community task force on maternal and child health

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The Manitoba Native Indian Mother & Child. Discussion Paper on a High Risk Population

THE MANITOBA NATIVE INDIAN MOTHER AND CHILD
a discussion paper on a high risk population

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The views expressed in the paper are those of the author and the Task Force Committee. It is their hope that the discussion paper will stimulate interest and result in a climate for change that will eliminate those factors which create risk for the native mother and child.

SUMMARY

THE MANITOBA NATIVE INDIAN MOTHER AND CHILD - A DISCUSSION PAPER ON A HIGH RISK POPULATION

In spite of improvement in maternal and child health in Canada and the Province of Manitoba in past years, and the institutionalization of a variety of approaches and methods aimed at reducing handicap of perinatal origin, higher morbidity and mortality amongst Native populations continued compared to the rest of the provincial population. The medical, socio-economic, cultural and geographic risk factors affecting pregnancy are discussed. Canadian perinatal and infant mortality rates have shown a decline since 1973, but those provinces which have the largest Native populations, and the most isolated communities reflect the higher figures. In Manitoba, the Native neonatal, postneonatal, and infant death rates were higher than the provincial population in 1979. The postneonatal rates show the most outstanding disparities in figures between the provincial population rate of 3.4 per thousand compared to 9.4 for Indian reserves.

A profile of Native populations:
- Perinatal deaths are higher.
- Infant death rates are nearly twice that of the provincial population
- Incidence of congenital anomalies are higher.
- There is a higher rate of low birth weight.
- There is a higher rate of high birth weight.
- Childbearing begins in very early years and extends into older years.
- There is a higher hospitalization rate for Indian infants than the rest of the population, as are the number of patient days spent in hospital for
- complications of pregnancy for the mothers.
- There are more adolescent pregnancies.
- More multiparity and grandmultiparity.

- Causes of infant deaths include gastrointestinal infections, respiratory infections, congenital anomalies.

- Other factors include access to fewer medical facilities, limited antenatal care, poverty, poor housing, isolation, lack of sewage disposal and potable water.

Development of high risk profiles and an examination of factors contributing to less than optimal health is required.

One of the factors affecting health care to treaty Indians today is the confusions of roles of provincial and federal government in provisions of health care to Indians.

Some causes of morbidity in Native Indians have been studied, such as respiratory infections, diarrhea, otitis media, bronchitis, accidents, nutrition and benefits of breastfeeding, along with socio-cultural consideration and changing lifestyles. The College of Physicians and Surgeons have developed risk scoring forms to identify patients at risk, through their Manitoba Perinatal and Maternal Committee. A grave concern with Medical Services Branch is the continuing shortage of nurses, and the need to develop programs for educating indigenous personnel.

The results of a brief survey of Native women delivering at the Women's Centre, Health Sciences, indicated that few ever attended a prenatal class, and expressed a lack of understanding of risk factors involved in pregnancy. They also expressed loneliness in being separated from their families and concern for more instructions in child care.

The recommendations include:

(1) Transfer control of Indian Health Services to the Indian people.

(2) Establish a basis for health care through Provincial-Federal-Indian negotiations.

(3) Encourage health professional training programs to establish a stable professional indigenous workforce in Manitoba.

(4) Continue Native involvement in the selection of health personnel.

(5) Establish innovative programs with and for the Native population to provide knowledge on family planning, childbearing, breastfeeding, child-caring and parenting.

(6) Identify outstanding socio-economic risk indices specific to Native women.

(7) Develop a perinatal health care standards package on Indian health involving Native people.

(8) Establish more comprehensive statistics on maternal and child health specific to treaty Indians, non-status Indians and Metis classifications.

(9) Establish an infant and a maternal risk registry to monitor trends in Native maternal and child health mortality and morbidity.

(10) Share data and research results with Indian people.

THE NATIVE INDIAN MOTHER AND CHILD: A DISCUSSION PAPER ON A HIGH RISK POPULATION

CHAPTER I: INTRODUCTION - THE RISK APPROACH

The improvement of maternal and child health has been of concern amongst medical professionals for many years in many countries, and, indeed, efforts have been rewarded with a lowering of mortality and morbidity rates. Reports published by Margaret and Arthur Wynn have served to consolidate studies conducted in European and Western countries and to highlight the formidable economic and social impact of handicap of perinatal origin.[1] Evidence suggests that a great many conditions producing handicaps and morbidity can be prevented prior to and at birth with a comprehensive, systematic approach to maternal health care, and that, given a combination of risk factors, the more negative influences are removed, the better the outcome.[2]

Health and Welfare Canada, in their publication entitled Recommended Standards for Maternity and Newborn Care, suggests that:

> It is estimated that approximately 10% of pregnancies may be described as high risks, and many of these can be identified preconceptionally or during pregnancy providing an opportunity for early detection and possible prevention of major complications. There are several numerical indices available to facilitate early detection of high risk pregnancies. Whichever one is utilized must assess physical, social and psychological factors. Poverty, malnutrition and anemia are social factors which reduce the chance of carrying to term a baby of sufficient weight with adequate brain cells.[3]

The following definition of a high risk pregnancy is best described by Dr. L.J. Peddle as

> ...one which carries an increased chance of morbidity or mortality to the mother, her fetus or newborn infant.[4]

Biological, social, economic, cultural and psychological factors which place the infant and mother at risk are numerous, and the challenge and search for accurate indicators to predict high risk situations continues with the earlier and major effort being undertaken by physicians.[5] In addition, in recent years, nurses, social workers and allied professionals have also designed risk identification scales which include social and psychological factors.[6]

The concept of "at risk". sub-groups and populations has also been recognized for some years. For example, teenage mothers have long been defined as a risk population, and statistics within this group continue to illustrate the dynamics of combinations of medical and social factors affecting pregnancy.[7] Saunders emphasizes that,

> The high risk infant program begins at the beginning , by identifying the at-risk mother who is a health risk. We must begin a program to identify, at the beginning, the mother at psychosocial risk as well, and develop appropriate prevention and intervention strategies.[8]

The process of identification of high risk populations, becomes somewhat of a complex task when dealing with identification of the individual mother at risk. As pointed out by Dr. Murdock, conventional scoring indices should involve "regional and ethnic differences.... and should be individualized to the population being cared for."[9]

CHAPTER 2: PERINATAL AND INFANT MORTALITY RATES IN CANADA

In Canada, mortality and morbidity rates for mother and child have been drastically reduced in past years in the general populations of Canada and the provinces as demonstrated below.

Perinatal Death Rates

Year	Manitoba	Saskatchewan	NWT	Canada
1973	17.3	20.1	21.4	17.6
1978	14.1	14.1	21.4	12.8

* Manitoba ranked sixth among the provinces in 1978

Perinatal death rate is defined as foetal deaths of 28 or more weeks gestation plus infant deaths under seven day of age per 1,000 total births. Total births are defined as live births plus stillbirths of 28 or more weeks gestation.[10]

Canada's perinatal death rate per thousand population declined from 17.6 in 1973 to 12.8 in 1978. Manitoba's perinatal death rate declined in these years from 17.3 per thousand to 14.1 per thousand.

Saskatchewan, although showing the same perinatal death rate (14.1 per thousand) in 1978, demonstrated a substantial reduction of perinatal deaths from 20.1 per thousand to 14.1 per thousand from 1973 to 1978 and showed a steady decline. However, the Northwest Territories' figures from 1973 and in 1978 show the rate of 21.4 per thousand although higher figures between these years are shown.

It has been suggested by the Government of Canada's document A New Perspective on the Health of Canadians that:

> It is generally agreed that early prenatal care, along with the early identification of high risk pregnancies, is the principal means by which the infant mortality rate can be further lowered. It is also true that economically deprived segments of the population, including Native Peoples, contribute disproportionately to the infant mortality rate in Canada.

Infant Mortality Rates

Year	Manitoba	Saskatchewan	NWT	Canada
1973	16.4	17.6	37.4	15.5
1978	13.7	14.3	23.3	12.0

Manitoba ranked 10th in its infant mortality rate in 1973 (given that a rank of one is representative of the most favorable rate) and ranked 6th in 1978. In both 1978 and in 1973, the highest infant mortality rate was recorded by the Northwest Territories. Prince Edward Island had the most favorable rate of 7.6. The second highest rates were shown by Saskatchewan with its rate of 14.3 second only to the Northwest Territories. There has been some speculation as to the reasons why both perinatal and infant mortality rates progress to a lower rate faster in some provinces than others. The outstanding characteristic appears to be that those provinces with the highest rates tend to have a larger Native population and have the most isolated communities with lack of access to medical facilities. Although these figures are not necessarily the latest, they were extracted from the Manitoba Vital Statistics Report update of 1979 indicating trends in these two selected areas for the purposes of discussion within the scope of this paper.

CHAPTER 3: MANITOBA NATIVE INDIAN MOTHER AND CHILD

Native Indian mothers and children continue to stand out as an identifiable high risk population across Canada.

Statistics continue to indicate disparities in this population as compared with the rest of Canada in most measurements and indicators of health and socio-economic status. Manitoba statistics are not much different from those of the rest of the country. Among this group, there are higher morbidity and mortality rates and, in particular Native mothers and infants show as a high risk group. There are more complications of pregnancy and childbirth, more congenital anomalies, more perinatal morbidity, with the outstanding risk population being identified as post-neonatal infants (28 - 365 days).[12]

In Manitoba the general population in 1979 was 1,098,904 and the Indian population was estimated to be 42,876 with total births in Manitoba, 16,242. The neonatal mortality and post-neonatal mortality rates per thousand are higher in the Indian reserves and unorganized territories as shown below.

	Indian Reserves & Unorganized Territories	Manitoba
General Population	42,876	1,098,904
Neonatal Death Rate	10.2	9.1
Post Neonatal Death Rate	9.4	3.4
Infant Death Rate	19.6	12.5
Stillbirths	7.1	6.3

The Manitoba statistics further indicate the following maternal and child health figures:

- Indian Reserves and Unorganized Territories indicate 27.1 perinatal deaths per thousand in 1975 and 14.0 in 1979 compared with 16.0 in 1975 in all of Manitoba and 13.8 in 1979. There has been some substantial progress in lowering of Native perinatal deaths in Manitoba.

- As shown in the previous statistical comparison of infant deaths, in 1979, Indian infant death rates were 19.6 per thousand compared with 12.5 per thousand for Manitoba. The conditions affecting infant deaths of the Native Indian tended to differ from that of the rest of the non-Native population. Two of the leading causes of Indian infant deaths have been gastro-intestinal infections and bronchopneumonia, and these appear to have remained the major causes of morbidity and mortality. The incidence of congential anomalies appears to be unnecessarily high in the Indian population as well.

- There is a higher rate of low birth weight babies in the Native Indian population, compared with the Manitoba total for 1979.

Birthweight	Indian Reserves & Unorganized Territories	Manitoba
<1500 grams	0.9	0.8
1500-2000 grams	1.3	1.1
2000-<2500 grams	4.6	3.8

- Indian Reserves and Unorganized Territories also indicate a greater incidence of higher birthweight than Manitoba overall figures.

Birthweight	Indian Reserves & Unorganized Territories	Manitoba
3500 grams	46.6%	43.3%
Mean Birthweight	3,437.1 grams	3,397.6 grams

- Parity as a high risk factor amongst Native Indian populations has been of some concern.

Parity	Indian Reserves & Unorganized Territories	Manitoba
4	11.2%	6.3%
5	7.5%	2.2%
8+	5.3%	0.9%

These are random figures from Manitoba's Vital Statistics report which are used to emphasize that Indian mothers tend to have more children thereby adding to risk.

- Age is also a factor amongst Indian women, with childbearing beginning in very early years and extending into the older years. 1979 figures indicate the percentage distribution of mothers by age services region.

Age	Indian Reserves & Unorganized Territories %	Manitoba %
Under 15	1.2	0.2
15-16	5.8	1.8
17	7.3	2.5
18-19	16.7	8.1
40-44	0.9	0.5

SOME CAUSES OF MORTALITY RATES

Neonatal Death Rates by Cause of Death:

1979	Indian Reserves & Unorganized Territories	Manitoba
Immaturity	31.4	13.7
Congenital Anomalies	39.2	22.3

Post Neonatal Death Rates by Cause of Death:

1979	Indian Reserves & Unorganized Territories	Manitoba
Symptoms ill-defined	31.4	10.5
Other causes	47.1	11.2

- Some other comparisons on the statistics on Indian Reserves, Unorganized Territories, and Manitoba populations are as follows:

Infant Death Rates:

Year	Indian Reserves	UT	IR & UT	Manitoba	Canada
1972	50.8	64.0		19.0	17.1
1976	31.6	29.5		15.6	
1979			19.6	12.5	

Newborn Death Rates:

Year	Indian Reserves	UT	IR & UT	Manitoba
1972	16.0	13.5		10.3
1976	11.8	11.8		9.0
1979			7.1	7.6

Perinatal Death Rates (Foetal deaths of 28 or more weeks gestation and infant deaths under 7 days of age per 1000 total births)

Year	Indian Reserves	UT	IR & UT	Manitoba
1972	28.5	48.5		19.9
1976	30.8	24.6		17.7
1979			14.0	13.8

Stillbirths (20 weeks)

Year	Indian Reserves	UT	IR & UT	Manitoba
1972	12.9	40.4		12.9
1976	23.7	19.2		11.8
1979			7.1	8.9

Stillbirths (28 weeks)

Year	Indian Reserves	UT	IR & UT	Manitoba
1972	13.0	37.0		9.9
1976	19.7	13.3		8.9
1979			7.1	6.3

Neonatal

Year	Indian Reserves	UT	IR & UT	Manitoba
1972	21.9	13.5		12.1
1976	15.8	13.3		10.6
1979			10.2	9.1

Postneonatal

Year	Indian Reserves	UT	IR & UT	Manitoba
1972	28.9	50.5		6.9
1976	15.8	16.2		4.9
1979			9.4	3.4

Although some of these statistics may be misleading due to the small number of live births on the reserves and unorganized territories, it serves to dramatize the disparities in rates between Indian and Manitoba populations. The caution with which one must read statistics or extrapolate information on Native Indian populations also demonstrates the need for separate and detailed statistics on high risk populations.

The Manitoba Health Services Commission Statistics indicate a higher hospitalization rate for Indian infants than the rest of the population.

For the year 1979, statistics indicate 241.07 patient days for 51.12 cases of complications of pregnancy for Indians compared with 105.14 patient days for 21.72 cases for Manitoba's total population. There were 6.73 cases or 54.45 patient days for certain causes of perinatal morbidity for Indians, as compared with 2.86 for 20.59 patient days for Manitoba. Hospitalizations for congenital anomalies for Indians was 31.4 patient days compared with 18.45 patient days for Manitoba.[14]

The Health and Community Services Statistics on Maternal and Child Care 1979 indicate that there are greater infant and post-neonatal death rates in populations from Indian Reserves and Unorganized Territories in Manitoba compared with the rest of the provincial population. There are higher percentages of low birthweight babies and higher rates of high birthweight babies. Indian mothers tend to have a higher parity than the rest of the population, and have babies earlier.[15]

Native mothers and children in Manitoba are a clearly identified high risk population. Generally, there are more adolescent pregnancies; more complications in pregnancy and childbirth; greater multiparity and grandmultiparity; higher perinatal, neonatal and infant death rates; more low birthweights, and more high birthweight Indian babies; greater mortality from immaturity; more deaths occur from gastrointestinal infections and congenital anomalies; less access to health care facilities; less antenatal care as well the majority of the population live in conditions of poverty in both isolated, semi-isolated and urban areas of the province.

CHAPTER 4: CHARACTERISTICS OF THE INDIAN POPULATION IN MANITOBA

For the purpose of this discussion paper, the term "Native" is used to mean the three basic groups in Manitoba:

- Registered Treaty Indian persons who have legal status as Indians under The Indian Act.
- Non-status Indians who, although of Indian descent and culturally, socially and economically Indian, are not recognized to be Indian in Canadian law.
- Metis, who are of mixed European and Indian descent and who follow a distinct and unique Metis culture.

Because of difficulties in obtaining accurate and separate data on the non-status Indian and Metis populations, as they tend to disappear into the provincial statistics, only available registered treaty Indian statistics are used, as well as the term "Unorganized Territories" which implies a predominant Native population in these areas.

According to 1978 statistics, there are 44,780 treaty registered Indians in Manitoba; 5,000 persons are estimated to be non-status Indians, and Metis persons number approximately 88,000.

Of the Indian population of 44,780 in Manitoba, there are 8,933 females of childbearing age (15-45). Although the rate of growth is decreasing, it is still a very young population - 58.5 percent are less than 25 years of age compared with Manitoba's, 35.2 percent.[16]

Indians in Manitoba consist of four tribal groups - the Cree, the Ojibway, the Sioux, and the Chipewyan - most of whom are members of the sixty different reserves in Manitoba. A fair number of Native Indian people, non-status Indian people and Metis live in urban Winnipeg, smaller and rural centers in the province, and what is termed as "unorganized territories."

Although the following observation was made by Indian and Northern Affairs Canada, poverty conditions continue to exist.

> Based on interviews made for this report and on available information, Indian living conditions have improved in some material ways: the quality and availability of housing has improved; water and other community services are better and more plentiful; health care, social services and welfare are more accessible to those in need.[17],

Measurements of conditions and lifestyle of Indians in Canada, in general, include the fact that: the life expectancy is ten years less than other Canadians; the rate of violent death and suicides are 3 to 6 times the national rate; there is a higher incidence of divorces; there are more births out of wedlock; there are more Indian children being taken into care; 50-70% of the Indian population received social assistance in 1977-78; one in three families are found in overcrowded conditions; and the Native unemployment rate of Manitoba is estimated to be as high as 90 percent in some communities.

Another indicator - that of educational attainment - is lower than the rest of Manitoba, and the drop-out rates continue to be high despite progress in recent years. Retention rates have improved but are still estimated to be less than one-quarter of the general population in Canada. In addition, Indian persons are over-represented in the prisons of this country. According to Indian Affairs:

> In Manitoba, Saskatchewan and the North, Indians and other Natives represent upwards of 40 percent of the population in jails and penitentiaries.[18]

CHAPTER 5: URBAN INDIANS

Studies have estimated that the Native population living in the City of Winnipeg to be 14-16,000 including treaty Indians who number approximately 5,500-6,500. One characteristic of this population, is instability due to its high mobility - instability in the sense that there is constant migration in and out and within the city. The Manitoba Health Services Commission figures indicate that there was a similar number of treaty Indians living in Winnipeg in June of 1978 and in June of 1979. There was an estimated 16.3% of the Indian population of Manitoba in 1978 living in Winnipeg and 16.7% in 1979. This population is described as young, predominantly female, unemployed, and living as single parent families.[19] Indian Affairs publications also indicate that there are 10% more females than males living off reserve[20] and if these figures were to include women who have lost status as Indians through marriage to non-Indians, they would be substantially higher. In urban Indian Canada, the unemployment and welfare dependence is estimated to be between 25-30%.[21]

To develop high risk profiles, an examination of factors which contribute to risk, solely or in combination, is necessary, along with outcomes as indicated by statistics. The Indian maternal and child health situation in Manitoba is rooted in poverty and demonstrates vividly the relationship between mortality, morbidity and socio-economic status.

CHAPTER 6: SOCIO-ECONOMIC STATUS AND HEALTH

The association between socio-economic status and risk population has long been recognized. Lower income Canadians suffer higher mortality rates for most conditions than Canadians with higher incomes.[22] The Hon. Justice Emmett Hall, Special Commissioner, noted in his report that there was "room for improvement" amongst Native people and the lower socio-economic groups in maternal and infant mortality rates.[23]

Characteristics of people living in poverty and their relationship with the health delivery system is basically similar to the observation that,

> ... children in families from economically and socially disadvantaged areas, and the elderly in similar circumstances share the characteristic of not being their own advocates in matters of health.[24]

The characteristics of mothers in poverty are often described as being of high parity, young, low income, seeking antenatal care late in pregnancy, unemployed, with low educational attainment. All these factors place her and her fetus in a risk category.

The high neonatal and post neonatal mortality rates are attributed mainly to respiratory ailments, infectious and parasitic diseases, "reflecting poor housing, lack of sewage disposal and potable water, as well as poorer access to medical facilities."[25]

Native populations continue to be of concern among health professionals due to the obvious disparities between their health and the rest of the general population of Canada. The socio-economic factors affecting health function in combination with medical factors to produce a greater degree of risks.

The health professional working with Native Indian communities has a great deal in common with the client. He is faced with the fact of poverty as is his client, and must deal with it. The frustration of conditions of poverty among reserve populations has been well documented and has been expressed by the Canadian Indian Lawyers Report from their Indian Child Welfare Workshop.

> The fact that most individuals on welfare would obviously prefer the dignity of employment, but are faced with a system that provides little or no alternative. The Government has repeatedly sought to unravel this vicious cycle of dependence and poverty, yet despite their well intentioned efforts, conditions persist and even continue to worsen.[26]

Yet the relationship between income and diseases, reflect those conditions which prevail in lower socio-economic groups such as "alcohol consumption, smoking, poor housing conditions, nutritional deficiencies..."[27]

CHAPTER 7: "CATCH 22"

Traditionally, the responsibility and jurisdiction for health care delivery has rested with the Government of Canada whose policy objective is described in the following statement:

> The objectives of the Indian and Northern Health activities, which are the major elements of the Medical Service Programs, are to provide for and arrange for health services for eligible Canadian Indians, Inuit and residents of the Northwest and Yukon Territories ...[29]

The extent of the Canadian Government's mandate of health services to Indians has long been a topic of debate between Indian people and government. The statement of the National Commission of Inquiry on Indian Health, clarifies the Indian position in its paper Rights and Priorities in Indian Health,

> It is our position that the Government of Canada is our trustee and is under a fiduciary obligation to protect our rights and interests.[30]

The contradictions go on to the policy level where there is an argument as to the responsibility and legal jurisdiction or mandate of the National Health and Welfare, and is viewed differently by the government and its clients. This argument of the government still persists today as is well described by Graham-Cumming in 1967

> Thus, contrary to much popular misconception regarding the matter, Canadian Indians do not have any treaty or legal rights to free health services to be provided by the central government. The central government did not and, in fact does not recognize any legal obligations to provide health services to Indians or Eskimos free of charge or otherwise.[31]

The position of the Indian people on Treaty and Aboriginal rights is well known, and is beginning to receive recognition, in part, as agreements are being negotiated with the Federal and Provincial governments.

Nonetheless, the lack of clarification of roles of the Provincial and Federal governments continues to result in inconsistencies in services, lack of coordination, thus affecting the access and quality of services.[32]

CHAPTER 8: SOME CAUSES OF MORBIDITY

There are a host of studies which have been carried out in attempts to identify those populations at medical risk, their characteristics and appropriate intervention. A myriad of studies have been conducted to determine underlying medical causes of morbidity amongst Native and Eskimo infants. Brody et al observed that "lower respiratory illness was found to be a major cause of infant mortality among Alaskan Eskimos."[33] Upadhyay and Gerrard observed that "The syndrome seems to be particularly common in Indian and Metis children - that of severe recurrent pulmonary disease associated with diarrhea .... recovery was noted when cow's milk and dairy products were excluded from diets.[34] Health and Welfare Canada reports causes of infant death were from respiratory illnesses, infective and parasitic disorders and congenital anomalies.[35] Manitoba Department of Health and Social Development note,

> Indian Reserve and unorganized territories do not, however, appear to have a problem with low birthweight; indeed they have a heavy concentration in the high birthweight groups.... Further, in these populations by far the greatest risk period is the post-neonatal period.[36]

Dr. O. Schaefer in a report on Otitis Media and bottle-feeding, stated,

> Analysis of otoscopic findings and infant nutrition histories of 536 Eskimos..... shows an inverse relation of incidence of chronic middle ear disease and duration of lactation enjoyed in infancy with a minimum incidence of Otitis in individuals breastfed more than 12 months.[37]

From 1976-78 the Medical Services Branch of the National Health and Welfare figures indicate that causes of Indian post-neonatal deaths in each ICD category show a higher death rate except for circulatory diseases. The leading cause of death was respiratory illnesses which was 5.8 per thousand for Indians and 1.0 for the provincial population.[38]

Houston et al., in their study of lung disease in Indian children observed that,

> The high frequency with which chest infections were associated with diarrhea in the Indian children in our study is of interest. It may indicate a higher susceptibility to both the respiratory and the gastrointestinal systems to infection, or it could relate to a common precipitating cause, such as milk allergy, which appears to be more frequent in Indian infants than in white infants.

They further suggest that,

> ... recurrent pulmonary infections in Indian children might largely be prevented by improvement of living conditions, encouragement of breast milk as the sole food for the first six months of life, and more widespread early vaccination.[39]

It seems that Manitoba Indians are not unique in the high infant mortality rates. Brenner et al in The Navajo Infant Mortality Report, state that,

> Unavailability of health services, low income, poor housing and sanitation, and large families have been found to be significant factors associated with infant mortality.

and point out that infection was significantly more frequent in infants subsequently dying in the postneonatal period than those dying in the neonatal period.[40]

Bronchitis has been observed to be a cause of morbidity and disability in Indians.[41]

Brett et al, in their study on perinatal deaths in the Northwest Territories, included low birthweight, inadequately utilized antenatal care services, accidents, substandard pediatric care and failure to diagnose a potentially treatable condition as causes of perinatal death. Infant death factors were identified as infections, malnutrition and poor health.[42]

The benefits of breast-feeding have been well documented, and universally advocated where possible by professionals. In Manitoba, Dr. Judith Ellestad-Sayed et al, documented in their study entitled Breastfeeding Protects Against Infection in Indian Infants, that bottlefed infants were hospitalized ten times more often than those who were breastfed.[43] Fortunately, the trend in Manitoba is that breastfeeding is quite popular at this time, and more Native mothers are encouraged to breastfeed. The Manitoba Pediatric Society Committee on Breastfeeding, in their promotion to increase breastfeeding, noted an increase in Native mothers breastfeeding, from 36 percent in 1978 to 39 percent in 1979.[44]

Although there is a wealth of information on Native and Eskimo maternal and infant studies, few attempts have been made to consolidate this information in order to promote a systematic holistic approach to reducing morbidities.

CHAPTER 9: RISK FACTORS - SOME SOCIO-CULTURAL CONSIDERATIONS

The history of Native-white contact is documented well in other studies dealing with the resulting acculturation, introduction of new diseases, conflicting ideologies, the cultural disintegration of minority populations, and impact of a change in lifestyle by outside agents. The Native Indian has experienced all these and in many instances the changes have not been to his benefit. Dr. Schaefer noted that Arctic Bay and Pond Inlet's Eskimo change in lifestyle and nutrition change with permanent settlements resulted in a "decline in hemoglobin level in growing children and in women of childbearing age."[44] The Nutrition Canada Survey reported that "In general, Nutrition Canada findings on the Indian and Eskimo Children and adolescents revealed deficiencies of iron, folate, and Vitamin C."[45]

Dr. Murray in his article, Special Considerations for Minority Participation in Prenatal Diagnosis, states:

> Beliefs and value systems may lead members of minority groups to make decisions that seem unwise or even irrational to members of a dominant group ..... These differences in perspectives are often exacerbated, because health professionals who represent the majority often do not recognize their limited abilities to communicate with persons of different cultural or religious background.

He further points out that the dilemma and complexity of prenatal diagnosis for minority populations and disadvantaged groups involves social, ethical and legal questions.[47]

It must be remembered that poverty, malnutrition and anemia are social factors which reduce the chance of a healthy outcome of pregnancy.

CHAPTER 10: HIGH RISK SCORING

Coopland et al, in their discussion on high risk scoring forms observe that,

> .... There is no agreement concerning all the high risk factors or the degree to which any one factor may influence outcome....[48]

Yet attempts must continue to be made to develop formalized methods in,

> recognizing, documenting, and cumulating antepartum and intrapartum factors, in order to predict later complications for the mother, fetus, and infant.[49]

Generally, the question of identification of risk factors which are generally and universally accepted are,

> previous abortion, pre-eclampsia, smoking, poor prenatal care, single status, anemia, uncertainty of last menstrual period.[50]

One of the key issues identified by Shirley Post in the foreword of the publication Prevention of Handicap: A Case for Improved Prenatal and Perinatal Care, was the "early identification of high risk pregnancies and appropriate referral to units equipped to give the quality of care needed."[51]

Parity and age as a risk factor has been discussed in many articles and are established medical risk factors in pregnancy in combination or in isolation. The age of reproductive risk is the extreme poles of age, and the degree of risk is determined by social, economic and cultural factors.[52]

In his article on Grand Multiparity, Dr. Baskett observed that of his sample studied, Indians were younger, and had a higher parity, but also had a higher rate of diabetes, tuberculosis, anemia, uncertain dates, hypertension, and premature rupture of the membranes. This sample also indicated that the Indians were more likely to have had little or no prenatal care which resulted in a higher perinatal death rate.[53]

CHAPTER 11: ANTENATAL CARE

The issue of attendance to antenatal care and inadequately utilized antenatal services appears to be quite common among Indian people across North America. Stewart et al, observed in their Navajo Health Consumer Survey, that:

> In all three areas Navajo mothers were much more likely to obtain postnatal than prenatal care ....[54]

The 1977 annual report of Medical Services Branch states that emphasis was being given to antenatal care. Bruce, et al, in the study on unregistered obstetric patients, state,

> In summary, as previously reported, perinatal losses and damage continue to be caused by a lack of antepartum care, even with the extension of care and services by a regional perinatal network.[55]

The College of Physicians and Surgeons of Manitoba Perinatal and Maternal Committee Report in 1978 indicated that 20% of total perinatal deaths reflected an insufficient number of prenatal visits, although the remaining 80% had adequate quantitative antenatal care. They suggest that these perinatal deaths may be due to patients not attending early enough for prenatal care.[56]

CHAPTER 12: ACCESS, ISOLATION AND HEALTH PROFESSIONALS' PROBLEMS IN STAFFING

One of the gravest concerns of the Medical Services Branch, is the continuing acute shortage of nursing professionals in the Indian communities due to recruitment difficulties and problems retaining staff which are within the service. Although efforts were made by recruiting tours, there was a problem of bringing in nurses with sufficient experience, and vacancies continued. Because of this shortage and high turnover of nurses the preventive program suffered. One of the reasons given for this dilemma was the financial restraint and subsequent restriction of training programs for nurses in Indian communities, thereby creating dissatisfaction. In 1979 no inservice was carried out due to restrictions in travel and training.[57] The other unmentioned and perhaps too well understood contributory factor is the problem of isolation and lack of access to facilities. The professional's needs differ somewhat to the client in: the requirements for job satisfaction; adequate financial and psychological compensation; an adequate standard of living in an accustomed style; a satisfactory cultural and social milieu conducive to personal growth and development, and most important of all, continuing professional growth. The present evidence suggests that Indian service barely meets these needs, thus necessitating the professionals to "move on" to a situation which better meets these requirements. One of the obvious solutions to these difficulties in meeting the standards is to provide a climate where these needs are met. Within this framework, a great deal of discussion has been initiated and implemented in the development of indigenous professionals and paraprofessionals. An observation made by Stewart et al, is that,

> The largest number of Navajo (and other Indian) health care providers in reservation facilities are nurses, both registered and practical nurses. Many of the nurses also speak both Navajo and English and tend to remain in the facilities longer than other providers....[58]

Cultural considerations also have been pointed out by Hobart, who stressed that the extreme poles of acculturation and traditionalism contribute to less than optimal health.[59] Traditionally, health professionals are viewed as agents of change towards better health practices. Along with this, they become agents of acculturation. Native professionals can become the agents of change in their own communities, can offer the empathy and understanding and are neither too traditional nor too acculturated.

Then, too, the problem noted by Dr. Baskett in his article entitled Obstetric Care in the Central Canadian Arctic, indicates that this is a universal problem:

> Providing obstetric care to small numbers of people scattered over a vast area presents a considerable challenge. The only practical way of providing primary care to isolated communities of a few hundred people is with nurse practitioners. Even then there are difficulties with a high annual turnover rate (52%) of nurses and in maintaining practical skills when even the busiest nursing station averages only about one delivery per month.[60]

To sum up, the factors which operate in combination to contribute to the degree of high risk of a population are vast, varied, and have no instantaneous solutions. A great deal of progress has been accomplished in raising

the standard of life for the Indian population in Manitoba, but a great deal must yet be confronted, courageous and sweeping new incentives in human development must be made by both the caregiver and the Native people.

The cost benefit of preventive programs as opposed to acute care have been proven many times over. It is sometimes extremely overwhelming to professionals who are involved in the health care for Indians that the acute care needs by far surpass other considerations. A systematic total approach is required in as much as is possible for Native Indian populations and this must involve those most affected by the present system - the Native people.

CHAPTER 13: A NATIVE PERSPECTIVE: A SURVEY

A very brief survey was made at the Health Sciences Women's Centre in Winnipeg, to solicit opinions of Native women regarding their own particular view of childbirth, evacuation, and the delivery system. At best, these interviews were sketchy, access to files was not sought, and the population interviewed was extremely random. Many of the questions in the questionnaire were open-ended, and a fair sample of the women were either too exhausted after childbirth or somewhat shy to express opinions. There was more success in the direct questions requiring yes or no answers.

There was a random sample of fifteen women who were interviewed in the Health Sciences Women's Centre.

A profile of these Native women who were interviewed follows:

- The average age was 22.2 years.
- The average education was 9.3 years.
- The average parity was 2.7.
- The average gravidity was 3.13.
- 80% of those interviewed spoke one or more Native languages.
- 60% did not smoke or drink during pregnancy.
- Two had a history of employment.
- 53.3% were from isolated Indian communities.
- 20% were single parents.
- Five had Caesarian sections.
- One only had ever attended one session of prenatal classes.

- Four husbands of these mothers were unemployed, others were seasonally employed.
- Five fathers were at home to look after children.
- Of the nine rural patients, the total stay in Winnipeg was 23 weeks.
- The sample had 42 children, in total:
  (a) seven of whom were Caesarian deliveries
  (b) twenty-two were breastfed - from 3 months - 2 1/2 years
  (c) eighteen were bottlefed,
  (d) two children were adopted out in the traditional manner.
  (e) there were two infant deaths (not included in 42)
  (f) seven had been hospitalized ranging from "once for a few days" to ten times, one being home for only three weeks in her first year of life. Causes were described as diarrhea, pneumonia, infected ears, "low blood", jaundice and "throwing up" and heart surgery.

*Future pregnancies:

- seven replied maybe,
- four replied a definite yes,
- one gave a definite no reply,
- three defined a method of birth control which they would use.

The striking impression one gets during these interviews is the seeming lack of understanding of risk factors involved in pregnancy, in particular for those who had previous less than optimal outcomes. There seemed to be an attitude that the decision for pregnancy was not their's to make.

Homes and Housing:

- three had no home at all and were living with relatives,

- two lived in one room houses,

- others varied in amount of rooms with off-reserve housing, and rental in duplexes and apartments in city

*The maternal complications in present pregnancies and deliveries included:

- one paralysis of cervix,
- two varicose veins and "breech",
- two toxemia and hypertension,
- three premature,
- one thyroid,
- one diabetes.

*Suggestions for improvements:

"I think mothers should be taught how to take care of their children good enough."

"There should be some opportunity for prenatal classes, and to learn about child care."

"There should be classes held where expectant mothers can go. They should have a school for both the mother and child to go after the child is born so that they can practice together."

"Mothers should breastfeed as long as they can."

"Women have to take care of themselves. Doctors can't do it."

"Younger single girls are getting pregnant. They bottle-feed. Only two married women are having babies in my community right now. The Community Health Representative was asked to put kids on pills. The youngest girl to have a

baby was thirteen years old. Some things can be done right in the community. They should have classes for young girls regarding pregnancy and prevention but the CHR is scared of the people."

"I would advise expectant girls not to drink."

"There should be more Public Health Nurse visits to the community."

"There should be more teaching about babies."

"I went to one prenatal class and did not like it."

"I went to the Nursing Station for a checkup."

"We need a place to go and talk and socialize other than prenatal classes - somewhere where we can go to shows together, etc.. That is, for singles."

Other comments included:

"I have no idea."

"I don't know."

The concerns of the mothers dealt mainly with the development of further instruction in child care. The majority of the women accepted the system as it is, and could not visualize many changes. The most commonly expressed concern of the mothers was their loneliness in being separated from their families and communities.

CHAPTER 14: RECOMMENDATIONS

The Community Task Force on Maternal and Child Health objective is to improve maternal and child health and to prevent avoidable handicap. One of its concerns is to raise the level of consciousness in the community about high risk situations and factors contributing to maternal and child complications. It is hoped that the readers understand that the following recommendations are not exhaustive, and that the majority of the recommendations should come from the Indian people themselves in respect to their own health care. Certainly the desire has been expressed by Indian people to provide their own alternatives. The Task Force supports the position of transfer of control of Indian health to Indian people, and it becomes one of its initial and foremost recommendations.

INDIAN CONTROL

Transfer control of Indian health to the Indian people.

The implementation of the "devolution" process which has been initiated by the Medical Services Branch and the Indian people is a most encouraging step towards adequate participation of Indian people in their own health care administration. The principle involved in this process has far-reaching implications for preventive health practice and independent community action. Adequate supports towards this objective clearly are indicated and should involve the Indian people in program, design, development, operation and evaluation.

BASIS OF CARE

Establish a basis for health care to Indians through Provincial-Federal-Indian negotiations.

The concept of Provincial-Federal-Indian negotiations is supported by the Task Force inasmuch as there could be a clarification and establishment of a basis for health care to Indians pending settlement of claims.

INDIGENOUS HEALTH PROFESSIONALS

Encourage health professional programs to establish a stable professional indigenous workforce in Manitoba.

The development of such courses can provide the needed professional caregivers to counter the present instability and high turnover of professional personnel in Northern Manitoba communities.

It is imperative that the Special Premedical Studies Program, the Special Mature Student Program at Brandon, General Hospital, the Inner City Nursing Program at the Red River Community College in Winnipeg and the proposed community-based nursing education program at Keewatin Community College in The Pas, be encouraged, supported and maintained. Development of Native Indian para-professionals must also be continued.

Scholarship programs should be available at every level to ensure that those mature Native students receive financial and academic support in order to succeed in their own and their people's development.

HEALTH PERSONNEL

Continue Native involvement in the selection of health personnel.

Provide courses on Indian culture and health at universities and colleges for health care givers.

Provide courses on Indian culture and health, at universities and colleges for health care givers.

Native involvement has been practiced for some time within the Medical Services Branch, as in the provision of Interpretor services. An evaluation of existing conditions for personnel must be implemented, including exit interviews with those leaving the areas. Inservice education programs should be made available for professional health care givers, and cultural awareness programs encouraged at all levels. Indian health courses could be developed in universities and colleges.

PROGRAMS

Establish innovative programs with and for the Native population to provide knowledge on nutrition family planning, childbearing, breastfeeding, childrearing and parenting.

The concept of Indian control of health has as many possibilities for innovative approaches as have been demonstrated in the Indian controlled schools.

The concept of a centralized Indian Health Community Clinic in urban Winnipeg which is being discussed and promoted by the Winnipeg Indian Council should be supported and encouraged.

Perinatal Committees could be encouraged in the communities with an expanded role in those areas which deal with maternal and child care. Traditional approaches to childbearing, childrearing, and breastfeeding could be encouraged and fostered by the communities themselves. For example, experienced elders could with minimum training, be involved to share parenting expertise.

Prenatal incentives could be introduced to ensure early identification of pregnancy, and early attendance to prenatal care such as in Finland where a prenatal community nursing service pays a bonus for early attendance at a prenatal clinic.[61]

Nutritional counselling should be made available. The Montreal Diet Dispensary provides counselling for those below poverty level, as well as offering a food supplement.[62]

RISK IDENTIFICATION

Identify outstanding socio-economic risk indices specific to Native women.

The risk identification scoring forms which are presently used could be reviewed and further developed to include the more outstanding socio-economic indices, regional disparities, and ethnic differences.[63]

STANDARDS

Develop a perinatal health care standards package on Indian health involving Indian people in the design and planning and taking into consideration environmental causes of morbidity.

STATISTICS

Establish more comprehensive statistics on maternal and child health specific to treaty Indians, non-status Indians and Metis classifications.

REGISTRY

Establish an infant and a maternal risk registry to monitor trends in Native maternal and child health mortality and morbidity.

The registry should be for and have representation of the treaty Indian, non-status Indian and Metis population.

STUDIES

Share data and research results with Indian people.

A method for sharing Native health research information could be established with Native communities.

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