Profile of a Suicide Attempter in the Sioux Lookout District

By

Jennifer Conlin

A thesis submitted to the Faculty of Graduate Studies
in partial fulfillment of the requirements for the Degree of

Master of Science

Department of Community Health Sciences
University of Manitoba
Winnipeg, Manitoba

THE UNIVERSITY OF MANITOBA

FACULTY OF GRADUATE STUDIES

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ABSTRACT

Many First Nation communities in the Sioux Lookout District have been experiencing a high rate of completed and attempted suicide over the last decade. The objective of the present study is to identify and profile the demographic features and other characteristics common to those Aboriginal individuals living in the Sioux Lookout District that have attempted suicide. A retrospective chart review of suicide attempts and completed suicides from the years 1995 to 2000 was undertaken. A total of 150 suicide attempts and 36 competed suicide charts were reviewed. In addition, six semi-structured interviews also took place with key informants from Nodin Counseling Centre who had substantial experience working in response to the suicide situation in the region. Chi-square analysis was used to test for differences between completed and attempted suicides, male and female suicide attempters and first and previous suicide attempters. Odds ratios were calculated for the significant x^2. The dominant profile for a suicide attempter that emerged from the results is female under the age of 25 who has a history of repeated attempts. She tends to have lived a life marked by negative experiences such as a history of alcohol abuse, and more than likely a combination of physical, verbal and sexual abuse. She also experienced a break-up with a partner/boyfriend or a fight with a significant other, and used alcohol right before the event occurred. This is consistent with much of the literature that looks at risk factors for suicide attempts. There are several factors that contribute to the decision to attempt suicide. Having knowledge of these factors can further the development of effective intervention and prevention programs to address this issue.

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CHAPTER 1

INTRODUCTION

1.1 Background

The Aboriginal populations in Canada, the United States and other parts of the world such as Hawaii and Australia have been identified as being at a greater risk for suicidal behaviour than non-Aboriginal people in these countries (Borrowsky, Resnick, Ireland, and Blum, 1999; Grossman, Millagan, and Deyo, 1991; Yuen, Nahulu, Hishinuma, and Mityamoto, 2000). The sudden contact with and domination by Western culture and the ensuing cultural stress these Aboriginal groups experienced as a result of colonization, has lead to generations of problems, notably suicide and attempted suicide.

The Royal Commission on Aboriginal Peoples (1995) identifies suicide as a high priority for further enquiry and intervention. Identifying the overall characteristics or risk factors associated with those who complete or attempt suicide and combining this with additional demographic, clinical and behavioural data to create a profile of the suicide attempter is a first step towards understanding these phenomena (Thompson, 1987; Zitzow and Desjarlait, 1994). Gaining an understanding of suicidal characteristics is thought to assist in developing effective early intervention and prevention strategies, as well as in focusing resources on those at greatest risk.

1.2 Scope of the Problem

Many First Nation communities in the Sioux Lookout Region in Ontario have been experiencing a high rate of suicide and suicide attempts over the last decade. Between 1986 and the year 2000 there was a total of 186 reported completed suicides and over 900 attempts (Nodin Counseling Service Annual Report, 2000). In one year alone,

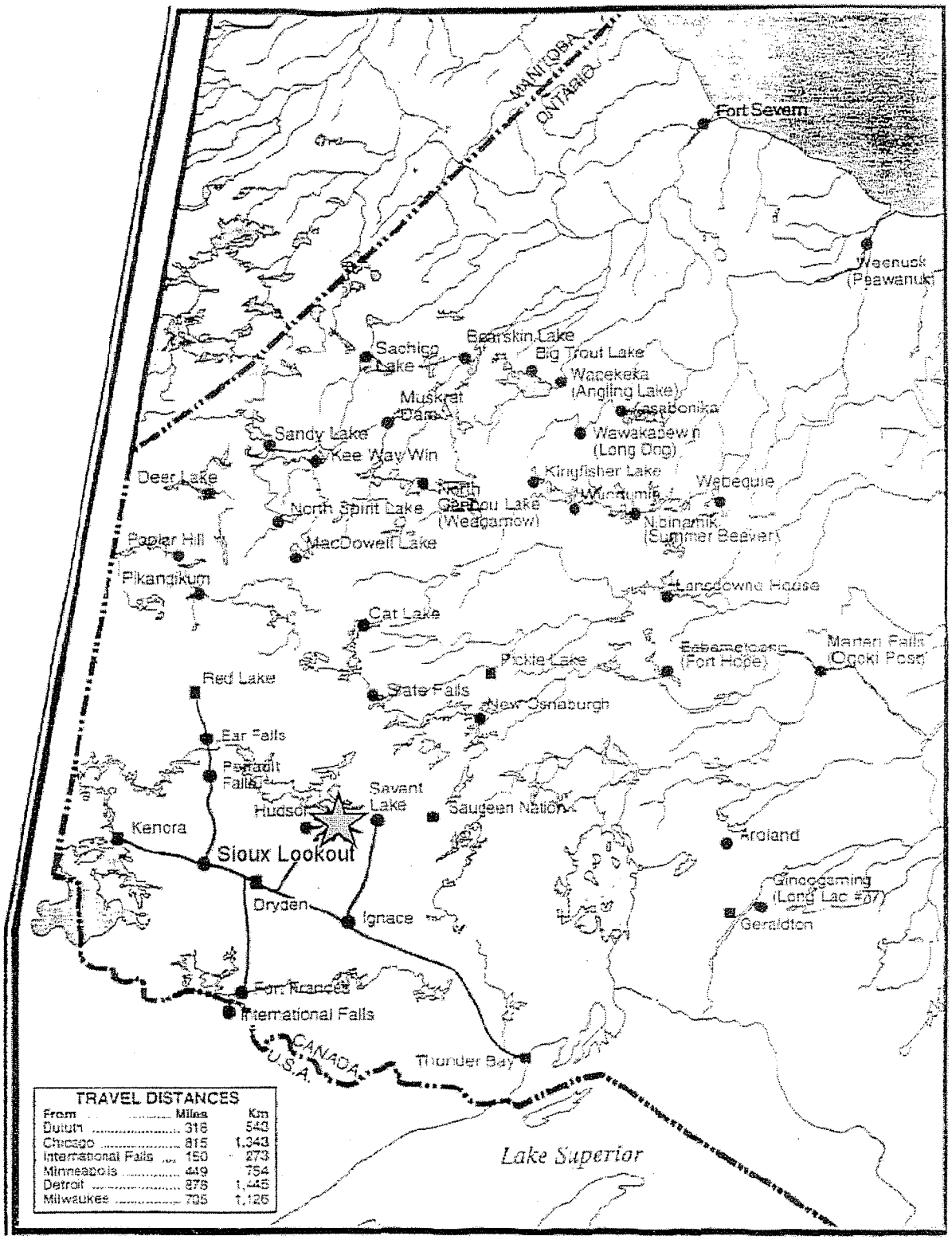
from April 1, 1999 to March 31, 2000, there were 19 suicides and 332 suicide attempts. From April 2000 until March 2001 this increased to 23 completed suicides and 472 attempts. These are high numbers considering the population of the Sioux Lookout Region for the year 2000 was approximately 16,103.

Nodin Counseling Centre is a regional First Nations Mental Health Service created in 1981 through the University of Toronto medical contract at the Sioux Lookout Zone Hospital. It is located in the town of Sioux Lookout, Ontario and provides a crucial service to members of 28 First Nations communities in the Sioux Lookout Region (see map Figure 1.1). In 1994 the administration of Nodin was transferred to the Sioux Lookout First Nation Health Authority.

Nodin provides four basic services to clients within the Sioux Lookout Region. These include Acute Care Services, Community Crisis Support, Community Development and Training and, Consultation Services. Over the last decade, one of the major areas of concern for this organization has been the high rates of suicide attempts and suicide completions. In many cases these high rates have reached crisis proportions in several of the communities. As a result, Nodin has been caught up in an ongoing, reactive response to the constant attempts and completions, which consume much of their energy and resources both human and financial. This leaves very little time to focus on developing and initiating effective prevention and intervention strategies that would contribute to decreasing the existing rates in the district.

In order to define and identify who is vulnerable it is important to understand some of the common characteristics of individuals attempting suicide. Documenting these characteristics may further assist in the identification of potential attempters and the development of interventions that may prevent attempts.

Figure 1.1 Map of Sioux Lookout Region



1.3 Research Objective

The purpose of the proposed study is to identify and profile the demographic features and characteristics common to those Aboriginal individuals living in the Sioux Lookout Region who have attempted suicide.

To accomplish this a retrospective chart review was undertaken of those individuals who had attempted suicide and presented at Nodin Counseling Centre from the year 1995 to 2000. A total of 150 suicide attempt charts were examined along with 36 charts of individuals who had completed suicide. A data abstract form based on risk factors and characteristics as described in the literature on both attempted and completed suicide, was developed. This form was used to assist in collecting the necessary information from the charts.

In addition to the chart review six semi-structured interviews took place. Those who were interviewed had substantial experience working in the First Nations communities in Sioux Lookout, particularly in response to community crisis which is often related to a suicide or suicide attempt. These interviews were to provide confirmation of the characteristics identified in the chart review, and provide depth to the data. Having an understanding of individuals' personal experiences enriches the data collected from the charts as well as assists in maintaining a human dimension to a very human issues.

In the analysis χ^2 was used to test for differences between completed and attempted suicides. Additional comparisons, for the suicide attempts only, were made between genders, as well as between first attempters and previous attempters. Odds ratios were calculated for the significant χ^2.

CHAPTER 2

LITERATURE REVIEW

2.1 Defining Attempted Suicide

Suicide has been described as a "death arising from an act inflicted upon oneself with the intent to kill oneself" (Rosenberg, Smith, Davidson, and Conn, 1987). This is a straightforward definition and no matter how you look at it the basic premise remains intact. The persons who complete suicide intend to kill themselves.

Attempted suicide is more difficult to define as there is often substantial ambiguity around the intention and lethality of the behaviour which creates controversy about whether the behaviour is an actual suicide attempt (Adam, 1985). As a result of this ambiguity there has been an assortment of new terms and definitions developed over the years to describe self-destructive behaviour. These include parasuicide (Kreitman, Philip, Greer, and Bagley, 1969), non-fatal, deliberate self-harm (Morgan, Pocock, and Pottle, 1975), and deliberate self-poisoning and self-injury (Kessel, 1965). This has caused some difficulties in interpreting results and making meaningful comparisons among the research that has been undertaken. (Eurosave, 2001).

An effort to clarify the terms attempted suicide and parasuicide was made in a report on parasuicide in Europe by the Eurosave project (2001). This report discusses four views on the relationship between attempted suicide and parasuicide. The first view is that parasuicide is a sub-category of attempted suicide and is an act that is low in intent. The second view, contrary to the first, looks at attempted suicide as a sub-category of high intent parasuicide. The third view looks at attempted suicide and parasuicide as mutually exclusive, with parasuicide being used in cases where there is low intent and attempted suicide being used where there is definite certainty that the individual intended to kill themselves. The final view is that these two terms should be

used interchangeably.

This last interpretation appears to consider all self-destructive behaviour as potentially lethal without making any distinctions between intent, and considers all acts of violence against oneself equally important. (Eurosave, 2001; Nelson, and Grunebaum, 1971). It allows for more flexibility in defining attempted suicide and supports the view that suggest that suicidal behaviours, from ideation to completion, can be viewed on a continuum of increasingly lethal behaviour. (Adam, 1985; Gould, Petrie, Kleinman, and Wallenstein, 1994; Kirmayer, Hayton, Malus, Jimenez, Quesney, Ternar, and Ferrara, 1994). First attempts may often be considered inconsequential, becoming more serious and lethal as suicidal thoughts become more persistent, or suicide attempts are repeated. For example, suicide ideation is fairly common in the general population, particularly when a person is dealing with undesirable life events, depression, or social isolation, and in most cases it does not lead to attempted suicide. (Adam, 1985; Paykel, Myers, Lindenthal, Tanner, 1974). However there are a small percentage of individuals who do follow through on the ideation. Schwab, Warheit and Holzer (1972) found that in the general population 15.4% reported some degree of suicidal ideation in the last month, while 3% had actually made a suicide attempt. In a follow-up of wrist-slashing behaviour, 3 (15%) women out of a sample of 19 subsequently went on to commit suicide, contradicting past reports that self-mutilators represented a low-risk group (Nelson and Grunebaum, 1971). In a report on suicide in Canada among Aboriginal populations it was stated that most individuals had expressed suicidal thoughts or made suicide attempts previous to a completed suicide (Kirmayer, et al., 1994). Shafii, Carrigan, Whittinghill and Derrick, (1985) found that 85% of the adolescents suicides reviewed had expressed that they wanted to die and 40% had previously attempted.

The WHO/ EURO Multicentre Study on Parasuicide has defined parasuicide as "An act with nonfatal outcome, in which an individual deliberately initiates a non-habitual behaviour that, without intervention from others, will cause self-harm, or

deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which aimed at realising changes which the subject desired via the actual or expected physical consequences" (Platt, Bille-Brahe, Kerkhof, Schmidtke, Bjerke, Crepet, De Leo, Haring, Lonnqvist, Michel, Philippe, Pommereau, Querejeta, Salander-Renberg, Temesvary, Wasserman, Sampaio, and Faria, 1992).

For the purpose of the present study attempted suicide will be more simply defined as, "An act of intentional self-harm carried out with an awareness that the outcome could be fatal" (Rosenberg, et al, 1987).

This definition encompasses a whole range of self-destructive behaviours that have been implicated in the literature as suicide attempts, from very serious, potentially lethal acts that require medical care, to minor gestures that are not at all life-threatening. (Adam, 1985; Mościcki, 1997). The individual may not want to die, however the act itself is a distress signal that should be treated as an indicator that something is not right in their lives and that person requires assistance.

2.2 Theoretical Framework

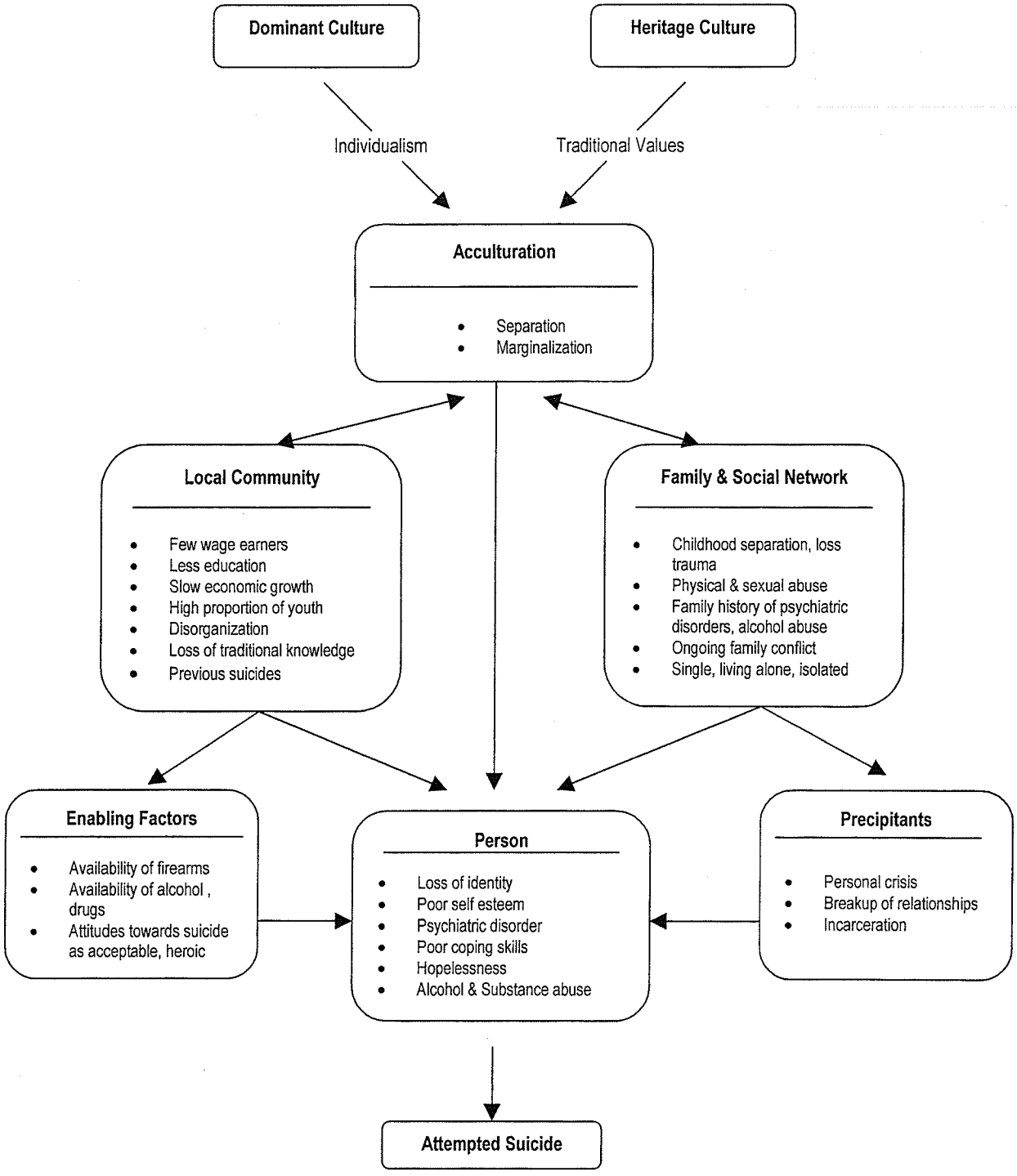
When explaining attempted suicide in the Aboriginal population there are two perspectives one can take as discussed in Kirmayer's work that explores suicide in the Canadian Aboriginal population (1994). The first is a psychiatric perspective that draws the attention directly to the individual and how suicidal behaviour is related to personal or family psychopathology. The second is the sociological perspective that views suicidal behavior as a consequence of economic disadvantage, acculturative stress, and political disempowerment. Both perspectives have their disadvantages. A purely psychiatric perspective focuses on the pathology of the individual and ignores the basic social problems that may contribute, whereas the sociological perspective runs the risk of labeling whole communities as unhealthy, thus contributing to the already acute

demoralization that may exist in many communities.

Combining these two perspectives is what Thorslund (1990) did in his theory of suicide in Inuit Youth in Greenland. Kirmayer, and his colleagues, (1994) developed a model based on this theory (Figure 2.1) which shows how the community, family, and individual are all affected by the stress of acculturation that has resulted from the clash of two cultures. Although the outcome depicted in Kirmayer's model is completed suicide it seems appropriate for providing the framework for the current research with minimal changes. Instead of the final outcome being suicide, attempted suicide would be the final result.

This model illustrates how the community can suffer economically, politically, and socially as a result of unemployment, poverty, lack of education, loss of traditional knowledge, loss of political power, a high proportion of youth, and previous suicides. A breakdown in the family and social networks of individuals can occur as a result of various circumstances such as childhood separation, loss and trauma, physical and sexual abuse, psychiatric disorders, alcohol abuse, loss of parenting skills, family conflict, and isolation. This in turn can lead to a multitude of personal problems for individuals that can reveal themselves in poor self-esteem, identity confusion, poor coping skills, mental health problems, a sense of hopelessness, and abusive behaviour. These factors when combined with precipitating factors such as a fight with a partner, and/or enabling factors such as the availability of alcohol or drugs can ultimately lead to a suicide attempt.

Figure 2.1: Adaptation of Kirmayer's Model of Suicide



2.3 Epidemiology of Attempted Suicide in the General Population

The incidence and prevalence of attempted suicide in most countries is difficult to determine due to attempted suicides traditionally not being a reportable condition. This is unfortunate as a system of surveillance would allow for more accurate identification of the actual rates of parasuicide and perhaps assist in identifying individuals and groups who may be at risk (Rosenberg et al., 1987).

Despite the limited surveillance, research is still undertaken and hospitalization data is what is commonly used when exploring the frequency of parasuicide (EUROSAVE Project, 2001; Langlois and Morrison, 2002). Although this can capture a significant portion of the population, some segments of the population are excluded, which can result in the data describing a sample of the population that may not be representative of the entire population (EUROSAVE Project, 2001).

The WHO/EURO Multi Centre Study on Parasuicide has set up centres across Europe to research attempted suicides, and rates have been estimated in several of these countries based on hospitalization data (EUROSAVE Project, 2001). It has been estimated that the incidence rates for attempted suicide 15 and over in 1976 ranged from 54/100,000 in Italy to 440/100,000 in the UK. Between 1989 and 1992 the highest male age-standardized rate was found in Finland (314/100,000) and the lowest was in Spain (45/100,000). For women this rate was highest in France (462/100,000) and lowest in Spain (69/100,000) (Schmidtke, Bille-Brahe, DeLeo, Kerkhof, Bjerke, Crepet, Haring, Hawton, Lönnqvist, Michel, Pommereau, Querejeta, Phillipe, Salander-Renberg, Temesváry, Wasserman, Fricke, Weinacker, Sampaio-Faria, 1996).

Rates have been determined for Canada based on the Hospital Morbidity Database (HMD) that is maintained by the Canadian Institute for Health Information and it is estimated that in 1998/99, 22,887 individuals were treated for attempted suicide. This would be a crude hospitalization rate of 87/100,000 aged 10 and over. (Langlois and

Morrison, 2002). One limitation of this database is that it only includes those admitted to hospital as a result of their attempt. It does not include cases of attempted suicide that were treated as outpatients in emergency rooms or other medical facilities. In addition, it does not include those patients in psychiatric hospital who attempted while they were in care, but whose outcomes were not serious enough to require hospitalization. This leads to an underestimation of the actual rates of parasuicide.

Another limitation to using hospital data which may lead to the underestimation of actual suicide attempts is that attempts may be reported as accidental or unintentional injuries (Langlois and Morrison, 2002).

Overestimation can also occur with hospital data, for example, when patients are counted twice for a single event as a result of a move from one hospital to another.

Population surveys provide a means of determining parasuicide prevalence rates in different populations. They can be carried out at a national or regional level and are often used to target certain groups such as the Aboriginal population or youth (Grunbaum, Kann, Kinchen, Williams, Ross, Lowry, and Kolbe, 2002; Thorlindsson and Bjarnason, 1994). The advantage of using surveys is that cases of suicide attempts can be detected that would not have been documented in medical records. The limitation of using this method is that results are likely to be biased because of self-selection of those responding.

Regardless of the limitations of parasuicide data, researchers continue to collect and use these statistics and it has been shown in Canada that although underreporting exists, it is not large enough to substantially alter the rates (Speechley and Stavraky, 1991).

2.3.1 Gender Differences

Statistics show that males are more likely to complete suicide whereas females are more likely to attempt (Bland, Newman, and Dyck 1994; Bille-Brahe et al., 1997;

Schmidt, O'Neal, and Robins,1954; Rosenberg et al., 1987; Sigurdson, Staley, Matas, Hildahl, and Squair,1994; Yuen et al., 2000). A recent study in Christchurch, New Zealand found that although suicides and attempted suicides were similar in terms of the risk factors and life processes, males were more likely to die by suicide then high–risk females (Beautrais, 2001). Overrepresentation of men in suicide deaths has been consistent across 22 countries according to information collected by the World Health Organization (Langlois and Morrison, 2002). Most of the countries had a ratio of 3 or 4 males to 1 female, although there was a range from 2:1 in the Netherlands, to 7:1 in Greece. Canada ranked in the middle with a ratio of 4:1 with a rate of 18/100,000 for males and 5/100,000 for females.

The gender rates for attempted suicide are much different. In a very large follow-up study to the WHO/EURO Multi centre study on Parasuicide, 1145 parasuicide patients, aged 15 years and older representing nine different centres across Europe, and treated in medical facilities were interviewed (Bille-Brahe et al., 1997). It was determined in this study that more females then males had attempted suicide. Another report generated by the EUROSAVE project reviewed the literature for epidemiological information of parasuicide in various European countries and it was found that Germany had an average annual parasuicide rate between 1989 and 1995 of 98/100,000 for males and 120/100,000 for females (EUROSAVE Project, 2001). Ireland had an annual average rate, for a four year period, of 166 and 190 per 100,000 for males and females respectively. In Denmark the rates of parasuicide have been decreasing since 1989 with the exception of teenage girls, 15 to 19 years of age, whose rates tripled during the 1990's. Finland was the one country that reported a higher rate for males then females, although some countries had equal rates for male and females.

This same phenomenon has been reported in different populations in the United States. For example, in Western Alaska 66% of all patients of Eskimo descent who were hospitalized for attempted suicide during a 5 month period were young, single, and

female (Gregory, 1994). In Hawaii, female high school students had a significantly higher rate then their male counterparts, both Hawaiian and non-Hawaiian (Yuen et al, 2000). The Center for Disease Control and Prevention in the United States conducted a national school-based Risk Assessment Survey and found that out of 13,601 students from 150 schools across the United States, females were almost two times more likely to attempt suicide than males (Grunbaum, Kann, Kinchen, Williams, Ross, Lowry, and Kolbe, 2002).

In Canada, parasuicide-related hospitalization rates were examined for 1998/99 and it was determined that the age-standardized rate for Canadians over 10 years of age was 108/100,000 for females, compared to 70/100,000 for males (Langlois and Morrison, 2002). A five year review of youth suicide in Manitoba, showed that females (62.5%) were more likely than males (35.2%) to have attempted suicide one or more times before they completed suicide (Sigurdson, et al., 1994). In Edmonton, Alberta the overall parasuicide rate for those 15 and over was 357/100,000 for men and 534/100,000 for women (Bland, et al., 1994).

Contrary to the results above, other studies have found that males and females attempt equally (Beautrais, Joyce, and Mulder 1996; Kirmayer, Boothroyd, and Hodgins 1998; Kirmayer, Malus, and Boothroyd, 1996) or that males attempt more often than females (Malus, Kirmayer, and Boothroyd, 1994).

2.3.2 Age Differences

A higher rate of attempted suicide has been found in younger age groups while traditionally the rates of completed suicides have been shown to increase with age (Adam, 1985; Schmidtke et al., 1996). In a comparison of suicides and suicide attempts, Beautrais (2001) found that the mean age of those who completed suicide was 36.8 and those making serious suicide attempts was 30 years of age. The World Health Organization (2001) reported that suicide was the first or second cause of death for both

sexes 15-34 years old. The data that has been collected on suicide attempts indicates that the rate for attempted suicide may be up to 20 times higher than completed suicides.

Age specific rates for attempted suicide appear to vary. In the EUROSAVE report on the Epidemiology of Parasuicide in Europe (2001) prevalence rates ranged from being the highest in the 15-24 year old age groups for both males and females in Denmark and Ireland, to the highest rate being found in males 70-74 in Padua Italy. It appears from this report that parasuicide tends to occur most frequently between the ages of 14 and 34.

In 1998 in Canada, completed suicide rates for males were highest in the 20-29 age group, 30-44, and the 44-45 (Langlois and Morrison, 2002). In women, the highest rates were found in the 30-44 and 45-59 age group. The group most likely to attempt suicide in Canada are females who are 15-19 years of age, at a rate that is over twice that of their male cohorts, 221/100,000 vs 87/100,000 respectively. Male hospitalization rates for attempted suicide are highest at 20 to 29 and 30 to 44 years of age (98/100,000), but are still lower than females in the same age categories (138/100,000). A study in Edmonton found that the age period with the highest proportions of suicide attempts, both male and female, was 25-29 years (Bland et al., 1994).

2.3.3 Methods of Attempted Suicide

Overdose or self-poisonings have been indicated in several studies as the most common method used in suicide attempts (Beautrais, 2001; Bland, et al., 1994; Garfinkel, Froese, and Hood, 1982; Mościcki, 1997; Mościcki, 1994; Schmidt, et al., 1954). More violent methods such as the use of firearms and hanging are used more often by those who complete suicide. (Rosenberg, et al., 1987; Sigurdson, et al., 1994; Michel, 1987 Mościcki, 1997).

2.4 Epidemiology of Attempted Suicide in the Aboriginal Population

The scope of the problem of attempted suicide in Aboriginal populations in terms of incidence and prevalence has not been well documented and national statistics are almost non-existent. What is known about the rates of attempted suicide in Aboriginal populations has been collected via community and regional surveys. (Grossman et al., 1991; O'Neil, Moffat, Tate, and Young, 1994; Yuen et al., 2000). The results of these surveys have not been standardized and remain specific to the community or region that was studied. What has been determined from a review of these studies is that attempted suicide is high in many Aboriginal populations when compared to the general population and there are significant gender and age differences that are cause for concern.

In a study of Native Adolescent Hawaiians it was found that Hawaiian adolescents had a higher rate of suicide attempts (12.9%) than non-Hawaiians (9.6%) (Yuen et al., 2000). Females from both groups attempted suicide more frequently than males, however Hawaiian males had a significantly higher rate of attempted suicide when compared to non-Hawaiian males, suggesting a greater relative risk for this group.

In a large survey of Navajo adolescents in grades six to twelve, 15% had attempted suicide, 35% had tried to kill themselves one year before the survey, and 58% had tried to kill themselves more than once (Grossman, et al., 1991). Female gender was associated with higher rates of attempts which is consistent with other research of both Aboriginal and non-Aboriginal populations. (Bland, et al., 1994; Borrowsky, et al., 1999; Gregory, 1994; Langlois and Morrison, 2002; Ross and Davis, 1986; Sigurdson, et al., 1994). The results of a study that looked at the psychosocial factors related to suicide in a groups of Zuni Adolescents found that 30% reported that they had attempted in the past, and 70% had tried two or more times (Pitney-Howard, Basil, LaFromboise, September, and Johnson, 1992). Once again the gender differences were similar to other studies where girls were two to three times more likely to attempt suicide then boys.

In Canada, studies have documented the rates of completed suicide in Aboriginal communities, which range from two to 10 times higher than that of non-Aboriginal populations (Bagley, Wood, and Khumar,1990; Malchy, Enns, Young, Cox, 1997; Royal Commission on Aboriginal Peoples, 1995). The National Task Force on Suicide in Canada (1994) states that investigators have found rates as high as 15 times that of the general Canadian population. They estimate that the average overall rates of suicide within First Nations and Inuit communities are from three to five times higher. One study that explored suicide and careless death in young Aboriginal males found that the rates of completed suicides were 80.11 per 100,000 on northern reserves and Metis settlements in Alberta (Bagley, et al., 1990).

Much of the research on attempted suicide that has taken place in Canada focuses on the Inuit populations in northern parts of the country. Kirmayer and his colleagues (1996) examined attempted suicide among Inuit youth living in a Northern Quebec community and found that out of a sample of 100 adolescents and young adults 34% had attempted suicide. Out of this, 20% had made more then one attempt and 12 % had made more then two attempts. Over half of the youth surveyed had a friend that had attempted. In terms of gender differences the results of Kirmayer's study were not consistent with other research. In this sample, males were more likely to attempt suicide then females (43% vs. 26%). This was attributed to the high rate of solvent abuse among males, as well as a greater discontinuation in the male role due to cultural change. Both these factors increase vulnerability to self-destructive behaviour. These results were supported in a later study of 100 Inuit youth in a Nunavik community (Kirmayer, et al., 1998). In this study 46% of the males and 41% of the females reported a suicide attempt.

In a study of the Inuit living in the North West Territories, the prevalence of suicidal behaviour, which included both planned and attempted suicide, ranged from 13% to 23% (O'Neil, et al., 1994). This study was more consistent with the general population in terms of gender as it was identified that females who were 12-17 years of

age admitted to suicidal behaviour three times that of males, and women 25-44 were twice as likely than men to engage in suicidal behaviour.

In Manitoba, one northern community had an overall rate of attempted suicide of 77 per 100,000 for a three year period from 1981-1984 (Ross & Davis, 1986). The rate for males in this community aged 20-24 was 241 per 100,000. In this same community, females ages 15-19 were overdosing at a rate of 7,000 per 100,000 population. The researchers attributed this high rate to two epidemic periods among this age group during the study period

2.5 Risk Factors for Attempted Suicide

Much of the research that looks at suicidal behaviour focuses on risk factors for completed suicide that may contribute to the ill-fated decision to take one's own life. These factors are fairly consistent over various studies and populations and include mental and addictive disorders, substance abuse, family dysfunction, isolation, life stress, physical illness, having a family member or friend commit suicide, and previous suicide attempts. (Isaacs, Keogh, Menard, and Hockin, 1998; Maris, 1997; May and Van Winkle, 1994; Mościcki, 1997; Roesenberg, et al., 1987; Rubenstein, Heeren, Houseman, Rubin, and Stechler, 1989; Vijayakumar and Rajkumar, 1999). Identifying risk factors allows researchers to determine what variables individuals have been exposed to that may increase the likelihood of the occurrence of suicidal behaviour (Kirmayer et al., 1994). Table 2.1 provides a summary of the risk factors and relevant literature in the general population.

Often the same risk factors associated with completed suicide are found in suicide attempts (Bland, et al., 1994; Borrowsky, et al., 1999; Kirmayer, et al., 1996; Rosenberg, et al., 1987). This has generated questions focusing on whether those who complete suicide are different from those who attempt suicide. Many researchers appear to agree

that these are two distinct but overlapping populations that share many similarities as well as differences (Adam, 1985; Beautrais, 2001; Hawton, 1987; Hawton & Catalan, 1982; Rosenberg, et al., 1987;).

Rarely do risk factors act on their own as they are interrelated and complex. Risk factors can reflect personal vulnerabilities or social-cultural factors and a useful way of organizing these risk factors is into two broad categories, distal and proximal risk factors (Mościcki, 1997; Kirmayer, et al., 1994).

2.5.1 Distal Risk Factors

Mościcki (1994) describes distal risk factors as representing the foundation on which events associated with suicidal behaviour are built. The presence of distal risk factors does not lead directly to parasuicide or suicide. They are however considered necessary and led to an increased vulnerability for suicidal behaviour when proximal risk factors are introduced. Some of the more common distal risk factors identified in the literature are described below.

2.5.1.1 Repeated Attempts

A history of repeated suicide attempts is one the strongest predictors for completed as well as repeated suicide attempts (Beautrais, 2001). Studies have found that up to 50% of a sample of parasuicides have attempted at least once before (Bland, et al., 1994; Bille-Brahe, et al. 1997). In a study looking at completed suicide it was found that 47% of the sample had a history of previous attempts (Ovenstone and Kreitman, 1974). Sigurdson, et al., (1994) found a higher percentage of previous attempts in females than males who went on to complete suicide, however it has been found that the suicide risk for men after attempted suicide was nearly twice that for women (Nordström, et al., 1995). In follow-up studies of parasuicide the overall mortality for those who had previously attempted ranged from 6% to 13.3%. (Johnsson, Öjehagan, and Träskman-

Bendz, 1996; Nordström, Samuelsson, and Åsberg, 1995; Tejedor, Diaz, Castillón, and Pericay 1999.)

2.5.1.2 Psychiatric Disorders

Another equally strong risk factor for attempted suicide is having a psychiatric disorder (Beautrais, 2001; Garfinkel, 1982; Mościcki, 1997). Mościcki (1994) found that having one psychiatric diagnosis as opposed to no diagnosis increased a person's likelihood of attempting suicide by four times. More than one diagnosis increased this risk to 18 times more likely to attempt. A study in Oxford found that psychiatric disorders were common in a sample of deliberate self-harm patients who presented to the district general hospital (Haw, Hawton, Houston, and Townsend, 2001). Ninety-two percent of the study participants had one psychiatric disorder, and a comorbidity of two or more disorders was found in 70% of the sample. The most common psychiatric diagnosis found was depression (70.7%), followed by personality disorder (45.9%). A substance use disorder, where there was harmful alcohol use or dependence, was found in 26.7% of the sample and drug misuse or dependence was found in 8.7 %. Other studies have found similar results in terms of the presence of a psychiatric disorder, the most common appearing to be mood disorders, personality disorders, and substance abuse (Beautrais, 2001; Garfinkel, et al., 1982; Mościcki, 1994; Sigurdson, et al., 1994).

2.5.1.3 Familial Risk Factors

Family dysfunction and psychopathology appears to have a significant role in the lives of those individuals who attempt suicide. A family history of suicide, negative parent-child relationships, parental absence, separation, loss, and parental psychopathology, have all been associated with attempted suicide. (Garfinkel, et al., 1982; Kessel, 1965; Kosky, 1983; Robins, Schmidt and O'Neal, 1957; Wagner, 1997).

Family history of suicidal behaviour: A history of family suicide has often been associated with attempted suicide. (Resnick, Bearman, Blum, Bauman, Harris, Jones, Tabor, Beuhring, Sieving, Shew, Ireland, Bearibger, and Udry, 1997; Robins et al., 1957; Roy, Rylander and Sarchiapone, 1997). In an extensive review of the research of family risk factors for suicidal behaviour in children and adolescents, Wagner (1997) reported finding consistent evidence that suicide attempters were more likely than normal controls to have a family history of suicide attempts. Twenty-four percent of the individuals admitted to the St. Louis County Hospital for attempted suicide over a one year period had a family history of attempted suicide (Murphy and Wetzel, 1982). In a study looking at adolescent suicide attempters it was found that there were more attempters (8.3%) than controls (1.1%) that had a history of suicidal behaviour in the family (Garfinkel, et al., 1982). Pfeffer, Normandin, and Kakuma (1998) found that the rate of adolescent parasuicide is more then seven times higher when the mother has a suicide attempt history. Depressed patients have been found to have an increased probability of violent suicide attempts, if a person had a first or second degree relative that had committed suicide (Liknowski, de Maertelaer and Mendlewicz, 1985).

Negative parent-child relationship: Wagner (1997) also found a consistency in the literature that indicated suicide attempters were more likely to have poor parent-child relationships. Findings from the National Longitudinal Study of Adolescent Health in the United States show that parent-family connectedness significantly protected adolescents in grades 7-12 from attempting suicide (Resnick, et al., 1997). In Canada, the National Longitudinal study of Children and Youth (1999) indicated that those adolescents who experienced a difficult relationship with one or more of their parents were 5.5 times more likely to have seriously considered suicide in the past year even after controlling for a number of variables such as gender, family type and family income. The results of a study of young women aged 18-30 showed a low score on parental care and a high score on parental overprotection in girls that attempted suicide (Goldney, 1985). These scores

were determined using an instrument that measured the dimension of parental care versus indifference and rejection, and parental overprotection versus encouragement of independence.

Parental absence, separation, or loss: Separation from parents has been linked to child and adolescent suicide attempts. Experiencing a loss which includes death or separation from a parent, grandparent or sibling was indicated in 80% of a sample of suicidal children under the age of 14 (Kosky, 1983). Sixty percent of these losses had occurred in the 12 months preceding the suicide attempt and in 30% of the cases the child had experienced more than one loss. This study also found that only 65% of the suicide attempters lived with only one of their natural parents.

Robins, et al., (1957) found that there was a very high prevalence of broken homes in a sample of 109 patients aged 17-78 who had just made a suicide attempt. A broken home was defined as death of a parent or a temporary or permanent separation from a parent. The parent missing most often in this study was the father. In a more recent study of suicide attempts in children and adolescents it was indicated that attempted suicide was equally associated with the absence of a father and the absence of both biological parents (Garfinkel, et al., 1982).

Wagner (1997) identified studies that were investigating the loss of a caregiver as a risk factor for attempted suicide and concluded that there is little evidence that a death of a parent or separation from a parent through divorce or separation were risk factors alone. What he did find was retrospective evidence that a combination of losses due to causes such as death, parental divorce and child placement outside the home, may be risk factors for attempted suicide. He also describes retrospective evidence that looks at the possibility of the effects of early childhood loss being related to the emergence of suicidal behaviour in young adulthood.

Gould, Shaffer, Fisher, and Garfinkel, (1998) determined that separation and divorce made a small impact on adolescent suicide. This was further diminished after

parent psychopathology was accounted for. What was interesting was there was an association between completed suicide and a poor relationship with the father regardless of separation and divorce.

Parental psychopathology: Suicide attempters have a high likelihood of coming from families with a history of mental illness, primarily alcohol or substance abuse (Garfinkel, et al., 1982). In a five-year follow-up study of 75 individuals who had attempted suicide, 88% of those who re-attempted had a parent who had been treated for a psychiatric illness versus 48% of those who had not re-attempted. (Johnsson, et al.,1996). In this sample it was the psychiatric treatment of the father who accounted for the difference between the two groups, however in both groups alcohol abuse was the most common disorder among fathers.

Psychopathology of first-degree relatives was found to be significantly associated with a history of suicide attempts in adolescents, in a study that looked at the relationship between family psychopathology and adolescent lifetime suicidal behaviour (Pffeffer, et al., 1998). In this study, more adolescents with a suicide attempt history had mothers and fathers who had a substance abuse problems. It was concluded that the strongest predictors of attempted suicide were maternal suicide attempts, paternal substance abuse, and family discord. There were also higher rates of mood disorders and alcohol abuse in the first-degree relatives of the suicide attempters, however these were not found to be significant.

2.5.1.4 Physical and Sexual Abuse

In his review of family and youth suicidal behaviour Wagner (1997) examined 17 studies where adolescent or child suicide attempters were compared with control groups. The majority of these studies found that a history of physical or sexual abuse was more often present in the suicide attempters than in the controls. In another study of 2,918 adults, there was a significant association between sexual assault and attempted suicide

(Davidson, Hughes, George, and Blazer, 1996). After controlling for sex, age, education, post-traumatic stress disorder, and major depression it was found that those with a history of sexual assault were six times more likely to attempt suicide. This risk increased substantially with women who were sexually assaulted before the age of 16 years. In a literature review that explored the research related to childhood abuse and adult suicidal behaviour, it was concluded that there is a relationship between childhood sexual and physical abuse and attempted suicide (Santa Mina and Gallop, 1998). This relationship however is nonlinear with various contributing factors such as the severity of the abuse, the age of onset of the abuse, and the perpetrator of the abuse being a parent.

In a study that investigated how child sexual abuse affects mental health in adulthood it was found that only one woman in the control group had attempted suicide, whereas 8% of those who had been abused as children had attempted suicide. The rates of attempted suicide increased as the severity of the abuse increased (Mullen, Martin, Anderson, Romans, and Herbison, 1993). These results were confirmed by Fergusson and his colleagues (1996), who found that 33.3 % of adults who had experienced more severe sexual abuse had attempted suicide.

2.5.2 Proximal Risk Factors

Proximal risk factors are more closely related to the actual suicidal event in terms of occurring shortly before the event itself, and are often the precipitating circumstances that act as a trigger (Mościcki, 1994; Mościcki, 1997). Examples include a recent stressful life event such as a death of a spouse or friend, interpersonal loss, alcohol and drug intoxication, exposure to the suicidal behaviour of others, and being in jail (Gould, et al., 1994; Rich, Fowler, Fogarty, and Young, 1988). These risk factors are neither necessary nor sufficient but when combined with distal risk factors they contribute to the ideal conditions for suicidal behaviour to occur.

2.5.2.1 Stressful Life Events

Those who attempt suicide reported four time as many undesirable life events in the six months prior to the attempt than subjects from the general population. (Paykel, Prusoff, and Myers, 1975). The stressful life events that precipitated a suicide attempt most often included a serious argument with a spouse, having a new person in the home, and having to appear in court for an offence. Death of a spouse, or in the case of young people, death of a friend or peer, interpersonal loss or rejection, economic problems, and finding oneself in jail have also been cited as stressful life events that have been associated with a recent suicide attempt (Rich, et al., 1988). Additional factors found to increase the risk of a suicide attempt include rape, physical assault, job loss, and property and home loss. (Statham, Heath, Madden, Bucholz, Bierut, Dinwiddie. Slutske, Dunne, and Martin, 1998).

The event that seemed to be fairly common in regards to stressful life events was the involvement of the suicide attempter in a major quarrel with a partner or key person in their life. Quarrels usually happened within a week to 2 days before the attempt (Bancroft, and Marsack, 1977; Hawton and Catalan, 1982). This has been found to be particularly common in subjects under 36 years of age (Adam, 1985). In a study that looked at Greek and Danish women who had attempted suicide, and the quality of their relationships with husbands and boyfriends, it was found that 100 % of the Greek women, and 74% of the Danish women had recently had conflicts with their spouse (Arcel, Mantonakis, Petersson, Jemos, and Kaliteraki, 1992). Most of these women were unhappy with their relationships to begin with and the conflict became the precipitating factor that drove them to attempt suicide in order to escape a stressful situation.

2.5.2.2 Exposure to the Suicidal Behaviour of others

There has been some evidence in the literature that suggests that individuals who are exposed to the suicide or suicide attempt of others are at a high risk for copying this

behavior (Ho and Hung, 1998; Mercy, Kresnow, O'Carroll, Lee, Powell, Potter, Swann, Frankowski, and Bayer, 2001). This copying behavior is often referred to as suicide contagion or cluster and it appears to be a phenomenon that occurs most frequently among adolescents (Brent, Kerr, Goldstein, Bozigar, Wartella, and Allan, 1989; Mercy, et al., 2001; Wilkie, McDonald, and Hildahl, et al., 1999). A New Zealand study lends support to this by concluding that clustering does occur in attempted suicides and the strongest effects are found in teenagers and young adults (Gould, et al., 1994). Another study that followed-up youth exposed to peer suicide in their high school found many of the youth were suffering from depression and had a history of depression and suicidal behavior (Brent, et al., 1989).

In a study that looked at the effects of exposure to the suicide or suicide attempts of others, it was observed that exposure to the suicide behaviour of friends acted almost as a protective factor, lowering the risk of non lethal suicide attempts (Mercy, et al., 2001). However, this protective factor was only evident when the emotional and temporal distant between the suicidal person and their friend was greatest. This distance may enable the exposed person to find the suicidal behaviour inappropriate.

Another study determined that exposure to suicide did not increase youth risk for attempting suicide, however it did predict future major depression in the exposed group versus the control group. This could possibly make them more vulnerable for future suicide attempts, as major depression is a risk factor in itself. (Brent, Perper, Moritz, Liotus, Schweers, and Canobbio, 1994).

2.5.2.3 Alcohol Intoxication

Alcohol has been implicated as both a distal and proximal risk factor. Long-term alcohol dependency has many implications one of which is a higher risk for attempted suicide. In many cases alcohol consumption is a precipitating factor that is implicated in many suicide attempts as a result of its depressant and disinhibiting effects (Hayward,

Zubrick, and Silburn, 1992). This combined with depression, resulting from a stressful life event and lack of professional help can create an emotional state where individuals attempt to take their own lives.

In a study that looked at completed suicide and blood alcohol levels, it was found that 35.8% of suicides had a positive blood alcohol level (Hayward, et al., 1992). The percentage of suicides that had been moderately or significantly impaired out of all the suicides was 24.8%. It has also been found that men are more likely then women to consume alcohol prior to an attempt (Hawton, & Catalan, 1982; Hayward, et al, 1992).

2.6 Risk Factors in Aboriginal Populations

Much of the research that has taken place in Aboriginal populations has focused on surveys used to identify risk factors or characteristics that are common to those attempting suicide (Borrowsky, et al., 1999; Grossman, et al., 1991; Kirmayer, et al, 1996; Yuen, et al., 2000). Some of the risk factors are consistent with those found in the general population while others have been identified less frequently in the literature. What will be reviewed in this section are the risk factors that have been identified in many Aboriginal and Inuit populations in North America in both Canada and the United States. A summary of the literature on risk factors for suicide in the Aboriginal populations is found in Table 2.2.

Kirmayer, et al. (1996) undertook a community survey in a small Inuit community in the Arctic of Quebec. Of the 99 participants, ranging in age from 14 to 25 years, those who had attempted suicide were more likely to report a parent with a drinking or drug problem. This is consistent with what has been found in the general population. The family risk factors that were not significant in Kirmayer's sample were family psychiatric history and having a relative attempt or commit suicide, both which have been identified as risk factors in the general populations. Also identified as significant risk factors were

being physically abused, using solvents, and having a friend who had attempted or completed suicide, however sexual abuse and alcohol use were not significant. Suicide attempters also felt more alienated from their family and community and had a personal or mental health problem in the previous year.

Grossman, et al., (1991) found several risk factors that were statistically significant to attempted suicide in a group of Navajo students in the United States. These included a history of mental, behavioral or emotional problems, extreme alienation from the family and community, exposure to suicide attempts of friends, and the weekly consumption of hard liquor. Also identified was a self-perception of poor general health and past physical and sexual abuse. What was interesting was that an interaction between gender and abuse demonstrated that sexual abuse for males and physical abuse for females were associated with a higher risk of attempted suicide. Risk factors that were not significantly associated with attempted suicide include, community of residence, history of friend's completing suicide, various family structure factors such as parental death or absence, household density, religiosity, weekly use of beer and wine, household presence of the natural mother, and having an adoptive or step-father.

A secondary analysis of data from 1990 National American Indian Adolescent Health survey identified the greatest risk factor for attempted suicide for both males and females was having a friend attempt or complete suicide (Borrowsky, et al., 1999). Other risk factors were headaches and stomach problems, a history of physical or sexual abuse, having a family member attempt or complete suicide, having health concerns, and frequent alcohol, marijuana or other drug use. This study also identified factors that decreased the risk of attempting suicide. Both males and females who talked about their problems to friends or family, were in good emotional health, and had a sense of connectedness with their family were much less likely to attempt.

One can not discuss risk factors for parasuicide in Aboriginal populations without acknowledging the insidious outcomes that have occurred as a result of colonization and

the ensuing acculturation process. The negative results of this process are substantial and include, the loss of land, suppression of beliefs, weakening and displacement of social and political institutions, and the breakdown of cultural norms and values (Royal Commission on Aboriginal Peoples, 1995). Also included are a diminished self-esteem, discrimination, institutionalized racism, and the adoption, voluntarily or not, of the norms of an external cultural, and a loss of identity. When this occurs, life falls into disarray and people become very uncertain about their place in the world and the meaning of their life. They struggle with the task of trying to live in two different worlds, trying to make sense of where they came from while being bombarded by the developments of western society that is becoming more and more pervasive as a result of new technology and communication.

The effects of cultural stress in Aboriginal populations have been studied in many disciplines. Psychology, psychiatry, sociology, epidemiology, and anthropology have all contributed to the literature of how the centuries of oppression has affected the health of Aboriginal people. An exploration of this literature is beyond the scope of this review, however it is safe to say that the decades of oppression and abuse by the dominant society has predisposed Aboriginal people to a large number of self-destructive behaviours which include parasuicide and suicide.

In an exploration of sociocultural stress and the Alaskan Native the authors discuss the role of acculturation in breaking down what was once an organized, consistent, traditional system (Kraus and Buffler, 1979). One result of this is seen in the patterns of mortality due to violence, which include suicide. Individuals experience loneliness, anxiety, frustration, constant stress and despair which manifest themselves in alcohol abuse and mental illness which increases their risk of suicidal behaviour.

Chandler and Lalonde (1998) explored how the prevailing cultural continuity of 196 bands in British Columbia protected youth from suicide and found that communities that took the steps to preserve and rehabilitate their culture had dramatically lower

suicide rates then those that didn't. Markers of cultural continuity included, whether the band had taken steps towards land claims, self-government, control of education, control of police and fire services, control of health services, and having a cultural facility in the community. The communities that had all six markers present had a zero rate of suicide within the last five years, while the communities that had none of these markers had a rate that was 5-100 times greater then the Provincial average. Although this study did not address attempted suicide it may be safe to predict that the attempt rates would be higher in the communities that had no markers and lower in communities with all six markers.

The inability to live in a bi-cultural environment may be an important risk factor for attempted suicide. In a survey of Native Hawaiian adolescents it was established that having a greater affiliation to Hawaiian culture was a significant risk factor for attempted suicide (Yuen, et al., 2000). The investigators speculated that this increased risk may be due to increased cultural conflict and stress associated with remaining culturally Hawaiian in an environment that is dominated by Western culture.

Although seemingly contradictory to the findings that more traditional societies have a protective factor, these results do have an explanation that makes sense. Berry, (1985) concludes that there may be an inverted "U" relationship between traditionalism and suicide. Those communities at the extremes, either very traditional of highly assimilated, are protected while those in the middle experience greater conflict and confusion about who they are, leading to an increased risk for suicide. Therefore being able to manage this intermediate stage in imperative to a healthy outcome.

In Canada, the devastating affects of acculturation have been supported by colonial and assimilation policies of churches and government that resulted in unfulfilled treaty and land rights, the suppression of traditional beliefs and cultural practices, and inequitable programs and services (Royal Commission on Aboriginal Peoples, 1995). Most evident are the effects of residential schools and child welfare policies that separated several generations of children from their families and communities. Although

not equally detrimental to all that experienced them, extensive harm has been done as a result of these practices. Individuals, families and communities have been devastated, spirits have been broken, and the trust that the world is a good and safe place, has been destroyed.

Table 2.1 Risk Factors for Attempted Suicide in the General Population (Summary of the Literature)

Risk Factor	Studies
Repeated suicide attempts	Beautrais, A. , 2001; Tejedor, et al., 1999; Johnsson, 1996; Bille-Brahe, et al, 1997; Nordström et al., 1995; Bland, et al., 1994; Sigurdson, 1994; Oventsone & Kreitman, 1974
Psychiatric Disorders	Beautrais, 2001; Haw, et al., 2001; Mościcki, 1997; Mościcki, 1994; Sigurdson, et al., 1994; Garfinkel, 1982;
Familial Risk Factors	*Family history of suicide attempts*: Pffeffer, et al. 1998; Resnick et al., 1997; Roy et al., 1997; Wagner, 1997; Liknowski, et al., 1985; Murphy & Wetzel, 1982; Garfinkle, et al., 1982;Robins, et al., 1957; *Negative parent-child relationships:* Wagner, 1997; Resnick, et al., 1997; Goldney, 1985 *Paretnal absence, separation or loss:* Wagner, 1997; Gould et al., 1998; Kosky, 1983; Garfinkle, et al., 1982; Robins, et al., 1957; *Parental psychopathology:* Pffeffer, et al. 1998; Johnsson, et al., 1996; Garfinkle, et al., 1982;
Physical and Sexual Abuse	Santa Mina & Gallop, 1998; Wagner, 1997; Davidson et al., 1996; Fergusson et al., 1996; Mullen, et al., 1993;
Stressful Life Events	Statham, et al., 1998; Mościcki, 1997; Mościcki, 1994; Gould et al, 1994; Arcel, et al., 1992; Rich et al., 1988; Hawton & Catalan, 1982; Bancroft & Marsack, 1977; Paykel, et al., 1975
Exposure to the Suicidal Behaviour of Others	Mercy et al., 2001; Wilkie, et al., 1999; Ho & Hung, 1998; Brent, et al., 1994; Gould, et al., 1994; Brent, et al., 1989; Gould and Schaffer, 1986;
Alcohol Intoxication	Hayward, et al., 1992; Hawton & Catlan, 1982

Table 2.2 Risk Factors for Attempted Suicide in the Aboriginal Population (Summary of the 00Literature)

Studies	Subjects	Risk Factors
Yuen et al., 2000	4.182 students grade 9-12, Hawaii	Depression; substance abuse; grade level; Hawaiian cultural affiliation; main wage earners education
Chandler and Lalonde, 1998	196 Bands in British Columbia	Lack of cultural continuity
Borrowsky, et al, 1999	11666 American Indian and Alaskan native Youth grade 7-12, United States	*Risk Factors*: Friend attempt or complete suicide; headaches and stomach problems; history of physical or sexual abuse; having a family member attempt or complete; health concerns, frequent alcohol, marijuana or other drug use. *Protective Factors*: discussing problems with friends and family; good emotional health; family connectedness
Kirmayer, et al., 1996	7,241 Inuit Youth, 14-25 years of age, Canada	Parent with a drinking drug problem; physical abuse; solvent use; having a friend who attempted or competed suicide; alienation form family and community; personal problem; mental health problem.
Grossman, et al., 1991	Navajo students, United States	History of mental, behavioural, or emotional problems; alienation form family and community; exposure to the suicide attempts of friends; weekly consumption of hard liquor; self perception of poor general health; physical and sexual abuse
Kraus Buffler, 1979	Alaskan Native	Role of acculturation in individuals feeling of loneliness, anxiety, frustration, constant stress ad despair. Risk factors: alcohol abuse and mental illness

CHAPTER 3

METHOD

The first step to developing effective strategies for prevention and intervention is to identify and define who is vulnerable in the target population. To accomplish this a retrospective chart review of suicide attempts and completions from the year 1995 to 2000 was undertaken. A total of 150 charts of individuals who attempted suicide were reviewed along with 36 charts of individuals who had completed suicide.

In addition to the chart review, six key informant interviews took place with various individuals. Those who were interviewed were Nodin counselors and employees of the Sioux Lookout Health Authority who had substantial experience working in the First Nations communities in Sioux Lookout particularly in response to community crisis, which is often related to a suicide or suicide attempt. The counselors work out of the Nodin Counselling Centre located in the town of Sioux Lookout and do extensive visiting in the communities that are serviced by Nodin.

Approval of the study was granted by the Nodin Counseling Centre Board of Directors, and the University of Manitoba Ethics Review Board. The researcher signed a contract and was considered a "deemed employee" of the agency for the duration of the data collection period. This was required to enable the researcher to review the charts and collect the required data on-site. An oath of confidentiality was signed.

3.1 Sampling for chart review

The charts were reviewed on site at Nodin Counseling Centre by the researcher who was employed by Nodin as a student placement and a "deemed employee" of the

agency for the course of the data collection period.

To determine which charts were to be reviewed for the suicide attempts, 25 charts were randomly sampled from each year from 1995 – 2000. Often the client had attempted suicide more then once in a year. In this case the first suicide attempt of that year was reviewed.

Because there were fewer completed suicides, approximately 100 documented in the database for the period of study (1995-2000), it was decided that all completed suicides would be reviewed. Once this task was undertaken it was found that there were only 36 existing charts of completed suicides that were available for review. In total, 186 charts were reviewed.

3.2 Data collection tool

A data abstract form was developed to assist in recording the information found in the client charts. A copy of this form can be found in Appendix 1. The abstract form was developed after a review of the literature on suicide and suicide attempts assisted in determining what risk factors and characteristics are common to those individuals who exhibit suicidal behaviour. It was organized into the following six areas:

1. Demographics: Information was collected on the date of birth, sex, marital status, employment status, and home community.
2. Description of the suicide/suicide attempt: This section contained question about the suicide event itself, such as whether it was a suicide attempt or completion, the method used, and an additional description of the suicide/suicide attempt if the method was unusual. Other questions included the date of the event, location,

time of day, age at the time of the event, if the client had previously presented at Nodin, number of previous suicide attempts, whether a special event had recently occurred in the community, and precipitating factors. This section also included whether any family members or friends had attempted or completed suicide and by what method.

3. Personal History: Included if the individual had problems in school or any legal problems. In addition, what distal factors are present in the individual's life, and whether the individual had experienced any form of abuse. If the individual was sexually abused, information was collected about the type of incident (single or repeated incident), and age(s) when sexually abused.
4. Family situation: Questions explored the present living situation and primary caretaker of the individual, number of siblings and whether any siblings were deceased, number of children and whether any children were deceased. In addition, information abut parental situation, whether they were divorced, employed, deceased, absent, incarcerated, or if there was conflict between the individual and a parent. Family dysfunction in terms of mental health issues, and alcohol and drug use was also explored.+
5. Medical History: If the individual had any medical problems, as diagnosed by a professional, that included acute or chronic illness, terminal illness, disability or disfigurement and mental illness.
6. Emotional Health: These questions focus on the emotional and mental state the person was recorded as being in prior to the suicide and prior or after the suicide attempt.

At the time of the present study, Nodin was not systematically collecting data on the suicide attempts with the exception of age, gender and home community. This information was stored in a database containing all referrals to Nodin for counseling. As a result the bulk of information gathered came from the client charts. The abstract form was tested for content validity in the field. Twenty charts of individuals who attempted suicide were selected and reviewed and revisions were made. These included developing additional checklist items or revising existing items based on the documentation that was found most consistently in the client files. These included:

1. Psychiatric Assessments: This contained a brief client history and a description of the presenting problem, family history, and the diagnosis.
2. Patient Consultation Reports: These were filled out if the patient presented at the hospital. It typically contains some client history and a very brief summary of the reason the person attempted.
3. Patient Discharge Summary: This is a summary of the patient and could contain family history, presenting problems, method of attempt, history of alcohol or substance abuse, responsiveness to counseling, and a discharge plan.
4. Nodin Counseling Initial Client Assessment: This included who the client was referred by, the reason for referral, presenting problem, history of presenting problem, family background, previous psychiatric history, marital status, issues identified, counselor's impression of the situation, and plan.
5. Nodin Suicide Risk Assessment: This document is filled out at the onset of counseling to determine if the client is at risk for suicide. It explores areas of past suicide attempts, alcohol/substance use, family or friends who committed suicide,

and mental health issues.

6. Nodin Counseling Discharge Summary Report: This includes the reason for referral, who referred the client, issues identified, risk assessment, treatment plan, follow-up, person contacted, and recommendations.
7. Progress Reports: This is the daily charting by the counselor during the period spent with the client. Usually a period of 7 days after which the client is discharged home to their community.
8. Mental Health Case Management Care Plan: This contains a brief synopsis of the client's background, strengths, treatment goals, strategies, clinicians involved, and timeframe.
9. Nodin Request for Care Workers: This often contained a brief history of the client's issues and details of the incident.

The above items were found most often in the client charts. Some charts contained all of the above documentation while others only contained one or two documents. Other sources of information that were found less often, but when available, were very useful in providing information, were reports from treatment centres, police reports as well as drawings, copies of suicides notes, letters and journal entries written by the client.

3.3 Reviewing Client Charts

The charts were reviewed over a three-week period during July and August of 2001. They were reviewed on site at Nodin Counseling Centre. A data abstract form was filled out for each client chart.

3.3.1 Limitations to Chart Review

3.3.1.1 Suicide Attempt Charts

There were several limitations that presented a challenge to the chart review process. The most challenging issues in terms of collecting data was the inconsistencies found in the client histories. In order to determine the clients' past experiences that may have had an effect on the suicide attempt, it was necessary to go back in the client files to see what their life experiences had been. Often these experiences were recorded differently from one year to the next and it was hard to discern if they were the same event or a different event all together. For example, one year a client may have dislosed being abused by his/her father. The next year this same abuse incident in terms of date and type of abuse was discussed in the charts again however the perpetrator was the client's uncle instead of the father. It was uncertain whether these were two separate incidences or if they were speaking of the same incident of abuse. One reason given why this may occur is that a language barrier existed between the counselor and the client and some information may have been misinterpreted.

Related to this was the lack of detail in the charting notes on the actual issues a client was facing or the events that lead up to the suicide attempt. There was often more written on the clients activities during the seven days of follow-up counselling in Sioux Lookout after the event had occurred. It was also very difficult to identify psychiatric diagnosis, medical history, whether there was a special event in the community, and often the parental history, such as divorce, employment, death, and separation. By combing through the history of each client, pieces could be identified, however in many cases never completely.

Often the client was listed as a suicide attempt on the Nodin database but when the chart was reviewed no such event had occurred. This was a result of incidents labeled "Problems with Living" that were being entered into the database as a suicide attempts. "Problems with Living" included clients in abusive relationships, families that have lost a loved one to a violent death, such as suicide, accident, or murder, parents who have lost children to suicide, post-partum depression, spouse of someone who committed suicide and other crisis events. One explanation for why they were listed under suicide attempts was that these clients were seen as high-risk for attempting suicide, given the stressful events they were facing.

Many of the charts were just not there when the researcher went to locate them to review. Reasons why they could not be found include:

- The client got married and had a name change
- People relocated and took their files with them.
- Often people go by different first names. They use their second or third name and often use different names each time they come to Nodin.
- When a person attempts suicide, Nodin will get a call for referral for counseling. Often the client will never show up however they have already been added into the database as a suicide attempt.
- On occasion the whole family is seen when there is a crisis so the person who attempted may be under their parents name.
- Names are often spelled incorrectly or differently for example, Wabasse is sometimes spelled Wapoose or translated into English and filed as Rabbit.
- Files can get mixed up because there are so many common surnames in a community.

3.3.1.2 Completed Suicide Charts

Similar challenges presented themselves when reviewing the charts of those who completed suicide, however data was more often not available. The primary reason for this is that, unlike attempted suicides, completed suicides were unable to provide information on certain factors for obvious reason. If there was no history of the client attending Nodin for counseling, there was very little information found in their charts with the exception of a police report or a statement of death.

4.3 Key Informant Interviews

Interviews took place with six key informants who worked at Nodin Counseling Centre as counselors or in the health field and were very familiar with the communities and many of the issues that were occurring related to the suicide deaths and the suicide attempts. The interviews were semi-structured and open-ended with the following key questions being asked to initially guide the discussion.

1. Tell me about who you are, your experience here at Nodin and any other experiences to give me an idea about what you have done in the Sioux Lookout Region?

2. Having been involved with the communities when these suicides and suicide attempts occur, what do you feel are some of the greatest factors that contribute to this in the communities?

After these two questions were asked the interview focused on what the participant wanted to discuss and questions were adjusted to accommodate this. The interviews were recorded using a hand-held recorder and later transcribed by the researcher.

3.4 Data Analysis

A database was created using SPSS. The demographic and clinical features of suicide attempters were summarized using descriptive statistics. The study sample was divided into several groups and the following comparisons were made: suicides (n=36) vs. attempted suicides (n=150); male suicides attempts (n=37) vs. female suicide attempts (n=113); and first attempts (n=42) vs. previous attempts (n=108) for only the suicide attempters. Differences in the distribution of characteristics between these three groups were assessed using chi-square analysis. Odds ratios with 95% CI were also calculated for those factors that were found to be significant.

The interview data was used to provide confirmation of the characteristics identified through the chart reviews, and to provide depth to the results by providing actual experiences of those working closely with individuals who have attempted suicide.

CHAPTER 4

RESULTS

Several points should be kept in mind when reviewing the results of the present study. First, chi-square analysis was used to compare completed suicides vs. attempted suicides, male suicide attempters vs. female suicide attempters and first attempters vs. previous attempters. This entails numerous comparisons, which increase the risk of a Type I error.

Secondly, any of the characteristics that were on the data abstract form that were not found in a client's chart were labeled a "non-event". Percentages were calculated as the number of charts mentioning a particular characteristic, out of the number of total charts. For example, if information on abuse was not found in a chart, this was identified as missing and considered a non-problem for that individual. As a result, there is a risk of underestimating the real proportion with a particular problem or characteristic.

This is an even greater issue when it comes to the completed suicides as these individuals were not able to provide much of the information required, for obvious reasons, particularly on family, precipitating factors, and distil factors, This may result in larger differences being observed between these two groups.

An additional issue that should be considered, in regards to the comparison of the completed vs. the attempted suicides, is the small sample of completed suicides. This may have an impact on the representativeness of the sample and the reliability of the results.

4.1 Completed Suicides Compared to Attempted Suicide

4.1.1 Demographics

Table 4.1 shows a significant gender difference between completed and attempted suicides. Completed suicides are more likely to be male (69.4%), while more suicide attempts were made by females (75.3%) ($x^2 = 24.2$, $df = 1$, $p<.001$). Of the total attempted suicide charts that were reviewed, 127 (84.7%) were 25 year of age or less, with 98 (65.3%) of these cases being between the ages of 11and 20 years of age. The majority of females who attempted suicide, were between the ages of 11 and 20 years old (74.3%). Of the total attempts 124 (83.0%) were not married.

Of the 36 completed suicides, the majority of the cases (86.1%) were 25 years of age or younger with 67.0% being between 11 and 20 years of age. Of the males who completed suicide, 68.0% were between the ages of 11 and 20 years of age. Completed suicides were more likely to be unmarried (91.7%).

Those who completed suicide were most likely to hang themselves (91.6%), while attempters were more likely to overdose (55.3%). No completed suicides actually overdosed, choosing instead to use other methods such as firearms if they did not hang themselves.

The majority of the suicide attempts took place at home (23.3%), while jail was the next most frequent location (8.5%). Other locations included the home of a family member, at the nursing station, and at the clubhouse. Home was also where the majority of completions took place (44.4%). The next location that was most frequent was in the bush (9.1%). Other locations included the home of a family member.

For the completed suicides there were no previous attempts for 36.1% while

63.9% had previously attempted before they finally completed. For suicide attempts the charts indicated that this was a first attempt for 28.0% of the sample. Seventy-two percent had one or more previous attempts. When compared for any difference between completions and attempts, none were found. Both had a higher percentage of individuals who had previous attempts prior to the event under investigation.

Whether the clients had suicide ideation before the event was hard to determine from the charts, in particular the completed suicide charts, as this was often not reported. It was at the discretion of the researcher to determine if suicide ideation had occurred. For example obvious indicators of ideation was if the client had said that they wanted to kill themselves, stated they wanted to die, or were gathering materials that could potentially be used to kill themselves, such as a rope or pills. There were 59 (39.3%) cases of attempted suicide where it was indicated that the client had previously thought about suicide. For completed suicides there were 14 cases (38.9%).

Table 4.1 Demographic Characteristics of Completed Suicide vs. Attempted Suicide

	Completed (%) (n=36)	Attempted (%) (n=150)	X^2	*p*
Gender				
Male	25 (69.4)	37 (24.7)	24.2	<.001
Female	11 (30.6)	113 (75.3)		
Married	3 (8.3)	26 (17.3)	1.17	.280
Previous Attempts				
1st attempt	13 (36.1)	42 (28.0)	.569	.451
previous attempts	23 (63.9)	108 (72.0)		
Age at Event				
25 or less	31 (86.1)	127 (84.7)	.00	1.00
>25	5 (13.9)	23 (15.3)		
Location				
Home	16 (44.4)	35 (23.3)	.00	1.00
Other	6 (16.7)	12 (8.0)		
Suicide ideation	14 (38.9)	59 (39.3)	.000	1.00
Method				
Hanging	33 (91.6)	55 (36.7)	–	–
Overdose	0	83 (55.3)		

x^2 with Yates correction

4.1.2 Precipitating Factors

Precipitating factors for both attempted and completed suicide can be found in Table 4.2. The factor that was most frequently identified for those attempting suicide was relationship problems. More suicide attempters reported having relationship problems prior to the event (53.3%) than completed suicides (13.9%) ($x^2 = 16.65$, $df = 1$, $p<.001$). This included a break up with a boyfriend or girlfriend or problems with family members. In these cases a fight or argument had usually occurred.

Other precipitating factors for attempts that were present in the charts, were having a friend or a family member complete suicide, and the community in crisis, often a result of a completed suicide or a violent or unexpected death. Legal problems were also indicated and took into account both past and present problems with the law. This included trouble with the police, spending time in jail/youth facility, facing criminal charges, pending court date, and being on probation.

For completed suicides it was difficult at times to determine what precipitating factors had occurred. Family (47.2%) or friend(s) (50.0%) having completed suicide was indicated frequently as a factor that preceded the suicidal event with the majority having one to three friends or family members who had previously completed. Problems with the law was indicated in 30.6% of the chart and included facing criminal charges, pending court dates, probation and having spent time in jail or a youth facility.

Twenty-five percent of the completions indicated that the community was in crisis at the time of the event. This may or may not have had an effect on the client, however 19.4% of the completed suicides had recently lost a family member or friend to death through an illness or accident which may be related to the community crisis.

Table 4.2 Precipitating Factors for Completed Suicide vs. Attempted Suicide

	Completed Suicide (%) (n=36)	Attempted Suicide (%) (n=150)	X^2	*p*
Relationship problems	5 (13.9)	80 (53.3)	16.65	<.001
Use of alcohol	5 (13.9)	58 (38.7)	6.89	.009
Family completed suicide	17 (47.2)	48 (32.0)	2.33	.127
Abuse	2 (5.6)	20 (13.3)	1.02	.312
Community in Crisis	9 (25)	27 (18.0)	.52	.472
Problems in school	9 (25.0)	49 (32.7)	.38	.489
Friends completed suicide	18 (50.0)	68 (45.3)	.10	.750
Use of substance	5 (13.9)	16 (10.7)	.07	.798
Death of family/friends	7 (19.4)	27 (18.0)	.000	1.00
Legal problems	11 (30.6)	47 (31.3)	.000	1.00

x^{x2} with Yates correction

4.1.3 Family Situation

Information regarding the family situation was often missing in the charts. Family histories were often confusing and there was a lack of clarity in many of the cases about who the client lived with, the size of the family, if the parents or siblings were alive, and if they even had a relationship with their parents. Despite this, it was determined that 30.0% of those who attempted and 25.0 % of the completed suicides lived with both their parents (Table 4.3). Both parents were also frequently identified as the primary caretakers during the individual's life for those who attempted (42.0%) compared to the completions (25.0%). Parents were divorced or separated in 33.3% of the attempted suicide cases and in 41.7% of the completions. Mothers were absent in 11.3% of the attempt cases and less likely to be absent in the suicides (5.6%). Fathers were more likely to be absent according to 17.3% of the suicide attempts and in 16.7% of the completed suicides. It was indicated in 39.3% of the attempters charts that the client had conflict with one or both of their parents.

There was a high frequency of family dysfunction reported in both the attempted suicide and the completed suicide charts. It was indicated that 76.0% of the families of

those who attempted were dysfunctional, while 66.7% of those who completed came from dysfunctional families. This dysfunction included excessive alcohol use by a parent or both parents, which was found in 48.0% of the attempters' chart and 38.9% of the completion charts. There was also a excessive use of alcohol in the extended family for those who attempted suicide (14.6%), while no cases of completed suicide had this reported in their chart. Family violence and conflict was indicated 56.7% of the time in the suicide attempters' charts and 58.3% of the time in the charts of those who completed suicide.

In terms of having their own families 28.0% of the individuals who attempted suicide had children. Of these 42 clients that had children, seven (16%) had children in care at the time of the attempt.

Table 4.3 Family Situation for Completed Suicide vs. Attempted Suicide

	Completed Suicide (%) (n=36)	Attempted Suicide (%) (n=150)	X^2	*p*
Primary caretaker is both parents	9 (25.0)	63 (42.0)	2.86	.091
Have children	6 (16.7)	42 (28.0)	1.58	.209
Family dysfunction	24 (66.7)	114 (76.0)	.878	.349
Parents divorced/separated	15 (41.7)	50 (33.3)	.558	.455
Family violence	21 (58.3)	85 (56.7)	.547	.459
Mother absent	2 (5.6)	17 (113)	.521	.471
Parents – alcohol use	14 (38.9)	72 (48.0)	.168	.682
Presently living with both parents	9 (25.0)	45 (30.0)	.151	.697
Conflict with parents	9 (25.0)	59 (39.3)	.002	.969
Family drug use	1 (2.7)	8 (5.3)	.002	.964
Father absent	6 (16.7)	26 (17.3)	.000	1.00
Family – alcohol use	0	22 (14.6)	-	-

x^2 with Yates correction

4.1.4 Distal Factors

There were statistically significant differences between suicide completions and suicide attempts when it came to the presence of distal factors (Table 4.4). A history of alcohol abuse was found to be higher in the suicide attempters (76.7%) compared to the

completions (55.6%) ($x^2 = 5.48$, $df = 1$, $p<0.05$). Suicide attempters (40.0%) were more likely than completions (22.2%) to have reported losing a loved on to death, which included accidents, natural causes, and illness but did not include suicide. This was reversed when it came to losing a loved one to suicide where it was indicated that 51.3% of the attempters lost a love one to suicide compared to 69.4% of the completions. A history of drug use was found in 45.3% of the attempts and 27.8% of the completed suicides.

There were no differences found between attempts and completions when it came to substance use. Fifty percent of the completed suicides and 43.3 % of the attempts had a history of substance use. Unresolved grief was also indicated for both completions (38.9%) and attempts (43.3%). Other personal issues such as having few or no friends, being a teen parent, gender conflict, having a psychiatric diagnosis, attending residential school, financial problems or gambling problems were identified infrequently or not at all.

Past abuse, which includes physical, verbal and sexual abuse was reported to have occurred more often in the lives of the suicide attempters (60.0%) compared to the suicides (33.3%) and was statistically significant ($x^2 = 7.29$, $df = 1$, $p<0.01$).

Table 4.4 Distal Factors for Completed Suicide vs. Attempted Suicide

	Completed Suicide (%) (n=36)	Attempted Suicide (%) (n=150)	X^2	p
Past abuse	12 (33.3)	90 (60.0)	7.29	.007
History of alcohol use	20 (55.6)	115 (76.7)	5.48	.019
Lost loved one to death	8 (22.0)	60 (40.0)	3.23	.072
Lost loved one to suicide	25 (69.4)	77 (51.3)	3.15	.076
History of drug use	10 (27.8)	68 (45.3)	2.99	.084
History of substance use	18 (50)	65 (43.3)	.29	.592
Single parent	2 (5.6)	15 (10.0)	.26	.611
Unresolved grief	14 (38.9)	65 (43.3)	.00	1.00
Separated from primary caregiver	7 (19.4)	32 (21.3)	.00	.982

x^2 with Yates correction

4.1.5 Past Supports

In terms of seeking past supports those who completed suicide appeared to have accessed supports more often in the past than the suicide attempters (Table 4.5). Over half of the completed suicides (55.6%) saw a mental health worker at some point in their past, compared to 33.3% of the attempted suicides ($x^2 = 5.20$, $df = 1, p < .05$). Eighty three percent had been to Nodin in the past compared to 60.7% of the attempters ($x^2 = 5.60$, $df = 1, p < .05$), and 27.8 % of the suicide completions had previously been in a treatment centre compared to 12.0 % of the attempted suicides ($x^2 = 4.41$, $df = 1, p < .05$). Finally, 22.0% of the suicide attempters had no past supports while all of the completions had at some point in their past, sought assistance.

Table 4.5 Past Supports for Completed Suicide vs. Attempted Suicide

	Completed Suicide (%) (n=36)	Attempted Suicide (%) (n=150)	X^2	p
Nodin	30 (83.3)	91 (60.7)	5.6	.018
Mental health worker	20 (55.6)	50 (33.3)	5.19	.023
Treatment/detox	10 (27.8)	18 (12.0)	4.41	.034
Seek help prior to the event	5 (13.9)	13 (8.7)	.401	.524
Psychiatrist	8 (22.2)	30 (20)	.004	.947
No treatment/support	0	33 (22.0)	-	-

x^2 with Yates correction

4.1.6 Overall Characteristics of Suicide Attempters

When comparing attempted and completed suicide, Table 4.6 identifies the following significant characteristics for attempted suicide. Attempted suicides are more likely to be female (OR, 6.94; 95% CI, 3.12-15.46), to have relationship problems (OR, 7.08; 95% CI, 2.63, 20.0) and to report using alcohol right before the event (OR, 3.85; 95% CI, 1.43, 11.1).

Past experiences of suicide attempters include, more likely to have lost a loved

one to death through illness or accident (OR, 2.33; 95% CI, 1.00, 5.56), a history of alcohol use (OR, 2.63; 95% CI, 1.23, 5.56); and to have experienced either verbal, physical or sexual abuse (OR, 3.03; 95% CI (1.39, 6.25).

In terms of past supports, suicide attempters are less likely to have seen a mental health worker then those who completed (OR, 0.40; 95% CI, 0.19, 0.90); less likely to have seen a counselor at Nodin (OR, 0.31; 95% CI, 0.42, 0.81) and less likely to have attended a treatment or detox centre (OR, 0.36; 95% CI, 0.14, 0.94).

Table 4.6 Overall Characteristics of Attempted Suicide (Compared to Completed)

	Completed Suicide (%) (n=36)	Attempted Suicide (%) (n=150)	OR (95% CI)
Gender – female	11 (30.6)	113 (75.3)	6.94 (3.12-15.46)
Relationship problems – yes	5 (13.9)	80 (53.3)	7.08 (2.63, 20.0)
Use alcohol before event	5 (13.9)	58 (38.7)	3.85 (1.43, 11.1)
History of alcohol use – yes	20 (55.6)	115 (76.7)	2.63 (1.23, 5.56)
Past abuse – yes	12 (33.3)	90 (60.0)	3.03 (1.39, 6.25)
Mental Health Worker – yes	20 (55.6)	50 (33.3)	0.40 (0.19, 0.89)
Nodin – yes	30 (83.3)	91 (60.7)	0.31 (0.42, 0.81)
Treatment/detox – yes	10 (27.8)	18 (12.0)	0.36 (0.14, 0.94)

4.2 Females Compared to Males

4.2.1 Demographics

When comparing females and males for differences, the results include only the cases of attempted suicide. Table 4.7 provides a summary of the demographic results. One hundred and thirteen (113) females and 37 males are included in this sample. In terms of age at the time of the event females were more often 25 years of age or under (89.4%) (x^2 =6.44, df= 1, p < .05). Despite this significant result there was still a high percentage of males (70.3%) who were 25 and under who also attempted. There were no gender differences in marital status as both males (78.4%) and females (84.1%) were more likely to be unmarried.

Both females (57.5 %) and males (48.6%) choose to overdose rather than hang themselves more often, while hangings were still quite high with males choosing this method 40.5% of the times and females 35.4%.

There was no significant difference between genders in terms of where the suicidal event took place. Females (24.7%) were more likely to engage in the suicidal activity in their own home then males (18.9%) however both genders were most likely to attempt or complete suicide at home then elsewhere.

This was a first attempt for 40.5% of the males and 23.9% of the females. The majority of both males (59.5%) and females (76.1%) had previously attempted. The percentage of males and females expressing suicide ideation were similar with 39.8% of the females and 37.8% of the males having had this indicated in their charts.

Table 4.7 Demographic Characteristics of Female vs. Male Suicide Attempters

	Females (%) (n=113)	Males (%) (n=37)	X^2	*p*
Age at Event				
25 or less	101(89.4)	26 (70.3)	6.44	.011
>25	12 (10.6)	11 (29.7)		
Previous Attempts				
1st attempt	27 (23.9)	15 (40.5)	3.05	.081
previous attempts	86 (76. 1)	22 (59.5)		
Method				
Hanging	40 (35.4)	15 (40.5)	.302	.583
Overdose	65 (57.5)	18 (48.6)		
Not Married	95 (84.1)	29 (78.4)	.296	.587
Location				
Home	28 (24.7)	7(18.9)	2.66	.103
Other	6 (5.3)	6 (16.2)		
Suicide ideation	35 (39.8)	14 (37.8)	.000	.984

x^2 with Yates correction

4.2.2 Precipitating Factors

Table 4.8 describes the gender differences found in regards to precipitating factors. Males were more likely than females to be involved or to have recently experienced

problems with the law prior to the event ($x^2 = 10.42$, $df = 1$, $p<0.01$). Females reported abuse in their charts 17.7% of the time while males did not report abuse at all.

There was a high percentage of both females (52.2%) and males (56.8%) who reported having relationship problems. Other precipitating factors that were frequently experienced by both genders included use of alcohol prior to the event and having family members or friends who recently completed suicide. Less frequently occurring was the community in crisis and the use of substances such as gas or solvents, and problem in school.

Table 4.8 Precipitating Factors of Females vs. Male Suicide Attempters

	Females (%) (n=113)	Males (%) (n=37)	X^2	p
Legal problems	27 (23.9)	20 (54.0)	10.42	.002
Use of alcohol	41 (36.3)	17 (46.0)	.728	.394
Use of substance	11 (9.7)	5 (13.5)	.115	.528
Relationship problems	59 (52.2)	21 (56.8)	.085	.771
Problems in school	36 (31.9)	13 (35.1)	.028	.867
Family completed suicide	37 (32.7)	11(29.7)	.019	.890
Death of family/friends	20 (17.7)	7 (18.9)	.000	1.00
Community in Crisis	20 (17.7)	7 (18.9)	.000	1.00
Abuse	20 (17.7)	0	-	-

x^2 with Yates correction

4.2.3 Family Situation

There was no significant differences found between males and females in regards to their family situation (Table 4.9). In term of their living situation 29.2 % of females and 29.7% of males were presently living with both parents. It was indicated for 42.5 % of the females and 40.5% of males, that the primary caregiver in their life was both parents. Parents being divorced or separated was indicated for females 35.4% and males 27.0%. Females (14.2%) had a higher percentage of mother's being absent then males (2.7%), however fathers were absent 18.6% of the time for females and 13.5% of the time for males. Conflict with parents was indicated for 61.1% of the females and 45.9% of the

males. Family dysfunction was present 78.8% of the time for females and 67.6 % for males. Parental alcohol use, and family violence/conflict was reported occurring at high levels for both genders.

Table 4.9 Family Situation for Females vs. Male Suicide Attempters

	Females (%) (n=113)	Males (%) (n=37)	X^2	*p*
Mother absent	16 (14.2)	1 (2.7)	2.59	.108
Family dysfunction	89 (78.8)	25 (67.6)	1.58	.209
Family – alcohol use	20 (17.7)	3 (8.1)	1.23	.268
Conflict with parents	69 (61.1)	17(45.9)	1.15	.284
Parents – alcohol use	57 (50.4)	16 (43.2)	.657	.418
Have children	30 (26.5)	13 (35.1)	.629	.428
Parents divorced/separated	40 (35.4)	10 (27.0)	.543	.461
Father absent	21(18.6)	5 (13.5)	.209	.648
Family drug use	7 (6.2)	1 (2.7)	.168	.682
Family violence	66 (58.4)	19 (51.4)	.161	.689
Primary caretaker is both parents	48 (42.5)	15 (40.5)	.000	.988
Presently living with both parents	33 (29.2)	11 (29.7)	.000	1.00

x^2 with Yates correction

4.2.4 Distal Factors

Distal factors can be found in Table 4.10 and there are some differences between males and females in regards to some of the factors. Females were more likely than males to have experienced physical, verbal, or sexual abuse in their past and this was significant at $x^2 = 6.71$, $df = 1$, $p < 0.01$. Being a single parents was a distal factor for 13.3% of the females however no males indicated this.

High rates of both females and males had a history of alcohol use (73.5% and 86.5% respectively), drug use (42.5% and 54.1%) and substance use (39.8% and 27.0%). In addition, it was indicated that 52.2% of females and 48.6% of males had lost loved ones to suicide while 40.7% of females and 37.8% of the males had lost a loved one to death through accidents and illness. Past grief issues were also being experienced by 41.6% of the females and 48.6% of the males.

Table 4.10 Distal Factors for Females vs. Male Suicide Attempters

	Females (%) (n=113)	Males (%) (n = 37)	X^2	*p*
Past abuse	75 (66.4)	15 (40.5)	6.71	<.01
Separated from primary caregiver	28 (24.8)	4 (10.8)	2.46	.117
History of alcohol use	83 (73.5)	32 (86.5)	1.97	.161
History of drug use	48 (42.5)	20 (54.1)	1.07	.300
History of substance use	45 (39.8)	10 (27.0)	.543	.461
Unresolved grief	47 (41.6)	18 (48.6)	.314	.575
Lost loved one to suicide	59 (52.2)	18 (48.6)	.035	.852
Lost loved one to death	46 (40.7)	14 (37.8)	.013	.908
Single parent	15 (13.3)	0	-	-

x^2 with Yates correction

4.2.5 Past Supports

Table 4.11 provides a summary of past supports utilized by either gender. Although both genders were unlikely to seek assistance just prior to the suicidal event, both males and females had accessed supports in the past. Males (45.9%) were more likely to have had support from a mental health worker compared to females (29.9%), to have attended a treatment centre (18.9%), and to have received support from a psychiatrist. A high rate of both females (60.2%) and males (62.2%) received assistance from Nodin Counseling. No support was indicated in 23.9% of the female charts and 16.2% of the male charts.

4.11 Past Supports for Females vs. Male Suicide Attempters

	Females (%) (n=113)	Males (%) (n=37)	X^2	*p*
Mental health worker	33 (9.2)	17 (45.9)	2.80	.094
Treatment/detox	11 (9.7)	7 (18.9)	1.44	.230
Seek help prior to the event	8 (7.1)	5 (13.5)	.758	.384
No support	27 (23.9)	6 (16.2)	.562	.453
Psychiatrist	22 (19.5)	8 (21.6)	.002	.962
Nodin	68 (60.2)	23 (62.2)	000	.984

x^2 with Yates correction

4.2.6 Emotional Health

It was difficult to determine the exact emotional state each individual was in before they attempted or completed suicide. These results were based on the observation,

assessment and charting of the professionals that had contact with an individual. Often these observations were made by a counselor after the suicide attempt.

In terms of gender differences there was only one statistically significant difference between males and females and that was in the experiencing of hallucinations and dreams. Females (34.5%) are more likely than males (13.5%) to have indicated in their charts that they experienced this ($x^2 = 4.75$, $df = 1$, $p < .05$).

Anger was indicated in 68.1% of the female charts and 67.6% of the male charts while grief was indicated in approximately 52.0% of both males and females. Depression was indicated in 66.4% of the females and 64.9 % of the males, while guilt, loneliness, and agitation were also indicated at a high level. Other feelings and factors experienced by both males and females that are related to their emotional state are found in Table 4.12. Overall females tended to experience these at a slightly higher proportion than males.

Table 4.12 Emotional State of Females vs. Males Suicide Attempters Before/After the Event

	Females (%) (n=113)	Males (%) (n=37)	X^2	*p*
Hallucinations/fears/dreams	39 (34.5)	5 (13.5)	4.75	.029
Agitated	52 (46.0)	14 (37.8)	.520	.471
Physical/emotional withdrawal	33 (29.2)	8 (22.0)	.398	.528
Hopelessness/helplessness	40 (35.4)	15 (40.5)	.110	.741
Guilt	43 (38.0)	16 (43.2)	.108	.742
Loneliness	47 (41.6)	17 (45.9)	.054	.816
Confusion/ disorientation	24 (21.2)	7 (18.9)	.009	.926
Mood swings	30 (26.5)	9 (24.3)	.006	.937
Increase/decrease in energy	18 (16.0)	5 (13.5)	.003	.960
Depression/sadness	75 (66.4)	24 (64.9)	.001	1.00
Indifference	14 (12.4)	4 (10.8)	.000	1.00
Shame	28 (24.8)	9 (24.3)	.000	1.00
Sleeplessness	41 (36.3)	14 (37.8)	.000	1.00
Anger	77 (68.1)	25 (67.6)	.000	1.00
Anxiety	26 (23.0)	8 (21.6)	.000	1.00
Irritability	20 (17.7)	6 (16.2)	.000	1.00
Grief	59 (52.2)	19 (51.4)	.000	1.00
Worthlessness/low self-esteem	29 (25.7)	9 (24.3)	.000	1.00

x^2 with Yates correction

4.2.7 Overall Characteristics of Female Suicide Attempters

The following summarizes the characteristics for females compared to males (Table 4.13). Females are more likely than males to be 25 years of age or under (OR, 3.56, 95% CI, 1.29, 9.89), to have experienced past physical, verbal, or sexual abuse (OR, 2.90, 95% CI, 1.27, 6.67); and more likely to experience hallucination and dreams (OR, 3.27, 95% CI, 1.09, 10.44). Females are less likely to have legal problems than males (OR, 0.27; 95% CI, 0.11, 0.62).

Table 4.13 Overall Characteristics of Females (Compared to Male) Suicide Attempters

	Females (n=113)	Males (n=37)	OR (95% CI)
< 25 years of age	101 (89.5)	26 (70.3)	3.56 (1.29-9.89)
Legal problems	27 (23.9)	20 (54.1)	0.27 (0.114-0.622)
Experienced past abuse	75 (66.4)	15 (40.5)	2.90 (1.27–6.67)
Experience hallucinations/dreams	39 (34.5)	5(13.5)	3.27 (1.09-10.44)

4.3 First Attempts Compared to Previous Attempts

4.3.1 Demographics

The comparison of first attempters to previous attempters include only the 150 suicide attempts that were reviewed. Although there was a higher percentage of females in both categories than males, this was more likely to be a first attempt for males (35.7 %) compared to 20.4% previous attempts for this group (Table 4.14). Females were more likely to have had attempted in the past (79.6%) compared to it being their first attempt (64.3%).

There was no significant difference between the two groups in terms of age. The majority of both first attempters (81.0%) and previous attempters (86.1%) were less than 25 years of age. There was also no significant differences between method, the location of where the attempt took place, and suicide ideation.

Table 4.14 Demographic Characteristics of First Attempts vs. Previous Attempts

	First Attempts (%) (n=42)	Previous Attempts (%) (n=108)	X^2	*p*
Gender				
Female	27 (64.3)	86 (79.6)	3.05	.081
Male	15 (35.7)	22 (20.4)		
Suicide Ideation	14 (33.3)	45 (41.7)	.565	.452
Method				
Hanging	18 (43)	37 (34.2)	.356	.550
Overdose	22 (53)	61 (56.5)		
Married	9 (21.4)	17 (15.7)	.343	.558
Age at Event				
25 or less	34 (81)	93 (86.1)	. 286	.593
>25	8 (19)	15 (13.9)		
Location				
Home	14 (77.8)	21 (72.4)	.004	.947
Other	4 (22.2)	8 (27.6)		

x^2 with Yates correction

4.3.2 Precipitating Factors

In terms of precipitating factors there were no significant differences between first attempters and previous attempters (Table 4.15). There was a higher proportion of previous attempters whose charts indicated that abuse precipitated the suicide attempt (14.8%) then first attempters (9.5%). It was also indicated that 40.7% of the previous attempters had reported using alcohol prior to attempting suicide compared to 33.3% of the first attempters. Previous attempters had also reported using substances more frequently prior to the suicide attempt (13.0%) compared to first attempters (4.8%). Previous attempters had more friends who had completed suicide (49.1%) than first attempters (35.7%) and had more legal problems (32.4% and 28.6% respectively).

Table 4.15 Precipitating Factors for First Attempts vs. Previous Attempts

	First Attempts (%) (n=42)	Previous Attempts (%) (n=108)	X^2	*p*
Friends completed suicide	15 (35.7)	53 (49.1)	1.67	.196
Use of substance	2 (4.8)	14 (13.0)	1.36	.243
Use of alcohol	14 (33.3)	44 (40.7)	.422	.516
Abuse	4 (9.5)	16 (14.8)	.346	.556
Community in Crisis	6 (14.3)	21 (19.4)	.252	.616
Legal problems	12 (28.6)	35 (32.4)	.067	.796
Family completed suicide	13 (31.0)	35 (32.4)	.000	.196
Problems in school	14 (33.3)	35 (32.4)	.000	1.00
Relationship problems	22 (52.4)	58 (53.7)	.000	1.00
Death of family/friends	8 (19.0)	19 (17.6)	.000	1.00

x^2 with Yates correction

4.3.3 Family Situation

Previous attempters were more likely to have a parent who used alcohol (56.5%) than first attempters (28.6%). This was found to be statistically significant at $x^2 = 8.06$, $df = 1, p<0.01$ (Table 4.16). Previous attempters also experienced a higher rate of family dysfunction and this was found to be significant at $x^2 = 4.44$, $df = 1, p<0.05$. They were also more likely to be living with both parents (30.5%) than first attempters (26.2%) although they were less likely to have their parents indicated as their primary caregiver in the charts. Previous attempters also had a higher rate of conflict with their parents.

Table 4.16 Family Situation for First Attempts vs. Previous Attempts

	First Attempts (%) (n=42)	Previous Attempts (%) (n=108)	X^2	*p*
Parents – alcohol use	12 (28.6)	61 (56.5)	8.06	<0.01
Family dysfunction	26 (62.0)	88 (81.5)	4.44	<0.05
Conflict with parents	19 (45.2)	67 (62.0)	.2.05	.152
Mother absent	2 (4.8)	15 (13.9)	1.68	.195
Family – alcohol use	9 (21.4)	14 (12.9)	1.16	.281
Family drug use	4 (9.5)	4 (3.7)	1.12	.291
Presently living with both parents	11 (26.2)	33 (30.5)	.191	.662
Father absent	6 (14.3)	36 (33.3)	.140	.708
Family violence	21 (50.0)	64 (59.3)	.088	.766
Parents divorced/separated	13 (31.0)	37 (34.3)	.037	.847
Primary caretaker is both parents	18 (42.9)	45 (41.7)	.000	1.00

x^2 with Yates correction

4.3.4 Distal Factors

A history of alcohol use was indicated more often in the charts of those who had previously attempted (84.3%) than in those who had attempted for the first time (57.1%). This was significant at $x^2 = 10.96$, $df = 1$, $p = .001$. A history of drug use was also higher in the previous attempters (53.7%) than in the first attempters (23.8%) ($x^2 = 9.73$, $df = 1$, $p < .002$. Past abuse was more often indicated in the charts of previous attempters (64.8%) than first attempters (47.6%). Previous attempters were also more likely to have a higher proportion reporting other distal characteristics summarized in Table 4.17.

Table 4.17 Distal Factors for First Attempts vs. Previous Attempts

	First Attempts (%) (n=42)	Previous Attempts (n=108)	X^2	p
History of alcohol use	24 (57.1)	91 (84.3)	10.96	<.001
History of drug use	10 (23.8)	58 (53.7)	9.73	.002
Past abuse	20 (47.6)	70 (64.8)	3.04	.081
Unresolved grief	14 (33.3)	51 (47.2)	1.84	.175
History of substance use	14(33.3)	51 (47.2)	1.84	.175
Lost loved one to suicide	18 (42.9)	59 (54.6)	1.24	.266
Single parent	2 (4.8)	13 (12.0)	1.06	.303
Lost loved one to death	14 (33.3)	46 (42.6)	.729	.393
Separated from primary caregiver	8 (19.0)	24 (22.2)	.042	.838

x^2 with Yates correction

4.3.5 Past Supports

Previous attempters were more likely to have seen a psychiatrist in the past than first attempters (26.9% vs 2.4%) ($x^2 = 9.84$, $df = 1$, $p < .005$) and had also been seen at Nodin for counseling more frequently than first attempters (73.1% vs 28.6%) ($x^2 = 23.48$, $df=1$, $p<.001$. Table 4.18 shows that previous attempters were more likely to have sought past supports in most areas although they were less likely to seek help just prior to the event. First attempters were more likely to have received no past treatment or counseling (40.5%) compared to 14.8 % of previous attempters. This was found to be statistically significant at $x^2 = 10.16$, $df=1$, $p< .005$.

Table 4.18 Past Supports for First Attempts vs. Previous Attempts

	First Attempts (%) (n=42)	Previous Attempts (%) (n=108)	X^2	*p*
Nodin	12 (28.6)	79 (73.1)	23.5	<.001
None	17 (40.5)	16 (14.8)	10.16	.002
Psychiatrist	1 (2.4)	29 (26.9)	9.84	.002
Mental health worker	11 (26.2)	39 (36.1)	.930	.335
Seek help prior to the event	6 (14.3)	7 (6.5)	1.45	.229
Treatment/detox	2 (4.8)	16 (14.8)	2.02	.155

x^2 with Yates correction

4.3.6 Emotional Health

It was indicated in the charts of previous attempters that 74.1% were angry before or shortly after the event took place, which is significantly higher than the first attempters where 52.4% were angry ($x^2 = 6.00$, $df = 1$, $p<0.05$). Mood swings were also indicted by 31.5% of the previous attempters and 11.9 first attempters ($x^2 = 5.18$, $df = 1$, $p<0.05$). Previous attempts had a higher percentage of individuals in almost every category with the exception of confusion/disorientation. Table 4.19 provides a summary of these results.

Table 4.19 Emotional Health of First Attempts vs. Previous Attempts

	First Attempts (%) (n=42)	Previous Attempts (%) (n=108)	X^2	*p*
Anger	22 (52.4)	80 (74.1)	6.00	.014
Mood swings	5 (11.9)	34 (31.5)	5.18	.023
Guilt	11 (26.2)	48 (44.4)	3.65	.056
Indifference	2 (4.8)	16 (14.8)	2.07	.150
Hallucinations/fears/dreams	9 (21.4)	35 (32.4)	1.34	.247
Hopelessness/helplessness	12 (28.6)	43 (39.8)	1.28	.257
Worthlessness/low self-esteem	8 (19.0)	30 (28.0)	.853	.356
Grief	19 (45.2)	59 (55.0)	.822	.365
Irritability	5 (11.9)	21 (19.4)	.770	.380
Shame	8 (19.0)	29 (26.9)	.661	.416
Agitated	16 (38.1)	50 (46.3)	.595	.441
Depression/sadness	26 (61.9)	73 (67.6)	.294	.588
Anxiety	8 (19.0)	26 (24.1)	.221	.638
Physical/emotional withdrawal	10 (23.8)	31 (28.7)	.186	.666
Sleeplessness	14 (33.3)	41 (38.0)	.143	.705
Confusion/ disorientation	10 (23.8)	21 (18.5)	.117	.733
Loneliness	17 (40 .5)	47 (43.5)	.039	.842
Increase/decrease in energy	6 (14.3)	17 (15.7)	.000	1.00

x^2 with Yates correction

4.3.7 Overall Characteristics For First Attempters

When comparing first attempters to previous attempters certain events or behaviours occurred less frequently in first attempters (Table 4.20). First attempters are less likely to have an indication of family dysfunction (OR, 0.39; 95% CI, 0.16, 0.94); less likely to have parents who abuse alcohol (OR, 0.31; 95% CI, 0.13, 0.72); and were less likely to have a history of alcohol use (OR, 0.25;95% CI, 0.11, 0.56 or drug us (OR, 0.27; 95%CI, 0.12, 0.60). First attempters were also less likely to have seen a psychiatrist (OR, 0.07; 95%CI, 0.01, 0.51) or a counselor at Nodin (OR, 0.15; 95%CI, 0.07, 0.33); They were less likely than previous attempters to be angry at the time of the event or shortly after the event (OR, 0.37; 95% CI, 0.16, 0.84); and less likely to experience mood swings before or shortly after the attempt (OR, 0.29; 95%CI, 0.10, 0.86). However first attempters were more likely to have had no past treatment or support compared to previous attempters (OR, 3.91; 95% CI, 1.73, 8.82).

Table 4.20 Overall Characteristics of First Attempters (Compared to Previous Attempters)

	First Attempts (%) (n=42)	Previous Attempts (%) (n=108)	OR (95% CI)
Family dysfunction	26 (63.4)	88 (81.5)	.394 (0.16-0.94)
Parents who use alcohol	12 (30.0)	61 (58.1)	0.31 (0.13-0.72)
History of alcohol use	24 (57.1)	91 (84.3)	0.25 (0.11-0.56)
History of drug use	10 (23.8)	58 (53.7)	0.27 (0.12-0.60)
Psychiatrist	1 (2.4)	29 (26.9)	0.07(0.01-0.51)
Nodin counselor	12 (28.6)	79 (73.1)	0.15 (0.07-0.33)
No past treatment	17 (40.5)	16 (14.8)	3.91 (1.73-8.82)
Angry at time/shortly after event	22 (52.4)	80 (74.8)	0.37 (0.16-0.84)
Experienced mood swings	5 (11.9)	34 (31.8)	0.29 (0.10-0.86)

4.4 Key informant Interview Results

Six individuals who worked as counselors or were directly involved with the suicide issues at Nodin Counseling Centre were interviewed regarding their views on the

risk factors for suicidal behavior. From the interviews several factors were identified that were consistent with the result from the chart review. These risk factors are summarized in Table 4.21.

Table 4.21 Characteristics of Attempted and Completed Suicide Identified Through Interviews

Factors Identified	Summary of comments
Youth	• There was consensus across interviews that the clients that took up most of the counselors time were the youth in the community • Those who exhibited suicidal behavior were described as angry, discouraged, and disillusioned. • They often had parents who were unsupportive, abusive, or absent. • Many times parents were separated and this was a way that the youth thought they could bring them back together.
Acculturation	• The effects of acculturation and the change in lifestyle over the years form a nomadic way of life to a settled one on reserve has been significant and the impact detrimental to the communities. • The history of oppression that Aboriginal people experienced had a significant impact on the people today. These factors have a cumulative effect both emotionally, spirituality and mentally, passing down from one generation to the next • The effects of modern society is becoming more and more pervasive in communities that were once very isolated. The internet, satellite dish, and other technology all contribute to the confusion, conflict, and doubt that many people feel.
Isolated Communities	• Placing people in small communities that were isolated and not equipped economically to support the people living there was detrimental. • Very limited opportunities for future education and meaningful employment exist. • If people are to leave the community for opportunities there is a great adjustment period. As a result of growing up in an isolated environment people are often lacking the social and life skills that assist them in connecting with others. This makes the already difficult task of further education or job training even more challenging. • The communities are small and everyone knows each other. Confidentiality is an issue when seeking assistance if one is having problems. • Confidentiality is also an issue outside individuals home communities as a result of relationships that people have across community borders through family, marriage, friends, and work. • Difficult to build the trust that is required with those who can help in order to do the healing work.
Residential School	• Where residential school seems to have the greatest impact is in the lack of parenting skills people have and the subsequent effect that has on the children in the community. • The residual grief that resulted from parents having their children taken from them and sent to residential school has been passed down from generation to generation. Whole communities were affected as suddenly they were void of children for months at a time.

Factors Identified	Summary of comments
Family Connection and Support	• Lack of family connection and support was indicated by all interviewees as a primary reason why individuals attempted or completed suicide. • Family breakdown is great and children lack structure and support as a result. • Children are often placed in the care of others besides their parents and this has a great impact on the individual who feels abandoned or neglected. • Many parents are dealing with their own pain and as a result are unable to provide the care and support their children require.
Grief	• Many individuals have lost five to 10 people to suicide. As a result of so many suicides people are in a constant state of grief.
Physical, emotional, sexual abuse *Violence against women*	• Abuse, particularly sexual abuse was frequently identified as a risk factor. • In many communities people are not ready to address the issue of sexual abuse. • Many parents are abusive towards their children . • Often parents are not supportive when their children come to them after they have suffered some form of abuse. As a result children distance themselves from their parents and often do not get help anywhere else. • Violence between men and women goes both ways in the community, however their was an emphasis on the violence women experience. • Women are faced with the very real possibility hat they will experience violence at some point in their lives through rape or domestic abuse. This can create a sense of fear and hopelessness.
Alcohol/substance abuse	• There was unanimous agreement that alcohol/substances plays a huge role in suicidal behaviour. The majority of the cases that are dealt with are alcohol-related.
Exposure to the suicidal behavior of others	• After a suicide parents become hyper-vigilant, they can't eat, they can't sleep and this trickles down to their children. • There is a spiraling effect that often occurs after a suicide and people start exhibiting suicidal behaviour • In the western world they call it mimicking whereas in the traditional way there is a certain energy that takes over people.
Hallucinations/hearing voices	• A dark figure or voices is often experienced by individuals who are distressed. This comes to them through dreams or in some cases a dark figure was seen while the person was fully awake.
Manipulation	• It was discussed in several of the interviews that suicide attempters are often used as a way to manipulate others to get what they want. This is treated as a risk factor since using these tactics put individuals at risk for serious harm and even death. • Children manipulate their parents through threatening suicide and parents who may not have the skills to set the parameters and structure for their children become controlled by this threat. • Often youth will attempt suicide to get out of the community to attend a big event or see their boyfriend or girlfriend.
Suicide pact/pressure	• Suicide pacts and pressure from peers was a concern for those working with youth. • Youth are inherently drawn to gangs and within the gangs is often where suicide pacts and peer pressure occurs. • Youth gangs have initiations where they lynch each other until they black out. • Suicide pacts are formed within gangs and youth take them very seriously.

CHAPTER 5

DISCUSSION

The major purpose of this study was to identify characteristics associated with attempted suicide with the intent of developing a profile of an Aboriginal suicide attempter in the Sioux Lookout Region. This was accomplished by engaging in a thorough chart review of 150 suicide attempts and 36 completed suicides that took place between the years 1995 and 2000. A data abstract form was developed, to guide the chart review, based on past literature regarding characteristics and risk factors, as well as what has been routinely collected by Nodin in regards to the client charts. Characteristics were identified and further confirmed through interviews that took place with counselling staff at Nodin based on their own personal experiences and observations.

5.1 Suicides Compared to Attempted Suicides

An examination of the entire sample found that as a whole the data was consistent with many of the patterns that have been identified in the literature regarding completed and attempted suicide. These include a higher proportion of females to male attempts and a higher number of male completing than females (Beautrais, 2001; Bille-Brahe, et al., 1997; Gregory, 1994; Yuen, et.al., 2000;). Overdose was indicated as the most common method of attempted suicide while more violent methods such as hangings and shootings were used for the completed suicides (Andrus, Fleming, Heumann, Wassell, Hopkins, and Gordon, 1991; Beautrais, 2001; Bland, et al., 1994; Garfinkel,et al., 1982; Mościcki, 1997; Mościcki, 1994; Weissman, 1974;).

One interesting result in the present study was that the majority of both suicides and attempted suicides were under the age of 25. For attempted suicides this younger age

is consistent with the literature that has found that attempts have traditionally occurred at a higher rate in younger ages groups, however completed suicides typically increase with age (Adam, 1985; Schmidtke et al., 1996; Weissman, 1974). The majority of these studies however are dealing with suicidal behaviour in the general population. The results of this study are more consistent with what has occurred in many Aboriginal populations where it has been found that completed suicides occur at a higher rate among the younger age groups (Garro, 1988; Malchy, et al., 1997; Prince, C., 1988; Ross & Davis, 1986). This was further confirmed by key informants who identified youth as the group that they frequently worked with as the following quotes describe;

> *"I would say it's angry youth or discouraged, disillusioned youth who can't turn to their parents because their parents aren't around to support them...so they react by turning the angry inward against themselves. Instead of violence outward, they turn it inward and they end their life."*

> *"...with the suicide attempts it is often kids thinking nobody wants me I might as well be dead, no one will notice I am gone."*

Other factors that were identified more frequently with suicide attempts, in the present study and are consistent with the literature, include relationship problems (Adams, 1985; Arcel, et al.,1992; Payjkel, 1974; Rich, et. al., 1988) and alcohol use (Hawton, Osborn, O'Grady, and Cole, 1982; Hayward, et al., 1992) precipitating the event. Attempters were seven times as likely to experience relationship problems and almost four times as likely to use alcohol just prior to the event.

In the present study, alcohol and other negative substances were seen by those interviewed as being a major contributor to suicidal behaviour. It was felt that the disinhibiting affect of alcohol gave people the courage to attempt or take their lives. The following are comments from the interviews;

"Most of the cases that I have come across in two years, which is quite a few, are alcohol-related and solvents. I don't even think I know from personal experience [a situation] where alcohol wasn't involved...a sober suicide. So I think right now alcohol is really the culprit to date and solvent abuse."

"I think alcohol is just a vehicle. It gives you the courage to suicide, I believe. Because there isn't that thought of self-harm when their sober but when they get into alcohol so many things surface and then they go beyond stopping."

"There's also drugs too. A lot of these kids are under the influence of drugs when they take their life or make the attempt. Sniffing gas, sniffing solvents, drinking homebrew, drinking hairspray, whatever they can get their hands on. They'll do that first [before attempting]."

Common distal factors for suicide attempts found in the present study included losing a loved one to death, history of alcohol and drug use and past physical, emotional or sexual abuse. These have all been noted in previous studies as risk factors for suicide behaviour in both the general and Aboriginal populations. (Beautrais, et al 1996; Grossman et al, 1991; Hayward, et al, 1982; Kosky, 1983; O'Neil, et al., 1994; Sigurdson, et al., 1994).

Abuse, particularly sexual abuse was considered a very important risk factor by the key informants, as the following comments reveal;

"Sexual abuse is a big one with a lot of them... boys and girls. They just feel so ashamed and dirty from that. They've already tried getting help and in their view they didn't get the help... So they're forced to bottle it up and eventually they can't take it anymore and they feel the only way out is to die."

"Abuse...it could be physical abuse and emotional abuse. Parents will just emotionally abuse their kids. Put downs and name calling. And sexual abuse. A lot of that is happenings in our communities and it is something that people are not ready to address."

The familial factor that was unique to the suicide attempters in the present study was that a high number had both parents at home while they were growing up. This is a result that is somewhat difficult to explain, considering one would assume that this would

be a protective factor considering much of the literature indicates that parental loss or separation at a young age contributes to the risk of attempting suicide (Botsis, Pluchik, Kotler, and van Praag, 1995; Garfinkle, et al., 1982; Robins et al., 1957,). It has also been suggested that losing a parent at a younger age may have a greater effect later in life in terms of a suicide attempt (Kirmayer, 1998; Robins, et al., 1957; Stanley and Barter, 1970). It may be possible that these individuals experienced something other than parental loss that contributed to their risk. In addition they may have experienced parental loss later in their life through their parents divorcing which may not have had as great an impact. When this was discussed in the interviews, losing a parent and feeling that sense of abandonment and loss was significant.

> *"...many of the youth that are completing [suicide]... their family has broken up or they are in foster care, or wards of the crown. That is a high risk factor right there. Then off course the grandparents are the caregivers. There is a belief that the first born go to the grandparents. It looks good but the kid is going to have abandonment issues. It could work if [things] were explained to [the child]. Maybe later on."*

> *"...one of the things that I see happening is either one or both parents are absent. The grandparents are trying to bring up the kids because either the parents have separated and have their own problems or both parents are working. Sometimes the parents may be there but they don't interact with the children. For me that is outstanding."*

There were additional familial factors that were found at a high rate in both the completed suicides and suicide attempts. These include family dysfunction, alcohol use by parents, conflict with parents, and family violence and conflict. Examples of family violence commonly sited in the charts were physical abuse from a parent, a boyfriend or from a mother's boyfriend. Family conflict commonly involved arguments and verbal abuse between the suicidal individual and siblings, parents, or partner/spouse These

arguments would often escalate into violence. These results point to the influence that a negative family situation can have on an individual's decision to attempt suicide (Blum, Harmon, Harris, Bergeisen, and Resnick, 1992). An actual account of what occurred in one young man's life was provided as an example of how family dysfunction and violence can lead to more negative consequences.

> *"Emotional neglect....One young man... his mother had [committed suicide], and his brother had [committed suicide]. He grew up seeing his dad beat up his mom all the time. There was abuse of alcohol by both parents in the home so there was again this nurturing neglect. This young man was now in a relationship with two children and he and his wife were constantly fighting. He was very violent towards her, very abusive. Again it's that breakdown of what we need to be human, to feel loved and to be accepted and none of that was happening for this young man. He was 25 and he shot himself."*

One area that did not present itself during the chart review was the health of the family unit itself although many of the variables identified regarding the family situation leads to the assumption that family breakdown had occurred. Many of those interviewed talked about the breakdown of the traditional family structure contributing to a sense of loss and confusion for children particularly when they are adolescents.

> *"...within the family structure there is no communication. There are no boundaries, there's no structure per say. The old unit, the traditional family unit does not exist anymore. The youth become self-sufficient, self-reliant ....I'm not sure if they [the parents] don't feel that they have to provide any structure for them [their children] or whatever. I don't know where that thinking comes from because there was structure in the traditional family."*

Exposure to the suicidal behaviour of friends and family has been identified in the literature as a risk factor (Grossman, et al. 1991; Ho and Hung, 1998; Mercy, et al, 2001; Pfeffer, et al, 1998). Although not found to be statistically significant in the present study

it was notably high enough to be of some importance. The interviews also brought attention to the effect that this kind of exposure can have on people.

> *"But what began to happen [after so many suicides] is the spiraling effect. The parents are so uptight because the kids are killing themselves. They go on their hyper-vigilance and they can't sleep and they can't eat and the kids can't do it either, they can't sleep, they can't eat. Within that week I was there, after the death of the young man, the second suicide... I must have had eight families come to me where their kids between the ages of 8 and 11 were thinking of suicide."*

Being a survivor of a completed suicide by a loved one can contribute to the risk of attempting to take one's own life. One person interviewed provided a personal example of what it is like to be a survivor and how it contributed to her own suicidal feelings.

> *"Now the direct survivors, like my own father committed suicide, there is just a sense of hopelessness of ever belonging anywhere. You're lost... So these are the kids of the survivors or the grandkids of the survivors and they are looking at... the hopelessness of that parent and the way they dealt with it. I remember saying myself, "maybe dad had a point, maybe there is no future for us"... No sense of direction, no sense of belonging, no sense of connection, no sense of desire to live because you feel you have lost everything, everything including your soul."*

Because of the size of the communities when one person completes or attempts suicide it affects so many people within and outside of a community. The fall-out from a single completed suicide is often many more attempts or completions.

> *" Of course there is a lot of grief stemming from that [completed suicide]. If one person does it then relatives are all affected... friends... up to 200 people are directly affected from a suicide. I seems to just multiply on itself. More and more youth will do it because their friends did. It gets out of hand."*

One significant finding in the present study was the high percentage of previous attempts for both completed and attempted suicides. Previous attempts have been indicated as one of the strongest predictors of both completed and repeated suicide attempts (Beautrais, 2001, Bland, 1994; Bille-Brahe et al., 1997). In several studies three to 12% of attempters eventually died by suicide within three to 10 years after an attempt. (Cullberg, Wasserman, and Stefansson, 1988; Eisenthal, Farberow, and Shneidman, 1966; Hawton, 1987; Motto, 1965; Nielsen, Wang, and Bille-Brahe, 1990; Roy, 1982).

When comparing suicides and attempted suicides in terms of whether they received past supports or not it was interesting to find that it was the completed suicides that received support more often. They were two and a half times as likely to see a community Mental Health Worker, three times more likely to have been at Nodin for assistance, and almost three times more often to have been in a treatment centre. This result is consistent with a review of articles that looked at suicidal behaviour and included some aspect of contact with health care services including psychiatric care, family doctor, or mental hospitals. It was found that contact with a health care provider was common in the months, weeks and days before the suicide occurred (Pirkis and Burgess, 1998).

Contrary to this are the results found in another study undertaken on an American Indian reservation that found suicide attempts tended to have more frequent and recent visits to a health care facility before their attempts than the completed suicides. (Mock, Grossman, Mulder, Stewart, and Koepsell, 1996). One possible explanation for the results found in the present study may be that completions presented more of a risk as a result of the factors they had been exposed to, thus requiring more support.

5.2 Female Compared to Male Suicide Attempts

By comparing male attempts to female attempters common characteristics can be further explored. There were similar results for both males and females on the majority of the factors that were looked at however there was some distinction between these two groups.

Males were more likely to have had legal problems than females. These were usually in the form of charges or pending court appearances. They were also more likely to have assistance from a mental health worker in the community, although because of the lack of mental health data in the charts it could not be determined if they had a psychiatric diagnosis. This result is contrary to the literature that found women to be more likely to seek assistance for mental health problems that may contribute to an attempt such as depression (Hawton, 2000; Mościcki, 1994).

There were several factors that distinguished females from males. Age was one of these factors as females were three and a half times more likely to be 25 year of age or less. Women were also more likely to have had previous attempts. Physical, verbal and sexual abuse was three times as likely to be reported by females although 40.5% of the males suicide attempters had experienced some form of abuse as well.

Violence against women was discussed in several of the interviews. One truly disturbing factor was that women were very aware that they would at some point in their lives experience violence. Knowing this can create a sense of fear and hopelessness that was obvious in the following comments;

"Some of the old traditional practices of arranged marriages is still happening. Whether that is abusive or not the church says once married, stay married. The young women who I have worked with who have since [completed suicide]...[told me] "we have no rights as women. We get beat on and I doesn't matter, we have to stay in that relationship".

"So these young girls are growing up... "what's going to happen to me when I get to be ten, eleven, twelve, I'll probably be raped, beaten up."...There's not much [for them]"

"But there was a lot of abuse that was going on. A lot of sexual abuse. A lot of girls when they reach puberty they were targeted by a gang of boys and gang raped. So the fear was always there."

One interesting factor found in the present study was the presence of hallucinations and dreams that often contained a black figure or someone who had previously died trying to convince the client to kill themselves. This was a fairly common phenomenon in the study sample, particularly with females where it was indicated that almost 35.0% had experienced this. This phenomenon has not been investigated in the literature so there is nothing to confirm that this has occurred in other populations, however those individuals who were interviewed were very familiar with clients indicating this type of event occurring before they attempted. The following are some accounts of this.

"...[I] got her talking about what she was going to do and she had it all planned. Scary. Eleven year old kid... what tree she was going to use, how she was going to use this rope off her purse. This wasn't like what they call mimicking. To me it's different. This was so real to her ...and why?...this voice telling her to do it. Because of there connection to the land, the connection to spirit still is pretty strong there in some ways. They see this form of energy as this black form that talks to them and tells them to do this."

"They'll see a dark figure or spirit come towards them and talk to them or it might be someone who had passed on and they'll say that is my friend who

committed suicide [and] now he's talking to me to go and do the same. I hear that in probably one third of the youth that survive that I counsel... they tell me that they hear voices to go and do the same, kill themselves. Sometimes it's their departed friend or brother or cousin coming back to them."

"She said she saw herself...like this voice, this force or whatever coming over her. She said that "the person who kept talking to me, kept showing me a picture of a girl hanging in the closet and that person was me. This voice kept telling me to go hang myself."

5.3 Repeated Attempts

One area that required further investigation was the high rate of repeated attempts in this population. This is important because it has been found that the risk of both completing and re-attempting suicide after an attempted suicide is high, particularly during the first year (Nordström, et al., 1995). Repeaters are constantly in crisis and distress as a result of continually putting themselves in harms way and are a burden on health services (Kreitman and Casey, 1988). Determining if there are unique characteristics to previous attempters may assist in identifying potential repeaters for intervention.

Predictors for repeated attempts found in the literature were young age, personality disorder, a poor social network a the time of the attempt, treatment of a psychiatric disorder in parents, (Johnsson, et al., 1996; Nordström, et al., 1995), the presence of a mental disorder, increased social stress, and poor coping skills, (Appleby and Warner, 1993). In addition, being male, of low social class, unmarried, the existence of sociopath and alcoholism, and being involved in physical violence were also identified (Kreitman and Casey, 1988; Nordström, et al., 1995).

Characteristics of previous attempters that were identified in the present study included being female, a history of alcohol use, a history of drug use and physical, verbal, or sexual abuse. In addition, previous attempters in this sample were more likely to come from dysfunctional families with parents who abused alcohol. They have also accessed treatment or support from a psychiatrist or counselor at Nodin although the lack of consistent data around mental health made it difficult to determine if they had a psychiatrist diagnosis. Emotionally they expressed anger, guilt and had mood swings right before or shortly after the attempt.

5.4 Effects of Acculturation

The effects of acculturation and the change in lifestyle over the years from a nomadic way of life to a settled life on the reserve has had an impact that has been detrimental to the First Nations population. Generations have lived with the negative consequences that have arisen from the acculturation process which include a reduction in health status, family disintegration, and increased societal breakdown (WHO/NCAMR, 1985). Suicidal behaviour could be viewed as a reaction or an attempt to escape these consequences.

Based on the literature (Chandler and Lalonde, 1998; Kirmayer, 1994; Yuen, et al, 2000) acculturation is the root from which all other risked factors for suicide stem. Given this it is safe to assume that the factors identified in the present study may have been influenced by the acculturation process as experienced by the people living in this region.

In the present study, data regarding the effects of acculturation was not possible to collect from the chart reviews. To identify the role of this process in relation to suicidal behaviour would have taken a more complex methodology. However the impact of acculturation and methods of assimilation were topics discussed by several of the informants during the interviews therefore it was important to include their comments in this discussion. The means of oppression used on First Nations people and how this has contributed to a sense of hopelessness, confusion and loss is reiterated in the comments below.

5.4.1 Overall Impact of Acculturation

> *"...in regards to my people's history of being conquered and being oppressed, even now. Being put into little packages of land that was really theirs. Much of their personhood and dignity was wiped away. There was a low level of functioning as a human person. Not much pride, not much motivation to live, the life was just sucked away. Their existence once they were conquered...the culture, the language...they couldn't speak the language."*

> *"...see we were widespread at one time, our nearest neighbour was five miles. We were all over our territory. Suddenly the government says we are bringing in housing and electricity so we have to come to these small communities. Houses close by, neighbours close, such a violation of their privacy that they have had for generations."*

5.4.2 Residential School

Residential school was a significant means of assimilation imposed by the Canadian government. Children were taken from their homes and their families. Whole communities were affected as they were suddenly void of children for months at a time.

> *"And often I think back to the residential school days when we were taken away. How did our parents feel? That's something they never talk about. They never*

talk about what it was like in the community when 20, 30 40 children were taken away. All of a sudden they [parents and grandparents] didn't have a role, everybody was gone, the children were gone. You don't hear them talk about that. I heard my father talk about what it was like when we were gone. How lost he felt, how lonely he was."

"A lot of the time there was a way of keeping the children hidden in the bushes in fear of the residential school pick-ups... When I was forcibly removed and my brother, they [my parents] just went into a state of grief. These families would only have children 5 or 6 years and then they were gone.

The children who attended residential school are the parents and grandparents today and many are struggling with raising their own families. Many of these individuals did not experience family life, they did not learn parenting skills, and this has resulted in several generations being negatively impacted.

"That family bonding and the role modeling they were gone too. So when you look at my three generations there is only about 18 years of actual family life, that's it. Three generations which is about a hundred years in my family... 18 years of family life...and it's gone."

"The negative impact that's [residential school] had on the parents of these children [who are attempting suicide]. The parents were forced into these institutions, like church run residential school. They weren't called by their names, they were given a number and they had to respond to that number when it was called. Beaten for speaking their own language. They were gone sometimes for years, some of them never went home. Others were able to go home just in summertime, back to their parents. But then they felt like outsiders when they went back [home] because they couldn't speak the language. They felt alienated from their own communities. These are the parents now who are losing their children, the ones who went to residential school."

"We talk about people not having [parenting skills]...especially those who were raised in residential school. They were not really exposed to ongoing parenting, living within a family. When you are raised within an institution, it's different from being in a family"

The impression that one received from the interviews was that the effects of acculturation ran deep. The mechanisms that were used to assimilate the First Nations people into "civilized" society did more harm than good and it was going to take some time before the impact of this process subsided and people were able to heal. As one informant commented,

> *"I don't feel hope overall for the whole native people in regards to the complete healing. Individuals ...yes, groups...here and there...but the whole Nation there stills needs to be a lot of issues to be talked about, the government needs to start listening, not according to their agenda but according to the native peoples agenda. In the beginning when the treaties were signed, it was supposed to be a partnership, but partnership... that was not how it was handled. It was all one sided for the benefits of Canada and the immigrants that were gonna take over. The native people were left aside. When you treat people like that there are so many underlying issues that are rooted in bitterness that eventually have to be dealt with. I know that some leaders are trying to little by little. Finally there is funding for residential school. It took... I don't know... how many decades? So maybe some day there will be some kind recognition or acknowledgement that native people have been wronged all these years. For me personally, I'm healing and I feel good about that, I see others healing and I am glad. But as a whole that saddens me. I don't know if that will ever happen...maybe it will."*

5.5 Limitations

It is important to acknowledge the limitations of the study which included missing or incomplete data and potential underreporting on a number of variables. Much of the data collected was a result of examining client histories and various reports filed by physicians, counselors, police and others, to answer many of the questions on the questionnaire. This was often inconsistent and in many cases missing important details. Some of the inconsistencies were a result of a lack of a standard reporting format for attempted suicide. Much could be learned if questions were asked consistently regarding the incident and the proximal and distal factors that may have impacted the decision to attempt suicide.

The subjectivity of the data may also have an affect on the results in terms of reliability. Not only is there the subjectivity on the part of the counselor who is documenting the information in the charts there are also self-reports on the part of the client. In addition, the researcher is making assumptions on the information presented in the charts based on personal interpretation.

Another limitation was that only 36 completed suicide charts were reviewed compared to 150 attempted suicides. In the initial planning of the study it was determined that there were approximately 100 suicide charts that were available for review. At the time of the chart review only 36 could be found. In addition several of these charts were incomplete in terms of containing very little information about the individuals history and the event itself. Reasons for this is that many of the individuals who completed suicide had never presented at Nodin at any time previous to the suicide. This low number and lack of information found in the charts may have an impact on the representativeness of the data and the reliability of the results.

CHAPTER 6

CONCLUSION

6.1 Profile of a Suicide Attempter

It appears that the dominant profile for a suicide attempter in the Sioux Lookout Region emerging from the results is a female under the age of 25 who has a history of repeated attempts. She tends to have lived a life marked by negative experiences such as a history of alcohol abuse, and more than likely a combination of physical, verbal and sexual abuse. She also experienced a break-up with a partner/boyfriend or a fight with a significant other, or used alcohol right before the event occurred. This is consistent with much of the literature that looks at risk factors for suicide attempts (Botis, et al, 1995; Isaacs, et al., 1998; Kirmayer, et al., 1994; Malus, et al., 1994; Maris, 1997; May & Van Winkle, 1994; Mościcki, 1997; Rosenberg, et al, 1987; Rubenstein, et al., 1989; Vijayakumar and Rajkumar, 1999).

The only factor not found in the literature was the presence of hallucinations or a dark figure that was present prior to the attempt. Investigating the effect of this phenomenon on a community and the individuals in the community in relation to suicidal behaviour warrants further research.

6.1.1 Repeated Attempters

Repeated attempters are a group that is important to identify. There was a very high rate of repeated attempts in this sample and being able to identify repeaters may provide an opportunity for intervention. Previous attempters are characterized by a

dysfunctional family situation that includes parents who abused alcohol. They have a history of drug and alcohol use and appeared to express more anger either before or after the attempt, as well as mood swings. This group has also accessed more treatment or support from a psychiatrist or counseling at Nodin. It is hard to say however if the increased contact was a direct result of their repeated attempts or if they were seeking assistance for other issues possibly connected or contributing to the attempts that they made.

Having established a profile and determining further sub-groups of this profile it is time to reflect back on Kirmayer's model of suicide. His model depicts an event impacted by many different characteristics that include the effects of acculturation on community, family and social networks, and personal factors. These same characteristics are found in the results of the present study with the exception of community factors, as these could not be identified through the chart review. There is also an assumption that acculturation is an underlying factor that has impacted the lives of those living in this region.

There is not just one factor that contributes to a person's decision to attempt suicide. It is a complicated process filled with negative experiences or characteristics that brings a person to the point of attempting to take his or her own life. Having knowledge of these characteristics can further the development of effective intervention and prevention programs for the communities.

Recommendations for Further Research

In saying this one must be careful not to paint the whole region with the same

brush. The profile that has been created provides potential markers for identifying suicide attempters. It does not take into account the individuality of each human experience and the context within which these experiences take place. Further investigation into these characteristics and how they are related to personal experiences will do much to further our knowledge on why people choose to engage in suicidal behaviour.

In addition, investigating community factors as a whole, as well as for each individual community may contribute a great deal to the understanding of who is attempting and why. Every community is unique with it's own history, it's own traditions and customs and it's own way of functioning in today's world. How this all contributes to the characteristics identified would be an area for further exploration. Related to this is the fact that there are communities in the Sioux Lookout Region who do not have high rates of suicidal behaviour and it would be beneficial to identify what protective factors are in place.

Other recommendations for further research include a comparison of attempters with non-attempters on the characteristics identified in the present study, to determine risk factors for this population. In addition, a longitudinal study exploring the natural history of attempts in terms of repeated suicide attempts, suicide completions, and the impact on the community, would also contribute a great deal to further the knowledge and understanding of suicidal behaviour in the region and beyond.

APPENDIX A

SUICIDE / SUICIDE ATTEMPTER DATA ABSTRACT FORM

A. Demographic Information:

1. Date of Birth _____/_____/_____
   m d y

2. Primary language (spoken/understood)? _____

3. Sex: ☐ male ☐ female

4. Marital status:
   ☐ single ☐ common-law
   ☐ married ☐ separated
   ☐ divorced ☐ widowed

5. Employed? ☐ yes ☐ no

6. Which community is individual from?

☐ Bearskin Lake	☐ Kasabonika	☐ Mishkeegogamang	☐ Nibinamik
☐ Kitchenuhmaykoosib Inninuwug	☐ Kee-way-win .	☐ North Spirit Lake	☐ Wabigoon Lake
☐ Cat Lake	☐ Kingfisher Lake	☐ Pikangikum	☐ Wapekeka
☐ Eagle Lake	☐ Lac Seul	☐ Poplar Hill	☐ Wawakapewin
☐ Deer Lake	☐ Neskantaga	☐ Sachigo Lake	☐ Weagamow Lake
☐ Eabametoong	☐ Muskrat Dam Lake	☐ Sandy Lake	☐ Webiquie
☐ Fort Severn	☐ New Saugeen	☐ Slate Falls	☐ Wunnimun

B. Description of Suicide Attempt:

1. ☐ completed suicide ☐ suicide attempt ☐ suicidal ideation ☐ suicidal threats

2. Method:
   ☐ hanging ☐ overdose ☐ drowning
   ☐ gunshot ☐ stabbing/laceration ☐ solvent ingestion
   ☐ carbon monoxide poisoning ☐ motor vehicle crash
   ☐ intentional fall ☐ alcohol poisoning ☐ exposure/hypothermia

3. Additional description of method if unusual:

4. When did it occur? (date)

5. Location:
   ☐ home ☐ wok place ☐ cemetery
   ☐ band office ☐ rec centre ☐ house of family member
   ☐ home of friend ☐ jail ☐ in the bush
   ☐ school ☐ health facility ☐ nrsing station
   ☐ other _____

6. Time of day: ☐ morning ☐ afternoon ☐ evening

7. Age at time of suicide/ suicide attempt: _____

8. Client seen at Nodin before? ☐ yes ☐ no

9. On how many different occasions? _____

10. How many previous suicide attempts? _____

11. Special events occurring in the community at the time of the suicide/suicide attempt?

☐ community feast ☐ community event ☐ gospel jamboree ☐ Christmas
☐ other _____

12. Precipitating event(s): (recent events)

☐ work related problems/loss of job
☐ marital/relationship problems
☐ birthday
☐ anniversary reaction: _____
☐ death of mother
☐ death of father
☐ death of sibling
☐ death of other family member
☐ death of friend
☐ death of partner
☐ use of alcohol
☐ use of drugs
☐ sniffing (gas, solvents)
☐ community in crisis (recent suicide(s) / deaths)
☐ suicide pact
☐ peer pressure
☐ hospitalized for psychiatric care
☐ gang-related activities
☐ other _____
☐ unknown

13. Reason given by individual:

C. Personal History:

1. Individuals experienced problems in school? ☐ yes ☐ no ☐ not in school
☐ don't know

Please identify what the problems in school were?

☐ trouble with school teachers/school authorities
☐ not passing
☐ does not get along with other kids
☐ bullied and teased at school

- ☐ gets in fights at school (is bully)
- ☐ not attending school (truancy)
- ☐ parents/caregiver do not support school attendance
- ☐ other _____

2. Individual experienced legal problems? ☐ yes ☐ no ☐ don't know

   Please identify what these legal problems were?

   - ☐ in trouble with the police
   - ☐ spent time in jail/youth facility
   - ☐ facing criminal charges
   - ☐ pending court date
   - ☐ other _____

3. Details of legal problems/charges.

4. Please identify what other factors are present in individuals life.

   - ☐ individual was separated from parents/primary caretaker
   - ☐ individual was adopted
   - ☐ individual was in foster care (Tikinagan)
   - ☐ gender conflict
   - ☐ sexual abuse by family member
   - ☐ sexual abuse by non-family member
   - ☐ unresolved grief
   - ☐ lost loved one to death
   - ☐ lost loved one to suicide
   - ☐ physical abuse
   - ☐ psychiatric diagnosis
   - ☐ sexual promiscuity
   - ☐ low self-esteem
   - ☐ lacks coping skills
   - ☐ inability to relate to peers
   - ☐ no friends or very few friends
   - ☐ attended residential school
   - ☐ financial problems
   - ☐ alcohol use
   - ☐ drug use
   - ☐ substance use (i.e. sniffing)
   - ☐ excessive gambling
   - ☐ other _____

5. Present living situation:

   ☐ lives alone ☐ lives with relatives ☐ lives with parents ☐ lives with partner
   ☐ transient ☐ institutionalized ☐ homeless ☐ other _____

D. Family Situation:

1. Who was/is the individual's significant caretaker?

☐ both parents ☐ mother ☐ father ☐ grandmother
☐ grandfather ☐ aunt ☐ uncle ☐ sister
☐ brother ☐ mother/stepfather ☐ father/stepmother ☐ foster parents
☐ no significant caretaker ☐ other _____

2. Size of family: _____

3. Parents divorced? ☐ yes ☐ no ☐ don't know

4. Parents separated? ☐ yes ☐ no ☐ don't know

5. Mother absent for all or the majority of individuals life? ☐ yes ☐ no ☐ don't know

6. Father absent for all or the majority of individuals life? ☐ yes ☐ no ☐ don't know

7. Parental conflict? ☐ yes ☐ no ☐ don't know

8. father employed? ☐ yes ☐ no ☐ don't know

9. mother employed? ☐ yes ☐ ☐ don't know

10. Parent(s)/significant caretaker deceased? ☐ yes ☐ no ☐ don't know

11. Who? _____

12. Please identify cause of death?

☐ natural causes ☐ injury/accident ☐ violence ☐ illness
☐ suicide ☐ other _____

13. Sibling(s) died at young age? ☐ yes ☐ no

14. Who? _____

15. Please identify cause of death?

☐ natural causes ☐ injury/accident ☐ violence ☐ illness
☐ suicide ☐ other _____

16. Parent(s) incarcerated? ☐ yes ☐ no ☐ don't know

17. Family dysfunction? ☐ yes ☐ no

☐ spousal abuse
☐ physical abuse
☐ sexual abuse
☐ excessive alcohol use by father
☐ excessive alcohol use by mother
☐ excessive use of alcohol by spouse

- ☐ excessive alcohol use by other family members
- ☐ excessive drug/substance use by father
- ☐ excessive drug/substance use by mother
- ☐ excessive drug/substance use by spouse
- ☐ excessive drug/substance use by other family members
- ☐ Depression or mental illness in father
- ☐ Depression or mental illness in mother
- ☐ Depression or mental illness in spouse
- ☐ Depression or mental illness in other family member

18. Other family member(s) have **attempted suicide**? ☐ yes ☐ no

19. Who? _____

20. How?
- ☐ hanging
- ☐ overdose
- ☐ drowning
- ☐ gunshot
- ☐ stabbing/laceration
- ☐ solvent ingestion
- ☐ carbon monoxide poisoning
- ☐ motor vehicle crash
- ☐ intentional fall
- ☐ alcohol poisoning
- ☐ exposure/hypothermia

21. Other family member(s) have **completed suicide**? ☐ yes ☐ no

22. Who? _____

23. How?
- ☐ hanging
- ☐ overdose
- ☐ drowning
- ☐ gunshot
- ☐ stabbing/laceration
- ☐ solvent ingestion
- ☐ carbon monoxide poisoning
- ☐ motor vehicle crash
- ☐ intentional fall
- ☐ alcohol poisoning
- ☐ exposure/hypothermia

24. Did the individual attend Residential School? ☐ yes ☐ no

25. Did any of the following family members attend Residential school?

- ☐ both parents
- ☐ mother
- ☐ father
- ☐ grandmother
- ☐ grandfather
- ☐ aunt
- ☐ uncle
- ☐ sister
- ☐ brother
- ☐ other _____

E. Medical History:

1. At the time of the suicide/suicide attempt did the individual have any of the following?

- ☐ acute illness or injury
- ☐ chronic illness or injury
- ☐ terminal illness
- ☐ disfigurement
- ☐ disability
- ☐ mental illness: diagnosis _____
- ☐ other physical problem _____
- ☐ none

F. Mental Health:

1. At the time of the suicide/suicide attempt was the individual experiencing any of the following? (last 10 days)

- ☐ anger
- ☐ anxiety/panic attacks
- ☐ behavioral problems
- ☐ depression/sadness
- ☐ post traumatic stress disorder
- ☐ stress
- ☐ victim of sexual assault
- ☐ victim of physical abuse
- ☐ victim of spousal abuse
- ☐ grief
- ☐ institutionalization
- ☐ loneliness
- ☐ hopelessness/helplessness
- ☐ irritability
- ☐ guilt
- ☐ shame
- ☐ mood swings
- ☐ demoralization of traditional way of life
- ☐ other _____
- ☐ hallucinations
- ☐ unrealistic fears/fantasies
- ☐ thoughts of hurting others
- ☐ preoccupation with thoughts
- ☐ disturbing dreams
- ☐ sleeplessness
- ☐ impulsive acts
- ☐ confusion/disorientation
- ☐ mood swings
- ☐ poor judgement
- ☐ agitated/upset
- ☐ hiding medication
- ☐ increase/decrease in energy
- ☐ giving personal items away
- ☐ refusing food
- ☐ emotional/physical withdrawal
- ☐ indifference/lack of motivation
- ☐ worthlessness

2. Was the individual getting any professional help at the time of the suicide/suicide attempt?

☐ yes ☐ no

3. Please identify the supports that were present:

- ☐ psychiatrist
- ☐ traditional healer
- ☐ NNADAP
- ☐ clergy/spiritual leader
- ☐ CHN
- ☐ not willing to access supports
- ☐ psychologist
- ☐ elder
- ☐ family member
- ☐ Tikinagan
- ☐ crisis centre
- ☐ social worker
- ☐ counselor
- ☐ mental health worker
- ☐ physician
- ☐ limited support
- ☐ spouse
- ☐ CHR
- ☐ Nodin
- ☐ friend
- ☐ none

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