaining an active file containing all encounter forms with identifying information or suicide content. Such forms are retained for five

years before they are destroyed. According to the MFRSL Annual Report (2007), the service received 9480 calls between the year 2003 and 2008. MFRSL thus offers a viable subject pool for data collection. However, farm calls represent only a fraction of incoming calls, and farm calls containing suicide content are even less common. In fact, in 2007 there were only 203 farm calls and only the calls containing suicide content as well as detailed information were kept in record. Calls containing no identifying information or suicide content are discarded yearly. Encounter forms were used due to the sensitive nature of the topic area. Examining retrospective data is the least obtrusive method for gathering information and it is also unaffected by social desirability bias.

The sample for this study comprised encounter forms relating to 29 people who called the Farm & Rural Stress Line over the past five years, and identified themselves as persons involved in farming and with concerns around suicide. Twenty-four of the callers were male and five callers were female. Sixteen of the callers were currently experiencing suicide ideation, eight had experienced past ideation, and five 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 three were between the ages 51 and 61. Nine of the callers were married, four were separated, three were single, one widowed, and 12 were unspecified. The majority of the callers (18) were new to the stress line, while eleven of the callers had called before (see Appendix C).

Data Collection. Encounter forms were gathered from the Farm & Rural Stress Line call center located in Brandon, Manitoba. Calls to the center are screened according to location and concern, and callers from urban areas are often encouraged to call general crisis lines. Each time a caller makes contact with a counsellor an encounter form is started by the staff member taking the call. The counsellor begins to fill out the form while still on the telephone, and completes it

promptly after the call ends. When calls contain suicide-related content, counsellors fill out suicide-risk forms and append these to encounter forms (See Appendix A). All forms are coded and marked when suicide content is present by the staff at the Farm & Rural Stress Line for statistical purposes. The collected information is later subject to statistical analysis and encounter forms are filed for five years within the building.

Encounter forms are legal-size forms, containing data on front and back. Forms are part of the assessment process and contain field notes on particular client calls. Because they contain private and confidential information, ethical protocols were followed to ensure protection of this information. The front of the form is primarily composed of checklists, demographic information and the clinical outcome. It also contains date and time of contact, client information such as name, address, age, relationship status, problem area(s), suicide ideation, region, and type of contact. The back of the form contains a detailed written account of presenting problems/feelings, relevant history, and focus of the call (See Appendix B).

Data Analysis. A widely used analytic qualitative method in psychology is thematic analysis (Braun & Clark, 2006). Thematic analysis is common tool used among many forms of qualitative analysis, but can be described as a method in its own right. It provides a systematic method for identifying, organizing, and describing the main themes and trends in descriptive or narrative data. A theme captures something important about the data in relation to the research question, and symbolizes some level of patterned response or meaning within the data set (Braun & Clark).

In this study I present a rich thematic description of the entire data set to highlight predominant themes. The themes identified, coded, and analyzed are considered an accurate expression of the content of the entire data set. With a general thematic analysis, some depth and

complexity is unavoidably lost (due to space limitations), but a detailed overall description is maintained. This method is a sound choice for analyzing suicidal tendencies among Manitoba farmers because, as Braun and Clarke (2006) noted, it is particularly useful when investigating under-researched topic areas. In order to maintain continuity in research methodology, the design of this study owes much to a detailed explanation by Braun and Clarke of how to apply thematic analysis in a scientific way to research. The six steps they provided (familiarizing self with your data, generating initial codes, searching for themes, reviewing themes, defining and naming, and producing the report) were used as a general guiding framework for this analysis.

The first step in data analysis involved sorting through all of the encounter forms that had been written and filed over the past five years. Forms are typically discarded if they contain no identifying information or suicide content. All forms containing suicide content were first separated from the remaining forms. These forms were further organized according to whether they 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, past ideation, or if they were calling about someone else (“third-party” calls).

All encounter forms were numbered according to category. Each encounter form was assigned a number that denoted the form number within a category, followed by a letter denoting the particular category the form belonged to. For example, 1A was the label given to the first form in the past ideation category. Next, all forms were photocopied and collated according to category. The original forms were placed back into storage; the photocopied forms became working forms for the purposes of this study.

I began the actual analysis by reading and re-reading all of the forms to get a general idea of their content. I noted ideas and made brief field notes in the left margins (or, depending on content, on a separate sheet of paper). I underlined key phrases or quotes for future reference, and boxed in information that stood apart from the rest. I then undertook a second, line-by-line read of the data, examining it for content pertinent to the experience of a Canadian farmer calling a crisis line and noting code words or phrases in the right margins to accurately describe a text segment whenever a relevant new concept became evident. For example, the term “crop failure” was used as one of the codes for a poor harvest during the year the call was made. I then re-examined these codes, and condensed them 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 any other researcher markings were transcribed in a Microsoft Excel spreadsheet for ease of analysis. Each code was typed onto a separate sheet each time it occurred. Next, I rearranged the codes into groups according to similarity or relevance. I identified major themes by the number codes that were that grouped together, and gave them 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”. I then re-read all text to identify any themes that could have been missed or codes that could have been better fit under another theme.

CHAPTER V

Results

Themes

The data analysis resulted in the emergence of seven distinct but interrelated themes. These were: coping mechanisms, financial concerns, health issues, family salvation, uncontrollable events, family stress, and farm culture. Health issues contained two minor themes: mental health and physical health. The following paragraphs describe each theme in the context of the data from which it was derived, and then connect the findings with previous research.

Coping Mechanisms. The theme of coping mechanisms describes callers' typical behavioral responses to the challenges of farm life. This includes phrases that referred to how individuals were reacting to the various stressors in their life 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. 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 behaviors such as continually not sleeping or eating, while others reported using alcohol, drugs, or both. One finding, contrary to the expectations of this researcher, was that a number of callers reported various self-care activities including reading, talking with someone, writing, napping, walking the dog, or attending self-help meetings.

The finding that some farmers have adapted and use effective personal coping strategies is consistent with the literature (Swisher, Elder, Frederick & Rand, 1998). According to Swisher et al., farm youth have developed resilience to stress from their role on the farm. This comes

from family cohesion, connection to community institutions, and productive roles fostered within the farm culture. Further, when disaster strikes farm men are thought to use downward social comparisons wherein they compare themselves to other farmers who have it worse to cope with the high levels of uncertainty. However, those who are not coping well are of particular cause for concern. Previous research demonstrates that many farmers are not seeking help (Martinez-Brawley & Blundall, 1989; Reese, 2002, CASA, 2005; Judd et al. 2006; Jackson et al. 2007). The finding that mood medications were the most commonly used means of coping, may reflect the tendency for rural people to go to their general practitioners for help rather than to a mental health professional (e.g., Meystadt, 1984). Finally, the finding that some farmers used alcohol as a means to cope does not appear frequently in the literature. Some evidence suggests that alcohol is often involved when there are high rates of work-related stress (CASA, 2005). However, in one of the few studies found on alcohol use among farmers, Hsieh, Cheng, Sharmc, Sanders, and Thiessen (1989) predicted that alcohol use will rise according to stress, but did not find evidence supporting their hypothesis. Future research may be warranted to determine the current prevalence of alcohol abuse and contributing factors for farm populations.

Financial Concerns. One of the strongest themes identified within the data involves concerns regarding financial well-being. Financial concerns was a theme prevalent 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 centered on debt load, financial loss, and continual financial uncertainty. Callers made statements indicating that they could not buy fertilizer or that they were “overdrawn most of the time”. Notably, those that 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 a lack of 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; Walker & Walker, 1987). As discussed in a recent large scale survey, financial concerns were ranked as the top stressor for Canadian farmers (CASA, 2005). It is not surprising that financial concerns were frequently discussed on the crisis line, given the prevalence of unpredictable events, such as the recent BSE crisis, and unfavourable market conditions. In fact, most callers that 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 possibly suicide due to the increased stress caused by financial hardship.

Health Issues. Health issues, consisting of 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 broken down 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 nearly one third of farmers in the sample experienced physical health concerns, and over one third reported 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 helps explain the claim that, in terms of fatal work-related injuries, farming is the fourth most dangerous occupation in Canada (Pickett, Hartling, Brison, & Guernsey, 1999). This is also consistent with the recent Canadian Census of Agriculture (2006), 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, and family 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 either some form of family tie, or family support, as something to live for. Six of those callers claimed to have great support from at least one family member, while the other five directly cited a certain family member or members, regardless of support, as a reason for living. For example, one 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 cited often as a form of support. Of the 11 callers, only two (18%) cited their spouses or significant others as positive forms of support. Instead, family support was perceived primarily of 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). An interesting finding, contrary to this researcher's expectations, was that so 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, or perhaps because they were taken for granted. A number of possibilities exist, and additional research would help explain this finding.

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 seizure, with five of the eight 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; Pipke, Svenson, & Drieger, 1987; Walker & Walker, 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 problems around marriage. 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 relationship breakdown and the possibility of divorce. Only finances and general stress were labelled as direct causes of marital breakdown with finances addressed twice and general stress just once. Five callers mentioned physical abuse or domestic violence, and one spoke of verbal abuse. A number of callers also mentioned the strain between themselves and their children, including relationship breakdown, problems with communication (including yelling), and isolation.

Considering the high stress that farmers experience, it is not surprising that marriages and family life are negatively affected. Additionally, farm men typically have been socialized to be independent and emotionally removed, leaving them reticent 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 calls made by farm women in this study were concerning someone other than themselves. In contrast to the sample studied, three out of four of the third-party callers were female. Two of the callers were currently married but considering separation, and one had already separated. Notably, the women were calling with

concern about their spouses even though they were often experiencing significant stress themselves and were contemplating leaving. Perceived changes in spouses' behavior appeared to be a primary concern, while other concerns about spouses included depressed mood and isolating behaviour. Interestingly, finances and thoughts of selling the farm were part of three out of four of the 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. In fact, one female caller indicated thoughts of murder-suicide, stating that she had "momentarily considered shooting her husband and then herself". In this situation, the caller was experiencing financial strain, stress from the BSE crisis, problems in her marriage – including lack of communication, and domestic violence, all leading to overwhelming feelings of sadness and anger. This finding illustrates the tremendous stress that at least some farm women are experiencing. Future research is needed to gain a better understanding of female suicide on the farm and their use of crisis services.

Farm Culture. It appears that farmers definitely 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, four callers cited pride as an esteemed value, and one that prevents them from talking to people about their problems. In fact, one caller went on to state that his partner was afraid that others would find out. Further, isolation may play a role. Three callers expressed feelings of physical and/or emotional isolation, and one caller actually commented that he has no supports.

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

was that “outside people” or people outside of the immediate family/community would not understand. Others indicated a preference to keep their emotions to themselves. For example, one caller stated that he even felt misunderstood by his counsellor; another refused to explain his situation to his agriculture representative as “they just would not understand”. In terms of expressing themselves, some callers felt they were unable to find the words to describe their emotions, or were nervous about receiving help. One actually stated he was not interested in receiving help. Finally, some callers reported worry about their reputation or the way the community would react if it were known that they were seeking help. Interestingly, off-farm employment is a common necessity that becomes an exaggerated stressor due to the farm culture. Instead of asking for help, or perhaps sacrificing some of their pride and selling part of the 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 towards farming; one said that he wanted to walk away, but felt stupid.

The idea of an existing farm culture has been proposed in research dating back to the 1980s (Martinez-Brawley & Blundall, 1989; Walker & Walker, 1987), and continues to be found in recent literature (CASA, 2005; Hirsch, 2006). It is important to note that the findings from the present study confirm much of what past research has found in regards to the existence of a distinct culture among farmers. Pride, excessive concerns around reputation, and the feeling that others do not and could not understand may pose a barrier to seeking outside services. Considering that these concerns are compounded by the fact that farmers often feel unable to express themselves and lack social supports, it should not be surprising that farmers in crisis consider selling their farm and experience suicide ideation.

CHAPTER VI

Synthesis and Implications of the Work

Suicide is a leading cause of death worldwide. Suicide research finds higher rates of suicide among rural populations, with farming as a specific risk factor. However, research on farm suicide is sparse, and Canadian studies are almost non-existent. Only two Canadian studies document the prevalence of suicidal behaviour among the farm population. For reasons already noted, these two studies did not find a higher incidence of suicide within the farming community; In contrast, studies outside of Canada have noted higher than expected levels of suicidal behaviour among this population. To gain a better understanding of suicidal behaviour among Canadian farmers, I examined this experience through a thematic analysis of individuals who call a rural crisis line. The primary goal of this research was to learn more about suicidal behaviour among Canadian farmers for the benefit of counsellors and others working with this population.

A sample of 29 subjects was compiled from encounter forms collected by the Manitoba Farm & Rural Stress Line. General thematic analysis of the content revealed seven major themes: coping mechanisms, financial concerns, health issues, family salvation, uncontrollable events, family stress, and farm culture. The results illustrate that farmers appear to experience a number of stressful events, with finances as a primary concern. In fact, almost all reports involving uncontrollable events had some connection with finances. The uncontrollable events discussed could be considered stressful in and of themselves (i.e., flooding), but with financial repercussions it is not surprising that so many farmers report high stress levels. Financial hardship and stress among farmers is evident, but help-seeking behaviour appears limited. The results of this study provide evidence of a farm culture that inhibits help-seeking behaviour, with many subjects citing pride, reputation, and lack of understanding as reasons for not seeking help.

Sadly, the coping mechanisms of most farmers were limited to the use of medication, with some resorting to alcohol abuse. However, some did engage in appropriate self-care behaviours. Regardless, many farmers also 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 the intense feelings. One hopeful finding was that family support appears to be a preventative factor in farm suicide, at least among Manitoban male farmers.

Limitations

A number of limitations are evident in the present study. This study focused on farm callers who were experiencing suicide ideation and who called the MFRSL. It documented the concerns presented primarily by male farmers, and considered the different factors around suicide behaviour. Therefore, the study provided an in-depth look at male farmers who called a rural stress line in a specific province in the Canadian prairies, and may be 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 thus limited the scope of information available. Additionally, the data was 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. Finally, the telephone counsellors may not have consistently filled out the forms or included all relevant information. It is probable that a lot of potentially helpful and meaningful information was lost through inconsistent documentation by the different counsellors.

The sample in the present study was limited to farmers that called the MFRSL and may not apply well to those outside of Manitoba. However, preliminary and exploratory studies such as the present study can yield useful information toward the design of larger and more comprehensive studies. For example, Pickett and Brison (1993) completed a pilot study on Ontario farmers, and went on to explore the Canadian population. The sample of Manitoba farmers represents a good starting point for future research.

A number of questions are generated by the findings presented in this study that provide direction for future research. While the present 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 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 the Canadian farmer than urban Canadians, it is also possible that past research may not be representative of the farm population today. For example, past research done by Pickett and colleagues (Pickett & Brison, 1993; Pickett et al., 1999) used the Canadian and Farm Operator Cohort database to examine suicide rates, but had no means of determining what was considered a suicide. Instead, suicide was a predetermined value in the database that may not have included all cases. It is conceivable that a number of suicides were disguised as farm “accidents” to avoid public scrutiny and financial repercussions. Another possibility may be that suicide rates have changed since these earlier studies were completed. Finally, in their studies (Pickett & Brison, 1993; Pickett et al., 1999) the sample consisted only of male operators and may not be representative of the entire population. Future research is needed to confirm the rate of suicide among Canadian farmers, and to draw comparisons with studies done in other countries.

In addition, further research is needed to determine the effects of farm stressors on women and children on farms. According to Pickett et al. (1999), health risks and suicide rates among women and children on the farm are not well understood. 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). To date, there is no epidemiological research on suicide among this population.

Results from the present study also indicate that relative to male farmers in the MFRSL 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 for whatever reason.

Researcher bias represents a potential problem in any research study, but perhaps more so in qualitative analysis due to its subjective nature. This researcher has volunteered for the MFRSL for two years; consequently, it is possible that past knowledge or judgement has affected the results of this study. I am also a white, heterosexual male in my late twenties, and have lived in the Canadian prairies throughout my life; such factors may have affected subsequent perceptions. Exceptional care was taken during the data collection and analysis portions of the study. All data was carefully coded, recoded, and then transcribed to an Excel spreadsheet before deciding on emerging themes. Themes were discussed and reviewed by the project supervisor before continuing with interpretation of the results.

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 is, at the moment, a matter of speculation. 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 & Forestry (1993). It is recommended that future research address the complex interplay between environmental stressors and suicide.

Strengths

To my knowledge, this is the first qualitative study involving farm suicide in Canada. As such, it provides much needed research in an under-researched topic area.

The substantial contribution of this research is that it can enhance counsellors' awareness of the experience of suicide (different themes) among Manitoban farmers. The results of this study suggest that counsellors may be able to apply their knowledge of farm suicide to the Manitoba farm population with the additional insight that a strong protective factor for the farmer may be family supports. However, counsellors should be wary to potential marital issues that might impede spousal emotional support, and further research needs to be done in other provinces to verify the findings presented in this study.

A second strength of this project is that the literature review provides a solid overview of suicide and the Canadian farmer. Most research concerning suicide addresses primarily urban populations or rural (but not farm) populations. This research is designed to specifically address the Canadian farmer, and to proactively prevent misunderstanding or exacerbation of the stress in a suicidal client's life.

A third strength is in the exploratory nature of the research question and procedure. The procedure was designed as a general qualitative approach that can be adapted to many contexts.

The benefits of the qualitative approach used are many. The results of this study were not limited to prior hypothesizing or preconceived theory regarding the phenomena of farm suicide. Further, the research was not limited to predefined variables. Instead, the results provide a rich description of the experience of the Canadian farmer. Finally, it was written out in a step-by-step fashion to minimize confusion and create a research method that can be replicated by others.

A fourth strength of this project is that it provides a foundation for further research. To date, only two research studies address the incidence of farm suicide in Canada and their results contradict research findings from other countries. 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.

A final strength of this research is that it draws upon qualitative data that might otherwise have been very difficult to gather. It would likely be difficult to find individuals who would consent to participate in a study around their suicide ideation and behavior as this is a very sensitive topic. Further, it is probable that those who did participate may limit what they share in an interview out of embarrassment or to be viewed by the researcher in a more positive light. Retrospective data avoids obtaining consent and reduces desirability bias.

How This Research Can Benefit Others

This research has the potential to benefit counsellors and health care providers working with suicidal clients among rural and farm populations. Counsellors in Canada need to be aware of the unique nature of concerns presented by the Canadian farmer, and of the potentially elevated suicide rates. This research can serve as an educational resource for counsellors working with suicidal clients from a farm background. 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 can educate counsellors on the complex factors surrounding suicide ideation among the farm population. Additionally, 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.

An additional potential benefit for counsellors is a renewed research interest in a high-risk Canadian population. Research to date on suicide and the Canadian farmer is very sparse; it is hoped that the findings of this study will stimulate future research.

Conclusion

This research provides increased understanding of the experience of Manitoban farmers who call a telephone crisis line. The results of this study appear to be consistent with findings of past research efforts to discern stressors facing the farm population. In keeping with such findings, a number of Manitoban farmers are experiencing numerous stressors, with finances as a key contributing factor, and they are not seeking help. Assuming that farmers in Manitoba embrace a collective farm culture and similar stressors to that of other places around the world, additional research is warranted along with enhanced programming to address the mental health concerns of Manitoban farmers. Current research identified significant gaps in services aimed at meeting the specific needs of farmers and their families across Canada (Beeson, 2000; CASA, 2005). To date only Manitoba, Nova Scotia, Saskatchewan, and Ontario have crisis lines devoted to farm and rural populations. Only Ontario and PEI have in-person counselling. Consistent with

the view that programs are needed, one Manitoba study found that providers themselves recognize that there is a scarcity of available, appropriate, and acceptable mental health services for rural citizens (Ryan-Nicholls, Racher, & Robinson, 2003). Herein, it seems clear that there are significant gaps in service provision to rural Canadians. Although rural crisis lines represent a first step toward addressing this concern, their use can be compared to putting a bandage on a broken arm. A significant increase in services is required that are specifically designed for the needs of the Canadian farmer. It is hoped that the results from this study will serve as a basis for initiating future studies of suicide and mental health concerns among Canadian farmers.

REFERENCES

- Apsler, R., & Hodas, M. (1976). Evaluating hotlines with simulated calls. *Crisis Intervention*, 6, 14–21.
- Bleach, B., & Clairborn, W. L. (1974). Initial evaluation of hot-line telephone crisis centers. *Community Mental Health Journal*, 10, 387–394.
- Barnett, J., & Scheetz, K. (2003). Technological advances and telehealth: Ethics, law, and the practice of psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, 40(1), 86-93.
- Beebe, L., & Tian, L. (2004). Telephone intervention-problem solving for persons with schizophrenia. *Issues in mental health nursing*, 25, 317-329.
- Beeson, P.G. (2000). Some notes and data on rural suicide. *Rural Mental Health*, 25, 13–15.
- Beshiri, R., & Bollman, R., D. (2001). Population structure and change in predominantly rural regions. *Rural and Small Town Canada Analysis Bulletin*, 2, Statistics Canada (Cat. No. 21-006-XIE). Ottawa, Ontario, Canada.
- Bonner, R.L. (1990) A 'M.A.P.' to the clinical assessment of suicide risk. *Journal of Mental Health Counseling*, 12, 232–236.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3, 77-101.
- Canadian Agriculture Safety Association (2005). *National Stress and Mental Health Survey of Canadian Farmers*. Retrieved February 18, 2008, from www.casa-acsa.ca/english/PDF/NationalStressSurveyResultsPublic2005.pdf

- Centre For Suicide Prevention. (2002, November). Rural stress: Incidence of stress and suicide among farmers and ranchers (SIEC Alert # 50). Retrieved February 9, 2009, from www.suicideinfo.ca
- Conger, R. & Elder, G. (1994). *Families in troubled times: Adapting to change in rural America*. New York: A. de Gruyter.
- Deutsch, C. J. (1984). Self-reported sources of stress among psychotherapists. *Professional Psychology: Research and Practice*, 15, 833–845.
- Dixon, A.W., Heppner, P.P. & Rudd, D. (1994). Problem-solving appraisal, hopelessness, and suicide ideation: Evidence for a mediation model. *Journal of Counselling Psychology*, 41, 91–98.
- Eisner, E., W. (2003). On the art and science of qualitative research in psychology. In Camic, P., M., Rhodes, J., E., & Yardley, L. (Eds.), *Qualitative research in psychology: Expanding perspectives in methodology and design* (pp. 17-29). Washington, DC: American Psychological Association.
- Gould, M., Kalafat, J., Munfakh, J., & Kleinman, M. (2007). An evaluation of crisis hotline outcomes: Part 1: Non-suicidal crisis callers. *Suicide and Life-Threatening Behavior*. 37(3), 322-337.
- Gunderson, P., Donner, D., Nashold, R., Salkowicz, L., Sperry, S., & Wittman, B. (1993) The epidemiology of suicide among farm residents or workers in five north-central states, 1980-1988. *American Journal of Preventive Medicine*, 9, 26-32.
- Hartley, K. (2001). Responding to the farm crisis in the UK. *Rural Mental Health*, 26(4), 11-12.

- Hawton, K., Fagg, J., Simkin, S., Harris, L., Malmberg, A., & Smith, D. (1999). The geographical distribution of suicides in farmers in England and Wales. *Social Psychiatry & Psychiatric Epidemiology*, 34(3),122-127.
- Heffernan, W. D. (1986). Review and evaluation of social externalities. In K. A. Dahlberg (Ed.), *New directions for agriculture and agricultural research: Neglected dimensions and emerging alternatives*. Totona, N.J.: Rowan and AllenHeld, 199-220.
- Hirsch, J. K. (2006). Research trends: A review of the literature on rural suicide risk and protective factors, incidence, and prevention. *Crisis*, 27(4), 189-199.
- Hoyt, D. R., Conger, R.D., Valde, J.G., & Weihs, K. (1997). Psychological distress and help seeking in rural America. *American Journal of Community Psychology*, 25, 449-470.
- Hsieh, H. H., Cheng, S., Sharmc, A., Sanders, R. A., & Thiessen, C. (1989). The relation of rural alcoholism to farm economy. *Community Mental Health Journal*, 25(4), 341-347.
- International Association For Suicide Prevention. (1999). International Association for Suicide Prevention guidelines for suicide prevention. *Crisis*, 20, 155–163.
- Jackson, H., Judd, F., Komiti, A., Fraser, C., Murray, G., Robins, G., Pattison, P. & Wearing, A. (2007). Mental health problems in rural contexts: What are the barriers to seeking help from professional providers? *Australian Psychologist*, 42(2), 147-160.
- Judd, F., Jackson, H., Komiti, A., Murray, G., Fraser, C., Grieve, A., & Gomez, R. (2006). Help-seeking by rural residents for mental health problems: The importance of agrarian values. *Australian and New Zealand Journal of Psychiatry*, 40, 769-776.
- Keating, N. C. (1987). Reducing stress of farm men and women. *Family Relations*, 36(4), 358-363.

- Kelly, S., & Bunting, J. (1998). Trends in suicide in England and Wales, 1982-96: Population trends. *Demography and Health, 92*, 22-41.
- King, R., Nurcombe, B., Bickman, L., Hides, L., & Reid, W. (2003). Telephone counselling for adolescent suicide prevention: Changes in suicidality and mental state from beginning to end of a counseling session. *Suicide and Life Threatening Behavior, 33*, 400-411.
- Charlton, J. (1995). Trends and patterns in suicide in England and Wales. *International Journal of Epidemiology, 24*(3), S45–S52.
- Langlois, S., & Morrison P. (2002). Suicide deaths and suicide attempts. *Health Reports, 13*(2), 9-22.
- Lester, D. (Ed). (2002). *Crisis Intervention and Counseling by Telephone* (2nd ed.). Springfield, IL: Charles C. Thomas Publisher.
- Lipkus, I., McBride, C., Pollak, K., Schwartz-Bloom, R., Tilson, E., & Bloom, P. (2004). A randomized trial comparing the effects of self-help materials and proactive telephone counseling on teen smoking cessation. *Health psychology, 23*, 397-406.
- Manitoba Farm & Rural Stress Line Annual Report (2007). Retrieved March 22, 2009, from www.ruralstress.ca/files/1095%20MFRSL_B_AnnualReport.pdf
- Martinez-Brawley, E., & Blundall, J. (1989). Farm families' preferences toward the personal social services, *Social Work, 34*(6), 515-522.
- McAdams, C.R. & Foster, V.A. (2000) Client suicide: Its frequency and impact on counsellors. *Journal of Mental Health Counseling, 22*, 107–121.
- Miller, K., & Burns, C. (2008). Suicides on farms in South Australia, 1997–2001. *Australian Journal of Rural Health, 16*(6) 327-331.

- Miller, H. L., Coombs, D. W., Leeper, J. D., & Barton, S. N. (1984). An analysis of the effects of suicide prevention facilities on suicide rates in the United States. *American Journal of Public Health, 74*, 340–343.
- Mishara, B. L., Chagnon, F., Daigle, M., Balan, B., Raymond, S., Marcoux, I., Bardon, C., Campbell, J., & Berman, A. (2007). Which helper behaviors and intervention styles are related to better short-term outcomes in telephone crisis intervention? Results from a silent monitoring study of calls to the U.S. 1-800-SUICIDE network. *Suicide and Life-Threatening Behavior, 37*(3), 308-321.
- Moscicki, E. K. (1997). Identification of suicide risk factors using epidemiologic studies. *The Psychiatric Clinics of North America, 20*(3), 499-517.
- Meystadt, D. (1984). Religion and the rural population: Implications for social work. *Social Casework, 65*, 219–226.
- Ortega, S., Johnson, D., Beeson, P., & Craft, B. (1994). The farm crisis and mental health: A longitudinal study of the 1980s. *Rural Sociology, 59*(4), 598-619.
- Page, A. N., & Fragar, L. J. (2002). Suicide in Australian farming, 1988-1997. *Australian & New Zealand Journal of Psychiatry, 36*(1), 81-85.
- Pickett, W. D., & Brison, R. J. (1993). Suicides on Ontario farms. *Canadian Journal of Public Health, 84*, 226-30.
- Pickett, W. D., Hartling, L., Brison, R. J., & Guernsey, J. R. (1999). Fatal work-related farm injuries in Canada, 1991-1995. *Canadian Medical Association, 160*(13), 1843-1848.
- Pickett, W. D., King, W. D., Faelker, T., & Bienefeld, N. (1999). Suicides among Canadian farm operators. *Chronic Diseases in Canada, 20*, 105-110.

- Pipke, L., Svenson, K., & Drieger, F. (1987). "There Are No More Dreams": A proposal for action in support of farm families in Saskatchewan. *Regina Family Service Bureau*, 115-122.
- Reese, P. (2002). Whatever it takes. *Successful Farming*, 100-7. 22-24.
- Reese, R., Conoley, C., & Brossart, D. (2002). Effectiveness of telephone counseling: A field-based investigation. *Journal of Counseling Psychology*. 49(2), 233-242.
- Reese, R., Conoley, C., & Brossart, D. (2006) The attractiveness of telephone counseling: An empirical investigation of client perceptions. *Journal of Counseling & Development*. 84(1), 54-60.
- Tutty, S., Simon, M., & Ludman, E. (2000). Telephone counseling as an adjunct to antidepressant treatment in the primary care system: a pilot study. *Effective clinical practice*., 4, 170-178
- Reeves, A., & Seber, P. (2004). Working with the suicidal client. *Counselling & Psychotherapy Journal*, 15(4), 45-50.
- Rosmann, M. R. (2005). Sowing the seeds of hope: Providing regional behavioural health supports to the agricultural population. *Journal of Agricultural Safety and Health*, 11(4), 431-439.
- Rosmann, M. R. (2008). Sowing the seeds of hope: Providing agricultural communities with crisis services specific to their needs. *Cultural Competency*, 58-61
- Rudd, M., D., Jobes, D., A., Joiner, T., E., & King, C., A. (1999). The outpatient treatment of suicidality: An integration of science and recognition of its limitations. *Professional Psychology Research and Practice*, 30, 437-446.

- Ryan-Nicolls, K. D., Racher, F. E. & Robinson, J. R. (2003). Providers' perception of how rural consumers access and use mental health services. *Journal of Psychosocial Nursing*, 42(6), 34-43.
- Scallon, M. (2007). Inquiry on the psychological health of agricultural producers: Farmers feeling forsaken. Montreal, Quebec, Canada: La Coop Federee.
- Shaffer, D., Vieland, V., Garland, A., Rojas, M., Underwood, M., & Busner, C. (1990). Adolescent suicide attempters: Response to suicide-prevention programs. *Journal of the American Medical Association*, 264, 3151–3155.
- Singh, G. K., & Siahpush, M. (2002). Increasing rural-urban gradients in US suicide mortality, 1970-1997. *Public Health*, 92, 1161-1167.
- Stack, S. (1982). Suicide: A decade review of the sociological literature. *Deviant Behavior*, 4, 41–66.
- Standing Senate Committee on Agriculture & Forestry. (1993). Farm stress: Its economic dimension, its human consequences. Retrieved February 5, 2009, from <http://www.parl.gc.ca/37/1/parlbus/commbus/senate/com-e/agri-e/rep-e/farm-stress-e.htm>
- Stark, C., Gibbs, D., Hopkins, P., Belbin, A., Hay, A., & Selvaraj, S. (2006). Suicide in farmers in Scotland. *Rural and Remote Health*, 6(1), 509.
- Statistics Canada. (1992). *91 census, urban areas: Population and dwelling counts*. Ottawa, Ontario, Canada: Minister of Industry, Science and Technology.
- Statistics Canada. (2001). *Leading causes of death at different ages, Canada, 1998: Shelf tables* (Catalogue 84-208-XPB). Ottawa, Ontario, Canada: Minister of Industry.

- Statistics Canada. (2003). *Appendix A: History of Changes to the Definition of “Urban Area” and “Rural Area”*. Retrieved on February 19, 2008 from <http://www.statcan.gc.ca/pub/21-601-m/2002061/4193597-eng.pdf>
- Statistics Canada. (2007, May 16). *The Daily: 2006 census of agriculture: Farm operations and operators*. Retrieved February 12, 2008, from <http://www.statcan.gc.ca/daily-quotidien/070516/dq070516a-eng.htm>
- Statistics Canada. (2008). Suicides and suicide rate, by sex and by age group (CANSIM, table 102-0551, Catalogue 84F0209X). Retrieved February 12, 2009 from <http://www40.statcan.gc.ca/l01/cst01/hlth66a-eng.htm>
- Swisher, R. R., Elder, G. H., Frederick, L. O. & Rand, C. D. (1998). The long arm of the farm: How an occupation structures exposure and vulnerability to stressors across domains. *Journal of Health and Social Behavior*, 39(1), 72-89.
- Turvey, A., Stromquist, K., Kelly, C., Zwerling, J., & Merchant, C. (2002). Financial loss and suicidal ideation in a rural community sample. *Acta Psychiatrica Scandinavica*, 106, 373-380.
- Trochim, W. (2006). The Qualitative Debate. *Research Methods Knowledge Base: Web Centre For Social Research Methods*. Retrieved on March 2, 2009, from <http://www.socialresearchmethods.net/kb/qualdeb.php>
- U.S. Department of Health and Human Services. (2001). *National strategy for suicide prevention: Goals and objectives for action*, Rockville, MD. Retrieved February 18, 2009, from <http://www.sprc.org/library/nssp.pdf>
- Walker, J.L., & Walker, L.J. (1987). *The human harvest: Changing farm stress to family success*. Brandon, Manitoba, Canada: Brandon University.

Weigel, R. (2003). *The personal nature of agriculture: Men seeking help*. Laramie, Wyoming: College of Agriculture.

World Health Organization. (2002). *Bovine spongiform encephalopathy*. Retrieved February 9, 2008, from <http://www.who.int/mediacentre/factsheets/fs113/en/>

World Health Organization (2006). *Preventing suicide a resource at work*. Retrieved February 18, 2009 from http://whqlibdoc.who.int/publications/2006/9241594381_eng.pdf

World Health Organization (2008). *Suicide prevention*. Retrieved January 28, 2008, from http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/

APPENDIXES

Appendix A: Blank MFRSL Threat to Self or Others Form

Date:

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 YR MO DAY

Sheet No. _____
 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:

Depression.... Mild Moderate Severe **Anxiety.....**Mild Moderate Severe
Anger..... Mild Moderate Severe **Hopelessness....**Mild Moderate Severe
Hostility.....Mild Moderate Severe

SUICIDE IDEATION

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

HAS A PLAN: Vague Detailed None

HISTORY OF ATTEMPTS:	OTHER FACTORS (√ as applicable):	TIMING OF ATTEMPT:
No <input type="checkbox"/>	Alcohol/Drugs involved at time of call <input type="checkbox"/>	Currently in progress <input type="checkbox"/>
Yes <input type="checkbox"/>	Alone <input type="checkbox"/>	Immediate <input type="checkbox"/>
When _____ <input type="checkbox"/>	Isolated <input type="checkbox"/>	Within 24 hours <input type="checkbox"/>
How _____ <input type="checkbox"/>	History of mental health issues <input type="checkbox"/>	Within 24-48 hours <input type="checkbox"/>
Received:	Current mental health issues <input type="checkbox"/>	After 48 hours <input type="checkbox"/>
Medical Attention <input type="checkbox"/>	diagnosis _____	specify _____
Other Intervention <input type="checkbox"/>	Medication _____	Would not specify <input type="checkbox"/>
	Significant Loss _____	Caller not asked <input type="checkbox"/>
Last Attempt <input type="checkbox"/>	Hx of suicide by a significant other: <input type="checkbox"/>	
Low Risk <input type="checkbox"/>	who _____	WHERE ATTEMPT WILL OCCUR:
Medium Risk <input type="checkbox"/>	when _____	Callers home <input type="checkbox"/>
High Risk <input type="checkbox"/>	Physical health problems _____	Other (specify) _____
	Significant life changes _____	
	Other factors _____	

INTERVENTION REQUIRED: No Yes Not Possible **INTERVENTION COMPLETED:** No Yes Not Possible

INCIDENT NUMBER:

CALL TRACED: No Yes time:

--	--	--	--

HOMICIDE IDEATION: No Yes (If yes, use Threat to Other form)

PAST:

None
History of Violence
History of Incarceration

PLAN:

None
Vague
Specific

MEANS AVAILABLE:

Yes
No
Unknown

INTENDED VICTIM:

Refused
Random
Significant other
Other (*specify*) _____

CURRENT:

None
Isolated Thoughts
Frequent Thoughts
Threatening

METHOD:

Unspecified
Stabbing
Assault
Firearms
Other

TIMING:

In Progress
Immediate
Within 24 hrs.
After 24 hrs.
Unspecified

ACCESS TO VICTIM:

Immediate
Easily Accessible
Remote

OTHER FACTORS:

Alcohol
Drugs

INTERVENTION REQUIRED:

Yes No Not Possible

CALL TRACED:

No Yes
Time:

INCIDENT NUMBER:

NOTES:

Appendix B: Blank MFRSL Encounter Form Page 1

DATE

Yr. Mo. Day

TIME OF CONTACT: hrs.

DURATION OF CONTACT: min.

SHEET NO.: _____ REFER TO: _____ WORKER: _____ SUPERVISOR: _____

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

Client Information:

Name _____
 Address _____
 Phone # _____
 E-mail: _____

Gender:

Male
 Female
 Unknown
 Transgender

Age :

Under 12 36-50
 13-17 51-64
 18-26 65 & over
 27-35 Unknown

Relationship Status: _____

Living Arrangements: _____

Problem Area: (√ all applicable areas)

Alcohol/Drugs <input type="checkbox"/>	Information <input type="checkbox"/>	Sexual Assault <input type="checkbox"/>
Anger <input type="checkbox"/>	Isolation/Loneliness <input type="checkbox"/>	Sexuality <input type="checkbox"/>
Child Welfare <input type="checkbox"/>	Job <input type="checkbox"/>	Suicide <input type="checkbox"/>
Domestic Abuse <input type="checkbox"/>	Loss/Grief <input type="checkbox"/>	Threats to Others (form) <input type="checkbox"/>
Financial <input type="checkbox"/>	Medical <input type="checkbox"/>	Other: _____
Housing <input type="checkbox"/>	Relationship <input type="checkbox"/>	

Mental Health: Depression, Anxiety, other _____

Farm related issues -

BSE <input type="checkbox"/>	PMU <input type="checkbox"/>
Exit <input type="checkbox"/>	Financial <input type="checkbox"/>
Gov. Programs/Policies <input type="checkbox"/>	Information <input type="checkbox"/>
Off-farm Employment <input type="checkbox"/>	Relationship <input type="checkbox"/>
Relationship <input type="checkbox"/>	Transfer <input type="checkbox"/>
Excess Moisture <input type="checkbox"/>	
Weather <input type="checkbox"/>	Drought <input type="checkbox"/>
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 <input type="checkbox"/>	Brandon <input type="checkbox"/>	Burntwood <input type="checkbox"/>	Central <input type="checkbox"/>	Churchill <input type="checkbox"/>
Interlake <input type="checkbox"/>	Nor-Man <input type="checkbox"/>	N.Eastman <input type="checkbox"/>	Parkland <input type="checkbox"/>	S.Eastman <input type="checkbox"/>
Winnipeg <input type="checkbox"/>	First Nation <input type="checkbox"/>	Out of Country <input type="checkbox"/>	Out of Province <input type="checkbox"/>	Unknown <input type="checkbox"/>

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 (ie: Safety, Lethality, Child Welfare, Coping Abilities, Client Goals, Supports, etc.)

Appendix C: Demographic Information

Sex	Age	Marital status	Previous contact
Male	Unknown	Unknown	Yes
Male	Unknown	Single	No
Male	Unknown	Married	No
Male	36-50	Separated	No
Male	51-64	Separated	No
Male	36-50	Married	Yes
Male	36-50	Single	No
Male	Unknown	Married	Yes
Male	Unknown	Unknown	Yes
Male	36-50	Unknown	Yes
Male	Unknown	Widower	No
Male	36-50	Separated	No
Male	36-50	Unknown	No
Male	Unknown	Unknown	Yes
Male	36-50	Married	Yes
Male	36-50	Unknown	No
Male	Unknown	Unknown	Yes
Male	Unknown	Unknown	No
Female	51-64	Married	No
Female	36-50	Unknown	No
Female	36-50	Married	No

Male	Unknown	Single	Yes
Male	Unknown	Single	Yes
Male	Unknown	Unknown	No
Female	36-50	Married	No
Male	51-64	unknown	Yes
Male	Unknown	Married	No
Male	Unknown	Married	No
Male	36-50	Separated	No

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