UNIVERSITY OF ALBERTA

WALKING THROUGH FIRE AND SURVIVING: RESILIENCY AMONG ABORIGINAL PEOPLES WITH DIABETES

BY

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In memory of my mother, Leona,

who taught me the meaning of resilience,

and whose words of encouragement stay with me,

always.

ABSTRACT

The purpose of the evaluation of the Aboriginal Diabetes Wellness Program (ADWP) in Edmonton is to determine whether or not individuals attending the ADWP are healthier as a result of the services that the program provides. The research is quantitative based. A limitation of the study is that it does not include qualitative data to assess what causes some people to improve their health and others not. This thesis utilized explanatory models as a guide to interview a total of twelve Aboriginal peoples with diabetes, their family members, and a health care professional from the ADWP to understand the lived experience of Aboriginal peoples with diabetes. The Aboriginal peoples were of Cree, Ojibway, and Metis heritage. In addition to the twelve explanatory models, a focus group with staff members and two semi-structured interviews with an elder and cultural helper were obtained. There was a broad range of explanatory models due to the age, gender, and geographic location of the people interviewed. Twelve themes were extrapolated, including causes of type 2 diabetes, impact of prior knowledge about diabetes, levels of exercise, the consumption of fatty foods, support systems, care-giving, native spirituality, humor, residential school experience, alcohol consumption, socio-economic status, grieving, and fears related to complications. These results reflect the experience of resiliency among Aboriginal peoples living with diabetes. This research complements an evaluation of the Aboriginal Diabetes Wellness Program that was outcome based.

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TABLE OF CONTENTS

Page

Chapter One: Introduction....1
Purpose of the Study....3

Chapter Two: Literature Review
Type 2 Diabetes in Aboriginal Populations....4
Determinants of Aboriginal Diabetic Health....7
Resiliency and the Historical Context of Aboriginal Peoples....14

Chapter Three: Philosophy of Method....21
Phenomenology....22
Explanatory Models....24

Chapter Four: Methodology....27

Chapter Five: Introduction....30
Explanatory Models....30
Interviews with the Elder and Cultural Helper....56
Focus Group Report....61
Written Responses....72

Chapter Six: General Discussion....76
Important Themes and Personal Reflection....77
Limitations of the Study....82
Implications for Future Research....82
Summary....84

References....85
Appendix A: Information Sheet for the Aboriginal Person with Diabetes....93
Appendix B: Information Sheet for the Family Member....94
Appendix C: Information Sheet for the Aboriginal Health Care Professional....95
Appendix D: Information for the Elder and/or Cultural Helper....96
Appendix E: Consent Form....97
Appendix F: Questions for the Aboriginal Person with Diabetes....98
Appendix G: Questions for the Family Member....99
Appendix H: Questions for the Aboriginal Health Care Professional....100
Appendix I: Questions for the Elder and/or Cultural Helper....101
Appendix J: Statement of Intent for the Focus Group Participants....102
Appendix K: Release Form for the Focus Group Participants....103
Appendix L: Questions for the Focus Group Participants....104
Appendix M: Aboriginal Diabetes Wellness Program Evaluation....105

Chapter One

Introduction

Diabetes is a multi-dimensional disease that strikes certain Aboriginal populations in epidemic proportions. The goal of the Aboriginal Diabetes Wellness Program is to educate Aboriginal peoples about this disease to prevent complications and promote healthier lifestyles. When Aboriginal people attend the Aboriginal Diabetes Wellness Program in Edmonton, Alberta, they are taught how to manage the disease using both a traditional Aboriginal approach and western biomedical practices. The program was initiated for two reasons: there existed and still exists a high prevalence of diabetes among Aboriginal people and most diabetic treatment programs are not culturally sensitive to Aboriginal peoples and have not worked (Loyie, 1996, p. B3). The program was developed under the guidance of elders, and, as a result, it is holistic and cultural in its approach. The program is unique in both the national and international communities because it is holistic and culturally sensitive to Aboriginal peoples. The program includes ceremonies, cultural teachings, education, and treatment for the individual patient and a support person. Over the four-day program period, Aboriginal people sit in a circle and are taught by elders and health care professionals about Aboriginal cultural ways, blood sugar testing, traditional and western meal planning, foot care, medications, and prevention of complications. Finally, they are given the opportunity of having one-on-one counseling with an elder or cultural helper.

The program is sponsored by the Capital Health Authority and initially funded by Nova Corporation to the amount of one million dollars, the funds being made first available in July 1995. The program costs twenty five thousand per month to operate. The funding provided by Nova Corporation will last until April 1999. In order to secure future funds, the Capital Health Authority and the University of Alberta have evaluated the program to determine its efficacy. The purpose of this study, specifically, is to determine whether or not individuals attending the Aboriginal Diabetes Wellness Program are healthier as a result of the services that the program provides, and thus, this study is an evaluation of the Aboriginal Diabetes Wellness Program. I collected the data under the supervision of Dr. Don Voaklander, who is the principal investigator. The research is strictly

quantitative based. The clients were asked to complete a SF-12 health survey form, and a follow-up form that requires information on their height, weight, and fasting glucose and glycosylated hemoglobin measurements. These surveys and blood tests were collected at three and six month intervals. A limitation of the study is that it did not include qualitative data and therefore does not explain why some people are improving and others not.

The purpose of this thesis is to provide insight into the process of resiliency among Aboriginal diabetics in order to address why some Aboriginal diabetics are improving their health while others, after attending the Aboriginal Diabetes Wellness Program, are not. It is believed that those who are doing well have successful coping mechanisms and therefore are able to deal with the stress which is often a risk factor for developing complications associated with this disease. Data were obtained through a literature search, interviews, a focus group, an open-ended survey, and personal experience gleaned while employed as a study coordinator with the Capital Health Authority.

Chapter Two presents a review of the literature that addresses diabetes among indigenous peoples. The indigenous peoples included in this literature review are the Aboriginal people of Canada and Native Americans of the United States. It includes theories that are believed to explain the cause of type 2 diabetes among these groups. This chapter includes a discussion of risk factors and complications of type 2 diabetes and how the determinants of health affect this population. This chapter also presents a review of the literature on the concept of resiliency.

Chapter Three outlines the philosophy of phenomenological research methodology and explanatory models. These approaches were chosen because they allow the researcher to gain access to the participants' lived experiences and convey them using the explanatory models as illness narratives.

Chapter Four provides a description of the participants in terms of age, background and other relevant data. Sample size and the criteria for participant selection are offered. In this chapter I will provide my own presuppositions about resiliency in dealing with a chronic disease such as type 2 diabetes. The chapter contains an explanation of the interview process and how the data were collected and analyzed. In addition, the chosen format of explanatory models is highlighted to describe the

illness narratives.

Chapter Five presents the research results. The explanatory models, as illness narratives, are provided. Two tables contrasting the outcomes of those who have improved their health and those who have not after attending the Aboriginal Diabetes Wellness Program are included. In addition, findings from a focus group report that was conducted in November 1997 is included. Two interviews with elders will be shared in this chapter as a means of exploring the concept of resiliency. Results of an open-ended survey conducted by the staff of the Aboriginal Diabetes Wellness Program will be included to demonstrate the high level of satisfaction participants have with the program.

Chapter Six offers a discussion of the results. The explanatory models reveal that there is a broad range of views concerning coping with diabetes. The similarities and differences will be addressed and a discussion of the important themes follows.

Purpose of the study

The purpose of this study is to answer the following question: Why are some people improving their health as a result of attending the Aboriginal Wellness Program and others not?

CHAPTER TWO

Literature Review

Type 2 Diabetes in Aboriginal Populations

According to The Report of the Royal Commission on Aboriginal Peoples, historically, most industrialized and urbanized populations worldwide have gone through three phases of ill health. The first phase is characterized by famine, and an increase in infectious disease. The second phase consists of a decline in the rate of infectious diseases and rapid population growth. During the third phase, an increase in degenerative or chronic diseases occurs. The Aboriginal peoples of Canada are in between the second and third phases (Royal Commission On Aboriginal Peoples, Volume 3, p. 125). One of the chronic diseases that debilitates the lives of Canadian Aboriginal peoples and other indigenous peoples worldwide is type 2 diabetes.

Type 2 diabetes is a confusing disease because although there is believed to be a genetic cause for it, the genetic markers have not been identified. As well, there is no widely accepted definition of diabetes mellitus because of the way it is classified. In this thesis the term type 2 will be used except when the references explicitly use the term NIDDM. According to Knowler, McCance, Nagi and Pettitt:

> The terms type 1 and type 2 diabetes have been used interchangeably with IDDM and NIDDM, respectively. Many believe, however, that type 1 diabetes is not synonymous with IDDM, nor type 2 diabetes with NIDDM, because one classification represents suspected cause and the other clinical outcome, as reviewed by Keen. (Knowler et al., 1993, p. 188).

Diabetes mellitus occurs when an excess amount of glucose is present in the blood (Szathmary, 1987, p. 27). It is also "a serious chronic disease of disturbed carbohydrate and lipid metabolism" (Macaulay, 1987, p. 85). The mortality rate for females who have non-insulin dependent diabetes mellitus is reduced by 6.7 years while for males the rate is reduced by 9.1 years (Macaulay, 1987, p. 85). This disease is at least two to three times higher among the Aboriginal population than the non-Aboriginal population (Royal Commission On Aboriginal Peoples, Volume 3, p. 146). This is a conservative estimate as there are also many undiagnosed cases.

Type 2 diabetes has become known as a disease of civilization, and it is contributing to the early deaths of many indigenous peoples worldwide (Joe et al., 1994, p. 1). According to Young et al. (1990), there is very little published information on the extent of diabetes in Canadian Aboriginal populations. While the members of the Pima tribe and other Native American diabetics have been studied, the Canadian Aboriginal population lives in an environment that is markedly different from the Native American locales. In Canadian Aboriginal populations, "a genetic predisposition to developing diabetes is being unmasked by environmental changes associated with cultural transitions from traditional to modern ways of living" (Daniel M. & D. Gamble, 1995, p. 245). Young et al. (1990) posit that the genetic predisposition may vary between Aboriginal populations, and depending on the degree of Euro-Canadian influence on their lifestyles, differences in morbidity may occur as a consequence of the variation in genetic and environmental factors.

Type 2 diabetes is costing the lives of indigenous peoples in Canada and others globally due to the effects of colonization, including oppression within their own homelands. According to Jennie R. Joe and Robert S. Young:

> In addition to the economic, social, and biological consequences of the conquest, there were also undetermined long-term psychological consequences, psychological scars that left many once proud Indian nations with a sense of hopelessness and powerlessness, and in most instances, a lifestyle colored by chronic, abject poverty. Unfortunately, despite the passage of time, healing has not occurred; instead, some of the long-term psychological consequences of many of these earlier traumas continue to plague the present generations of Indian people (Joe et al., 1994, p. 6).

The history of diabetes in indigenous populations was unknown prior to the 1940s, but since the 1950s, the prevalence rates of diabetes have risen to the point that the disease is being called an epidemic (Young et al., 1990, p. 129). Ways of managing type 2 diabetes involve using a holistic Aboriginal approach. The Aboriginal view of health gives equal emphasis to the physical, spiritual, mental and emotional aspects of the person (RCAP, vol. 3, p. 205). People must be in balance in order to live a healthy life to live and grow and when one of the aspects is off balance the individual may not reach his or her full potential (RCAP, vol. 3, pp. 204-205).

The risk factors for diabetes are genetics, general obesity, upper trunk obesity, a lack of physical activity, poor diet, and psychosocial stress. The consumption of alcohol is another risk factor for type 2 diabetes (Royal Commission On Aboriginal Peoples, Volume 3, p. 146). Although obesity is a risk factor, not all people with type 2 diabetes are obese. When obesity is associated with aging, the risks of developing type 2 diabetes are greater (Szathmary, 1987, p. 44). Body fat patterning, particularly in the upper trunk fat and intra-abdominal fat, is significantly correlated with type 2 diabetes (Szathmary, 1987, p. 46). During pregnancy a sudden or massive weight gain is also indicated as a risk factor for type 2 diabetes. A pregnant female who develops type 2 diabetes during her pregnancy has a fifty percent chance that her child will develop this disease. Basically, physical inactivity, coupled with an excess intake of calories resulting in obesity, are risk factors for type 2 diabetes (Szathmary, 1987, p.46). A speculative risk factor is psychosocial stress (Szathmary, 1987, p. 52). Researchers are also examining how hormonal imbalances lead to upper trunk obesity (Szathmary, 1987, p. 52). The emergence of psychoneuroimmunology, the study of the mind and body connection, "has opened doors for researchers and clinicians" (Fine, S., 1991, p. 494). Endocrinologist Hans Selye (1978) studied the impact of stress on the hormonal and neurochemical aspect (Fine, S., 1991, p. 494).

Although the introduction of insulin therapy in 1924 has saved the lives of diabetics, it has also uncovered a plethora of complications that lead to premature death or disability. The secondary complications include kidney disease, heart and circulatory disease, blindness, amputations, nervous system disease, and birth defects among infants born to diabetic mothers (Royal Commission on Aboriginal Peoples, Volume 3, p. 143).

Despite the advances in laser techniques for the eye surgery, diabetic retinopathy is the most common cause of blindness in the United Kingdom (Heaven C.J & Boase D.L., 1996, p. 1). The risk of developing it increases depending on the duration of diabetes; it is rare in the first five years of the disease (Heaven C.J. & Boase D.L., 1996, p. 13).

Renal disease is a multistage disorder that changes the function and causes increases in its size (Watts, 1996, p. 32). Elevated microalbuminuria levels progressing to renal disease may result in nephropathy when renal replacement therapy is required for survival (Watts, 1996, p. 32). According

to Rosenthal, "chronic renal failure among native people is 2.5 to 4.0 times higher than in the general Canadian population, mostly due to type 2 diabetes" (Rosenthal, 1998, p. 168).

Erectile dysfunction or impotence is more common among the male diabetic population than the non-diabetic population (Alexander W.D. & M. Cummings, 1996, p. 69).

Macrovascular disease, a major complication of diabetes, is a disorder of the large blood vessels. Those with diabetes may exhibit coronary disease, angina, acute myocardial infarction and heart failure, at an earlier age than is normal and with great severity (Shaw, 1996, p. 192). In comparison to non-diabetic woman, diabetic women suffer as much from coronary heart disease as men (Macaulay, 1987, p. 86).

Cerebrovascular disease affects the circulation of blood. Dizziness, sudden blackouts, unsteadiness of gait, weakness of limbs, and loss of vision in one eye are temporary in nature, but they are a warning of a potentially severe stroke in the future (Shaw, 1996, pp. 198-199).

Peripheral arterial disease of the lower limbs results in impaired circulation. Amputations are often a result. According to Shaw, "cigarette smoking can increase the prospect of serious peripheral arterial disease of the leg by as much as 50-fold, while cessation of smoking may improve peripheral blood flow by as much as 50% within six months" (Shaw, 1996, p. 202).

The psychological consequences of living with diabetes involve a cluster of emotions including denial, obsession, anger, frustration, fear and guilt (Saudek et al., 1997, p. 209). These emotions vary in range and severity depending on how the individual is able to cope with the disease and the stress involved.

Determinants of Aboriginal Diabetic Health

The Canadian government's white paper, A New Perspective on the Health of Canadians, offered a very powerful and compelling framework for presenting the determinants of health (Evans, R.G. & G.L. Stoddart, 1994, p. 32):

> The federal report A New Perspective on the Health of Canadians (Lalonde, 1974) identified and examined the interaction between four determinants of health: (a) human biology (genes); (b) the

environment: (c) lifestyle and behavioral factors: and (d) the health care system. Diabetes exemplifies this interaction perhaps better than any other chronic disease (Daniel M. & D. Gamble, 1995, p. 255).

Since 1974, the determinants of health have been expanded in scope. According to the Strategies for Population Health, the evidence indicates a number of key factors that influence a population's health. They include income and social status, social support networks, education, employment and working conditions, safe and clean physical environments, biology and genetic make-up, personal health practices and coping skills, childhood development and health services (Strategies for Population Health, 1994, p. 12). In the context of this thesis, genetic factors, income, education, and lifestyle are addressed.

In [1962] Neel postulated the "thrifty" genotype, concluding that Indigenous peoples had a "quick insulin trigger" that enabled them to store fat efficiently during times of feasting so that during times of famine they could use their body fat as fuel, thus enabling their survival (Szathmary, 1987, p. 39). The study of twins supports the theory of a genetic basis for diabetes. Monozygotic (MZ) twins share all of their genes, where as dizygotic (DZ) twins share only fifty percent, and there is a higher concordance among MZ than DZ twins to develop elderly-onset diabetes (McCarthy M. & G. Hitman, 1993, p. 158). Individuals from the Indian subcontinent also exhibit high rates of diabetes when they are living indigenously within their countries compared to when they migrate. However, those that migrate have higher rates of diabetes than those who do not (McCarthy M. & G. Hitman, 1993, p. 158). A study of genetic admixture showed that eighty-three percent of full-blooded Nauruan islanders developed diabetes, compared to only seventeen percent of those islanders who have a foreign admixture (McCarthy M. & G. Hitman, 1993, pp. 158-159). While some research has been conducted to provide a better understanding of the genetic link to type 2 diabetes, the evidence is rudimentary. Finding the genetic markers has been difficult and meanwhile other hypotheses have emerged.

The thrifty phenotype hypothesis suggests that type 2 diabetes is a result of "poor fetal and infant development has long term consequences on carbohydrate metabolism" (Phillips, D.I.W. & D.J.P. Barker, 1993, p. 291). According to Phillips and Barker:

Poor nutrition is thought to be one of the important adverse influences, in adapting to which the fetus and infant have to be nutritionally 'thrifty'. If poor nutrition continues throughout life, these adaptations are not detrimental. However, if nutrition in adult life becomes abundant the ability of the pancreas to maintain glucose homeostasis is over stretched and diabetes follows. (Phillips, D.I.W. & D.J.P. Barker, 1993 pp. 291-292).

Evidence based on studies of men and experimental animals have shown that defective B cell growth and function result from under nutrition in early life (Phillips, D.I.W. & D.J.P. Barker, 1993, p. 295). Impaired insulin sensitivity and B cell dysfunction suggest that both are necessary for the development of the majority of cases of NIDDM (Cook J. & R. Turner, 1993, p. 229). In rats, having a low protein diet impairs the response to glucose permanently (Snoeck A. et al., 1990, pp. 107-118). Malnourished children showed a permanent reduction of insulin response to glucose (James W.P.T. & H.G. Coore, 1970, p. 386-389). The 'thrifty phenotype' hypothesis offered by Phillips and Barker suggests that poor nutrition in fetal and early infant life is detrimental to carbohydrate tolerance, and this may affect the structure and function of B cells (Phillips, D.I.W. & D.J.P. Barker, 1993, p. 302). Poor nutrition is also believed to affect the muscle tissue that responds to insulin, leading to insulin resistance (Phillips, D.I.W. & D.J.P. Barker, 1993, p. 302). Phillips and Barker also acknowledge the role of obesity, age, and physical inactivity as risk factors leading to the onset and severity of NIDDM (Phillips, D.I.W. & D.J.P. Barker, 1993, p. 302).

In 1988, Reaven described what is known as Syndrome X. The six components of syndrome X are hypertension, abnormal glucose tolerance, increased VLDL triglyceride levels, decreased HDL cholesterol levels, obesity, and hyperinsulinaemia or insulin sensitivity (Walker, M. & K.G.M.M. Alberti, 1993, pp. 305-306). This association of hyperlipidaemia, obesity, and glucose intolerance was discovered twenty-five years ago among people who had NIDDM. Due to the association of the latter association, Syndrome X has become questionable. A major finding of the San Antonio heart study showed that "a combination of three or more factors was much more prevalent than the presence of each risk factor in isolation, and even more prevalent than any combination of just two of the factors" (Walker, M. & K.G.M.M. Alberti, 1993, p. 306). The clusters of disorders can be treated by dietary

and physical activity regimes in a three to four year period. Following a moderate plan, people can return to a normal metabolic state (Walker, M. & K.G.M.M. Alberti, 1993 p. 314).

Since the Aboriginal Diabetes Wellness Program was utilized by a majority of Aboriginal Albertans the population needs to be identified. Information from the Aboriginal Population Profile of 1996 is used. The information is based on the 1996 census of Canada, which cites the total Alberta population as 2, 669, 195, of which six percent is Aboriginal. According to the Aboriginal Population Profile, of the 155, 645 Aboriginal peoples, 71 percent (117,465) are Indian, 28 percent (45,745) are Metis, and 1 percent (1,645) are Inuit.

According to Alberta's Aboriginal Population socio-demographic overview based on the 1991 census of Canada, 59.6 percent (31,910) of Indians, 57.4 percent (17,235) of Metis, and 49.8 percent (825) of Inuit earned less than fifteen thousand dollars annually. Furthermore, those that earned less than ten thousand dollars annually were categorized as follows: 23, 580 Indians; 12,205 Metis; 600 Inuit. The unemployment rate for Indians is 19.7 percent, 19.8 percent for Metis, and 12.0 percent for Inuit. In Strengthening the Circle:

> Aboriginal people have fewer jobs and less money than other Albertans. Unemployment rates in some communities are over 90 percent. The average income of an Aboriginal person is about half of that of other Albertans. Most Aboriginal people work in labour or unskilled positions. Aboriginal people who live off reserve are getting more managerial, technical and professional jobs as time goes on (Strengthening the Circle, 1995, p.28).

Income and social status are "the single most important determinant of health" (Strategies for Population Health, 1994, p. 2). The Whitehall study of ten thousand British civil servants held that hierarchy of rank and income determines health (Evans, R.G., 1994, p.5. Although the evidence is culturally specific to British civil servants and although there is no longitudinal evidence that suggests that this theory is also specific to Aboriginal people, using the available evidence suggests that income and social status are determinants of Aboriginal health. Wallerstein theorizes that having a generalized lack of control, a sense of powerlessness, and living with chronic stress factors such as poverty, being unemployed, not being allowed to make decisions that affect one's life, are risk factors for disease

(Wallerstein, 1992, p. 199). The Report of the Royal Commission on Aboriginal Peoples affirms the link between poverty and ill health: "People who are poor experience the major risk factors for illness with greatest frequency" (Report of the Royal Commission on Aboriginal Peoples, 1996, volume 3, chapter 3, p.166).

According to Alberta's Aboriginal Population socio-demographic overview based on the 1991 census of Canada, the education levels were as follows: 16.8 percent of Indians, 15.3 percent of Metis, and 8.4 percent of Inuit had less than a grade nine level of education. The percentage rates for those who have a grade nine to thirteen level with a secondary certificate were as follows: 9.6 percent of Indians, 9.9 percent of Metis, and 11.2 percent of Inuit. The percentage rates for those who have a trade certificate or diploma were as follows: 3.0 for Indian, 3.0 for Metis, and 4.1 for Inuit. Those who held a university degree were as follows: 4.4 percent for Indian, 2.8 percent for Metis, and 10.1 percent for Inuit.

According to The CFPC's (College of Family Physicians of Canada) Task Force on Child Health, only fifty percent of Aboriginal children complete high school in comparison to the national rate of seventy-five percent. The determinants of income and education are often correlated as to how they affect health, as The CFPC's Task Force on Child Health affirms:

> Poverty among aboriginal peoples is acute. Aboriginals on reserves have the highest rate of unemployment (lack of jobs, mismatch of education and job experience to available jobs, and lack of child care) and adults of child-rearing age (15 to 49 years) are less likely than other Canadians to have higher education (The CFPC's Task Force on Child Health, 1998, p. 359).

A lack of income affects their ability to buy enough food to eat, and even obesity reflects poor nutritional habits (CFPC's Task Force on Child Health, 1998, p.359). Thus, buying groceries becomes a problem. The affordable items tend to be quick-energy, low-nutrient foods (Rosenthal, 1998, pp. 172-173).

Another problem that compounds the health risks of Aboriginal people is a result of geographic location affecting lifestyle. In northern rural communities in Alberta's north, fresh vegetables and fruits are expensive (Rosenthal, 1998, p. 168). To supplement their incomes, many Aboriginal people

rely on the traditional economy of hunting and trapping as a means of providing meat for their families. Although the economy of Aboriginal peoples has changed from one that depended largely on hunting and trapping to a wage-based economy or welfare, the traditional lifestyle of the hunter gatherer is neither dead or dying (Asch, M. & S. Smith, 1993, p. 149). It is not easy for a traditional economy and culture to sustain itself amidst social changes occurring within the communities. According to Kuhnlein and Receveur:

> Central to many of the issues concerning retention of traditional food knowledge and use of traditional food systems by indigenous peoples is the issue of politics. To practice and retain cultural knowledge and values, peace, stability, and prosperity are needed. Unfortunately, all too often it is the indigenous peoples within a nationality who are discriminated against, oppressed, marginalized, and colonized, which makes it difficult to retain their cultural practices (Kuhnlein H.V. & O. Receveur, 1996, pp. 420-421).

Hunting and trapping continues to be an important economic activity for many Aboriginal peoples in northern Alberta and further studies are required to affirm this (Asch, M. & S. Smith, 1993, p.153). The traditional economy constitutes an important economic sector in an area with few other stable economic alternatives (Asch, M. & S. Smith, 1993, p. 153). If a hunter is able to provide food to his or her family it ensures that families immediate survival.

Surviving, assimilating, and coping, are words that are a part of the lexicon of the language that describe what Aboriginal peoples have endured. According to Kuhnlein and Receveur:

> Mission schools, boarding schools, public health programs, and nutrition education programs emphasizing the food known to the dominant culture have had their impact on children for more than 100 years, particularly in the Americas, Africa, and Australia. The introduction of new foods such as sugar, refined grain flour and bread, sweetened tea, and alcohol took place rapidly, and at the time there was little acknowledgement or respect, and very little understanding, of the nutritional and cultural beliefs traditional food gave to the indigenous peoples (Kuhnlein H.V. & O. Receveur, 1996, p. 422).

In many instances, the traditional diet of high protein, low-fat foods and quality game meats has been

replaced with starches, fats, sugar and alcohol (Rosenthal, 1998, p. 173). Unfortunately, vegetables and fruits are not usually available in the small stores on many reserves and if they are, they are so expensive that nobody buys them (Rosenthal, 1998, p. 174). Even in the cities, there may be the problem of not being able to afford certain foods at particular times of the month.

In part, the absence of traditional foods in the diet has triggered hypoglycemia, diabetes, and weight problems. A diet consisting of refined carbohydrates and high caloric content has been implicated as a causal factor in obesity and ultimately diabetes among native peoples (Joe et al., 1994, p. 13). Hypoglycemia, diabetes, and weight problems are interrelated and often associated conditions which are partly due to carbohydrate metabolism. The Report of the Royal Commission on Aboriginal Peoples state: "Avoidance of most refined carbohydrates, fruits, fruit juices, and sweeteners lies at the heart of the dietary treatment of diabetes and hypoglycemia. Weight problems usually revolve around the use of refined carbohydrates and unnaturally fatty foods" (Schmid, 1994, p. 123). Another aspect of lifestyle factors that is believed to be a risk factor for diabetes is alcohol consumption (RCAP, 1996, volume 3, chapter 3, p.146).

Alcohol was first introduced to Aboriginal people as a result of the fur-trade (Waldram et al., 1995, p. 137). There are three academic perspectives-- sociological, psychological, and genetic-- that offer theories as to why Aboriginal alcoholism is-- (Maracle B., 1993, p. 215). Whatever the reason may be, alcoholism is an idiosyncratic behavior and the motivation lies within each individual. How alcoholism affects the health of Aboriginal peoples is a question that must be answered from a holistic perspective. Alcohol consumption affects the individual's mind, body, and spirit. Furthermore, it not only affects the individual but the family, community, and nation. To deal with the issue of alcohol abuse one must be ready to deal with the emotional aspects of the self.

For Aboriginal peoples who smoke cigarettes and drink alcohol, the combination can be hazardous to their health. Alcohol can lower the blood sugar, causing extremely low-blood sugar reactions in people who use insulin as well as those who take diabetes pills" (Beaser R.S. & J.V.C. Hill, 1995, p. 279). It can also raise blood sugar levels because "liquors such as sweet wines, liqueurs, and cordials contain large quantities of carbohydrate" (Beaser R.S. & J.V.C. Hill, 1995, p. 280). Smoking causes

the blood vessels to constrict, or become narrowed, and people with diabetes are already at a higher risk for blood-vessel disease. Smoking therefore adds an additional risk for such problems as heart disease and stroke (Beaser R.S. & J.V.C. Hill, 1995, p. 279). Incidences of complications ensue as a result.

Resiliency and the historical context of Aboriginal peoples.

In order to explain resiliency, the historical context of Aboriginal peoples is explained. The areas that are addressed include the depopulation of North America, attacks on religion, sovereignty over self-governing indigenous nations, depression of spirit, and incidence of social disorders. Aboriginal peoples have experienced multi-generational and systematic trauma, but somehow they continue to survive. It is the power of the people, the power of prayer, the power of the land and hope that sustain them.

The old John Wayne westerns always depict cowboys killing Indians for the greater good. According to Sioui describing the real situation, "it was not the warring that caused the depopulation of eighteen million North American Aboriginal peoples by far the most important cause of the 'American apocalypse' was the epidemic of diseases brought forth by Europeans" (Sioui, G., 1992, p.3). Yet popular culture would have one believe otherwise.

The harsh words "pagan" and "heathen" were often words used by missionaries to describe Aboriginal peoples in a negative and derogatory attempt to demean Aboriginal spirituality and culture. This oppression of Aboriginal traditional knowledge was conducted systematically through the federal government's assimilation policy. As Waldram notes:

> Historically, when indigenous peoples have been colonized, the colonizers have accurately identified religion as central to human cultural existence. They have often attempted to destroy or alter religion as part of a plan for alienating indigenous peoples' land, labour, and resources. In the societies of indigenous peoples, what westerners call "religion" and "healing" are integrated and inseparable parts of the cultural whole. Therefore, attacks on religion have often had negative consequences for traditional healing systems; the repression of one invariably included the

repression of the other (Waldram, J., 1997, pp. 5-6).

The assimilation policy was an attempt to acculturate Aboriginals to Euro-Canadian ways by committing what is now known as cultural genocide. Through this process, Aboriginal people have become outsiders within their own lands, and those who attempt to re-establish their influence within the dominant society are often seen as threats.

By exerting power over Aboriginal peoples, the British Crown and federal government have created social dependency in what once were self-governing nations. The Royal Proclamation of 1763 enabled the British Crown to unilaterally assert its right over self-governing nations and claim title to the land (Boldt, 1993, p.3). Borrows asserts that the Treaty of Niagara of 1764, which was ratified by over 2,000 chiefs, established a relationship based on peace, friendship, respect, and mutual non-interference between the British and First Nations (Asch, 1997, p. xiii), Furthermore, to understand the Royal Proclamation of 1763, the terms of the Treaty of Niagara of 1764 need to be understood (Asch, 1997, p. xiii).

Amidst this ongoing debate about these terms between First Nations and the Crown, the immediate problems pertaining to environmental protection should be addressed too. The traditional use of land is integral to the culture of Aboriginal peoples. The traditional lands are used for ceremonies, hunting, fishing, trapping, and other life-sustaining activities, and these activities and the land itself give life to the spirit and well-being of Aboriginal peoples. The land needs to be preserved, and the encroachment of resource companies on traditional lands is affecting their quality. Mother Earth, an inherent element of traditional Aboriginal culture, is revered as sacred.

In an article entitled "Explanations of diabetes: Anishinaabeg and Dakota deliberate upon a new illness", Linda C. Garro and Gretchen Chelsey Lang argue that type 2 diabetes has been brought about by Euro-Canadian disruption and destruction of the Anishinaabe way of life. Some Anishinaabeg think that environmental conditions are to blame-- having to consume canned foods, living in a polluted environment, and not having traditional lands to hunt and fish are factors involved in the diabetes epidemic. Others believe that unless people live a traditional Anishinaabeg way of life, they will continue to live unbalanced lives and will struggle with diabetes (Garro et al., 1994, pp. 293-328).

They believe that balance is living in harmony with nature and that a state of imbalance can be created by people.

The energy that people send out to others within their environment can be either positive or negative. When the energy is negative, there is a sense of imbalance, and over a long period of time, this creates a need for healing. According to The Report of the Royal Commission on Aboriginal Peoples:

> Healing, in Aboriginal terms, refers to personal and societal recovery from the lasting effects of oppression and systemic racism experienced over generations. Many Aboriginal people are suffering not simply from specific diseases and social problems, but also from a depression of spirit resulting from 200 or more years of damage to their cultures, languages, identities and self-respect. The idea of healing suggests that to reach 'whole health', Aboriginal people must confront the crippling injuries of the past (RCAP, chapter 3, p.11).

The issues of the past and present are multi-generational in scope; they may stem from a number of sources depending on the individual's life circumstances relating to the family situation or social milieu. In general, Aboriginal people are in a state of grief over losses they have endured. These losses may involve abstract concepts such as respect, trust, honesty, and integrity. Concrete concepts of grief stem from the loss of family members, land, language and traditional knowledge. Healing will come through an empowering process of sharing power related to governance issues.

The world that we live in is far from a perfect place, and there are many issues that affect us all. According to Fyre Jean Graveline:

> We all currently share location in a world in which an increasing number of people are affected by widespread homelessness, joblessness, illiteracy, crime, disease (including AIDS), poverty, drug addiction, alcoholism and other illness-producing habits. Our degradation as humans is vitally interconnected with the continuing destruction of our Mother Earth, upon whom our existence depends. The Aboriginal peoples of North America are seriously affected by all of these calamities and reportedly have the highest incidence of all social disorders (Graveline, F.J., 1998, p.7).

Amidst the social disorder, there are people committed to making the world a better place to live, and Aboriginal peoples need to be included in this process to help influence some decisions for the greater good, using the tenets of equality and respect for all.

Nina Wallerstein finds that powerlessness is a broad-based risk factor for disease, whereas empowerment is an important promoter of health (Wallerstein, 1992, p. 197). Powerlessness pertains to the lack of control over destiny. Political empowerment is utilized to improve "the lives of the disenfranchised, or for spawning social action" (Wallerstein, 1992, p. 198). In Powerlessness, Empowerment, and Health: Implications for Health Promotion Programs, Wallerstein states that:

> In its broadest definition, empowerment is a multi-level construct that involves people assuming control and mastery over their lives in the context of their social and political environment; they gain a sense of control and purposefulness to exert political power as they participate in the democratic life of their community for social change (Wallerstein, 1992, p. 198).

In this context, empowerment involves the study of both the individual and social setting (Wallerstein, 1992, p. 198). Empowering activities are pro-active, and they involve a reciprocal relationship between the giver and receiver of power. Empowerment is a word that conveys duality. It is a word that begs the question, "Shall I take power or shall you give me power?" (Labonte, p. 51). On one hand, the giver has a sense of "power over" the receiver and the giver "tolerates other's views." On the other hand, the receiver has "power with" the giver and the receiver "respects [the] other['s] views" (Labonte, p. 54). The empowerment process is a reciprocal one, and a study to affirm the positive health effects of empowerment could involve Aboriginal communities who are becoming self-governing. This would require further research.

From my perspective, as an Aboriginal person, resilience is a defense mechanism that is used as a process to protect oneself either from the social context or environmental circumstance. As Aboriginal peoples, we have had to defend our traditions and culture as mainstream cultural values and norms have become pervasive. Therefore, Aboriginal people have been able to bounce back in the face of adversity and some even thrive because they are so used to having to defend themselves to succeed.

According to researchers studying the phenomenon of resiliency, resilient people are those who

experience adversity and strive to rise above it (Fine, 1991, p. 493). Fine argues that "the most stressful dimensions appear to be those that challenge personal assumptions about oneself and the structure of the world one lives in" (Fine, 1991, p. 495). The loss of identity is sometimes more significant than any real threat to life and limb (Fine, 1991, p.495). Aboriginal peoples who have experienced an enforced assimilation process have undergone what has been described as one of the most stressful and significant threats to the individual. Resiliency is viewed as a process that changes over time and depends on the social context (Rutter, 1993, pp. 626-627). Therefore, an Aboriginal person may not always be resilient, depending on the time and place. "Resilience appears to be less than an enduring characteristic and more of a process" (Fine, 1991, p. 499). The process depends largely upon "personal perceptions and responses to stressful life events" (Fine, 1991, p. 493). Resiliency is a process that shifts and changes over time as the individual accesses a range of mechanisms for support (Fine, 1991, p. 499).

According to Rutter, "it appears that resilience may be fostered in the steps that make it more likely that people will feel in control of their lives and become effective in shaping what happens to them" (Rutter, 1993, p.628). Analysis of a California longitudinal study of young men from disadvantaged backgrounds illustrated five preceding and succeeding circumstances in the origins of resilience. First, protective factors, such as joining the army to obtain an education and thereby delaying the onset of marriage, are viewed positively (Rutter, 1993, p. 628). Rutter notes that it is not the army that is the key but the protective factor that can be inherent as a result. Second, protective influences such as those in a good marriage can help a person become resilient (Rutter, 1993, p. 629). Third, there are individual variations in susceptibility or vulnerability to adverse experiences that determine one's resilience (Rutter, 1993, p. 629). Fourth, temperamental characteristics have an important constitutional component (Rutter, 1993, p. 629). Last, contextual factors determine how individuals will appraise their circumstances, so cognitive factors play an important role in how people deal emotionally with social problems (Rutter, 1993, p. 630).

Based on a review of the literature of resiliency Watt, David, Ladd, and Shamos formulated a hypothetical rationale to guide their study of the life course of resilience among middle-aged adults.

These resilient individuals possess an "inner strength, which they may be endowed with from birth or acquire through early experience that enables them to confront life's vicissitudes" (Watt et al., 1995, p. 215). According to Watt et al., resilient people use a multitude of coping mechanisms" (Watt et al., 1995, p. 215). As children they sought support from "at least one caring adult" to help dispel the confusion, isolation and debasement from the primary sources of their distress (Watt et al., 1995, p. 215). Another coping mechanism for resilient people is to "develop a healthy skepticism" of the people who cause the distress (Watt et al., 1995, p. 215). They find someone outside of their nuclear family to be "a parental surrogate" to be able to provide support, acknowledgement, validation, guidance and a belief system to live by (Watt et al., 1995, p. 215). "Ventilation of suppressed emotions" is a key behavior for coping with severe life stress (Watt et al., 1995, p. 215). Resilient people "acknowledge [that] recognition of one's basic self-worth" is an appropriate way to banish thoughts of worthlessness or feelings of guilt (Watt et al., 1995, p. 215). According to Watt et al., "resilient people possess or create an internal gyroscope that provides direction for their energies and enables them at least to strive to achieve control over the forces that oppress them" (Watt et al., 1995, p. 215).

For some individuals, the source of stress may come from the family unit, but in other circumstances, the family may be a buffer to the stress caused by external factors within society. There are some mechanisms within the family system that enable members to cope with stress factors. The family schema is the fundamental convictions and values that serve as an informational network to process and evaluate experiences (McCubbin, H.I., Thompson, E.A., Thompson, A.I., McCubbin, M.A. & A.J. Kaston, 1993, p. 1064). The family paradigm is a set of beliefs and expectations to guide the functioning aspects of family life (McCubbin et al., 1993, p. 1065). According to McCubbin et al.:

> Historically, the family has been the conduit for cultural transmission, providing a natural atmosphere for traditions to be passed from generation to generation, as well as updated throughout the ages to keep culture and ethnic heritages alive. In turn, the traditions themselves have given families a sense of stability and support from which they draw comfort, guidance, and a means of coping with the problems of daily life (McCubbin, H.I., Thompson, E.A., Thompson,

A.I., McCubbin, M.A., & A.J. Kaston, 1993, p. 1063).

An individual family member may choose to apply the family schema and/or paradigm to her worldview as a coping mechanism. Regardless of whether or not individuals utilize their parents, siblings, husbands, wives, children, or friends as a source of support or find another mechanism, "a social support network can buffer stress and provide a reinforcing social environment" (Kaplan, R.M., Toshima, M.T., 1990, p. 427). Kaplan and Toshima also note that the means of social support is quite different for males and females.

In conclusion, type 2 diabetes is an epidemic among Aboriginal peoples in Canada and globally. Researchers acknowledge that there is a genetic predisposition to this disease and it emerges after a phase of colonization. The price of colonization has a human cost that affects the mind, body, and spirit of Aboriginal peoples. To be able to cope with type 2 diabetes, Aboriginal peoples must look to their past for solutions of present day problems and to safely steer themselves into the future. Given the historical context of colonization Aboriginal peoples have had to be resilient to survive the past. Today, part of the answer to achieving health involves following a recommended diet and living a physically active lifestyle. Another part of the answer involves empowerment or a transfer process between the governments and Aboriginal nations. To achieve holistic health, Aboriginal communities need to feel control over the nations' destiny, and that will inevitably be achieved through sound governance so leaders can promote healthy lifestyles and protect the environment.

Chapter Three

Philosophy of Method

In this chapter, two predominant approaches to research will be presented: the natural science method and the human science method. The combination of natural science with human science will be employed to answer the research questions. The primary research question is, "Why are some Aboriginal diabetics improving their health after attending the Aboriginal Wellness Program, and others not?" The secondary research question is, "How do Aboriginal diabetics cope with their disease?"

Natural science has been the mainstay of "hard" scientific research. The hallmarks of this scientific method are prediction, control, and explanation of findings. There are three basic assumptions that underlie this type of research: the subject must be observable, the results must be measurable and they must have inter-observer consensus "to agree on [their] existence and characteristics" (Valle and King, 1978, p.4). The method of the natural science researcher involves controlling variables by means of manipulating, modifying, or holding constant external influences while a limited set of outcome variables are measured (Patton, 1990). If the researcher has feelings, values, interpretations, and musings, she must remember that there is no place for what might be deemed "researcher bias" in the positivist's view of natural scientific inquiry (Borg and Gall, 1989, p. 17). Natural science places importance on quantification and demands precision and control. Natural science attempts to be objective by creating a distant neutrality between the researcher and subject. As a consequence, when people are being studied, the social nature and human purposes of research are ignored (Patton, 1990). Therefore, the human science approach with its use of qualitative research methods gives "voice" to the research subjects, allowing the clinician to better understand the explanatory models of Aboriginal diabetics. According to Miller and Crabtree, published clinical research contains studies that involve "separating the variables of interest from their local, everyday milieus, entering them into a controlled research environment, and then trying to fit the results back into the original context" (Miller, Crabtree, 1994, p. 341).

To accomplish this task of portraying them as diverse individuals with their own identities, thoughts

and feelings. I used a phenomenological methodology to portray their lived experience. In order to do this, I have utilized a clinically applied anthropological method, specifically Arthur Kleinman's explanatory models to highlight the illness narratives (Miller, Crabtree, 1994, p. 341). According to Miller and Crabtree, there are many questions about body, life, power, experience, meaning, patterns, relationships, and values; the knowledge contained within the answers to these questions are relayed by way of stories (Miller, Crabtree, 1994, p. 343). Thus, the descriptions become "holistic narratives" (Miller, Crabtree, 1994, p. 343).

Phenomenology

There is a split between the natural sciences and human sciences. According to Bernard, there is a "split between the positivistic and interpretive phenomenological approach" within the human sciences (Bernard, 1995, p. 15). It is a centuries old debate over quantitative versus qualitative data (Bernard, 1995, p. 15). The human science method involves getting close to individuals who are being studied to understand how they think and what they are saying based on their experiences. The human science method used in psychology studies the inward, subjective aspects of an individual's experience. However, most research in psychology is conducted using the positivistic natural science approach that depends on collecting quantitative data. For the purposes of this thesis, qualitative methods will be used to shed light on the experience of resiliency among Aboriginal diabetics.

Phenomenology is appropriate for studying human thought and action. According to Bernard, "the philosophical foundations of phenomenology were developed by Edmund Husserl (1859-1938), who argued that the scientific method, appropriate for the study of physical phenomena, was inappropriate for the study of human thought and action" (Bernard, 1995, p. 14). Throughout the 1960s and 1970s, phenomenology was marginalized by sociologists who could not understand it or were hostile to it (Holstein, Gubrium, 1994, p. 262). This methodology still exists at the periphery of sociology.

Deviating slightly from Husserl's ideology was Alfred Schutz, who attempted to merge social phenomenology with philosophical phenomenology because he believed that scientists had taken the real life world of its subjects for granted (Holstein, Gubrium, 1994, p. 263). In their neglect of the

experiential world, Schutz believed that scientists formed a fictional portrayal that would permeate their findings. The purpose of Schutz's recommendation was to study social action and bracket the experience. By bracketing, one is following a procedure for the purpose of setting aside one's biases concerning the experience (Holstein, Gubrium, 1994, p. 263). A researcher is not supposed to assume that "others'" experience of the real world is the same experience as theirs. However, bracketing the text or experience does not imply greater objectivity because the decision to select content and bracket the text is actually a subjective decision. In phenomenology, subjectivity is not a methodological taboo (Holstein, Gubrium, 1994, p.264). Thus, to bracket or not to bracket is an option, depending on which theoretical camp one sits in. According to Rothe, "we want to elucidate the psychological, sociological or whatever discipline we use, in a depth we consider appropriate for understanding the events" (Rothe, 1993, p. 140).

In part, this thesis adopts a phenomenological methodology to study the lived experience of Aboriginal peoples who have diabetes. Conducting existential investigation involves gathering the type of material that may have a bearing on developing a deeper understanding of resiliency among Aboriginal peoples. The objective is to "borrow other people's lived experience and their reflections on their experiences in order to better be able to come to an understanding of the deeper meaning or significance of an aspect of human experience, in the context of the whole of human experience" (Max van Manen, 1984, p. 55). Some methods of collecting data include obtaining a written response from the subject, tape recording and interviewing the subject, observing the participant, and so forth. To gather other people's experience allows the researcher to, in a vicarious sort of way, to become more experienced (Max van Manen, 1984, pp. 56-57).

Since April 21, 1997, I have conducted field research through observation, discussion with Aboriginal diabetics, their support person(s), health care professional(s), elder(s), and cultural helper(s), while collecting quantitative data for the Capital Health Authority and University of Alberta as part of their evaluation of the Aboriginal Diabetes Wellness Program. The purpose of using a phenomenological methodology is to better understand the resiliency process and to shed light on the coping mechanisms that Aboriginal diabetics may or may not have.

Explanatory models.

This paper adopts the explanatory model as proposed by Arthur Kleinman. In 1980, Kleinman stated that "explanatory models are the notions about an episode of sickness and its treatment that are employed by all those engaged in the clinical process" (Kleinman, 1980, p. 105). In 1988, he further explained, "explanatory models are the notions that patients, families, and practitioners have about a specific illness episode" (Kleinman, 1988, p. 121). In 1995, Kleinman expressed his "uncomfortablness" with his explanatory models because they implied "formalism, specificity and authorial certainty" (Kleinman, 1995, p. 7). The intended use for the explanatory models was to serve as a "device" to "privilege meanings" (Kleinman, 1995, p. 8). As well, the explanatory models were designed to foster "respect for difference" (Kleinman, 1995, p. 8). When he published his first book in 1980 he was in a constructionist mode, and the explanatory models reflect this, but in reflection Kleinman wanted to make clear his intent.

Explanatory models are responses (Kleinman, 1988, p. 121) to illness or disease. Explanatory models are formed based on certain beliefs about a health system but are rooted in the concrete reality of a patient having a certain illness or disease (Kleinman, 1980, p. 106). In an explanatory model, practitioners define how they understand and treat sickness (Kleinman, 1980, p. 105). Further, patients and their family members can tell us how they make sense of their illnesses or diseases and what they do about them (Kleinman, 1980, p. 105). In an everyday situation, patients do not volunteer their explanatory models to health care professionals, and if they do, it is in a single phrase statement because they are embarrassed to share their beliefs in a formal health care setting (Kleinman, 1980, p. 106). In the process of investigating each subject, these explanatory models will contain contradictions and shift in content (Kleinman, 1988, p. 122).

The subjects who were interviewed in this study were expected to elicit strong emotions and feelings that would be difficult to express openly (Kleinman, 1988, p. 122). As this thesis relates to a particular cultural group, one can expect a variety of responses to the etiology of this disease. In Rethinking Psychiatry, Arthur Kleinman, states that:

Patients' and families' models of treatment often express concerns about the appropriateness,

efficacy, and side-effects of medication and other therapies. Cultural models may implicate sacred or secular causes and treatments: they also tend to relate personal distress to social circumstances" (Kleinman, 1988, p. 156).

Kleinman quotes M. Weiss, to support the relevance of the belief that understanding the cultural beliefs of a population is key because they may believe that they are victims of sorcery or witchcraft or have broken a taboo or that for religious or other reasons, they cannot accept medical advice and treatment (Kleinman, 1988). According to Joe et al., "the more traditional an Indian patient is in their world view and lifestyle, the more likely he or she will seek explanations for their disease within their own cultural frame of reference (Joe et al, 1994, p. 12). With Aboriginal peoples the concepts of health and illness often contain spiritual views which are not normally accepted as part of the western biomedical view.

The idea to use explanatory models was introduced to me by Dr. Jeff Henderson, a Lakota physician. After reading some of the literature by Arthur Kleinman, I thought using this approach would serve a purpose within the context I was working in. Along with the health care professionals, the program encouraged Aboriginal diabetics to bring a support person, usually a family member, to attend. Therefore, it seemed like an appropriate device to use. A second purpose for using the explanatory models was to delve into the psychosocial schema of Aboriginal peoples who have diabetes, their family members, and health care practitioners to find out what more can be done to improve the resiliency among Aboriginal peoples who have diabetes. A third purpose was to develop respectful relations between Aboriginal peoples and those working in the field of biomedicine by providing information that would help others understand what life is like for Aboriginal peoples with diabetes. By studying the cultural beliefs, values, or practices of other cultures, those working in biomedicine can make an impact on Aboriginal health and illness. "Culturally sensitive care can affect patient compliance, satisfaction, comfort, and attitude toward the medical establishment" (Loustaunau, M.O. & Sobo, E.J., 1997, p. 146). By using explanatory models, one can begin to understand the thinking process of Aboriginal diabetics, their family members, and the health care professionals with regard to coping with this disease. Finally, stories of people intrigue me, and I enjoy researching and

writing about them. Narratives provide information about significant events in the ongoing life histories of the people who are the subject of the research (Kugelmann, 1997, p. 256).

According to Manning and Cullum-Swan, "medical writing on stories is revealing" (Manning & Cullum-Swan, 1994, p. 465). They acknowledge the work of Kleinman, Brody, Coles, and Paget who argue that the stories are reflections of human feelings and the lived experience. Manning and Cullum-Swan note that the work of these writers offers a healing process because it involves the telling, hearing, and unraveling of stories. Manning and Cullum-Swan state that these writers "share no common definiton, purpose, method or technique, or mode of analysis" (Manning, Cullum-Swan, 1994, p. 465). The acknowledgment of this pointed fact speaks to the rigor and objectivity of positivism. Sharing or telling stories stems from the art of the oral tradition that Aboriginal peoples have long practiced since time immemorial.

According to Paula Gunn Allen, "the oral tradition is a living body" (Gunn Allen, 1986, p. 224). Gunn Allen theorizes that it represents not only a reflection of an individual but also the collective body of Aboriginal peoples (Gunn Allen, 1986, p. 224). Since generations of Aboriginal peoples have lived through colonialism, she warns that attitudes underlying racist, sexist, class-driven, realities may reflect the views of those working both from within an oral tradition to the written text (Gunn Allen, 1986, p. 224). In her words to native female writers, she shares the sage wisdom of her great-grandmother, "never forget you are an Indian" (Gunn Allen, 1986, p. 224). These words of wisdom are detrimental for writers like me who are working in the area of bridging understanding of an Aboriginal epistemology.

Chapter Four

Methodology

This chapter covers the following procedures: ethical considerations, participant selection, the interview process, and the method of analysis. Additionally, a list of my presuppositions is outlined.

Ethical approval for this study was established through the Health Research Ethics Board (B: Health Research), University of Alberta. In addition, administrative approval for research conducted concerning a Capital Health Authority site was received.

The participant selection was deliberate. The participants had to have attended the Aboriginal Diabetes Wellness Program [ADWP], and they had to consent to the Capital Health Authority's and University of Alberta's evaluation of the ADWP. Based on the quantitative measurements of desired levels of hemoglobin A1c six Aboriginal diabetics who showed improvement and six who did not were selected for the interview process. Desirable outcomes were noted as having a hemoglobin A1c level of 7.5% or less at three or six month intervals. This information was based on the criteria provided by Franz et al. While the hemoglobin A1c measurement is not recommended for diagnosing diabetes, both hemoglobin A1c and fasting plasma glucose "have become the measurements of choice in monitoring the treatment of diabetes" (The Expert Committee on the Diagnosis and Classification of Diabetes Mellitus, 1998, p. S14). However, standardization of hemoglobin A1c "has just begun" (The Expert Committee on the Diagnosis and Classification of Diabetes Mellitus, 1998, p. S15). The hemoglobin A1c, fasting glucose, height and weight measurements were compared at baseline, three months, and six months. This information is included in two charts in Chapter Five.

The demographics of participants were documented. Six females and six males were selected for the interviews. The ages ranged from seventeen to seventy-two years, with a mean age of forty-nine years. Out of twelve individuals, seven people who were interviewed live in Edmonton. Three people who were interviewed live in the Alberta communities of Sturgeon Lake, Driftpile and Desmarais. Two people who were interviewed were from Onion Lake, Saskatchewan.

Data collection in this study was conducted through in depth, semi-structured interviews. Good rapport between the researcher and the participants occurred because they saw me as one of them who was also an "insider" at the Aboriginal Diabetes Wellness Program and they trusted me. According to

Delmos Jones, a vantage point "from which research can be conducted [is] that of the 'insider', the person who conducts research on the cultural, racial, or ethnic group of which he himself is a member" (Jones, 1982, p. 471). Each of the diabetics, family members, and health care professionals participated in one interview. Two males did not have family members living with them so only they and their health care professional were involved in the interviews. One female did not want me to interview her elderly grandmother because she thought it would be an inconvenience for her grandmother, so her interview is similar in structure to those of the two male bachelors. Some follow-up calls were conducted as required to clarify details.

The interview process involved obtaining informed written consent forms so the participants were familiar with the purpose of the research and to ask any questions about the study, although no questions were asked. Confidentiality, informed consent, and the participants' right to withdraw from the study at any time without having to give a reason were explained. An information sheet and consent form (see Appendix A, B, C, D, and E) were then signed by each participant.

The interviews were conducted at either my office at the Aboriginal Diabetes Wellness Program, the board room at the Onion Lake Health Centre or at their homes, depending on their ability to travel or geographic location. A list of questions was prepared based, primarily, on the explanatory model format. It was suggested to me, by a member of the Aboriginal community, that I ease into the questions because of the sensitive nature of the topic by following a line of questioning that first addresses the past experience, then present situation and future thoughts (see Appendix F, G, H, and I). In addition to these questions, I followed the conversational lead of the participants and asked for elaboration as required. The interviews ranged from forty-five minutes to approximately an hour and a half. Most of these sessions were tape-recorded except for one and in this case I took notes and wrote it up immediately afterwards. I transcribed most of these tapes myself, while Elizabeth Rae transcribed some for me. She signed an oath of confidentiality to ensure this process was completed honorably and efficiently.

The focus group report was conducted during November, 1997. Virginia Gibson directed questions and encouraged discourse, while I recorded the session, took notes, and observed. The focus group was used for preliminary field research, prior to conducting the semi-structured interviews.

Two semi-structured interviews with elders were also conducted using the same procedure as stated above except interviews with family members and health care professionals were not conducted, as doing so was not necessary.

Also included in the findings of Chapter Five is a randomly selected list of written statements from the clients who have attended the Aboriginal Diabetes Wellness Program. The staff members asked the clients to complete the surveys, and I randomly selected the written statements and categorized them into positives, negatives, and suggestions for the program.

The procedure for phenomenological analysis was followed to analyze resiliency among Aboriginal diabetics. According to Rothe (1994), the steps in the analytical process are as follows:

1. Each interview was read several times to obtain a sense of the participants' experiences.
2. Meaning units were extracted to retrieve genuine discoveries in the data.
3. Analysis and categorical themes were formulated based on the verbal expressions of the participants.
4. The meaning units and writer's frame of reference were synthesized and written about.

The following is a list of my presuppositions concerning the experiences of the Aboriginal diabetics under investigation. The compilation of this list was derived from my work at the ADWP as a study coordinator and in consultation with colleagues who had experience working with Aboriginal diabetics.

1. I believed that the Aboriginal culture would make a difference as to how Aboriginal people coped with stress.
2. I suspected that many of the people who developed diabetes were grieving over the loss of a loved one.
3. I suspected that many of the participants were under a great deal of stress due to their socio-economic conditions.
4. I suspected that lifestyle habits either prevented or enabled people from managing their diabetes.

CHAPTER FIVE

This chapter contains twelve explanatory models, derived from interviews with Aboriginal diabetics. family members or friend, and health care professionals from the ADWP. A set of six explanatory models describes those who have improved their health, while another set of six explanatory models describes those who have not improved their health after attending the Aboriginal Diabetes Wellness Program. The primary indicator of improved health among the diabetics is having a hemoglobin A1c value of 7.5 % or less at three and/or six month follow-up. Other indicators include fasting glucose, height and weight measurements that can be compared from baseline then at three and six month intervals. These outcomes are included in two separate tables to illustrate the health outcomes of the Aboriginal diabetics after attending the program. In addition, two semi-structured interviews with Elder Madge McCree and Henry Laboucan are summarized to highlight factors that enable Aboriginal diabetics to improve their health or prevent them from doing so. A focus group report conducted with staff members was conducted to capture the important aspects of what it is like for Aboriginal diabetics to cope with this disease amidst a complex array of social factors and to define a concept of resilience. Lastly, the general views of program participants, collected from an open-ended survey, conducted by the staff, are included for review. The results of the survey have been randomly selected to obtain the program participants' views of the ADWP.

Explanatory Models

Medical anthropology employs explanatory models to bridge the concept of illness, which is psychosocial in perspective, or disease, which is biomedical in scope, to better understand the cultural context of patients [Kleinman, 1980, pp. 72-74]. Although Aboriginal peoples live in Canada, their reality is different from that of non-Aboriginal Canadians. Their socioeconomic status, ethnicity, culture, and marginalized existence cause them to experience and perceive disease in ways that are personal and/or socially adaptive.

The following tables illustrate the outcomes of six Aboriginal diabetics who have improved their health and six who have not after attending the ADWP. The explanatory models are included

thereafter. in narrative form.

Table 1 Outcomes of those who have improved their health after attending the ADWP

	Explanatory Model #1 Sarah	Explanatory Model #3 Noel	Explanatory Model #5 Tom	Explanatoy Model #7 Don	Explanatory Model # 9 Helen	Explanatory Model # 11 Lory
Height	153 cm	184 cm	177 cm	176 cm	145 cm	159 cm
Weight	88 kg	100.5 kg	119 kg	89.5 kg	46 kg	74 kg
FG	7.1	4.8	6.3	5.2	6.6	6.2
HbA1c	0.06	0.1	0.08	0.059	0.07	0.058
Weight 3m	87.27 kg	106.81 kg	117.2 kg	88.63 kg	49.2 kg	Incomplete
FG 3m	5.6	6.7	6.4	5.0	5.4	5.3
HbA1c 3m	0.065	0.062	0.066	0.060	0.065	0.053
Weight 6 m	Incomplete	110 kg	117.5 kg	90.9 kg	50.9 kg	71 kg
FG 6 m	Incomplete	5.0	Incomplete	5.3	5.9	5.3
HbA1c 6m	Incomplete	0.064	0.066	0.059	0.062	0.060

Table 2 Outcomes of those who have not improved after attending the ADWP

	Explanatory Model #2 Charlie	Explanatory model #4 Christine	Explanatory model #6 Michael	Explanatory Model #8 Tony	Explanatory model #10 Kathy	Explanatory model #12 Joanne
Height	166 cm	178 cm	171 cm	181 cm	163 cm	152 cm
Weight	103 kg	111 kg	117 kg	170 kg	98 kg	107 kg
FG	12.2	8.1	23.6	10.8	19.8	13.1
HbA1c	0.08	0.09	0.11	0.08	0.142	0.1
Weight 3m	109.09 kg	103.63 kg	Incomplete	145.45 kg	Incomplete	Incomplete
FG 3m	4.4	15.5	9.9	9.1	16.8	Incomplete
HbA1c 3m	0.064	0.111	Incomplete	0.083	0.131	Incomplete
Weight 6m	106.81	Incomplete	117 kg	145.45 kg	99 kg	106.81
FG 6m	5.5	Incomplete	14.9	12.2	18.3	12.6
HbA1c 6m	0.089	Incomplete	0.119	0.09	0.109	0.099

Explanatory model #1

Sarah [a pseudonym] is fifty-five years of age. Of Ojibway ancestry, she is a reformed alcoholic who is now a traditional practitioner of native spirituality and culture. She is an urban, Aboriginal female originally from Eastern Canada but now living in Edmonton.

Her mother died in 1973 . Prior to her death she tripped on the cord of a heating element and burned herself and never was able to heal. Sarah suspected that her mother's burns did not heal because she had undiagnosed diabetes. With regards to her own diabetes, Sarah first blamed poor eating habits as a cause for developing diabetes. "Growing up, man, like we had a lot of white bread, bannock, dumplings in the stew, pancakes; it was always white flour! Then there was salt pork added

to stew…In the summer, it was great because we had lots of fish, and we ate lots of fish," she recalled. In addition to the diet, Sarah began to talk about her alcoholism.

She quit drinking in 1990. In 1994 she was diagnosed with type 2 diabetes. "I figure it's an imbalance. Too much of the salt, too much of the sugar, too much of the white flour, alcohol included." She identified the consumption of processed foods, fat, and alcohol as responsible for her diabetes.

Spirituality is a primary focus of Sarah and her husband's life together. Jim [a pseudonym], her husband, believes in her spiritual strength. He explained how Sarah had an intuitive feeling about her physical health; she suspected she was diabetic. When she approached the doctor, he dismissed her feelings, telling her, "we can find out if you're really diabetic or not; go home and eat two cups of sugar." Jim said that she was very upset with the doctor's comments "because he meant that in a sarcastic kind of way."

When she did find out that she was diabetic, Sarah said, "I never really knew what to do about it at the time you know. He [the doctor] just mentioned my kidneys and to eat fresh fruit and just forget about the juice, eat fresh fruit and go for long walks…otherwise [that was the extent of it]." She felt that the doctor did not adequately explain what having diabetes would mean for her.

In the summer of 1997, she went to Sault St. Marie and while there consulted with a nurse. It was then that she realized the significance of having diabetes. In the spring of 1998, Sarah sought guidance from the Aboriginal Diabetes Wellness Program. Jim stated that Sarah "felt really good about it," but the first time she called there was no immediate openings available but "she prayed on it and then there was a cancellation and she went".

When she did arrive at the Aboriginal Diabetes Wellness Program, the nurse whom I interviewed said that Sarah seemed ready to learn about diabetes but that she had her own belief system in place. In the nurse's opinion, the spirituality was "a big blinder for her" because she relied on it too much:

> She was open to information, [but] when she would receive it instead of taking it in and doing something with it she would say, I would have to pray on this or do this, and the answers would come for her…In my mind, it prevented her from doing all the technical stuff or the physical stuff on her own. [Personal communication, September 15, 1998].

The nurse stated that preventing complications and adopting a healthier lifestyle involve a lot of hard work and commitment that Sarah had not demonstrated in terms of following a diet or exercise plan. However, the nurse was aware that Sarah had a stressful full-time job. As a result, the nurse thought she neglected herself.

Sarah is over weight, but she manages to control her diabetes effectively (See tables). According to both Sarah and Jim, she tries to eat a variety of healthy foods, although once in a while she will be "bad" and have pork chops with mashed potatoes or a chocolate bar. Anything that may be fattening or sweet they both consider "bad." Meals are difficult to manage because they have different needs. For instance, he likes eggs and bacon but she prefers a slice of toast in the morning, and at suppertime, he will not usually eat potatoes unless they are loaded with butter, but she is not supposed to eat them that way.

Although Jim will eat what he likes, he tries to avoid interfering in her diet because of the experience he saw his own mother endure. Jim's father used to tease his mother about losing weight because she had an eating disorder and a poor self-image, and the teasing made the matter worse, so he does not want to see Sarah feeling that way. Jim stated:

> If I saw her health really deteriorating then I would [interfere]. I wouldn't do it with anger. I wouldn't do it with humor. I would do it with fact. [Sarah] is open-minded enough that she would listen. We would discuss it. [Personal communication, September 15, 1998].

He places a high value on his relationship with her and holds her in high regard. The support she receives from him helps her deal with stressful situations.

Sarah works in a high stress environment on a full-time basis. She spends a fair amount of time in spiritual activities, and this helps her cope with the stress. She follows the nutrition component to the best of her ability and indulges in sweet or fattening foods only occasionally. While it is commendable that she monitors her blood sugar levels daily, she needs to devote more time to exercise. According to the Aboriginal health care professional:

> I think that [spirituality] could be a deterrent if they keep turning all their stuff over. I think it has to be a holistic approach incorporating a little bit of everything not a lot of one thing because I think with diabetes you have to be kind of a doer. [Personal communication, September 15, 1998].

For many people. today's lifestyle is hectic and stress is unavoidable. but Sarah manages to control her blood sugar levels by living a spiritual lifestyle, following a healthy diet, and abstaining from alcohol.

Explanatory model #2

Charlie [a pseudonym] is a fifty-five year old Cree male living in Edmonton's inner city. Charlie is diabetic and an alcoholic, and the combination has been very harmful to him. but like other addicts, he has difficulty staying sober.

Charlie has had diabetes for the past fifteen to twenty years. He was the first person that he knew of who had this disease, and when he found out that he had diabetes, he was shocked and depressed. He blames his alcoholism for the disease, "I drank lots of wine and it has a lot of sugar in it" [Personal Communication, September 21, 1998]. In addition to being an alcoholic, Charlie has been diagnosed with depression, and the psychiatrist whom he sees has prescribed medication for an indefinite period. At times, he has attempted to wean himself off the medication, but when he does, he relapses into his alcoholism.

When asked to define stress factors, Charlie thought in terms of his past. He moved from Saskatchewan after leaving his wife in June of 1997. He stated that he was doing too many things all at once when he worked as a security guard, attended university classes, AA meetings, etc. When prodded to define present stress factors, Charlie stated:

> I still have ten more years now to go before I reach sixty-five. I [would] like to get back into the labor force and overcome my health problems, alcoholism. There is a sense of loss not being able to function in society...I am living with my sister now and that causes tension because of the finances...I guess what I'm getting at is I think she is using my dad for financial reasons and that is pretty depressing too...She practically takes all his old age pension check and he sits there doing nothing. He won't even go for walks he's so weak now, ready to die. [Personal communication, September 21, 1998].

He defines poverty as a stress factor in his life. According to the health care professional I interviewed, Charlie's sister is physically abusive towards him. On one occasion, he had a black eye,

and Charlie had told the nurse that he had fallen down but told another man that "his sister beat him up."

Living on a fixed income, he cannot afford his own place to live and provide food for himself, so he lives with his abusive sister, their father, and his sister's husband. As a result of living in this crowded household, Charlie blames his poor diet on his living arrangement. When I asked him what his diet is like, he stated:

> Right now it's haphazard. It's really no good. That's why I have to be on my own to follow a proper diet. Sometimes I feel guilty just eating at my sister's place. This morning I didn't eat until twelve o'clock for breakfast. It's a hard thing. [Personal communication, September 21, 1998].

One of the ways that inner-city people survive is by going to the churches that provide meals. Charlie tries to cope by accessing any available resources such as eating breakfast at one of the inner-city churches twice a week. When Charlie and his sister arrived for breakfast, the reverend had noticed that they do not sit together, and concluded, they are "not close".

The reverend has observed that unlike other people who pile on food and go back for second or third helpings, Charlie takes one plate, finishes his meal, and then leaves. The reverend was not aware that Charlie had diabetes. He regards Charlie as a courteous person. Although Charlie tries to monitor his food intake by allowing himself only one plate of food, his health is haphazard in many other ways.

He is a binge drinker. He told me that the last time he drank was before Christmas in 1997. During the summer of 1998, some of the staff at the Aboriginal Wellness Program had gone out for a walk and found Charlie passed out or sleeping at a bus shelter in front of the Royal Alexandra Hospital. There is some confusion as to when he last drank. Perhaps he did not want me to know that he drinks as often as he does. Regardless of when he last drank, Charlie is an alcoholic, and he has difficulty maintaining sobriety for very long.

Given his street background, alcoholism, and knowledge of diabetes, Charlie told me what effect alcohol beverages and non-beverage alcohol have on his blood sugar levels. Beer, wine, and hard liquor are considered alcohol beverages, while hairspray, rubbing alcohol, lysol, mouthwash and so on

are considered non-beverage alcohol. The effect of these substances on his blood sugar level varies. He stated:

> It depends on the type of stuff I am drinking. [If] I drink beer, whiskey, wine, it [causes my sugar levels to go up]. If I drink a non-beverage alcohol, like rubbing alcohol, it brings my sugar down because there is no sugar in rubbing alcohol. In beer, whiskey, wine, there is a lot of sugars. [Personal communication, September 21, 1998].

Charlie believes that he is unable to quit drinking because of the state of his mental health. He believes that the causes of his depression are so deeply rooted that he cannot quit. The health care professional at the Aboriginal Diabetes Wellness Program stated that she thought that he was ready to modify his lifestyle because he came back to the ADWP seeking support, but she added that he also needs support from home.

Living with diabetes amidst poverty, family violence and alcoholism in Edmonton's inner city is a difficult challenge. In an attempt to cope with these stress factors, Charlie attends a Bible study class, AA meetings, and a mental health program offered by the Boyle McCauley Health Centre. In his spare time, Charlie listens to gospel country radio programs and plays guitar. When he was at the Aboriginal Diabetes Wellness Program, he said that he enjoyed the native spirituality component. I asked him if he thought there were any differences for him because he attended Bible study classes and the native spirituality workshop. He stated, "We all serve the same God. It doesn't matter to me."

It is dangerous when an Aboriginal diabetic is intoxicated, but Charlie is aware of the situation:

> I hope I don't go back drinking but if I do go back I'm going to go into a coma; that's what I'm scared of, especially if I'm taking needles. This one time I was drinking and I don't even remember this, but my sister told me that there was a needle sticking out of my stomach. I was trying to put insulin in while I was drinking. [Personal communication, September 21, 1998]

For Charlie, managing his diabetes and abstaining from alcohol is a life or death struggle. He is a chronic alcoholic, he suffers from blackouts or a loss of memory, and he is insulin dependent: the sum of this equation is grim. Unless he gets the support he needs and the motivation to quit drinking, his health will continue to be haphazard.

Explanatory model #3

Noel [a pseudonym] is 57 years old and lives in Edmonton's inner city. He is a Cree baby-boomer. During his childhood years, he did not know of anyone who had diabetes. Over time, he began to hear about diabetes, but it was not until his mother was diagnosed that he actually knew someone who had this chronic disease. Noel believes that he has diabetes for two reasons: he is Aboriginal, and because one parent had it, he believes that both he and his sister have inherited the genes that predispose them to diabetes. Noel was newly diagnosed with type 2 diabetes in 1998. After witnessing his friend struggle with an amputation as a result of having this diabetes, Noel was upset when he found out that he had it. He overcame his fear and acknowledged that he needed to take care of himself. He stated:

> At first…it was hard to take, but then I started [to realize] that nobody was going to help me but myself, so I had to take care of this sickness. Every morning I get up now; I know what to do, my diet, exercise, and pills; those are the things I have to do. [Personal communication, September 22, 1998].

By taking care of himself, Noel has shown his hardiness to survive. He opts to take care for himself as opposed to adopting a self-defeating attitude, and this helps him survive.

Life is not easy for him. When he attends ceremonies and feasts, he struggles with the social norms of the Cree culture. According to Noel, "when you're at a feast or something people ask you why you're not eating." He explained that if people understood that diabetics have to watch what and how much they eat, it would make the situation easier to deal with. Noel does not want to violate cultural traditions or bring attention to himself, so he will eat a little bit of everything because "you're supposed to eat it."

Like many Cree families after World War II, Noel's family is a large one. In large families, there is a tendency for members to rely on one another in times of need. So when someone passes away or if Noel is running out of groceries, they help him: "I come from a big family and that's the good thing. I have a few brothers and sisters around, [to] help…towards the end of the month, that is the hardest part." Noel is currently unemployed and is on a fixed income. His diet varies, "Sometimes you can't afford whatever you're supposed to eat so you eat whatever you can." He lives in a small basement suite in Edmonton's inner city, which he shares with two of his siblings.

Despite his financial hardship. Noel is a resourceful survivor. His younger sister. Jeanne. who shares the basement suite with him. informed me that Noel tries to supplement his income as he exercises: "Every morning he goes out for about two hours. He goes walking. He says he is supposed to get exercise so he goes. I don't know where he goes walking: actually he leaves about three in the morning and doesn't come back until six or seven." Having alluded to these early morning walks. I asked Jeanne why he goes out at that particular hour. and she laughed and told me that he picks up bottles or cans in the back alleys. Some days he will get a big bag full of cans and bottles: other days there will be nothing.

As a result of these long walks, Noel's medication level was lowered. The health care professional from the Aboriginal Diabetes Wellness Program informed me that "he was recommended to lower his medication because he was doing really well. The medication was bringing his sugars too low, so the doctor made adjustments for him." The health care professional described Noel's as positive and self-reliant because he was motivated to learn how to balance his diet. exercise and medication.

Despite his routine of walking and picking bottles or cans. Noel has been thinking about moving back to the reserve, but one factor preventing him from making the decision to move is a lack of transportation. He believes that without a car, it would be difficult to go grocery shopping or do much else. While Noel has adjusted to inner-city life, he is still affected by the social problems of that geographic area. Jeanne stated:

> There are about three of my family members that are on the streets here. They drink a lot. They are always at Spady or at the hostel. They come around and they bang on the door; sometimes they bust his windows. They try to come in. They bother him a lot. He's called the cops. They get picked up but they come back the next day. They start that up again. He's been wanting to move, but he doesn't know where to move. He doesn't have enough for a deposit...He gets five something, I think, a month...He wants a place where you don't have to pay for power, that is included with the rent, like what he has right now. [Personal communication, November 13, 1998].

His quality of life could be better if he had good quality affordable housing but in the meantime Noel continues to be burdened by his transient relatives, who know where he currently resides.

Explanatory model #4

Christine [a pseudonym] is a Cree woman, who is in her late twenties. She has a full-time job and lives on a reserve.

She has some beliefs as to what causes diabetes among Aboriginal peoples, but she also has her own beliefs as to what caused her diabetes. As far as other Aboriginal people are concerned, two reasons why they develop type 2 diabetes are advancing age and change of diet from country foods to store bought foods. Unlike most other Aboriginal diabetics, Christine does not have type 2 diabetes; she has type 1, which was diagnosed at the age of twenty-five. In her explanatory model, Christine discusses the practice of native medicine and the mystery surrounding it. She stated that:

> In the beginning I had complications with my pancreas. There was a cyst that was growing there on my pancreas, my pancreatic wall. It kept bursting. It would fill with blood, and then it would burst. My sugars started going high. The doctor's didn't know what was wrong with me for about a year. Then they started checking my sugar and it was high. My blood sugar was high all the time. They fixed my pancreas. They put a gel block or something into my pancreas so the blood wouldn't leak into that cyst any more. [Personal communication, November 5, 1998].

During the course of a year, Christine lived in a state of confusion and fear, beginning to believe that she was going to die. Before they put the gel block on her pancreatic wall and then diagnosed her with type 1 diabetes, Christine thought she had cancer, but her mother would not let her believe that. She stated, "I would be bleeding in my stomach and I didn't know where this blood was coming from. I was throwing it up...I was really scared that I was going to die with all this bleeding and stuff." [Personal communication, November 5, 1998].

Christine believes that part of the reason she has diabetes is the cyst on her pancreas, which prevents her body from producing insulin. She thinks that the gel block placed in her pancreas by the doctors fixed that problem. However, other events occurred at that time, and she believes that it is the other events that also cured her.

Before Christine was diagnosed with diabetes, both Christine and her mother were learning about native culture and spirituality. Her mother would "take away their illness when they were sick. She would take them and she would suck from their mouth and their nose and from their head" [Personal

communication, November 5, 1998]. During one of Christine's illness episodes, her mother treated her using this approach while she was in the hospital. After this native treatment, the doctors finally had a breakthrough and discovered the problem with Christine's pancreas. Meanwhile, as Christine's health improved, her mother's health started deteriorating.

In November, Christine's mother started getting ill. Some of her symptoms included not being able to eat or drink. In early January, her mother was told that she had cancer of the throat. The doctors tried to remove it surgically, but on the seventh of January, she died. In the sadness of that moment, Christine shared a story about a mother's love and sacrifice for her daughter, tragically ending in death. Cree people have their own ways of treating sickness and coping with diseases, and Christine's story reflects this. Science cannot explain this particular type of phenomena, but her story acknowledges that there are ways inherent within native culture for treating disease. The ultimate cause and treatment of an undiagnosed medical problem can be discovered by a gifted and experienced medicine man or woman.

Christine is willing to further explore native culture and spirituality as an alternative approach to mainstream biomedical services because she does not want to take insulin. She has heard of an insulin dependent person who went to see a medicine woman and has been successfully treated for her diabetes. She was planning on seeking out the medicine woman.

The health care professional from the Aboriginal Diabetes Wellness Program has heard stories of people being treated for diabetes and cured. Other than these stories, there has been no concrete evidence or scientific proof of a potential cure or treatment.

The health care professional I interviewed did not know about the surgery or that Christine had type 1 diabetes as opposed to type 2 until she read the file. Therefore, the health care professional could not discuss this aspect of the case. The health care professional thought of Christine as a person who was more active during certain seasons and, therefore, recommended adjusting her insulin levels under the supervision of a physician when she was playing sports. When I interviewed Christine's roommate, she stated that Christine was not exercising. This explains, in part, why she had high blood sugar levels. The roommate also said that Christine does eat whole grains and other healthy foods but that she also has a habit of indulging in chocolate bars.

Despite the fact that Christine is aware of the treatment and methods of both native and non-native worlds, her sugars are still high. She blames this on her love of chocolate and the stress she faces at work. Finding a balance is difficult when one lives in two worlds.

Explanatory model #5

Tom [a pseudonym] is a Cree bachelor; as a result, I was unable to interview a family member who knew what his lifestyle habits were like. Tom lives on a reserve. He was diagnosed with diabetes two years ago, but it did not come as a surprise to him because both his mother and some of his siblings have it. Tom thinks he has diabetes for two reasons: a genetic predisposition to it and poor eating habits.

His sister, who is very close to him, was concerned about his diabetes because she has been unable to manage her own and fears the same for him. Tom says that his sister is in denial about having diabetes, and as a result she does not take care of herself. In some ways, Tom is a martyr because he wants to prove to his family members, particularly his sister, that this disease can be controlled. He does not look at having diabetes as a negative; he views it as a challenge to take care of himself physically and spiritually. His motivation for thinking positively stems from his upbringing:

> I look back at the way we were brought up…my parents would never me allow to feel [defeated and to] never give up, especially my father. He refused to let me give up…This is how I lived my life. If I am stuck I got to stand up and look at it [the problem or situation] from all angles. [Personal communication, November 5, 1998].

Tom's father had a tremendous influence on his attitude towards life and Tom was disciplined to be the person he is today. When his siblings went to social events, Tom was told to stay home and work. For years he resented his father, and it was not until his father apologized for his lack of parental love and support that they developed an understanding. Although he had resented his father, many of Tom's characteristics are similar to his father's, in particular self-discipline and self-control. Today he views himself as a father figure to the rest of his siblings.

When Tom arrived at the Aboriginal Diabetes Wellness Program, he talked about his inner strength and spirituality. According to the health care professional, Tom believed that the spiritual aspect of the

native culture would help him cope with his diabetes. With regard to his physical health the health care professional said that "he was over weight but his blood sugars were not too bad." She added, "he didn't have them in good control but was on the way to doing so" [Personal communication, November 12, 1998]. The health care professional believed that Tom was not only attending to his physical health but also discovering a path of wellness for himself.

Tom said he enjoyed the sharing circle because it helped him to release some anger and frustration over past issues that occurred as a result of his residential school experience. After venting some of his emotional issues during the four-day program, Tom was determined to control his blood sugar level within a safe and healthy range:

> I was almost punishing myself for having my sugar too high. Then one night I had a dream [the message was], 'Relax! Take it easy!' So I did. The more relaxed I was, the more easy [on myself] I was, then my sugars stayed [within range]. [It was] because I was frustrated [that] I couldn't [get the blood sugar levels down]. [Personal communication, November 5, 1998].

Since attending the Aboriginal Diabetes Wellness Program, Tom has been coping with his stress by talking it out at a men's wellness circle in his community. Other ways that help him deal with his thoughts and feelings are through meditation or going for a walk.

He walks every day after supper to maintain a healthy blood sugar level range. He does not eat any fried foods at all. Most of his foods are boiled, he said. He monitors his blood sugar levels twice a day. Although he finds it difficult to lose weight, he intends to keep on exercising.

Most of the diabetics I interviewed said their worst fear was facing a complication. Unlike the other diabetics whom I interviewed, Tom said his worst fear was losing control. I asked why, and he stated that he would feel like a failure if he lost control, and when he feels like a failure, he works harder because he wants to be in good health and to set an example. It is not an easy task to be so self-disciplined, so once in a while he indulges in sweets. At Halloween, Tom stated he ate two donuts and he saw this as "falling off the wagon," but he tries not feel too bad about it. Given his remarkable control, he is also learning to "take it easy".

Explanatory model #6

Michael [a pseudonym] is a Cree teenager with diabetes, who says he cares a lot about his health but does not know how to manage his diabetes even though he attended the Aboriginal Diabetes Wellness Program. In general, he liked the program, particularly the talking circles because of the opportunity to listen to others' experiences or to talk about his own.

After leaving the four-day program, Michael was doing well managing his diabetes; he applied the information for a while but he then became apathetic towards managing his diabetes. He has extremely high sugar levels and is overweight. His mother said that he does not take his pills, monitor his blood sugar levels, or do much else for himself.

Michael comes from a large family who live in poverty in the inner city. He, his mother and disabled father, four other siblings, as well as their girlfriends all live under the same roof.

His mother Melissa [a pseudonym] says her son does not listen to her: "He won't go to the doctors or take his pills. He won't poke his finger. He won't do nothing" [Personal communication, November 16, 1998]. Like many mothers of teenage boys, she feels frustrated, worried, and helpless.

When Michael attended the Aboriginal Diabetes Wellness Program his mother dropped him off and then left. The health care professional at the program thought the mother should have stayed to support her son because doing so would have enabled her to help her son at home. The health care professional stated that "the fact that she wasn't there, and from hints indicated [by Michael], the adults in his life are too busy for him" [Personal communication, December 14, 1998]. The health care professional informed me that "he takes care of a lot of his own cooking, and if his mom were cooking, then it would be for a large group of people." She added that it was the "same with the shopping" [December 14, 1998]. The health care professional was concerned that Michael did not have enough healthy food choices to eat at home. For a Cree teenager who has diabetes, living in poverty is extremely difficult because one is dependent upon the adults to provide nourishment and support. The health care professional stated:

> Certain foods weren't available to him...especially the health choices that would be more expensive, such as fruits and vegetables. He would eat a lot of bologna and the cheaper meats that didn't require cooking, a lot of canned stuff. Plus even with his own attitude towards foods his

response would be, 'if my mom could get it', or 'if my mom would cook it'...[the phrase] 'well there is a lot [of food] at home I can choose from.' ...was never a statement from him. [Personal communication, December 14, 1998].

In many instances Michael informed the health care professional that if there were not any food choices available he would eat a bag of chips. The health care professional concluded that his poor health was partly an economic issue and partly resulting from peer pressure. She said that "teenagers eat certain kinds of foods with their friends and maybe it's un-cool to have an apple while everyone else is eating a bag of chips" [Personal communication, December 14, 1998]. The adolescent phase to adulthood is a difficult one, especially when it is compounded with poverty.

The Aboriginal Diabetes Wellness Program does not offer a session for teenagers. The young people who have participated in the program sit in with the adults. She stated that "even though kids can still have a maturity level, it still may not always give them the opportunity to discuss what's going on with them" [Personal communication, December 14, 1998]. The health care professional thought that the teenagers would be unable to relate to the residential school experience because it was not a part of their past; however, they may be able to relate to it if their mothers or grandmothers went to residential schools. She added, "I bet they are going through other issues though" [Personal communication, December 14, 1998].

The residential school syndrome has created what is known as multigenerational trauma. Children of parents who have gone to residential schools may receive the same treatment that their parents were subjugated to as a result of the parents' not seeking any form of therapy to cope with their experiences'.

Explanatory model #7

Don [a pseudonym] is a fifty-five year old, Cree, man living in Edmonton.

For the last fifteen years Don did not accept the diagnosis that he had hypoglycemia; instead, he related his constant fatigue to heart problems. Don had a heart attack in 1994 in which his heart stopped for fifteen minutes. He was given shock treatment seven times and was brought back to life. After having been on the brink of death, Don began to wonder why he was constantly tired.

Don has thrived on work all his life. He has worked for the public service for twenty-five years. He is responsible for managing job sites and has been responsible for over one hundred employees. After fifteen years of a troubled marriage, he got divorced and raised two sons alone, a process he found to be very stressful. He believes that work is the best medicine for anything, so after working twelve hours a day, even though he would be extremely tired, he would want to work even longer if his fatigue had not prevented him from doing so. After having been referred to the Aboriginal Diabetes Wellness Program by a friend, he realized that his fatigue stemmed from having low blood sugar levels. He stated:

> The part I like...is the thoroughness of this program and the way they take time to help diagnose you. I'm fifty-five years old, and this is the first time that I know exactly what is needed for my low blood sugar. [Personal communication, December 3, 1998].

Prior to attending the ADWP, Don would sleep if he was tired, instead of having a small snack, and he realizes now that this "haphazard way of surviving" could lead to complications such as a diabetic coma. While attending the Aboriginal Diabetes Wellness Program, he utilized the information he was given by the dietitian, who showed him exactly how and when he should eat.

Having lived in Edmonton for many years and also having worked for the past twenty-five years, Don felt a cultural loss, and so he appreciated the spiritual component offered at the Aboriginal Diabetes Wellness Program. This aspect enhanced his opinion of the program services:

> The part I really liked was the spiritual aspect of the program. The healing part, I'm back into the spirituality of things. I have been for the last ten years kind of lost. When you work in mainstream society and then you work with Aboriginal people [there is a difference]. [Personal communication, December 3, 1998].

Although he has felt separated from the native spirituality because of his work environment, Don manages to periodically visit the communities of Calling Lake and Desmarais.

Don and his common-law wife, Denise, are very interested in their Cree spirituality. Don and Denise often travel northward to visit their respective communities, and when they do, traditional foods are plentiful. Don mentioned that when they visit her family, "everyone kind of looks at me funny" when he takes a small portion of food. He said that she defends him by telling them that he has

to watch his diet because he is a diabetic, and so they all praise him for having the inner strength to eat just a small amount of traditional foods. She stated:

> He really likes the deli part of the traditional cooking like the moose nose and stuff like that. We both like it, and I always eat a bigger amount than him. He really, really, has to watch what he eats...It is really hard on him when we go to things like that, feasts, but he has learned to control himself. Some traditional foods are fattening too, so we have to watch what we eat. [Personal communication, December 8, 1998].

Overall, his diet is healthy. He eats whole grain bread, fruit, chicken, and fish. Once in a while, he eats a bag of chips or a chocolate bar. Denise informed me that in comparison to how he used to eat, his eating habits have changed considerably, and the ADWP has influenced his dietary habits.

In relation to stress, Don disclosed that one of his sons committed suicide on October 1, 1997. About this incident, he stated that "stuff that I have no control over really bothers me." He is in therapy to cope with the loss of his grown son, and it is a healing process that he "would recommend...to anyone who is grieving" because keeping the emotions inside will prevent the healing that needs to occur.

Explanatory model #8

Tony [a pseudonym] is of Metis ancestry, whose work was his life. He was an ironworker whose job took him all across North America. He enjoyed the money and travelling involved. One day, four and half years ago, his life changed forever. He was working at a waste treatment plant in Fargo, North Dakota when he had his accident. Occupational injuries among males are high, particularly among twenty-five to thirty-four year olds [Alberta Labour, Occupational Injury and Disease in Alberta, June 1998]. At the time, Tony did not know that he was working with an inexperienced forklift operator, and this was the cause of his injury. It happened at the end of the day while they were unloading steel: "As I was trying to signal to lower the forks, he tilted the forks forward and the bundles of steel came sliding off the forks" [Personal communication, January 8, 1999]. The steel fell on the steel: it crushed his left leg, and a doctor told him his leg needed to be amputated. Fortunately for him, another doctor was able to save his leg and it was while he was in the hospital that he was told

that he had high blood sugar levels. To treat the type 2 diabetes the medical staff put him on insulin for two to three months and then on pills.

Tony is 53 years of age. He has had type 2 diabetes for four and half years now. He lives alone in the north east part of Edmonton, and because he lives alone, I was unable to interview any family members to discuss his lifestyle.

According to Tony, type 2 diabetes runs in his family; his late mother, late sister, and two brothers have this disease. At the time he first attended the program, Tony was extremely obese, weighing 170 kilograms. Three reasons that he thinks he has diabetes are lifestyle habits, a genetic predisposition, and being Metis and having gone through rapid acculturation.

When Tony attended the Aboriginal Diabetes Wellness Program, he did so initially to support his diabetic mother, but once he was there, he joined the program as a full participant. While he was at the ADWP, his sugar levels ranged from 8.5 to 17.0, which is high. Because of the injury to his leg and his heavy weight, Tony informed the Aboriginal health care professional that exercising was difficult. She thought this was why he had high blood sugar levels. Although he mentioned that he wanted to lose weight, his motivation level was not high and his attitude was not positive. The health care professional stated that "his interest wasn't totally there" [Personal communication, February 4, 1999].

Since he first attended the program, his life has taken a turn for the worse. Within a year of attending the program, his mother died of leukemia. In 1992 cancer was the third leading cause of death among First Nations people in Alberta [Medical Services Branch, Health Canada].

In December of 1998, Tony admitted himself into the emergency department of the Royal Alexandra Hospital; he had cancer of the kidney, and the doctors operated on him. They took one of his kidneys out, and now he is living with one. He has had an extremely difficult time coping with the cancer and diabetes. He stated:

> Well to tell you the truth when I had heard of that cancer I was pretty well ready to give up on life. The shock of having it, even just the word of cancer, really scared me because all of my uncles and my aunts on my mother's side of the family died of cancer. It didn't take them very long to die. I guess they were up in age and I guess it got into the blood where it would spread more than

what I had. The tumor was inside my kidney, so by removing the kidney they had removed all the cancer. [Personal communication, January 8, 1999].

Surviving the cancer operation, the loss of his mother, and the loss of his wife as a result of divorce have caused Tony to examine his life. These events have also prompted him to look after his health including his diabetes. He now checks his blood sugar levels three times a day, but unfortunately his lifestyle habits have not changed. The operation still causes discomfort and he is unable to exercise. He drinks alcohol, an unhealthy way to cope with his life circumstances, and he takes prescribed medication for the pain as a result of his operation. The combination is not helping him improve his quality of life.

Despite his hardships and loneliness, he has dreams and ambitions of reclaiming his life back. He wants to go to Alaska and is thinking about buying a truck and equipment to travel there. As he spoke about travelling to Alaska, all I could do was imagine stark whiteness and I connected this image to the spiritual significance of travelling north. One symbolic representation of north, on the medicine wheel, is the completion of a life cycle. The thought just came to me in the moment of the hushed silence.

Explanatory model #9

Helen [a pseudonym] is a seventy-two year old, Cree, woman; who lives on a reserve in Northern Alberta. Despite her disability from poliomyelitis, and having had tuberculosis, and now painful arthritis, Helen sees herself as a survivor. She manages her diabetes well.

The first time she knew of anyone who had diabetes was when she was a girl in a residential school during the 1930's and 1940's. The nuns talked about one of her schoolmate's having diabetes but, as a child, she never knew what caused it. So when Helen found out that she had type 2 diabetes, she panicked because she feared what complications would mean for her, given the fact that she was already disabled.

Like many elderly people, Helen's fears stem from incidents that have happened to her while she was alone. Her husband, who is hearing impaired, was outside doing yard work at the time. She stated:

> One morning I was doing the dishes in the sink and I started to feel weak in my arms and legs. I started wondering what was happening to me. I was yelling to someone and tried to make it to the couch but I fell flat. My arms were so weak, and I just kept rubbing myself and I had a glass of water beside me, so I drank that, and that revived me. [Personal communication, December 5, 1998].

After she went to the hospital for blood tests, the doctor told her that she had "a bit of sugar" in her blood. Since the incident, Helen has had an appointment with the local dietitian and is monitoring her blood sugar levels and following a diet. She also attended the Aboriginal Diabetes Wellness Program. One of the suggestions that she was given and has followed up on was doing chair exercises as she has difficulty walking.

Her daughter Melissa [a pseudonym], stated that she eats plenty of fruit and cheese along with wild meat and fish. The cost of food in the community is high for her, so she will often ask her daughter, who is making a trip into Slave Lake, to buy her some groceries. Melissa stated:

> One time I came to Edmonton. I asked her if she wanted anything. She wrote on her list that she wanted naked chicken! We didn't see the list until we were in the store. I asked her why she wrote that she wanted naked chicken. She said I didn't know what to call "skinless" chicken! [Personal communication, December 10, 1998].

If one does not know the English language well and tries to communicate in a written form thinking Aboriginally the result is Indian humor. Although neither Helen nor Melissa stated that they use humor as a coping mechanism to deal with stress, laughing is good medicine.

Unfortunately, in the community that she lives in, there is not a lot to laugh about considering the serious social problems. There is a lot of drug and alcohol abuse and as a result of that lifestyle there is a high mortality rate, and because the community is the way it is, Helen worries. She worries about the health and safety of her children and grandchildren.

When she is stressed out, Helen tries to keep herself busy by sewing or going out for a drive with someone or having visitors because there is not much else for elderly people. Melissa stated that her mother talks about her problems or her mother will find out what is going on by phoning someone.

Talking about the social problems within the community is a way for her to cope with her worries and fears. At the end of the day, "she prays every night" as elderly native women do.

The Aboriginal health care professional stated that Helen had attended the ADWP with prior knowledge of her diabetes symptoms and complications. Therefore, the health care professionals were able to reinforce the knowledge she already had, and Helen was able to learn the benefits of chair exercises. The health care professional stated, "she has a positive attitude towards her health in some ways; for example, she is able to limit her intake of food, not over eating, and she checks her blood sugars" [January 4, 1999]. However, Melissa thinks that her mother is too strict with her diet because one day her blood sugar level was below four. She worries about her mother going into a coma from having low blood sugar levels, so she always tells her to eat. Helen says that since she has been on the diet, she has gone from 135 pounds to 112 pounds, and she takes her blood sugar levels very seriously.

I asked her whether she cared a lot about herself. She responded by saying that she is trying to survive to avoid her fear of having another dizzy spell. From her point of view Helen has always had to be a survivor otherwise, "I would just lay there in bed with nobody to take care of me" [Personal communication, December 5, 1998]. She is someone who does not give up.

Explanatory model #10

Kathy, and her husband Bill, are Cree people; they have a home on a reserve in northern Alberta. Kathy has had type 2 diabetes for ten years.

Unlike her grandparents who ate country foods from the land, Kathy recalls that when she was a child, she was introduced to puffed wheat and other store bought foods. Her grandfather was a hunter and her grandmother was a traditional healer. Despite being a Cree healer, her grandmother developed type 2 diabetes. Kathy stated:

> I don't know why she got it. She looked after herself. She was living the old [way]. We weren't into all kinds of fried stuff and everything...I remember we had dried fish. We used to smoke fish, can berries; we always used to pick berries in the summer and yet I have no idea where it came from...I remember as a child, my grandparents would talk about these diseases, like sugar

diabetes, and they figured it came from canned stuff, store bought canned food stuff [Personal communication, February 6, 1999].

A combination of the old way with the new was not enough to prevent her grandmother from developing type 2 diabetes. Kathy also thinks that genetics plays a role in inheriting this disease. Kathy stated, "one time I went to a workshop and I heard that everybody carries that little gene or something in their body and when something traumatic happens it [brings on the diabetes.]" She thinks that this may be true because in her grandmother's day there were no fast foods.

When she attended the Aboriginal Diabetes Wellness Program, the health care professional noticed that Kathy "was knowledgeable about [diabetes]" and even though she would give herself insulin on a daily basis she would not accept responsibility for managing it [Personal communication, February 19, 1999]. Her husband, Bill, said she was "rebelling" against it [Personal communication, February 6, 1999]. He said, "she puts her lard on her duck...she eats her fat choices" [Personal communication, February 6, 1999]. Kathy clarified what was meant by fat choices:

> When we talk about fat choices, like all my old diabetic friends, when we talk about fat choices we are talking about the fat on the meat that we are eating, especially if it is moose meat, like ribs or chest meat. We are not talking about how many fat choices are in that [blue berry muffin]. We are talking about [actual] fat. Our fat choices! [Personal communication, February 6, 1999].

She will not follow any dietary restrictions and chooses to eat fatty meats as she wants. He avoids eating fatty foods to set an example for her, but she continues to eat her "fat choices." To him, the reason for this is that "she just likes to be ornery" [Personal communication, February 6, 1999].

Her blood sugar levels have ranged from eleven to eighteen, which is not within a healthy, safe range, and she knows this. Over the New Year, she made a resolution to take her insulin on a scheduled basis, and rather than having high blood sugar levels, they have reduced to the eleven and twelve range. This is the only change that she has made to try to improve her health.

When she is under stress, Bill says she takes it out on him by not talking to him or anyone else. Bill is a very frank type of person. After thirty-three years of marriage, he has developed two approaches to her moods: "I have to laugh at her, tease her [to] bring her out [of it], eh" [Personal communication, February 6, 1999]. The other method is to avoid her, "I am like an old wolf, who once in a trap doesn't

go back. You learn to stay away once the teeth come out" [Personal communication, February 6, 1999]. When she is in a mood, Kathy says she goes to her room and reads.

As for exercising, Kathy says the only walking she does is at work. She is on her feet all day, and by the time she gets home, she is tired and her feet get sore. She told me that she wears a pair of store-bought native slippers which are comfortable for her but do not provide enough protection against any possible foot injuries. With diabetics proper footwear is important because if they step on a tack or something sharp, they may or may not feel it penetrate. When a person has high blood sugar levels, a foot injury may not heal normally and an amputation can result. Her worst fear about diabetes' complications is amputations. Lately, Kathy's feet have been sore and she thinks it might be arthritis.

She told me that her doctor is very concerned about her diabetes and has asked Kathy to visit every six weeks, but she refuses to go. Kathy asked, "if I am feeling good, what do I need a doctor to see me for?" The health care professional at the Aboriginal Diabetes Wellness Program said that they wanted her to increase her activity levels and wear proper footwear. Having a defiant attitude and doing what she wants to as far as her diabetes is concerned have not been very helpful for her, but only she can choose to take proper precautions for herself.

Explanatory model #11

Lory [a pseudonym] is a Cree woman, and she is thirty-seven years of age. At the time I interviewed her, she was attending a follow-up session at the Aboriginal Diabetes Wellness Program. Her husband and grandmother attended with her, but I was unable to interview either of them. Her husband had left early to go back home, and she did not want me to interview her grandmother because she thought it would inconvenience her.

Lory's grandmother is the first person that she knew of who had type 2 diabetes. As a teenager she recalls having to practice injecting a needle into an orange because her grandmother wanted her to know how to do it in case she went into a coma. Her grandmother raised her, and Lory feels very close and protective of her.

Two years ago, after having had dizzy spells, Lory was diagnosed with type 2 diabetes. She was scared, so she went to see her grandmother for advice. Her grandmother told Lory that she had to

adjust her diet and exercise. Lory stated. "I love to eat fried foods. I still do but I try to stay away from it as much as I can...My granny told me I have to exercise, so she helped me a lot" [Personal communication. January 22. 1999]. Since she has been diagnosed with type 2 diabetes. Lory has lost thirty pounds through monitoring her food intake and exercising. Lory is relieved that she does not have to take insulin or pills because she is able to control her blood sugar levels by watching her food intake.

She can control factors such as diet and exercise but not external factors. The most stressful thing that happened to her occurred when her eleven year-old, son, died in a fire arms accident. During the period of 1983 to 1995. forty percent of all deaths among status Indians were a result of injuries, either intentional or non-intentional [Medical Services Branch, Health Canada]. From 1983 to 1995. there were fifteen unintentional deaths among status Indians related to firearms [Medical Services Branch, Health Canada]. Regarding her child's death, Lory stated:

> He was eleven. He shot himself accidentally. He had an old gun. It was from the bush...one of our uncles left it there because it was old. It was right in the bush [and] back then there was lots of trees. They [the children] were playing and he was banging it and then he shot himself right here, shot all his insides. [Personal communication, January 22, 1999].

His death was extremely devastating to her, and it could not have happened at a worse time. While her son was dying in the bush, she was giving birth to a baby in Edmonton. This accident occurred eight years ago. As a way of dealing with this tragedy, she found comfort in food: "It bothered me...I used to just eat and eat and eat" [Personal communication, January 22, 1999].

Death and grief are no strangers to her. In addition to grieving the death of her son, Lory is also grieving the loss of her aunt who died of cancer three years ago. As well, she is attempting to convince a suicidal teenager not to kill herself. In 1992, suicide was the leading cause of injury death among First Nations in Alberta [Medical Services Branch, Health Canada]. If this girl is successful in committing suicide, Lory says that she may not be able to cope with it in a healthy way, and this means relapsing from sobriety.

Lory used to drink alcohol, but she no longer does. She quit drinking and has become a caregiver in her community. She helps children who have no place to go by providing shelter and a meal at her

place. When she sobered up, she did it on her own without help from Alcoholics Anonymous or any other support group. She gets her support from her husband, grandmother, and best friend. Right now, she manages to cope with her stress by escaping to play bingo and going to the arena where she volunteers with minor hockey or goes for a walk to her best friend's place.

What motivates her to manage her blood sugar levels is her fear of not wanting to rely on insulin or pills and to further avoid the risk of an amputation. According to the health care professional at the Aboriginal Diabetes Wellness Program, "she is doing well physically but there are still emotional issues from the past that she kind of brought up during the sharing sessions in the circle" that need to be addressed [Personal communication, February 4, 1999]. Lory needs to deal with the emotional aspect as another positive step towards holistic health. If she deals with her emotions, she may be able to find the inner strength and self-love that is required to bounce back in the face of adversity.

Explanatory model #12

Joanne [a pseudonym] is an elderly Cree woman who lives in Edmonton with her grandchildren and great-grandchildren, and she works full-time. Four years ago, prior to being diagnosed with type 2 diabetes, there were three deaths within her family. She was in a grieving stage. Then three years ago, she was diagnosed with type 2 diabetes. Three years ago before her diabetes, Joanne noticed that when she would drink two beers, she would feel as though she had drunk more than that, and now she abstains from alcohol and cigarettes entirely.

Both Joanne and her brother are the first two family members to develop type 2 diabetes. Three years ago, when Joanne first found out she had it, she cried because she already had arthritis and high blood pressure. She thought that there was nothing she could do to control it.

When Joanne first attended the ADWP, she had a high hemoglobin A1c levels of 0.13, according to the health care professional [Personal communication, February 19, 1999]. In addition, she was obese, which made it very difficult for Joanne to walk because she also had knee problems. It was recommended to her to try to lose weight, become physically active and wear proper footwear. When these recommendations were given to her, the nurse thought that Joanne "didn't want to hear it and really didn't accept it" [Personal communication, February 19, 1999].

Joanne attended the program because she was interested but not ready to make a commitment to changing her lifestyle. When Joanne has high sugar levels, it affects her health. She stated:

> I always feel like I'm worn out and I just have to go home and sleep. I just feel played out all the time. Sometimes I have my bad days. When I get up in the morning, I can barely get up out of bed and I just make myself come to work. [Personal communication, February 19, 1999].

In addition to working full-time, Joanne is a grandmother and great-grandmother, too. The stress takes a toll on her emotions. When her grandchildren have personal problems, she worries about them, "it's like it's my problem, too, [and] I know I shouldn't think that way but I love my grandkids and try to help them as much as I can" [Personal communication, February 19, 1999].

Two of her grown grandchildren, Trisha and Sonya, [pseudonyms] spoke to me about their grandmother. Trisha said that when her grandmother is not feeling well, "she gets grouchy at us," so they clean up the house and stay out of her way. She stated, "when she comes home, she goes to sleep, gets up and goes to work, comes home, and sleeps, [that] kind of thing" [Personal communication, March 10, 1999].

Prior to Christmas, Joanne said she was making some effort to change her diet and lose weight because she has an enlarged heart. Then she went off her diet during the Christmas holiday.

Since then Joanne has been trying to make some improvements in her diet. Instead of eating fast foods or fried foods, she has been making homemade soup three times a week. Sonya said that before "she wouldn't care what she [ate]...now I think she is trying to watch what she eats" [Personal communication, March 10, 1999]. Trisha said that their grandmother has told them that "she wants to live longer for her grandchildren, [and] her great-grandchildren" [Personal communication, March 10, 1999]. Sonya and Trisha stated that their grandmother does monitor her blood sugar levels, but as far as they know, she does not exercise except for the babysitting she does occasionally or the walking that she does at work. She is making an effort but needs to continue on a healthy path.

Joanne is not a believer in native spirituality but prays to the Lord that her health will be good because her worst fear about having diabetes is having to go for renal dialysis.

Interviews with the Elder and Cultural Helper

Interview with Madge McCree:

Madge McCree is a busy elder. She carries her pipe from the town of Slave Lake to Edmonton, and she provides a variety of services to the Aboriginal Diabetes Wellness Program. She is a women's pipe carrier. She provides a variety of teachings for all program participants. She facilitates the sharing circle and offers one-on-one counseling. Sometimes, she translates between the doctors and patients at the Aboriginal Diabetes Wellness Program. Some of her apprentices say that when she speaks, her words come from the spirits, who channel their voices through her, though this might seem unbelievable to people steeped in western scientific knowledge. On the other hand, Madge realizes that not all people believe in spirits, so she has openly explained how she has come to learn some of her wisdom and knowledge.

Madge McCree bought a set of posters while she was attending a diabetes conference in Winnipeg. She was told the posters contained Ojibway teachings, and so she paid thirty-five dollars for them. At first Madge was disappointed because she could not see the relevance of these teachings, so she put them away in her home but five years later she reviewed the pictures and had an epiphany. She realized that the wisdom was already in her and all she needed to do was relate the virtuous words of wisdom contained in the posters to her own life and those of others. The teachings of "The Seven Grandfathers" are the virtues of wisdom, love, respect, bravery/warrior, honesty, humility, and truth.

In addition to these poster teachings, Madge McCree also shares teachings she has received from her elders. "The Five Little Devils" are teachings that alcohol and drug rehabilitation programs such as Poundmaker's Lodge shares with its alcoholic clients. Essentially, "The Five Little Devils" are vices that can lead one down a path of self-destruction. The teachings are similar to the religious construct of "The Seven Deadly Sins," sloth, lust, gluttony, envy, avarice, pride, and anger. "The Five Little Devils" are not caring, fear, jealousy, anger, and revenge. Similarly, the moral message is to avoid these vices to live a virtuous or good life.

She teaches the virtues of "The Seven Grandfathers" and vices of "The Five Little Devils" through the oral tradition of story telling. Often, the stories Madge shares are told in the first person. She talks

about her own personal experiences, and other times she shares the stories of other people. As a result of listening to Madge McCree's stories, participants are able to connect to the teachings.

During my interview with her, she shared her personal view of having diabetes. She said it was "traumatic" because the physicians did not explain the etiology of diabetes nor did they reassure her that she could "live a normal life." When she first found out she had it, she was fearful of it:

> Well I didn't really understand it. [I didn't think that] the people with diabetes could live a normal life because nobody explained it to me. [In my case], it was just that I had diabetes [and] I had to take care of it. [The] doctors never really explained that I could live a normal life. [Personal communication, August 27, 1998].

Fear is an inhibitor to managing diabetes. If individuals are in fear of the disease, they are unable to understand and learn how to manage it. At the Aboriginal Diabetes Wellness Program, staff teach experientially rather than lecturing, and this empowers the participants to fully understand the disease. Once a person understands the etiology of the disease, he or she will have the hope, strength, love, and understanding to prevent diabetes mismanagement. By monitoring their blood sugars, Aboriginal diabetics begin to learn and understand how stress causes their blood sugar levels to increase. They become aware of how emotions affect the body; thus, a person becomes motivated to begin to apply a holistic approach in the management of diabetes.

Conversely, if individuals do not care about themselves or their disease, they become self-destructive: "If we love ourselves, we don't hurt ourselves," said Madge McCree who added that hurting oneself implies over-eating, being physically inactive and not managing stress in a healthy way. Unfortunately, lifestyle changes are the most difficult ones to make, and unless the individuals have the resources or the means to support the changes they need to make, it can be difficult to be consistent with the necessary changes over a period of time. The individual may relapse into apathy because he or she lacks self-love and support, be it financial or emotional.

At the ADWP, the staff members discuss what it means to have inner strength by encouraging spirituality. This approach offers an empowerment tool to enable Aboriginal diabetics to take responsibility for their health. McCree states: "Their prayers are giving them hope. They can help themselves so that they won't have that helpless feeling that they come in here with. Most of them

come in with that helpless feeling. By the time they leave I see that feeling going because they start to feel [good]." [Personal communication, August 27, 1998]. It requires inner strength to control diabetes. Inner strength is a spirit that comes from having faith in the Creator, to help one through the day because each day is a gift, and by praying in the morning, one gives thanks for the new day and prays, too.

A primary factor preventing people from having self-love and inner strength comes from the past, a past in the residential schools. McCree states, "I have heard others say that [diabetes is caused by having] a wounded spirit. The pancreas lives right [there] (she touched her abdomen), the spirit lives there, and the pancreas lives there, so it's caused from not loving yourself. Holding a bunch of stuff in from the past [is unhealthy]. I feel that just talking about it, is getting rid of [the bad feelings]. A lot of [the Aboriginal diabetics] speak about the past, the hurts and the pains that have happened. Within the few days that we have with them, they feel a lot better because they release that stuff." [Personal communication, August 27, 1998]. The talking circles and individual time spent with the staff and elders help give them the opportunity to disclose their personal issues.

Four days is not enough time to deal with a lifetime of personal pain and to teach about diabetes management. In the four days that are offered to the Aboriginal diabetics, seeds of hope are planted in them: "We give them the opening to start talking about it. So I imagine when they go home they open up more," stated McCree [Personal communication, August 27, 1998]. According to the quantitative data that have been collected for the Capital Health Authority and the University of Alberta evaluation of the Aboriginal Diabetes Wellness Program, some people are improving their health after attending the program and others are not. An explanation for this is a lack of support. McCree stated:

> It's probably that they have more support when they go home. They need it...To me diabetes is an everyday thing. It's really easy to lose hope with something if you don't have a support group...I feel that the communities are responsible [for their people] after they leave here to set up something for them. [The communities should] not expect us to change everything because it has to be an on-going thing. You need to grow. It's just like weight loss, it's just like A.A., it's just like anything, gambling, you need to talk; otherwise, you lose focus. So I feel that at [the]

community level...responsibility [needs to be taken]. [Personal communication, August 27, 1998].

The development (of holistic community-based programs) is essential for the continuity of services provided by the Aboriginal Diabetes Wellness Program. Some communities are more advanced than other communities and offer programs and services to their Aboriginal diabetics, but in many communities the holistic component is not recognized as an integral approach to health management.

Interview with Henry Laboucan:

He has a strong reluctance to call himself an elder. He is a humble person who feels that he is not worthy to be considered an elder because he reveres elders and holds that honored position in high esteem. Henry Laboucan is originally from the Peace River area and has had cultural teachers from across Alberta. He offers his views and opinions of colonization and its impact on Aboriginal communities and culture. He also offers cultural teachings at the Aboriginal Diabetes Wellness Program. The topics he addresses are colonization, residential school syndrome, the impact of emotions on health, and traditional cultural practices.

Henry Laboucan envisions health holistically and uses an analogy of the eagle to describe this holistic concept. Every part of the eagle is symbolically represented as a member within the Aboriginal community. For instance, the head and eyes of the eagle represent the elders, the wings represent the parents, and the tail feathers symbolically represent the children [Personal communication, September 10, 1998. When one part of the eagle is damaged, it cannot fly, and if the community is unable to manage their personal and community problems, along with the diabetes, the community cannot fly or has difficulty flying.

Although he does not have type 2 diabetes, Henry's contact working with Aboriginal diabetics has given him some indirect experience with the disease. He is of the belief that having diabetes means different things to Aboriginal people based on where they are at emotionally and what is happening in their lives at that particular time. While some of the people who attend the Aboriginal Diabetes Wellness Program are committed to improving their health and quality of life, others are not. Based on his experience working with Aboriginal diabetics, he defined three attitudes towards this disease:

highly motivated: people who are those with short-term motivation: and those with no motivation at all. What knowledge they absorb depends upon their motivation level. If they are highly motivated, individuals will seek to learn everything possible for their own wellness in terms of the mind, body, spirit, and emotions. If individuals are not very motivated they may temporarily apply the information or not at all. Henry Laboucan explained that those who are not highly motivated "are wounded somehow by either the [residential schools] or the systems" [Personal communication, September 10, 1998]. Multigenerational trauma stems from the residential school syndrome. He stated:

> All of those unresolved issues [from colonization] carry over [to the following generation, because] they don't get motivation. Consequently...I find those [diabetics] are the ones that have problems later on. I think also, no matter how hard we try, no matter how qualified the information is, it is not always taken in because their motivation is kind of low. In fact, some of them are overly negative [and] sensitive and they are really hard to reach. [Personal communication, September 10, 1998].

Henry explained that Aboriginal diabetics who are wounded are often in denial, and when he talks about how the emotions impact the physical body, they often become defensive. As a result, the information that is provided at the Aboriginal Diabetes Wellness Program "falls short...because some reject it...because they are too wounded" [Personal communication, September 10, 1998]. In contrast, the highly motivated person is one who is "willing to look at the woundedness" [Personal communication, September 10, 1998]. The highly motivated individuals are the ones who have begun a healing process, and because they have dealt with their issues, they demonstrate a readiness to learn about managing the disease. The individuals who obtain a higher level of optimum emotional and spiritual health and wellness "become a plus for society not a burden for society" [Personal communication, September 10, 1998]. He sees a need for healing programs at the community level as a precursor for biomedical programs so that like an eagle, the community can fly.

Focus Group Report

RESULTS SUMMARY

According to Krueger (1994), focus groups have been a mainstay of private sector marketing research. This method is different from individual face-to-face interviews because of the group dynamics that often unfold during a focus group session. "Focus groups can improve the planning and design of new programs, provide means of evaluating existing programs, and produce insights for developing marketing strategies" (Krueger, 1994, p. 3). The focus group that was conducted with staff at the Aboriginal Wellness Program was conducted to obtain their views on the strengths and weaknesses of the program and to identify resiliency traits among Aboriginal peoples with diabetes.

The contents of this focus group report include an interpretive summary, summary of themes but not recommendations. The verbatim input has been included in the interpretive summary. The information was then categorized into a summary of themes. Both the interpretive summary and summary of themes have been attached at the end of this report. The verbatim input is to assist readers to completely understand the views of the focus group participants. Not included in this focus group report is a list of recommendations. "Recommendations are optional and not automatically included in all focus group reports" (Krueger, 1994, p. 166). This focus group report is a presentation of information.

Overall, the feedback from the Aboriginal Wellness Program staff was both positive and negative. On one hand, the program appears to be meeting the immediate needs of the population they serve. The staff members strongly believe that the cultural teachings are a strength that this program offers to Aboriginal peoples. Focus group members also stated that having Aboriginal peoples on staff is a culturally appropriate way of providing services to the population they serve. The "homey environment", "joking around", and "not putting on airs" is believed to contribute to compliance among Aboriginal peoples with diabetes. On the other hand, a lack of time appears to hinder the staff's ability to effectively deal with the emotional, mental, issues of Aboriginal peoples. The unresolved issues of Aboriginal peoples were stated as stemming from the government and churches. Focus group members expressed concern that these issues were preventing people from being able to learn while they attended the program. Lastly, some frustration was expressed regarding a lack of

community leadership to deal with the socioeconomic determinants of health and provide proper community based care for the people.

STATEMENT

This report outlines the results of a focus group held on behalf of Josephine Auger as research for a Public Health Science 540 class and master's thesis. Informed written consent was obtained (see Appendix J and K). Virginia Gibson, Ph.D. candidate, helped to prepare questions and moderated the focus group discussion (see Appendix L). I prepared, observed, and analyzed the focus group discussion. The purpose of the focus group was to obtain input from the staff of the Aboriginal Wellness Program. Most of these staff members have worked either directly or indirectly with Aboriginal peoples. Overall, the focus group session was conducted in order to find out what causes some Aboriginal peoples with diabetes to improve their health and others not.

GROUP COMPOSITION

- four Aboriginal staff members and two non-Aboriginal staff members
- five focus group participants were female and one was male

Ten people were invited to participate in the focus group discussion. Six of the invited guests were of Aboriginal descent and two did not attend. Four of the invited guests were non-Aboriginal people and two did not attend.

PROCESS USED

Aboriginal Wellness Program Focus Group:

1. Using small group discussion, the participants were asked to share their thoughts of what it means to an Aboriginal person to have diabetes. They were asked to state the benefits of the Aboriginal Diabetes Wellness Program and to determine whether or not the program is meeting the needs of Aboriginal people. The focus group participants were asked to identify the factors that influence the cooperation of patients while they attended the program. In addition the group was asked to distinguish which factors influence the health of Aboriginal diabetics after they leave the program.

2. Each question was asked once. The participants then answered the questions and after everyone responded to the question once, some discussion followed.

INTERPRETATIVE SUMMARY

What do you think it means to an Aboriginal person to have diabetes?

The participants responded to these questions from different perspectives. The questions were answered in a clockwise order beginning from the moderator's left. One young Aboriginal female did not want to begin the discussion. An older Aboriginal female began the discussion and the circle of questioning began. Two other Aboriginal people answered the question followed by two non-Aboriginal people. The last one to answer the question was a young Aboriginal female who chose not to answer first. Overall the answer to this question was that having diabetes is "scary" and people either manage it successfully or not depending on their attitude.

Typical comments by these focus group participants included:

- I think it means that it is a death sentence to some people, because they are sick and unable to do things. (Aboriginal female, November 3, 1997)
- It is thought to be like a curse or a retribution for what a person has done before. (Aboriginal female, November 3, 1997)
- The word diabetic has different levels. One level could be that it is a curse. A second level is that it is something from lifestyle. (Aboriginal male, November 3, 1997)
- My feeling is that there is a lack of education and poverty, plus issues about the government and churches that affect the health of Aboriginal peoples. (Aboriginal male, November 3, 1997)
- It must be confusing for them to manage it and understand the causes of it. (Non-Aboriginal female, November 3, 1997)
- When they think of diabetes they relate it to the complications like having a leg amputated. It also means they have to sacrifice foods, no feasts. To them having diabetes also means they are not able to enjoy life. (Non-Aboriginal female, November 3, 1997)
- I see a fear, with a capital "F". There is denial. Then there gets to be some acceptance of the disease. They feel sorry for themselves. Reactions vary among Aboriginal people who have

diabetes but a pattern is there. There is a defeatist attitude. (Non-Aboriginal female. November 3. 1997)

- It depends on the person and their personal development. I had gestational diabetes and for me it was a motivator. It was something positive. (Aboriginal female. November 3. 1997)

The answers to this question branched out in different directions. Two Aboriginal females thought in terms of culture. There is a belief that diabetes is a death sentence. One Aboriginal female stated that there is a belief that disease is caused by living out of balance. Furthermore, if individuals are not living in balance there will be repercussions, for instance, to the person's health. Two older people both Aboriginal and non-Aboriginal people acknowledged emotional issues. The Aboriginal people identified lifestyle as a contributor to diabetes. Lifestyle is affected by socioeconomic factors such as poverty, a lack of education, the geographic location, and unresolved emotional issues. In concrete terms, a non-Aboriginal female suggested that for Aboriginal people understanding the etiology of this disease and managing it is confusing. The Aboriginal female, who initially declined to answer first, supported all the comments. She added that [the successful management of] diabetes depends on the person and their personal development. The answer to this question shows how incongruent the answers are among Aboriginal people and how non-Aboriginal people think about Aboriginal diabetics.

What are the benefits of the Aboriginal Wellness Program?

A non-Aboriginal female excused herself from the focus group session and did not answer this question and her opinion is not included. This female held a great deal of influence over the group and once she left the dynamics of the group session relaxed. Group participants began to interject their thoughts freely. With regard to this question all the focus group participants echoed similar responses. It seemed they were surer of how to answer this question. There were no differences of opinion. Overall, they seemed pleased with the quality of work.

Typical comments by these focus group participants included:

- The Aboriginal traditions are the strength of this program. Plus most of the staff are Aboriginal. (Aboriginal female, November 3, 1997)
- The Aboriginal Diabetes Wellness Program has Aboriginal staff. It is a holistic place that

provides pipe ceremonies and cultural teachings. (Aboriginal female, Nov. 3, 1997)

- The ceremonies and talking circle's help get people in touch with their emotions. (Aboriginal female, November 3, 1997)
- There are no bosses around here. In the circle everybody is equal. We speak to the level they can understand. (Aboriginal female, November 3, 1997)
- It is a very relaxed environment in which there is a lot of joking going on, in a lot of other places this is not important. (Aboriginal female, November 3, 1997)
- We look at how feelings interrelate with the physical health. (Aboriginal male, November 3, 1997)
- The teachings we give to treat the disease are based on biomedicine. (Aboriginal female, November 3, 1997)
- The talks we give about stress and blood sugar levels begin a path to inner wellness. (Non-Aboriginal female, November 3, 1997)
- People can stay here while attending the program. They interact with other people. (Aboriginal female, November 3, 1997)
- The Aboriginal people who have diabetes are allowed to bring somebody to help them. It teaches their guest the concept of support. (Aboriginal female, November 3, 1997)

The staff members view the quality of their work at the Aboriginal Diabetes Wellness Program as good. The work environment coincides with the Aboriginal belief of equality and sharing. The idea that there are no bosses overseeing the program should be explored further. This relaxed environment enables the caregivers to share in the laughter with Aboriginal diabetics. One suggestion was to have the program divided into phases of pre-treatment, treatment, and post-treatment. Aboriginal diabetics require long-term counseling to deal with emotional trauma.

Typical comments provided by these focus group participants included:

- There should be pre-treatment, treatment, post-treatment. (Aboriginal male, November 3, 1997)
- Here at the program the diet and exercise is covered well. That's good, but what they (diabetics) do at home is another issue. I don't see follow-ups being beneficial. (Aboriginal male, November 3, 1997)

- Here people are able to disclose. People can speak one to one about the problems they have in their homes and communities. People normally feel ashamed about talking about these things. Unfortunately, we do not have time to address all that. (Aboriginal female, November 3, 1997)
- After being here and having the opportunity to at least disclose it makes them look at the health care worker differently. (Aboriginal female, November 3, 1997)

Diabetes is reaching epidemic proportions among Aboriginal peoples. Stress is a risk factor for diabetics. The group expressed that not enough attention is given to the emotional issues of Aboriginal diabetics. They do not have sufficient time to be able to work with the emotional needs of individuals. Working at the emotional level involves time and energy. It seems that more emphasis needs to be placed on mental health to deal with stress related factors.

Do you think that the program is meeting the needs of Aboriginal people?

The young Aboriginal female did not want to answer this question first. The dynamics of the circle of questioning changed. The Aboriginal male took a lead role and piped up first. The rest of the group members seemed a bit tired and hungry, perhaps uncomfortable with the question. Diabetes education goes beyond the recommendations provided by a doctor, nurse, or dietitian. Education involves the community.

One Aboriginal male had a theory about what causes diabetes particularly among Aboriginal females. The theory coincides with traditional teachings on pregnancy for the purpose of maintaining a hormonal balance. These traditional teachings are viewed as a method of diabetes prevention. These teachings must begin in youth because they take years to absorb before one can successfully practice the recommended traditional lifestyle.

Typical comments provided by these focus group participants included:

- For the time allotted I would say the girls are doing the job. It is the best we can do with the time factor. Sometimes I want an extra day with the clients but four days is just the way it is. To me, the feelings and emotional part is being rushed. (Aboriginal male, November 3, 1997)
- Ancient teachings on having mates, children, are things I would like to teach. It takes 3 years for a woman to recover from pregnancy. It is important to space child births for quality child rearing. (Aboriginal male, November 3, 1997)

- Some clients are learning something new about cultural traditions and it is not being taught in a classroom setting. The people who are willing to learn will take some of the information at a time and make changes that way. (Aboriginal female, Nov. 3, 1997)

The females within the focus group session seemed to oppose the Aboriginal male's point of view. It seemed they do not want emphasis being placed on providing cultural teachings specifically for Aboriginal women because it may be offensive to those women who have grown up with the missionary attitude of giving birth to, and raising twelve children, as worthwhile work. The women guided the discussion towards the needs of the diabetics, and discussed the effects of high intake numbers, and how this effect the quality and quantity of time staff are able to spend with each individual.

Typical comments provided by these focus group participants included:

- Our teachings are taught in a circle. This method meets the needs of the people. We work with what the clients need. Each client's knowledge base varies. The clients vary in terms of age, education, and so forth. (Aboriginal female, November 3, 1997)
- I don't think that the question of the program meeting the needs could be one hundred percent in any situation. The teaching is as good as the people who want to receive it. (Aboriginal female, November 3, 1997)
- We are meeting the immediate needs. I mean we cannot go home with them. We are giving them the tools, yes. We can't help them reduce the stress. They can reach out for support people and this is a touch of prevention. (Non-Aboriginal female, November 3, 1997)
- I agree with the ladies'. It depends on what the person is seeking. Some people are apathetic. They want a trip to the city. Some are eager to learn how to help themselves. It also depends on the number of group participants we have in each session. Twelve people in a group cause problems. (Aboriginal female, Nov. 3, 1997)
- I feel like I am going to be reprimanded. There is a fear in saying the things [that] I am saying. Diabetes is an explosive issue that is making us realize there are other problems that affect the health of Aboriginal people. (Aboriginal male, November 3, 1997)

A common theme that emerged from this line of questioning was that there is not enough time to

educate the diabetics on culture nor can they remove stress from the client's lives. It almost seems that unless certain measures are taken to breathe cultural life into the Aboriginal diabetics their health forecasts are not so good. It seems that unless one can wave a magic wand to eliminate stress in the lives of Aboriginal peoples, hope is lost. One focus group participant stated that diabetes is overwhelming. There is a dawning realization that they can only meet certain demands within a four-day period.

What factors influence the cooperation of patients while they are attending the clinic?

The word clinic was used when posing the question although the group understood it as synonymous with program. There was in agreement that Aboriginal people providing services to Aboriginal people is effective in terms of reaching the clientele.

Typical comments provided by these focus group participants included:

- The friendly staff [are a factor that encourages] the cooperation of the people. We are not intrusive. We respect them and the patients have self-respect too. It goes a long way to compliance. Essentially, the home life determines how they are going to feel when they come here. If there is unfinished business or chaos, they are not going to get anything out of this program while they are here. (Aboriginal female, November 3, 1997)
- They have support while they are staying here. It is not like being in the hospital. (Non-Aboriginal female, November 3, 1997)
- We are just ourselves. We don't put on airs. We are one of them. (Aboriginal female, November 3, 1997)
- Humor is a big thing here. It's part of our homey environment. (Aboriginal femaie, November 3)
- Patients are given time to ask questions. Our agenda is a guideline. It is not an absolute, strict structure. (Aboriginal female, November 3, 1997)

The staff members strongly believe that a homey environment with plenty of laughter adds to the ambiance this program exudes. This ambiance enables the staff to achieve compliance from the Aboriginal diabetics while they are attending the program.

What factors influence the health behavior of Aboriginal patients after they leave the clinic?

The idea of resiliency among Aboriginal diabetics emerged from the discussion and the focus group

participants provided their thoughts as to what makes people resilient. Resiliency is about loving yourself it involves adopting a caring attitude towards oneself and making educated choices for one's health. This group identified internal and external factors affecting the ability for Aboriginal diabetics to become resilient.

Typical comments provided by these focus group participants included:

- There are external and internal factors involved here. Internally, I think the individual must have a readiness to learn. Externally, I think the individual must have self-love to deal with extreme factors at the community level. (Non-Aboriginal female, November 3, 1997)
- Patients who are able to achieve and sustain their health have a positive outlook. They realize there are choices available providing they are willing to learn, and develop their knowledge about diabetes, they can make change. (Aboriginal female, November 3, 1997)
- It depends on how they think and what is going on in their lives. (Aboriginal female, November 3, 1997)
- I think the role between the Aboriginal diabetes patient and their family physician needs to be addressed. (Aboriginal female, November 3, 1997)
- The community members need to get involved. (Aboriginal female, November 3, 1997)
- It is like an alcoholic program you have to want to be able to do it because nobody can do it for you. (Aboriginal female, November 3, 1997)

An Aboriginal female urged that leadership look at community based health care as a way to dealing with these external problems because they have a heavy impact on individuals within communities. The group identified several external factors that are an obstacle to maintaining one's resiliency.

Typical comments provided by these focus group participants included:

- There is poverty. (Aboriginal female, November 3, 1997)
- Children are apprehended. (Aboriginal female, November 3, 1997)
- Even the stores don't sell the nutritious foods they need. There are survival foods like macaroni, and tomato soup, available, that [are] affordable. These foods are good once in a while but not all the time. (Aboriginal female, November 3, 1997)

- The traditional wild meats were shared before now people don't share. People sell it. This takes away the feeling of being able to help others by sharing, a good feeling. (Aboriginal female, November 3, 1997)
- At the local level there are alcohol and drug programs. Some of those running these programs have not dealt with their own personal issues. Locally, these programs are not well attended because they turn into laughing sessions. It is a drag down system where people try to prevent you from healing by laughing at you. (Aboriginal male, November 3, 1997)

The socioeconomic determinants of health were discussed in this focus group session they were identified as external factors that influence the health behavior. Resiliency is affected by thought processes, feelings, attitudes, and actions that occur internally. It is also affected by external factors like socioeconomic status and community consciousness. The group members were in agreement that leadership needs to scrutinize the health structures and those working within those structures to effectively meet the needs of people at the community level because the Aboriginal Diabetes Wellness Program is limited in their four day program to do it all.

SUMMARY OF THEMES

This summary represents the common themes and suggestions for improvement. The verbatim input has been attached in the report as interpretative summary. It is "detailed" to assist readers to completely understand the views of the Aboriginal Diabetes Wellness Program staff.

- **PROGRAM CONTENT**

Overall, the feedback from the group was very positive. It was made clear that the holistic component, the relaxed environment, and the Aboriginal staff, are the strength of this program. It was emphasized that the biomedical treatment and education provided by the doctor, dietitian, and nurses is meeting the demand of the clients.

- **INSUFFICIENT TIME**

The focus group participants felt there was a need to have a longer program. They emphasized the need to be able to have time to deal with the emotional issues of the clients they serve.

- **MENTAL HEALTH**

The group identified internal factors inhibiting the well being of Aboriginal clients. The internal factors involve such things as unresolved emotional issues that need to be addressed. These issues were identified as stemming from the residential school syndrome and colonization.

- **SOCIO-ECONOMIC DETERMINANTS OF HEALTH**

The group identified external factors as inhibiting the well being of Aboriginal clients. These external factors were defined as poverty, lack of education, lifestyle, and geographic location. The group advocated for more community involvement inclusive of Aboriginal leadership.

- **RESILIENCY**

This was identified as having "self-love". A person who would be successful in managing their diabetes and maintaining good health would be someone who had a positive outlook, was willing to learn and had the ability to make informed decisions regarding their health.

LIMITATIONS AND ALTERNATIVE EXPLANATIONS

The method to analyze this focus group session was note-based analysis. "Note based analysis relies primarily on field notes, a debriefing session, and summary contents at the conclusion of the group" (Krueger, 1994, p. 144). To ensure that the material was correct, I provided a transcript to each participant the next day. Four of the six participants returned the transcripts back with few or no changes. I received their copies within four days. Note based analysis is an efficient means of completing the work.

Written responses.

The following is a list of written responses from an open ended survey that was collected by the staff from program participants after the four day session was completed at the Aboriginal Diabetes Wellness Program (see Appendix M). This is a random sample of sixty responses that have been categorized into positive and negative statements and contains another list of suggestive statements provided by the program participants. Generally, the program participants have a high appreciation for the program and the front line staff members. Considerable emphasis was placed on the circle as a format for providing teachings about medications, risk factors, complications, and culture. Conversely, some did not like the native spirituality aspect, cafeteria food, temperature of the rooms at Anderson Hall, and they did not like having any programs in the evening. Suggestions included increase the length of the program to allot for more emphasis on the emotional aspect of health, ceremony, elders presentations, foot care, exercise programs, and to prepare the food on site.

Positive Statements:

"This is really what First Nations people need. This is a place where they can feel comfortable and cared for."

"I like the fact that you trust my intelligence to decide on what is best for me rather than you telling me what is best for me."

"It was nice not to worry about money. For Natives with families and long distance travel, this could be a problem."

"The location is very good."

"It was not so monotonous."

"There was no strict time schedules."

"It was my first time in a talking circle and it helped me with my healing process."

"It has Aboriginal foods."

"Non-judgmental acceptance from everyone here."

"The staff are the greatest, friendly, understanding, and take time to listen."

"I feel that the instructors explained healthy eating, foot care, and medications."

"They made you feel special."

"I loved the staff and elders, the doctors really listened to you and gave good advice."

"The sharing, caring and laughter lifted the spirit."

"The professionalism."

"The doctors came here which was great."

"We wouldn't change a thing the way you do things here is just perfect for us."

"Dietitians assessment."

"I like it a lot, no changes."

"The sharing circle and staff joining in on activities."

"Combining Aboriginal wellness and western science."

"I found everything in the program valuable, the accommodations, staff, information, meals, and resources."

"I learned very important, significant, beautiful things about native culture which is my heritage too. I am very honored and blessed by this opportunity."

"I'm definitely impressed with the program. I didn't expect to see it like the way it is set up. I'm so grateful it is set up this way. I see and feel that it's comfortable for native people."

Negative Statements:

"The program was too short."

"Having to go to the hospital for two of the meals."

"Problems with meal tickets and cashiers [at hospital cafeteria]."

"Don't like cafeteria at the Royal Alexandra Hospital."

"The cafeteria and coffee shop served greasy food, no-no's for a diabetic(s)."

"I would have liked less fattening foods from the cafeteria."

"Not much variety with meals."

"Lateness of breakfast affected my blood sugar."

"Having no agenda."

"I didn't like the free time in the evenings."

"Smoking in the community lounge prohibited my participation due to allergies."

"The rooms were too warm."

"Noise outside from both the ambulance and airplane."

"About the spiritual program. I think they need to know more about the herbs, etc."

"Not all native people follow the spiritual way!"

"Long evenings and videos."

"I got tired of sitting."

"I like it a lot, no changes."

"The length a lot of information to digest in such a short period."

"Too hot in the room, too noisy."

Suggestions:

"Perhaps include additional follow-up sessions which focus on a specific area such as dealing with emotions."

"Start the program on Monday's because you need a full day on foot care."

"I think a little exercise room would be nice."

"I would like to see this program operate for two weeks. You have to learn so much in such a short time."

"I would like to end the program with a sweat lodge ceremony."

"Make it last longer and have a sweat lodge ceremony when you start and before you go home!"

"A longer program, one more day."

"Meals to be eaten at Anderson Hall all the time."

"Could be bigger, more people coming."

"To have a door bell to be operable at all times."

"Parking stalls properly designated."

"Have staff keep in contact with clients, monthly."

"It would be nice to have an elders presentation every day."

"A map of the city, I was totally lost."

"Get the family involved."

"Explain what was said in Cree so we could understand it."

"I wish the food was prepared here instead of re-heated stuff."

"Present programs to our young."

"The heat could be changed."

"There should be more concentration on stress management."

CHAPTER SIX

General Discussion

The following discussion includes important themes that emerged from the explanatory models concerning diabetes among Aboriginal peoples, and my reflections of resiliency. Some important issues are examined, the study's limitations are discussed, and implications for future research are presented.

During the course of researching and writing this thesis, I discovered that some Aboriginal diabetics described their experience as survival. Now perhaps the word "survival" does not quite equate directly to the concept of "bouncing back" which implies having enthusiasm and a positive attitude. Instead, the word "survival" denotes existence despite apparent social problems. Thus, in the Aboriginal context, one needs to be resilient in order to survive, and this paints a picture of existence under harsh circumstances.

The lived experience of Aboriginal peoples involves coping with the historical past while contending with the contemporary social milieu of Canadian society. Aboriginal peoples have had to endure the loss of their land and sovereignty and face ongoing attacks on their way of life, yet they continue to survive despite these adverse circumstances. Some Aboriginals are finding a way to work within the Canadian system for their peoples, as a way to regain their losses to land, governance, and livelihood. Through these struggles, some Aboriginal peoples thrive as a result of the challenge because like other marginalized groups, they are finding ways of adapting to and achieving their objectives in the Canadian system. Proving they can survive, whether it seems as if the Aboriginal peoples are at the periphery of a larger dominant society or perhaps their communities are the central focal point while the rest of the society is on the fringe, demonstrates their adaptability.

Regardless of who is at the fringe of society, survival among Aboriginal peoples has not come without a human cost. As a result of having a genetic predisposition and having gone through rapid acculturation, Aboriginal peoples have developed type 2 diabetes. This is a chronic disease that causes a host of undesirable complications. Conversely, colonization has impacted Aboriginal peoples' health through a type 2 diabetes epidemic which is an outcome of losing control and living out of balance from a traditional cultural lifestyle.

Through the experiences of Aboriginal peoples with diabetes, their family members, and health care professionals, stories of strength, sadness, determination and hope have been told.

Important Themes and Personal Reflection

A number of important themes emerged from the interviews with Aboriginal diabetics, family members or friends, and health care professionals.

Causes of type 2 diabetes:

Seven out of twelve diabetics believed that a change of lifestyle was responsible for causing type 2 diabetes. Five out of twelve diabetics thought they had a genetic predisposition that is responsible for causing type 2 diabetes. Alcohol consumption was believed to be the third leading cause of type 2 diabetes, with two people stating this. Other factors that the Aboriginal diabetics thought may have been responsible for their diabetes included; Aboriginal ancestry, high stress levels, age, and the result of a curse.

Impact of prior knowledge relating to type 2 diabetes:

Among the diabetics, five out of twelve people mentioned they had some prior knowledge about diabetes. Three out of the five individuals had positive outcomes relating to their hemoglobin A1c levels. Three out of twelve stated that they had no prior knowledge of diabetes, but one of the three had a positive metabolic outcome. Four out of twelve did not state whether they had any prior knowledge about diabetes. Generally, people who have some prior knowledge of diabetes will do better in managing their diabetes than those who do not.

Levels of exercise among Aboriginal peoples with type 2 diabetes:

Exercise is thought to be a powerful determinant of health and well-being. Nine out of twelve Aboriginal diabetics said they were active either through team sports, domestic work, walking, or chair exercises. Six of these nine individuals had positive metabolic outcomes and three did not. Three out of twelve interviewees said they did not or could not exercise. Two of these individuals experienced problems with mobility, primarily due to obesity. Those who exercise even moderately are able to manage their diabetes better than those who do not.

Consumption of fatty foods:

Eating wisely is another positive determinant of diabetic health and well-being. Five out of twelve Aboriginal diabetics had issues with food; they were predominantly eating too many fatty foods too often, such as lard on top of duck meat, animal fat, chocolate bars, and fast foods. These five people who had issues with food also exhibited poor metabolic control. Being able to limit "fat choices" and "sweets" would be beneficial for the individual who eats fatty foods too often.

Positive support systems among Aboriginal peoples with type 2 diabetes:

Seeking support in times of stress is beneficial to an individual's health. In this context support systems are identified as spouses, friends, family, therapists, and support groups. Eight out of twelve Aboriginal diabetics have support systems in place to help them cope with stress. Six of these eight people have positive outcomes relating to their hemoglobin A1c levels, and two do not. Four out of twelve Aboriginal diabetics did not have supports in place or did not identify any, and these four individuals had negative outcomes. People who seek support to deal with their stress are able to manage their hemoglobin A1c levels better.

Care-giving as a positive determinant of health:

Providing care for others is an act of benevolence and a health-promoting behavior. Caregivers are those who fill a void in their families or communities. They may provide care on a volunteer basis or caregivers could be employed. By helping people, caregivers may feel good about themselves and this could be beneficial for their well being. Six out of twelve people identified themselves as caregivers; and four of these people had positive outcomes while two were negative. Six out of twelve people did not make clear whether or not they were caregivers.

The positive impact of native spirituality on Aboriginal health and well-being:

Feeling empowered is also key to one's well being. For Aboriginal peoples, this involves taking part in a decolonizing process, which usually involves exploring native spirituality. For program participants, owning their native spirituality is an empowering process, by doing so they reclaim their Indian identity and become proud of it rather than ashamed. Five out of twelve individuals mentioned they had attended traditional feasts or were practitioners of native spirituality, and of these five people four had positive metabolic outcomes.

Humor as a positive coping mechanism:

Aboriginal people love to laugh. They find humor in the little things of life. They laugh at their mistakes, their poor situations, and they tease each other to show affection. This information was discovered by way of interviews with the people with diabetes, family members, or health care professionals. Three out of the twelve cases stated they used humor as a way of coping with stress. Two out of the three had positive metabolic outcomes.

The effects of the residential school experience:

Residential school issues were discussed. Only two out of twelve people mentioned it in a brief way, and both had positive metabolic control. One of these individuals said he was dealing with his issues in group therapy sessions. Two of the twelve individuals were too young to have attended the residential schools. Eight out of twelve Aboriginal peoples with diabetes belonged to a generation that had gone to the residential schools, but they did not bring up those experiences during the interview process. It is difficult to determine whether or not dealing with those issues is a health promoting factor for Aboriginal diabetics because it may create stress and raise blood sugar levels in discussing it. Thus, more research addressing this issue is required.

Effects of alcohol among Aboriginal peoples with diabetes:

While only two people believed that alcohol was a causal factor for diabetes, five people discussed the role alcohol currently has or has had in their lives. Two out of five individuals said they were presently using alcohol and both had negative metabolic outcomes. Both of these individuals were males. Three out of five females said they were abstaining from alcohol. Two out of the three females had positive metabolic control. Generally, those who abstain from alcohol are able to manage their diabetes better.

Effects of socio-economic status:

Socio-economic factors such as living on a fixed income, being unemployed, and living in inadequate housing, are factors that affect the well being of Aboriginal peoples. During the interview process, either the Aboriginal diabetics, family members, and health care professionals addressed socio-economic status as a determinant of health. Three out of twelve people were clearly identified as facing extreme hardship. Two out of these three individuals were identified as having negative

outcomes with regard to their hemoglobin A1c levels. One individual living in extreme hardship, said he walked for two to three hours daily looking for bottles to recycle, and by finding a way to cope with poverty this individual was also able to improve his health by exercising.

The common experience of grief prior to diagnosis of type 2 diabetes among Aboriginals:

Extreme stress factors such as grieving the loss of a loved one or divorce were mentioned often in the explanatory models of the Aboriginal diabetics. Five out of twelve people shared their experiences of extreme grief that occurred prior to being diagnosed. Three others shared stories about unresolved grief. Four participants did not mention anything concerning this topic.

The fears of complications:

Diabetic complications are the reality among people who have type 2 diabetes. Four out of twelve Aboriginal diabetics identified amputations as their worst fear of diabetes. Three out of twelve people cited blindness. Two out of twelve diabetics had not thought about it. Other fears included being on insulin, losing control thus feeling like a failure, being on dialysis thus having their skin turn black, and it affecting their heart and kidneys. Fear can be a strong motivator for trying to manage diabetes successfully.

Personal reflection:

Life is a cycle from birth, childhood, adolescence, adulthood, late adulthood and into the elderly years. There are many cycles the day, month, season, and year. There are cycles within cycles from morning, noon, early evening, and late night. Everything is part of the circle of life. Within our life span, we as Aboriginal peoples have had to endure many hardships since being "invaded." Our boundaries have been invaded in many ways and in writing this it is not a statement of anger, it is a perceived reality. Hence the abuse that Aboriginal peoples have suffered since contact occurred, has forced people into a "survival" mode.

Having to be survivors of this experience has made Aboriginal peoples more resilient. The ways in which Aboriginal peoples cope with their life situations may not always be viewed by others, as healthy, such as the consumption of alcohol or eating too many fatty foods. However, there are many healthy ways in which people cope, such as, laughing, caring, exercising, practicing native spirituality,

and seeking support as needed. By coping with their life situation in healthy ways, Aboriginal peoples are demonstrating their locus of control and seeking social support in the management of diabetes both internally and externally (Tillotson & Shelton Smith, 1996, p. 133). Survival skills such as these help Aboriginal peoples with diabetes cope with their residential school experiences, socio-economic factors, grief, and other life stressors.

As one reflects on the stories that elders have shared about their experiences emerges a concept of resiliency. The elders have always maintained that caregivers who are able to really help others are those who have experienced hardship first hand. Those elders that talk about this have had to face many hardships. It is like walking through fire and surviving that people really become strong. It is they who do not quit or give up the struggle to survive and to ensure their grandchildren and great-grandchildren do as well. It is through sobriety that people gain that inner strength to hold their head up and help others in the process.

One Aboriginal person who has diabetes told me in a round about way, that resiliency does not come from the culture, it comes from the spirit. Culture is a tool or a means of developing resiliency. In my personal reflection, it is through faith and belief in the spiritual concepts inherent in native culture that people find inner strength or their spiritual helper(s). The spirit is about life and it extends beyond the physical realm and that is why we call life "The Great Mystery." Those who know, are the ones that live life according to their cultural ways. They are the enlightened ones. Following a cultural way of life involves living in balance by taking care of the mind, body, spirit, and emotions.

Hope is a life gift, as are prophecies and visions. One gift bestowed from our forefathers to the Aboriginal peoples of today is a prophecy of hope. Prophecies pertaining to the signing of the prairie treaties during the 1870s looked into the future; by talking about their descendants the First Nations forefathers have provided hope to the succeeding generations. "This vision, which became known as the fifth-generation prophecy, has been widely interpreted to mean that the fifth generation would witness the rebirth of the Indian people" (York G., 1990, p. 262). This renewed strength, confidence, and pride in their identity is coming to pass, and now is the time for Aboriginal peoples to build for their children's future. By reclaiming the Indian identity and accessing historical and traditional knowledge about the past, Aboriginal peoples will become empowered to work to help their people.

The Aboriginal Diabetes Wellness Program is one example of this in action. It has been like a ripple of hope cast across the waters of our land because it gives people the skills to improve their lives. Like the eagle that flies, it takes all members of the nation to manifest the prophecy of our forefathers.

Limitations of the Study

A number of limitations are evident in the present study. In choosing to use Arthur Kleinman's explanatory models, which originate from medical anthropology some steps of phenomenological methodology were not conducted. First, the method of bracketing was not conducted and neither was the procedure of hierarchical thematic analysis. Bracketing is not really necessary because the research will not appear to be more scientifically objective because the method is still a subjective one. Second, hierarchical thematic analysis is not necessary because the intent of using phenomenology was to provide a description of a phenomenon not to conduct multiple interviews to verify the content. Internal validity was achieved through the triangulation of interviews among health care professionals, diabetics, and their family members.

A third limitation involves the generalizability of the study. Due to the small sample of participants it is difficult to form conclusions which could apply to anyone other than these twelve individuals, their family members, and health care professionals. These results are intended to only describe the people involved in this study. However, the role of phenomenology is to develop an understanding of the lived experience of Aboriginal diabetics and explore a concept of resiliency. It was not my intention to generalize my findings to the entire Aboriginal population.

Implications for Future research

In Alberta, one area that needs to be developed is an Aboriginal health policy that does not change or alter the meaning or intent of the original treaties. An Aboriginal health policy for Alberta could provide direction and guidelines for Aboriginal involvement in all areas of health. Currently, there are no health policies concerning Aboriginal health in Alberta but there should be, so that positive health can be achieved for all in a way that is environmentally sound.

To address diabetes among Aboriginal peoples, there should be more nutrition programs made available. Nutrition programs could focus on healthy lifestyles for Aboriginal mothers, families, those in recovery from addictions, people with HIV/Aids, and those who have other chronic or infectious diseases (Ontario Ministry of Health, 1994, p. 24). To accomplish this objective, holistic programs for Aboriginal nutritionists or dietitians should be provided so that more Aboriginal peoples could become health care professionals. McCubbin et al state:

> It fact, cultural and ethnic sensitivity alone is no longer adequate; health care professionals must also be ethnically and culturally competent, that is, be able to recognize, respect, and engage ethnic diversity in a way that leads to mutually desirable outcomes (McCubbin H.I., Thompson E.A., Thompson A.I., McCubbin M.A., & A.J. Kaston, 1993, p. 1063).

Nutrition programs facilitated by Aboriginal dietitians or nutritionists would be beneficial, as these programs could address other areas of health, too.

Another recommendation that would be appropriate for Aboriginal dietary needs is to ensure that Aboriginal health care facilities have access to wild game and other traditional foods (Ontario Ministry of Health, 1994, p. 33). Doing so would involve working with various ministries.

Hunting and trapping should be viewed as an economic activity, like agriculture, and benefits should be extended to reduce the cost of production, for example, the use of untaxed gas (Asch and Smith, 1993, p. 154). The perception that hunting and trapping are not important to the economy is a myth.

Environmental protection programs should consider working with respected Aboriginal peoples who could advocate for an Aboriginal environment policy to help ensure that water, earth, and air, are safe for all living beings (Ontario Ministry of Health, 1994, p.26).

Centrally located in the city of Edmonton the ADWP is designed to meet the needs of all Aboriginal peoples within central and northern Alberta. However, some gaps in regional services exist. There are no diabetes outreach programs in local communities because the programs are not developed, or if they are the local programs are not working with the ADWP to target the Aboriginal diabetic population. Local programs should be developed so that the people within the communities are not waiting a long

time to attend a follow-up session or having to go without. A strategy is needed to develop community outreach programs.

Community outreach programs must involve the family members or friends to provide ongoing social support for the Aboriginal person with diabetes so that behavior change can be encouraged and facilitated. For this to happen diabetes educators need to develop new ways of involving the social network of diabetics (Tillotson & Shelton Smith, 1996, p. 138).

As stress is a risk factor among diabetics, one recommendation is to focus more attention on providing group and individual counseling to deal with personal issues or trauma that have occurred. Culturally appropriate services or workshops need to be targeted to Aboriginal diabetics. In addition to counseling, the health promotion of positive Aboriginal lifestyles is recommended as an educational component as a complement to these sessions.

Summary.

Diabetes is a multidimensional disease. It strikes people who have a genetic predisposition to it and this is a factor beyond our control. Type 2 diabetes prompts the society as a whole to look at the controllable factors of lifestyle and environment; so that people may begin to find balance within themselves and the world around them. Like Mother Earth, the people on this planet also need healing and purification. The elements of our Mother Earth are polluted from chemicals that have been disposed into our waters, earth, and the air we breathe. Unless we begin to look at our relationship with the environment, we will continue to see the human cost of "civilization" affecting us all. As people are not able to eat foods from the land that are likely to sustain them, better than some store bought foods, the effects will become even more apparent through a host of other chronic diseases. Type 2 diabetes is seen as a red flag that is being raised to alert us of immanent danger, and the government's need to be able to work with Aboriginal peoples to create healthy public policy and programs addressing these concerns. The goal is to ensure that Mother Earth, who offers sustenance through an indigenous food chain, is not destroyed.

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Appendix A

INFORMATION SHEET FOR THE ABORIGINAL PERSON WITH DIABETES

Qualitative Research to Compliment the Quantitative Research Conducted at the ADWP

Principal Investigator:	Josephine Auger	477-4512
Co-Investigators:	Dr. L. Laing	492-6211
	Dr. Don Voaklander	492-5099
	Dr. Michael Asch	492-5840
	Dr. A. Fisher	492-0129

Background: The Capital Health Authority and the University of Alberta are conducting an evaluation of the Aboriginal Diabetes Wellness Program [ADWP]. To compliment their study, Josephine Auger is conducting her thesis research by interviewing Aboriginal diabetics who have attended the program, their family members, and a health care professional from the ADWP.

Purpose: You are being asked to participate in an interview as part of Josephine Auger's graduate thesis. This research may also be used as part of the ongoing research conducted by the Capital Health Authority and the University of Alberta.

Procedures: You will be asked questions regarding your experience with diabetes. In addition, one of your family members and a health care professional from the ADWP will be asked to describe your experience with diabetes and how you have coped with it. The interviews may take about 45 minutes and they will be tape recorded. A follow-up session may be required to make sure the information provided was clearly understood.

Possible Benefits: There may not be direct benefits to you for being in this study. However, it is expected that once the study is complete, the results will help caregivers understand what life is like for Aboriginal diabetics.

Possible Risks: You may be guided to a caregiver, such as a doctor, nurse, psychologist, counselor, or elder, if there is a concern about your physical, mental, emotional, or spiritual health.

Confidentiality: Personal information relating to this study will be kept confidential. Any report coming of this research will not give your real name. Only the investigators named above will have access to your study records. All the information will be kept for seven years in a secure place accessible by only the research team. After seven years the tapes and notes will be destroyed. If any secondary analysis is done with the data in the future, that further ethics approval will be sought first.

You are free to withdraw from the research study at any time without any adverse consequences. You also have the right to refuse to answer any questions.

Please contact Josephine Auger at (403) 477-4512 (call collect) if you have any questions or concerns. If you have further concerns about any aspect of this study, please call the office of the Capital Health Authority Patient Representative at (403) 474-8892. This office has no affiliation with the study investigators.

Initials of the research subject _________. Initials of the researcher _________.

Appendix B

INFORMATION SHEET FOR THE FAMILY MEMBER

Qualitative Research to Compliment the Quantitative Research Conducted at the ADWP

Principal Investigator:	Josephine Auger	477-4512
Co-Investigators:	Dr. L. Laing	492-6211
	Dr. Don Voaklander	492-5099
	Dr. Michael Asch	492-5840
	Dr. A. Fisher	492-0129

Background: The Capital Health Authority and the University of Alberta are conducting an evaluation of the Aboriginal Diabetes Wellness Program [ADWP]. To compliment their study, Josephine Auger is conducting her thesis research by interviewing Aboriginal diabetics who have attended the program, their family members, and a health care professional from the ADWP.

Purpose: You are being asked to participate in an interview as part of Josephine Auger's graduate thesis. This research may also be used as part of the ongoing research conducted by the Capital Health Authority and the University of Alberta.

Procedures: You will be asked questions about what it is like to have a family member who has diabetes, and what sort of lifestyle habits they have, and their ability to cope with stress. The interviews may take about 45 minutes and they will be tape recorded. A follow-up session may be required to make sure the information provided was clearly understood.

Possible Benefits: There may not be direct benefits to you for being in this study. However, it is expected that once the study is complete, the results will help caregivers understand what life is like for Aboriginal diabetics.

Possible Risks: None.

Confidentiality: Personal information relating to this study will be kept confidential. Any report coming of this research will not give your real name. Only the investigators named above will have access to your study records. All the information will be kept for seven years in a secure place accessible by only the research team. After seven years the tapes and notes will be destroyed. If any secondary analysis is done with the data in the future, that further ethics approval will be sought first. You are free to withdraw from the research study at any time without any adverse consequences. You also have the right to refuse to answer any questions.

Please contact Josephine Auger at (403) 477-4512 (call collect) if you have any questions or concerns. If you have further concerns about any aspect of this study, please call the office of the Capital Health Authority Patient Representative at (403) 474-8892. This office has no affiliation with the study investigators.

Initials of the research subject ___________. Initials of the researcher __________.

Appendix C

INFORMATION SHEET FOR THE ABORIGINAL HEALTH CARE PROFESSIONAL

Qualitative Research to Compliment the Quantitative Research Conducted at the ADWP

Principal Investigator: Josephine Auger 477-4512

Co-Investigators:	Dr. L. Laing	492-6211
	Dr. Don Voaklander	492-5099
	Dr. Michael Asch	492-5840
	Dr. A. Fisher	492-0129

Background: The Capital Health Authority and the University of Alberta are conducting an evaluation study of the Aboriginal Diabetes Wellness Program [ADWP]. To compliment their study, Josephine Auger is conducting her thesis research by interviewing Aboriginal diabetics who have attended the program, their family members, and a health care professional from the ADWP.

Purpose: You are being asked to participate in an interview as part of Josephine Auger's graduate thesis. This research may also be used as part of the ongoing research conducted by the Capital Health Authority and the University of Alberta.

Procedures: You will be asked questions about a former patient of the Aboriginal Diabetes Wellness Program about their physical health, attitude, reason for attending the program, and effectiveness of the program in helping the patient. The interviews may take about 45 minutes and they will be tape recorded. A follow-up session may be required to make sure the information provided was clearly understood.

Possible Benefits: There may not be direct benefits to you for being in this study. However, it is expected that once the study is complete, the results will help caregivers understand what life is like for Aboriginal diabetics.

Possible Risks: None.

Confidentiality: Personal information relating to this study will be kept confidential. Any report coming of this research will not give your real name. Only the investigators named above will have access to your study records. All the information will be kept for seven years in a secure place accessible by only the research team. After seven years the tapes and notes will be destroyed. If any secondary analysis is done with the data in the future, that further ethics approval will be sought first.

You are free to withdraw from the research study at any time without adverse consequences. You also have the right to refuse to answer any questions.

Please contact Josephine Auger at (403) 477-4512 (call collect) if you have any questions or concerns. If you have any further concerns about any aspect of this study, please call the office of the Capital Health Authority Patient Representative at (403) 474-8892. This office has no affiliation with the study investigators.

Initials of the research subject ___________. Initials of the researcher ___________.

Appendix D

INFORMATION SHEET FOR THE ELDER OR CULTURAL HELPER

Qualitative Research to Compliment the Quantitative Research Conducted at the ADWP

Principal Investigator:	Josephine Auger	477-4512
Co-investigators:	Dr. L. Laing	492-6211
	Dr. Don Voaklander	492-5099
	Dr. Michael Asch	492-5840
	Dr. A. Fisher	492-0129

Background: The Capital Health Authority and the University of Alberta are conducting an evaluation of the Aboriginal Diabetes Wellness Program [ADWP]. To compliment their study Josephine Auger is conducting her thesis research by interviewing Aboriginal diabetics who have attended the program, their family members, and a health care professional from the ADWP.

Purpose: You are being asked to participate in an interview as part of Josephine Auger's graduate thesis. This research may also be used as part of the ongoing research conducted by the Capital Health Authority and the University of Alberta.

Procedures: You will be asked general questions about the services provided by the ADWP, factors preventing people from getting better, and character traits of people who do well after attending the program. The interviews may take about 45 minutes and they will be tape recorded. A follow-up session may be required to make sure the information was clearly understood.

Possible Benefits: There may not be direct benefits to you for being in this study. However, it is expected that once the study is complete, the results will help caregivers understand what life is like for the Aboriginal diabetics.

Possible Risks: None.

Confidentiality: Personal information relating to this study will be kept confidential. Any report coming of this research will not give your real name. Only the investigators named above will have access to your study records. All the information will be kept for seven years in a secure place accessible by only the research team. After seven years the tapes and notes will be destroyed. If any secondary analysis is done with the data in the future, that further ethics approval will be sought first.

You are free to withdraw from the research study at any time without any adverse consequences. You also have the right to refuse to answer any questions.

Please contact Josephine Auger at (403) 477-4512 (call collect) if you have any questions or concerns. If you have any further concerns about any aspect of this study, please call the office of the Capital Health Authority Patient Representative at (403) 474-8892. This office has no affiliation with the study investigators.

Initials of the research subject _________. Initials of the researcher _________.

Appendix E

CONSENT FORM

Title of Project:	Qualitative Research to Compliment the Quantitative Research Conducted at the Aboriginal Diabetes Wellness Program	
Principal Investigator(s):	Josephine Auger	477-4512
Co-Investigator(s):	Dr. L. Laing	492-6211
	Dr. Don Voaklander	492-5099
	Dr. Michael Asch	492-5840
	Dr. A. Fisher	492-0129

Part 2 (to be completed by the research subject):

Do you understand that you have been asked to be in a research study?	Yes	No
Have you read and received a copy of the attached Information Sheet?	Yes	No
Do you understand the benefits and risks involved in taking part in this research study?	Yes	No
Have you had an opportunity to ask questions and discuss this study?	Yes	No
Do you understand that you are free to refuse to participate or withdraw from the study at any time without having to give a reason?	Yes	No
Has the issue of confidentiality been explained to you? Do you understand who will have access to your records?	Yes	No

This study was explained to me by: ______________________________

I agree to take part in this study. Yes No

______________________ ________ ______________________________

Signature of Research Participant Date Witness

______________________ ______________________________

Printed Name Printed Name

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

______________________________ ______________________________

Signature of Investigator or Designee Date

Appendix F

QUESTIONS FOR THE ABORIGINAL PERSON WITH DIABETES

1. When you were a child did you know of anyone who had diabetes? (If "no" go to 4)
2. What did you think caused it?
3. Why did it happen?
4. What happened when you found out you had diabetes?
5. What did you think caused it?
6. Why did it happen?
7. What is it like to have diabetes?
8. What causes stress in your life?
9. How do you cope?
10. What was the most helpful aspect of the Aboriginal Diabetes Wellness Program?
11. What is your diet like?
12. How much activity or exercise do you do in a week?
13. What is the least helpful aspect of the Aboriginal Diabetes Wellness Program?
14. What is your worst fear about having diabetes?
15. Next month, what do you think your health will be like?
16. In the distant future how will your health be?

Appendix G

QUESTIONS FOR THE FAMILY MEMBER

1. What is it like to have a family member with diabetes?
2. Do they eat any differently from other family members?
3. What are their eating habits?
4. What sort of exercise do they get in a week?
5. How do they cope with stress?
6. How did their attendance at the Aboriginal Diabetes Wellness Program affect them?

Appendix H

QUESTIONS FOR THE ABORIGINAL HEALTH CARE PROFESSIONAL

1. Why was the person attending the program?
2. What was your first physical assessment of the client?
3. What recommendations were they given?
4. How would you describe their attitude?
5. Did they seem willing to modify their lifestyle? How so?
6. Do you think the Aboriginal Diabetes Wellness Program was able to help them in any way?

Appendix I

QUESTIONS FOR THE ELDER OR CULTURAL HELPER

1. What do you think it means to an Aboriginal person to have diabetes?
2. What are the benefits of the Aboriginal Wellness Program?
3. Do you think that the program is meeting the needs of the Aboriginal people?
4. What factors influence the cooperation of patients/clients while they are attending the program?
5. What factors influence the health behavior of Aboriginal patients after they leave the program?
6. What are the characteristics of the Aboriginal patients who are successful in sustaining their new patterns after they leave the ADWP?

Appendix J

STATEMENT OF INTENT FOR THE FOCUS GROUP PARTICIPANTS

My thesis will focus on why some people are improving their health after attending the Aboriginal Diabetes Wellness Program and why others are not. In contrast to the Capital Health Authority evaluation that employs quantitative methods, my thesis will utilize qualitative methods. The primary difference is that you achieve more depth by conducting qualitative research than you do with quantitative methods. The two methodologies could be complimentary.

This focus group is one method that I will be using as part of my thesis research. It is your opportunity to give me your views on the health status of the Aboriginal people who attend this program. You are an important part of this research for two reasons; because you work here, and you have expertise to offer.

Following this portion of the research, I have thought of conducting interviews with a number of clients who have improved their health and those who have not. It is through my thesis that their stories and your comments will be read, and this will hopefully enable others to better understand this issue.

Appendix K

RELEASE FORM FOR THE FOCUS GROUP PARTICIPANTS

I hereby release my permission to Josie Auger for the purpose of compiling a research project. The information obtained from the focus group will serve two purposes. First, it will be used as part of a field research paper in Public Health Sciences 540 under the supervision of Dr. Lory Laing. Second, it will contribute to Josie Auger's thesis under the supervision of Dr. Nancy Gibson. The interviews will be treated confidentially.

As the interviewee, I have been fully informed of the following points before proceeding with the interview:

1. My participation in this research is completely voluntary and I understand the intent and purpose of this research.
2. Upon my request, I understand that my identity will be kept confidential and that I have the right to withdraw at a later date.
3. I know I may refuse to answer any questions and that I may withdraw at a later date.
4. I am aware that others will be reading the results of this research and that this research will eventually be published.
5. Additional conditions for my participation in this research are noted here:
6. I will receive a copy of this contract.

______________________________ ______________________________

Interviewee Date

____

Interviewer

Appendix L

QUESTIONS FOR THE FOCUS GROUP PARTICIPANTS

1. What do you think it means to an Aboriginal person to have diabetes?
2. What are the benefits of the Aboriginal Diabetes Wellness Program?
3. Do you think that the program is meeting the needs of Aboriginal people?
4. What factors influence the cooperation of patients/clients while they are attending the program?
5. What factors influence the health behavior of Aboriginal patients/clients after they leave the program?
6. What characteristics of the Aboriginal patients who are successful in sustaining their new patterns after they leave the program?

Appendix M

ABORIGINAL DIABETES WELLNESS PROGRAM EVALUATION (prepared by the staff members)

Date ____________________________ Name____________________________________

1. How did you hear about us / who referred you to the program?
2. Were the instructions, verbal / on letter, before to coming to the program, clear or confusing for you, such as location, what to bring, what to expect or what to do before coming – blood work?
3. Overall, how did you find the (Circle for each...suggested improvements)

Rooms	Poor	Fair	Good	Excellent
Meals	Poor	Fair	Good	Excellent
Location	Poor	Fair	Good	Excellent
Staff	Poor	Fair	Good	Excellent
Teaching area	Poor	Fair	Good	Excellent

4. What are your thoughts / feelings on each of our staff members ie. Were they friendly, helpful, easy to understand, confusing, clear with their teachings, needs improving or other?

Ann at front desk ____

Kathleen ____

Doctor ____

Henry/Madge ____

Vanessa ____

5. What did you feel was most helpful / valuable part of the program?
6. Do you feel comfortable with what you have learned here?
7. What sort of lifestyle changes do you see yourself making in the near future, because of what you know now?
8. What did you not like about the program? And what ways would you like to see it changed?
9. Would you recommend us to others?

Thank you for your time.