Great Beginnings
A Prenatal Program Evaluation

by

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Abstract

This study represents the evaluation of The Canada Prenatal Nutrition Program, Great Beginnings Project of Canning, Nova Scotia. The evaluation is based on the views as expressed in three focus groups of women who had been participating in the project.

The women identified several reasons for becoming involved in the program which included support with other mothers, information and financial help. These factors were also identified as services the women were receiving from participating in the program. The women appreciated the nutritional supplement called The Good Food Box as it was the vehicle for initiation of social contact and interaction.

Final analysis indicates that the program is meeting the short term needs of these women. The participants express interest in meeting as a group for future support in the future and after the program was concluded for them. As well the women indicated they would like to have the program extended. These results indicate there is a need to build in sustainable support and skills as a component of the program.

Recommendations include involving participants as peer support, developing a group meeting, develop means to address sustainable support with other mothers, and ways to spread out the food budget. The findings from these groups were used to redirect program priorities and to improve delivery of services.

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CHAPTER I

INTRODUCTION

Pregnancy is an important period in the life of both the mother and the fetus. The well- being of the fetus is dependent upon the health and well-being of the mother. The prenatal period offers a wonderful opportunity to educate the mother about nutrition, health, and lifestyle factors that can improve her chances of a successful pregnancy outcome, allowing the fetus to achieve its maximum physical and mental potential.

The recognition of the importance of prenatal care in Canada has led to the development of numerous prenatal programs designed to support women, particularly low-income women, during their pregnancy. An important component of all prenatal support programs is the objective to provide improved nutrition for both the mother and the fetus in order to reduce the rate of low birth weight infants. Low birth weight is associated with an increased incidence of neonatal mortality, cerebral palsy, epilepsy and mental retardation. The Government of Canada has recognized the importance of prenatal care and has made the establishment of prenatal nutrition education programs a priority. At the national level, the Community Action Program for Children (CAP-C) and the Canada Prenatal Nutrition Program (CPNP) were developed to respond to the need to reduce the incidence of low-birth weight infants. The majority of the programs developed with government funding emphasize nutrition education and supply food supplements for the mother.

Further, Health Canada has seen evaluation as integral to the implementation and development of these programs and has prepared a basic evaluation instrument that can be used across the nation for all programs funded by the CPNP initiative (Michelle Rivard, personal communication, October 18, 1995). The indicators assessed by this evaluation tool include: rate of breast-

feeding; incidence of low-birth weight infants; changes in lifestyle habits; and the use of food supplements supplied to the participants. However, it must be recognized that each program is unique and a single evaluation tool may not provide enough information to meet the needs of all prenatal programs. Therefore, each program has been encouraged to develop an evaluation strategy that will focus on its unique elements.

The extent of the enhancement of the health of the fetus has been found to be directly related to the length of time that the mother is enrolled in the prenatal program (Devaney, 1992). Therefore, it is crucial that the prenatal program meets the needs of the women enrolled so that they will continue to participate. The only way to know that their needs are being met is to involve the participants in the evaluation of the program and discuss their expectations of the program. Participants offer a wealth of information and ideas to program coordinators. As such, program evaluation is an integral part of these programs.

One program created under the federal initiatives was established in Canning, Nova Scotia on April 1, 1995. The project was titled the Great Beginnings Project. In order to maintain funding, the project was required to provide evidence that the program had an impact on the well-being of mothers and infants enrolled. The coordinator of the Great Beginnings Project felt strongly that she must be responsive to the needs of participants, making changes based on input by the participants. In particular, it was felt to be important that the evaluation focus on the needs of the women enrolled in the program and to ascertain what features enhance and block the clients' continuing participation throughout pregnancy.

The author of this thesis was invited to undertake an evaluation of this project which would ascertain: (1) what activities of the Great Beginnings Project the clients perceived to be working for them; (2) what features the clients found useful; (3) what activities influenced their pregnancy

experience; and (4) why they feel the program is, or is not, successful. The results of this evaluation were to be communicated to Health Canada as an addition to the results of the basic evaluation instrument developed by Health Canada. All evaluation results would be used for seeking support for continuing funding. In addition, the results would be used by the program coordinator to make changes to the program in response to the self-identified needs of the participants.

In the next two chapters, the development of prenatal nutrition policy and programs is outlined and the subject of the present thesis, the Great Beginnings Project in Canning, Nova Scotia is described. A review of the literature that has evaluated prenatal nutrition programs is then presented and the scope of the thesis is defined. This is followed by specification of the methodology that was used in the evaluation described in this thesis. The findings that emerged from the analysis of the discussions that took place in the focus groups will be found in Chapter VI. The thesis concludes with a discussion of the implications of the findings for the development and enhancement of prenatal nutrition programs that are addressed to similar populations.

CHAPTER II

DEVELOPMENT OF CANADIAN PRENATAL NUTRITION POLICY AND PROGRAMS

In the present chapter, the origins of policies governing the development of current prenatal nutrition programs in Canada are described. The chapter closes with a description of the Nova Scotia initiative within the national context, detailing the aims and objectives of the Nova Scotia programs.

The Origins of Current Canadian Prenatal Nutrition Programs

Although Canada has been cited as having four cities with the highest quality of life in the world in 1995 (Howard and Koehl, 1996) many Canadian children still remain at risk for poor health and social development. While Canadian children are less likely to contract infectious diseases, suffer from malnutrition, or to die in their first year of life compared to children in the developing world, there are serious challenges to their health. The infant mortality rate in the lowest income bracket is more than twice that of children in the highest income bracket. Low birth weight is a factor in two thirds of the leading causes of death and disability among Canadian children. Low-birth weight infants are at a greater risk of developmental disabilities and chronic physical, mental and emotional health problems. Factors that are known to be associated with low-birth weight outcomes include: poor nutrition before and during pregnancy; maternal age; the use of tobacco, alcohol or other drugs during pregnancy; and low income (Health and Welfare Canada, 1992). Given this background it is clear that the life chances of children who are at risk of being born with low birth weight or who are born with a low birth weight can be improved through prevention, intervention and health promotion efforts in the early stages of pregnancy and development of the fetus and in the early years of life.

In 1990, at the World Summit for Children, leaders of 71 countries met to discuss the future

of the world's children. In response to Canada's participation at this Summit meeting, Health and Welfare Canada produced a document titled, Brighter Futures: Canada's Action Plan for Children (Health and Welfare Canada, 1992). The programs developed under the Brighter Futures initiative were directed at children's health, specifically towards low-birth weight babies and children at risk of inadequate growth and development. It was recognized that additional costs in health care, family counseling, education, and social services are incurred over the lifetime of a low birth weight baby. It was acknowledged that prenatal programs such as those that are described in Chapter IV are models on which strategies to decrease the incidence of low-birth weight babies can be based.

The Community Action Program for Children (CAP-C) was one component of the Brighter Futures initiative of the federal government. Its purpose was to help community groups address the health and developmental needs of high-risk children through the preconception, prenatal, infant, and early childhood periods. The program aimed to reduce the health, social, environmental and developmental barriers that children at risk may experience, enhancing their prospects for success later in life (Health Canada, 1992, Brochure).

The outcome goals of this program included: (1) a reduction in the incidence of low birth weight; (2) promotion of growth of healthy babies; (3) increased partnership and collaboration among governments, parents, professionals and community groups; and (4) increased empowerment and knowledge of families through participation in program design and decision making (Health Canada, 1992).

The target populations included children and teen-parent families, youth at risk for early pregnancy, and women in low-income and other high risk groups (Health Canada, 1992). Program activities outlined included diet supplementation, parenting information, nutrition

counseling and food preparation, and birth companion programs (Health Canada, 1992).

At the outset, the CAP-C was set up to disburse funding for programs meeting the needs for children from conception through age six. In 1994, Health Canada asked for proposals from agencies already providing a CAP-C program for submissions for the support of programs that were specifically targeted to reduce the incidence of low birth weight babies. The funded programs were intended to reduce the incidence of low-birth weight babies among low-income populations and improve the nutritional health of mothers and babies up to six months post partum. Special consideration was to be given to programs targeting the following populations: (1) pregnant adolescents of low-income groups; (2) first time pregnant women from low-income groups; (3) low-income women at risk of abuse; (4) low-income pregnant women who abuse tobacco, alcohol, or drugs; and (5) low-income pregnant women from off-reserve aboriginal, black, and immigrant populations. Special consideration was also given to projects that promote breast-feeding.

CPNP Programs in Nova Scotia

The focus for CPNP programs in Nova Scotia was to be on low-income women having their first child because women expecting their second and third children in Nova Scotia qualify for Provincial Family Benefits which have a 'built in' nutrition education component. The main objectives established for the CPNP programs were the reduction of low-birth weight babies among low-income populations, reduction of smoking, drinking and drug abuse during pregnancy and lactation, reduction of physical abuse to pregnant women, improved nutritional intake during pregnancy and lactation; and the promotion and protection of breast-feeding initiation and duration. Within the Nova Scotia context, the reduction of these risk factors was operationalised as follows.

To Reduce the Incidence of Low Birth Weight. Low birth weight in Canada continues to be an issue since there has been no significant decline in the incidence of low-birth weight babies in the past ten years (The Canadian Institute of Child Health, 1994). The national low birth weight rate for 1990 in Canada for both sexes was 5.5 percent of live births (Canadian Institute of Child Health, 1994). The rate of low birth weight (less than 2500 grams) in Nova Scotia in 1993 was 5.1 percent (The Reproductive Care Program of Nova Scotia, 1995). In the central region of Nova Scotia, the low birth weight rate was 5.3 in 1993 (The Reproductive Care Program of Nova Scotia, 1995). Nova Scotia Department of Health has set the goal of decreasing the rate of low birth weight to 5.0 percent by the year 2000.

In order to achieve this goal, programs were necessarily directed towards the reduction of known risk factors for low birth weight. Kramer (1987), in a meta-analysis of an extensive range of studies of the determinants of low birth weight, found that, in developed countries, the factors that directly affect intrauterine growth retardation and thus low birth weight include cigarette smoking, low calorie intake or poor weight gain, low prepregnancy weight, primiparity, female sex, short stature of the mother, non white race, maternal low birth weight, prior low-birth weight history, and general morbidity (Kramer, 1987). Other studies have shown that maternal age under 18, lack of prenatal care, lower level of education, reproductive history, and short inter-pregnancy interval (Eisner, Brazie, Pratt, & Hexter, 1979) are associated with low birth weight.

To Decrease Use of Cigarettes. Women who smoke during pregnancy are at two to three times increased risk of having a baby small for gestational age and at one and a half times increased risk of the baby being born pre-term (Stewart, Potter, Dulberg, Niday, Nimrod, & Tawagi, 1995). Mitchell and Lerner (1987) found that "infants of mothers who smoked more than twenty cigarettes per day were 156 grams lighter than infants of non smokers" (p. 734).

Webster, Chandler, and Battistutta (1996) found 60 percent of severely abused and 30 percent of nonabused women were smoking during pregnancy.

In Canada, a national survey completed in 1989 of the practices of youth found that 30 percent of youth across the country aged 15 to 24 were regular smokers, the rate in the Atlantic region was higher at 34 percent (The Canadian Institute of Child Health, 1993). A study completed in the Ottawa-Carleton area found smoking rates of 37.4 percent before pregnancy and 28.5 percent after the first trimester (Stewart et al., 1995). Stewart et al. (1995) found a decrease in the prevalence of smoking prior to pregnancy from 37.4 percent in 1982 to 26.4 percent in 1993. As well, the proportion of women smoking in the first trimester decreased from 28.5 percent in 1982 to 18.7 percent in 1993 (Stewart et al., 1995). A study completed by the Pregnancy Outreach Program (POP) in Victoria found that the average number of cigarettes reported smoked prior to pregnancy was 16.3, upon entering the program it had decreased to 6.7 and, at the last visit, it had decreased again to 5.2 cigarettes per day (Fisher, 1995).

The percentage of the total population in Nova Scotia in 1994 who did not smoke was 71 percent (Nova Scotia Department of Finance, 1995). However, 41 percent of women aged 18-34 were found to be regular smokers (Nova Scotia Department of Health, 1993). A study by the Nova Scotia Advisory Council of the Status of Women, (1992) found that 30 percent of those women surveyed were regular smokers.

To Decrease Use of Alcohol. Concern arises if the "same [as before pregnancy] drinking habits are continued during pregnancy" (Casiro, Stanwick, Pelech, Taylor & The Child Health Committee Manitoba Medical Association, 1994). Single, Brewster, MacNeil, Hatcher, and Trainor (1995) completed a General Social Survey, and looked at the alcohol problems in Canada. The factors shown to be associated with current alcohol consumption were religious attendance,

age and language followed by gender, income, education and employment status. Factors that strongly predicted the volumes of alcohol consumed included male gender, attendance at religious ceremonies, age, marital status, and employment status.

Single et al. (1995) also found residents in the Atlantic provinces were more likely to report a problem related to their drinking than other provinces. The average number of drinks per day reportedly consumed by participants of POP in Victoria was 8.4 prepregnancy, 0.9 at the first visit and 0.17 at the last interview (Fisher, 1995), showing a definite decline in the consumption of alcohol during the pregnancy with program participation.

A Nova Scotia survey measured the use of alcohol among women aged 18-34. The results indicated that 32% of the respondents consumed no drinks per week, 55% consumed 1-7 drinks per week, 9% consumed 14-20 drinks per week, and 1% consumed greater than 20 drinks per week (Nova Scotia Department of Health, 1993). A survey of young women ages 15-24 found that two thirds of them used alcohol on a regular basis (Nova Scotia Advisory Council on the Status of Women, 1992). In a national study, the prevalence of regular drinking among this age group was found to be 81 percent (Health and Welfare Canada, 1992) with the rate for the Atlantic region being 75 percent.

To Decrease Drug Abuse. A study of women aged 15-24 on use of drugs found that 5 percent were using solvents on a regular basis and 13 percent were using marijuana regularly. Solvents used included glue sniffing. It was found that those who were using alcohol most frequently were most likely to use coke or crack cocaine (Nova Scotia Advisory Council on the Status of Women, 1992). The percentage of Canadians aged 15 to 24 in 1989 who used illicit drugs was found to be 15.5 for hashish, 2.5 for cocaine or crack and 1.6 for LSD, speed or heroin (Health and Welfare Canada, 1992). In the Maritimes, the amount of drugs used for the same

year and age group was found to be 30.1 percent for marijuana and hashish, and 3.9 percent for LSD, speed or heroin (Health and Welfare Canada, 1992).

To Decrease Physical Abuse to Pregnant Women. It has been suggested that there is a prevalence rate of 8-9 percent for spousal abuse in pregnancy depending on the population studied (Webster et al., 1996). It was noted that there was an increased number of miscarriages and abortion in the abused population when compared with nonabused women (Webster et al., 1996). Nevertheless, reliable data are difficult to find, especially as there is likely a bias towards underreporting. A study completed by the Nova Scotia Advisory Council for the Status of Women (1992) found that 18 percent of women had experienced physical abuse while dating, 11 percent sexual abuse and 32 percent had experienced emotional abuse. According to Health Canada, it is estimated that more than fifty percent of Canadian families experience some form of family violence (Levitt & Hanvey, 1995). It is estimated that spousal abuse affects at least one in ten Canadian women (Macleod 1987 in Levitt & Hanvey 1995).

To Promote and Protect Breast-feeding Initiation and Duration. There have been three breast-feeding trends since the Second World War in the United States. First, from 1946 to the early 1970's there was a decline in the extent of breast-feeding. The second trend was a doubling of the proportion of women breast-feeding between the early 1970s and 1982. The third trend saw the rates peak in the early 1980's. They have steadily declined since then (Schwartz, Guilkey, Akin, & Popkin, 1992). In general, breast-feeding appears to be related to socio-demographic characteristics, but the reasons for these relationships are not clearly defined.

Factors shown to be positively associated with the initiation of breast-feeding include being a non-smoker or a previous smoker, being currently employed, speaking a language other than French, being married, and having a higher level of education (Nolan & Goel, 1995). Factors

shown by this study to be positively associated with the duration of breast-feeding of at least four months were being previously employed, being a non-smoker or a previous smoker, speaking a language other than French, having higher levels of education, being older at time of delivery, and having a higher level of well-being (Nolan & Goel, 1995).

The rates of breast-feeding initiation in Nova Scotia were 52.3 percent in 1993 (The Reproductive Care Program of Nova Scotia, 1995) and 53.8 percent in 1994 (Nova Scotia Department of Health, 1994). The rate for all of Canada for 1994 was about 72 percent. The goal is to increase the rate of initiation of breast-feeding to 75 percent in Nova Scotia by the year 2000. Data on breast-feeding rates from a Survey of Routine Maternity Care and Practices in Canadian Hospitals released in 1995 showed that 58.6 percent of women were breast-feeding upon release from the hospital in Nova Scotia compared to the national average of 73.6 percent (Levitt & Hanvey, 1995). The percent of Nova Scotia women who breast-fed for at least 4 months was 33.8 percent in 1994 (Nova Scotia Department of Health, 1994).

Preliminary results from an evaluation of the Healthy Babies Program in Halifax indicate that 62.4 percent of women on this program initiate breast-feeding but only 45 percent of these women are still breast-feeding after 4 months (Elizabeth Shears, February 19th, CPNP Nova Scotia Meetings, Truro, Nova Scotia, 1996). These figures suggest that less that 30 percent of all babies born to the program are still being breast fed at 4 months of age. The goal of the program is to increase the breast-feeding rate at 4 months to 60 percent by the year 2000 (Nova Scotia Department of Health, 1994).

Conclusions

The Canadian government has clearly accepted the challenge to improve the reproductive health of Canadian women and their children. In so doing, it has built on experience in a wide

variety of jurisdictions and has advocated the development of programs that will reduce risk factors such as alcohol consumption, smoking, and abuse and has recognized the need for food supplementation for poor and otherwise disadvantaged populations. This has been translated into specific aims and objectives at the provincial level in Nova Scotia, while individual programs within the Province have adapted their overall programs to meet the specific needs of local communities.

In the next chapter, the program that is serving specific communities in Nova Scotia is described in detail with respect to its organization, program elements, and mode of delivery.

CHAPTER III

GREAT BEGINNINGS PROJECT -- PROGRAM DESCRIPTION

The focus of the present thesis is a Canadian Prenatal Nutrition Program that was given the label, The Great Beginnings Project. It was established as multi agency project and includes input from Provincial Department of Health, Acadia University, Apple Tree Landing Children's Center, and the Chrysalis House Association. The Chrysalis House Association is a service that assists battered women and children, and was the founding organization of the partner Community Action Program for Children (CAP-C) in this geographical area.

Great Beginnings Project is located at the Apple Tree Landing Children's Center in Canning, Nova Scotia and its programming is linked to Apple Tree Landing Children's Center, and the Annapolis Valley - Hants Community Action Program for Children (CAP-C).

Goals and Objectives of the Project

The Great Beginnings Project coordinator selected various goals and objectives. These goals and objectives were established prior to the formal structure of Great Beginnings Project being set up and are as follows:

1. To implement an effective outreach program such that prenatal and postpartum support can be extended to pregnant women at risk of birthing low weight babies due to socio-economic factors.

2. To provide continuing support to women participating in the prenatal and postpartum outreach program such that an increased comfort level and success rate with breast-feeding their babies will occur.

3. To increase skill regarding prenatal care and counseling and the nutritional needs of pregnant women, nursing mothers and infants aged 0-6 months, among staff and volunteers responsible for outreach work in the AVH-CALC network.

4. To promote greater awareness among community members, particularly those working with pregnant women, of (a) the need for increased prenatal and postpartum support to young, single, and /or low-income women and (b) the

proactive role communities need to play in helping address the gaps in services provided for this target group.

5. To provide mechanisms for partnership between community development workers, public health nurses, nutritionists, lactation consultants, family practice physicians and representative program participants such that each partner can benefit from the skill, insight, and perspective of others.

6. To establish a mechanism for early and continued contact with pregnant women at risk, from early pregnancy, through birth, and during the first 6 months of the infant's life and to ensure that this mechanism can provide every possible support to those pregnant women and mothers of infants whose daily lives are effected by the fear and disruptions caused by physical, sexual and /or emotional abuse.

7. To increase awareness among pregnant and breast-feeding women of the need for good nutrition and / or improved food intake during pregnancy and breast-feeding, and the nutritional requirements of infants aged 0-6 months.

8. To increase awareness of women participating in the prenatal and postpartum program of the detrimental effects of smoking, drinking alcohol, and drug abuse during pregnancy and breast-feeding, and of the effects of second-hand smoke on infants.

9. To provide a comprehensive, cost effective food supplement package that meets or exceeds the nutritional requirements of pregnant women, breast-feeding women and infants aged 0-6 months.

10. To provide programming and support for approximately 50 women from the target group (Apple Tree Landing, March 1995).

Target Population

Great Beginnings Project is targeted to reach women with low incomes, and limited family or service support during their pregnancy and for six months following birth. The target population includes young single women, women at risk of abuse, and women seeking help to decrease tobacco, alcohol and drug use. Only women who are living in low-income circumstances who are pregnant or have a baby aged 0-6 months are eligible for the program.

The geographical area involved is the Annapolis Valley-Hants Region of Nova Scotia which covers two counties, Kings County and Hants County. The two counties cover an area of 8441

square kilometres.

The population within this region is estimated at 118,000 (Nova Scotia Department of Finance, 1994). There are several large towns in the region but the majority of residents live in small, isolated, rural communities. Many of the communities are characterized by low incomes, high unemployment and underemployment rates, and education levels below the provincial norm (Apple Tree Landing, 1995). It is the perception of the Chrysalis House Association that the women and children of this area experience a high rate of physical, emotional and sexual abuse within the home and have difficulty escaping such situations.

Further, due to the social and geographical isolation of the rural communities, many pregnant women and mothers of young children do not receive the benefit of prenatal and postpartum counseling and support staff.

Administration

The project is overseen by a Regional Steering Committee which meets monthly to make decisions and discuss project development and other project issues. The Steering Committee provides a forum for ongoing problem solving and for training. The varying expertise of committee members can be brought to the question or task at hand. The Steering Committee consists of the coordinator of the local CAP-C program coordinator, staff from Hants County, staff from Apple Tree Landing, representatives from Public Health, Acadia University Nutrition and Food Science Department, the Regional Coordinator of the Community-Based Family Resource Program for Rural Children, representatives from the Annapolis Valley Hants CAP-C project, and target group representatives. Topics that have been discussed at this level include how to promote breast-feeding, how to increase volunteer involvement in project delivery, the merits of vitamin supplementation for pregnant women and the inclusion of this in the Good Food

Box, the best resources to include in the core library, and the appropriate written resources to distribute to participants.

The Great Beginnings Project has a staff of three people. The individual who carries the majority of the responsibility is the coordinator who oversees the entire program for both Hants and Kings County and is responsible for project planning and process. She is also responsible for the delivery of the program in the Kings County area. She does all the grocery shopping and assembles the Good Food Boxes for both Kings and Hants County participants. She is employed on a half time basis and is funded for fifteen to twenty hours per week.

Two staff persons, each funded for five hours a week, are responsible for project delivery in the Hants County area. They deliver the Good Food Boxes to the participants and provide support to participants in that area on a regular basis.

The Program in Operation

Between April and June 1995, staff and volunteers attended workshops designed to build skills in 3 key areas: outreach and counseling; prenatal and postpartum nutrition; and breast-feeding.

In June 1995 promotional letters and participant brochures were delivered to all family physicians whose practices included obstetrics in Kings County. Brochures were delivered to Kings County public health units and hospitals. In August 1995 promotional letters and participant brochures were delivered to all family practice physicians with an obstetrics practice in Hants North, Hants West, and Windsor. Brochures were also provided to the public health nurses serving these areas of Hants County. Posters were also placed in key locations including mall bulletin boards, waiting rooms, and hospitals. These locations were checked on a regular basis and brochures replenished as needed.

Referrals to the Program

Referrals to the program in 1995 came from community nurses, physicians and peers. Clients also referred themselves to the program. Indication from the initial data on source of referrals show that 60 percent of the referrals to the program come from the Public Health Nurses of the Region. Seventeen percent of the referrals came from the client themselves and 10 percent of the referrals came from family and friends (Great Beginnings Interim Report, Jan. 1996). In the first six months of operation the project was providing services to thirty participants. The goal was to maintain fifty clients at any given time.

Characteristics of the Participants

The first interim report also showed that all of the project participants were living in low-income circumstances. Single mothers made up 62 percent of the project participants, and 48 percent of the participants were first time mothers (Great Beginnings Interim Report, Jan. 1996).

When transportation was considered it was found that 41 percent of the participants owned a car and 28 percent lived on a bus route. The other 31 percent neither owned a car nor lived on a bus route (Great Beginnings Interim Report, Jan. 1996).

The age of the participants varied with 45 percent falling into the 15-19 year range, 35 percent were 20-25, and 20 percent were over 25 years of age (Great Beginnings Interim Report, Jan. 1996).

Program Services Provided

Upon referral, a client is visited in her home and an informal needs assessment is completed to assess whether the individual qualifies for the program using the criteria described above. Once admitted to the program, the services described below are provided on a regular and "as needed" basis. Referrals are made to other agencies if deemed necessary.

The Good Food Box. The Good Food Box is a box that contains foods from all four food groups with an emphasis on the vitamins and minerals necessary for pregnancy. An example of the contents of a Good Food Box is shown on the next page. The macro nutrient, vitamin and mineral content of each box is calculated each month by a fourth year nutrition student. This is provided to the project coordinator for her to examine the nutrient content that each box is providing in relation to the dollars that are being spent. The Good Food Box is delivered on the third Monday and Tuesday of every month. This third week is considered to be the week of greatest need since social welfare support cheques will have run out by this time. The amount of food provided in the box is usually enough to last a full week and often for two weeks. Specific items of food may last the entire month or longer.

Each Good Food Box recipient contributes fifteen dollars towards the cost of each box, an amount that is matched with Great Beginnings Project dollars. In addition, donations and discounts are solicited by the project coordinator from local farms, dairies, and grocery store chains to add further value to the box. The Good Food Box is offered as an option and those participants who choose not to receive the food box still receive home visits.

Clothing, Car Seat and Toy Exchange. The coordinator has developed a program for the exchange maternity clothes, car seats, baby clothes and other amenities that are needed on a short-term basis. This exchange takes place between project participants but the coordinator also hears of these goods becoming available in the community at large in this county because of her social and professional connections.

Support -- Home Visits and Telephone Support. When the Good Food Box is delivered, the visit provides an opportunity for 'one-on-one' home contacts for emotional support. The worker provides information regarding nutrition, pregnancy and accessing health care services. Home

FOOD BOX CONTENT FOR OCTOBER n=12							
3 Food Boxes		7 Food Boxes		1 Food Box		1 Food Box	
Apple Juice	1 litre	Apple Juice	1 L	Apple Juice	1 L	Apple Juice	1 Litre
Apples	5 lbs	Apples	5 lbs	Apples	5 lbs	Apples	5 lbs
Bagels, Whole Wheat & Honey	6 (21 oz.)	Bagels, Whole Wheat & Honey	6 (21 oz.)	Bagels, Whole Wheat & Honey	6 (21 oz.)	Bagels, Whole Wheat & Honey	6 (21 oz.)
Bananas	4 med.	Bananas	4	Bananas	4	Bananas	4
Broccoli	1 head	Blueberry Muffins	6, large	Blueberry Muffins	6, large	Blueberry Muffins	6
Can of Beans	540 mL	Broccoli	1 head	Broccoli	1 head	Can of Beans	540mL
Can of Tuna	120 g	Can of beans	540 mL	Can of beans	540 mL	Can of Tuna	120g
Carrots	5 lbs	Can of Tuna	120 g	Can of Tuna	120 g	Carrots	5 lbs
Cauliflower	1 head	Carrots	5 lbs	Carrots	5 lbs	Cheese slices, light	8 slices
Cheese	227 g	Cauliflower	1 head	Cauliflower	1 head	Chocolate milkshakes	3 X 200 mL
Cream Cheese-Light	250g	Cheddar Cheese, medium	227 g	Cheddar Cheese, medium	227 g	Chunky Soup, Chicken with Pasta	540 mL
Eggs	1 dozen	Chocolate Milkshake	3 X 200 mL	Chocolate milkshake	3 X 200 mL	Cream of Cheese, light	250 g
Grapefruit	2	Eggs	1 dozen	Eggs	1 dozen	Eggs	1 dozen
Harvest Crunch	800 g	Evaporated Milk, 2%	385 mL	Evaporated Milk, 2%	385 mL	Evaporated Milk, 2 %	385 mL
Honeydew Melon	1	Flakes of Turkey	184 g	Flakes of Turkey	184 g	Flakes of Turkey	184 g
Milkshake	3 * 200 mL	Grapefruit	2	Grapefruit	2	Grapefruit	2
Muffins	6	Harvest Crunch, low-fat, orginal	800 g	Harvest Crunch, low-fat, orginal	800 g	Harvest Crunch, low fat	800 g
Onions	2 lbs	Honeydew Melon	1	Honeydew Melon	1	Honeydew Melon	1
Orange Juice	1.36 L	Light cream cheese	250 g	Light cream cheese	250 g	Instant Oatmeal & Apple Cereal	10 X325 g pack.
Oranges	5	Onions	2 lbs	Oat Bran Bread	18 slices, 675 g	Oat bran bread	18 slices, 675 g
Spagetti	500 g	Orange Juice	1.36 L	Onions	2 lbs	Onions	2 lbs
Spaghetti sauce	750 mL	Oranges	6	Orange Juice	1.36 L	Orange Juice	1.36 L
Tomatoes	3	Pasta- spaghetti	500 g	Oranges	6	Oranges	6
Turnip	1 sm.	Potatoes	5 lb	Pasta-spaghetti	500 g	Peach slices, light syrup	398 mL
Whole wheat, 60%	20 slices, 570g	Spaghetti sauce-original	750 mL	Potatoes	5 lb	Potatoes	5 lb
		Turnip	1 sm.	Spaghetti sauce- original	750 mL	Pudding- instant butterscotch	113 g
		Whole wheat, 60%	20 slices, 570g	Turnip	1 sm.	Pudding- instant vanilla	92 g
						Turnip	1 sm.

visits and telephone support are available to participants on an 'as needed' basis. All participants receive both the work and home numbers for their support workers. The level of support and types of support provided vary greatly depending on the individual needs of the client.

The following examples of support requested or offered to date were abstracted from the Great Beginnings Interim Report, Jan. 1996.

- Transportation to a doctor's appointment. The opportunity to accompany a woman provides time to talk informally and to offer appropriate information and practical help with issues or concerns.
- Responding to a two A.M. call from a participant in labour. Taking her to the hospital, staying with her during labour and attending the delivery.
- Supporting a woman in her choice to place a child for adoption. Helping her deal with friends and family pressure to keep her baby.
- Sending a volunteer to help a participant "get her car started."
- Providing layettes to celebrate the birth of babies born while on the project.
- Driving a pregnant participant in need of shelter from an abusive partner to the local transition house.
- Providing information and encouragement to breast-feeding mothers. The coordinator is currently breast-feeding and, therefore, provides a model for support of breast-feeding.

Information. Each participant receives a Great Beginnings binder upon joining the project. This gives information about the project and a place for filing information by topic. The topics include: Pregnancy and Labour; Nutrition-Eating for Two; Breast-feeding; Recipes; Infant Development; and Parenting a Newborn. A new recipe is included in the food package each month. This binder initially has little information in it but, with each monthly visit, information sheets are provided to be added to the binder at that time. This is done in order to decrease the 'information overload' that often happens with new projects. Specific information is provided as

requested and topical information is included with each food package delivery As well, a lending library is available to all participants. This operates on a mobile basis with books being delivered by the support workers.

Conclusion

The elements of the program have been described in detail in this chapter in order to place the program in the broad context of various prenatal nutrition programs that have been described and evaluated in the literature. A literature review focusing on related programs in North America is provided in the following chapter.

CHAPTER IV

REVIEW OF THE LITERATURE -- PRENATAL NUTRITION PROGRAMS AND THEIR EVALUATION

In recent years, the number of prenatal nutrition intervention programs throughout North America has increased. Emphasis has been placed on interventions for populations of women which are considered hard to reach and are at high risk for poor pregnancy outcomes. Evaluation of these programs becomes important since each evaluation contributes valuable information and ideas for implementing each succeeding program.

This literature review, therefore, focuses on the documentation of selected programs and their evaluations that have been initiated in North America.

The Montreal Diet Dispensary

The longest running prenatal program in Canada is the Montreal Diet Dispensary (MDD) established by Agnes Higgins in 1963 to serve a disadvantaged population of women in Montreal. The program of interventions is popularly known as the Higgins Method and focuses on home visits by a registered dietitian. An assessment of nutritional status is completed and the need for supplementary protein and calories is calculated based on the degree of underweight, under-nutrition and nutritional stress. Under-nutrition is determined by the use of a 24 hour recall or diet history, cross-checked with food lists and family market orders. Nutritional stress is defined by the presence of one or more of the following conditions: pernicious vomiting; pregnancy spaced less than one year apart; previous poor obstetrical history; failure to gain ten pounds by the twentieth week of gestation; and serious emotional problems.

Based on the nutritional assessment, a food supplement of milk, eggs and vitamin and mineral supplements may be provided. Problems not related to nutrition are referred to appropriate

agencies for assistance and follow up.

Evaluations of this program have suggested that it has had positive influences on the outcomes of pregnancy. Higgins, Moxley, Pencharz, Mikolainis, & Dubois (1989) retrospectively studied the impact of the Higgins Method on birth weight and pregnancy outcomes. Subjects were matched with their siblings for this study. The data were adjusted for parity and sex. It was found that infants whose mothers participated in the program weighed an average of 107 grams more than their matched siblings at birth. The rate of low birth weight was 50% lower among the intervention infants than among their siblings. The authors concluded that "the high risk of poor pregnancy outcome in this group of urban low-income women was reduced by the Higgins program" (Higgins et al., 1989, p.1097). These investigators also found improvements in variables such as length of gestation, intrauterine growth retardation, and perinatal mortality. These improvements were greater with increased contact between client and dietitian (Higgins et al., 1989).

Dubois, Dougherty, Duquette, Hanley, & Montquain (1991) studied the impact of the Higgins program on maternal and neonatal outcomes using twin pregnancies. The study group consisted of mothers of twins who delivered at eighteen Montreal area hospitals between 1974 and 1988 who had been enrolled in the program. The control group was matched by hospital and year of delivery and the data were adjusted for key confounding variables. The results showed that the twins in the intervention group weighed, on average, 80 grams more than the non intervention twins. The rate of low birth weight was 25% lower and very low birth weight was almost 50 % lower in the intervention group (Dubois et al., 1991).

In addition, rates of intrauterine growth retardation were similar for both groups (Dubois et al., 1991). Rush (1981) found that there was an overall increase in the birth weight of babies born

to mothers participating in the program. The longer the period of time spent in the program, the greater the magnitude of positive effects. Decreased rates of maternal morbidity such as gestational diabetes, bleeding and premature rupture of membranes were also found to be associated with program participation (Dubois et al., 1991).

The MDD studied diet change measured by a preprogram food score and a late program food score. The food score is a "unitless measure ranging from 0 to 100 and represents an intake of four servings of milk, two and a half servings of meat and alternatives and five servings of both fruits / vegetables and breads / cereal" (Mendelson, Dollard, Hall, Zarrabi, & Desjardins, 1991, p.230). The food score was based on three, 24 hour recalls taken at the beginning of the intervention and the final diet score was taken from three recalls completed at the end of the intervention period. The results showed an improvement in diet scores throughout the early intervention period and overweight women had a more dramatic improvement in food score than underweight women (Mendelson et al., 1991).

Healthiest Babies Possible Program, Toronto

The Healthiest Babies Possible Program (HBP) in Toronto was designed as a primary prevention program to improve the health knowledge and behaviours of high-risk pregnant women. The program is based on a home visiting protocol with instruction and support provided by public health nurses and 'one-on-one' nutrition counseling by dietitians (Speilberg, 1988).

The dietitian provides a nutritional assessment, education, and counseling specific to the client's needs. Emphasis is placed on the need for vitamin supplements and milk tickets are provided to low-income clients. The nurse provides a general health assessment, information regarding labour and delivery, parenting, and family planning, and refers the clients to other agencies when appropriate.

Speilberg (1988) conducted an evaluation of the Healthiest Babies Possible Program using a retrospective, randomized, non-matched control group study design. The data were subjected to a multivariate analysis to identify the factors that explain birth weight outcomes. The findings indicated that, among the participants, the factors that affected birth weight included length of gestation, body mass index of mother, weight gain during pregnancy, maternal age, number of dietitian visits received, early discharge from the program and the number of cigarettes smoked (Speilberg, 1988).

A higher incidence of low-birth weight babies was found among clients of the program when compared to all Toronto births. Low birth weight incidence among participants was 10.9% compared to 6% for the city of Toronto (Speilberg, 1988). This result has two possible explanations. Firstly, the participant population may constitute a high risk group for low birth weight due to factors that have not as yet been identified. Secondly, the contents of the program itself may not be addressing the needs of the clients and there is a need to change the interventions among these "high-risk" women (Speilberg, 1988).

Mendelson et al. (1991) evaluated the program for diet changes and pregnancy outcomes using a pre and posttest design. Birth weight data were collected from records kept by dietitians. The results showed that the majority of low-birth weight infants were born to women who were the most underweight. A significant correlation was found between birth weight and maternal weight gain in the underweight group although this relationship was not found in the overweight group. The women in this sample who were underweight gained more weight than the overweight women yet they gave birth to smaller infants (Mendelson et al., 1991). This analysis did not take into account other variables such as smoking, alcohol intake, and caffeine consumption, factors that may have contributed significantly to low birth weight status.

Nevertheless, studies of this program have shown that there was a reduction in the number of cigarettes smoked (Speilberg, 1988) and improvement in food intake (Mendelson et al., 1991).

Pregnancy Outreach Program, Victoria

The Pregnancy Outreach Program (POP) in Victoria was initiated in 1988 with the goal of promoting positive health practices that contribute to the health of newborns and mothers. The program was targeted towards high risk women who do not access the traditional prenatal services. The major objectives of the program were to prevent low birth weight and reduce the incidence of fetal alcohol syndrome (FAS). These objectives were to be achieved by strategies to improve nutrition, decrease smoking, decrease alcohol and drug use, ensure social support, and encourage breast feeding (Fisher, 1995).

The program is delivered through community-based agencies that receive core funding from the Ministry of Health. Nutritionists, nurses and peer counselors provide health and nutrition education, emotional support, and referral to other community-based resources. Individual counseling is provided on a drop-in and outreach basis. Group sessions usually include a nutritious meal or snack. Clients are offered food supplements including milk, eggs, bread, and orange juice.

In 1995, the Pregnancy Outreach Program of Victoria evaluated the delivery of its program during 1993 and 1994. It was found that the program had reduced the incidence of low-birth weight infants in its client population from 11% in 1989/90 to 6.3% in 1993/94 (Fisher, 1995). The intervention had reduced cigarette, alcohol and illicit drug use and had improved nutrient intake (Fisher, 1995). The Pregnancy Outreach Program measured the amount of alcohol being consumed prepregnancy, at the participants' first visit, and at the last visit. The percentage of clients reporting no drinking increased from 50.6% to 89.4% to 97.1 % in this time frame. The

POP measured illicit drug use in terms of the proportion of clients who reported no drug use in the previous week at prepregnancy, at the first visit, and last visit. The results were 74.9%, 88.3% and 94.8% respectively, a definitive decline in the use of illicit drugs during the pregnancy period.

The Pregnancy Outreach Program assessed breast-feeding in their population and found that 75.5 percent of clients who stayed in the program were breast-feeding at hospital discharge. After one month 71.7 percent of those participants they were able to find again were still breast-feeding (Fisher, 1995).

Special Supplemental Program for Women Infants and Children-U S

The Special Supplemental Program for Women, Infants and Children, popularly known as WIC, in the United States is a national program that is administered by individual states. It targets low-income pregnant and postpartum women and children under five who are judged to be at nutritional risk. The priority target outcomes for women enrolled include reduced rates of premature births and fetal and infant mortality. Eligibility for enrollment is determined by income and nutritional risk. Nutritional risk is defined in terms of abnormal nutritional conditions such as anemia, extremes of prepregnancy weight, low prenatal weight gain, nutrition-related medical conditions such as diabetes, vitamin and mineral deficiency, lead poisoning, dietary deficiencies that impair or endanger health, predisposing conditions for inadequate nutritional intake such as substance abuse, short inter-conception periods, and chronic infections (Choquette & Julien, 1995).

Services provided by this program include supplemental food, nutrition education, and referrals to various other types of health and medical care. The supplemental food is either delivered directly to the home or, more often, provided by vouchers or checks that can be

exchanged for specified foods at the markets. The nutrition education sessions help clients learn the importance of nutrition and how to improve their nutritional status, particularly by using the food supplied by WIC. Nutrition education varies in method, frequency, and style. It most often consists of individual or group counseling and supplemental written materials. WIC encourages and coordinates the use of existing health services although it does not pay for health services (Choquette & Julien, 1995).

Numerous studies have been completed on the WIC program, measuring various outcomes including the incidence of low birth weight. A number of the major studies are reviewed in detail here, describing both methodology and findings.

Endozien, Switzer, & Bryan, (1979) completed a prospective study of a population enrolled in the WIC program. Medical assessments were completed on the pregnant women at enrollment into the program and on mother and child six months after participation. The results for birth weight and mortality rates were compared to a matched control group. Lower birth weight and higher mortality rates were seen when the study group was compared to the control population. Increased weight gain during pregnancy, increased birth weight, and acceleration of fetal growth were found after six months of program participation.

Kennedy, Gershoff, Reed, & Austin, (1982) studied the effect of WIC supplemental feeding on birth weight using a randomized design and a nonequivalent comparison group. The data were gleaned from the nutrition and or medical records kept at the WIC centres and non-WIC health facilities. The data showed a statistically significant difference between the birth weight of infants born to program participants who received the supplement and the non-WIC participants without the supplement (7.19 pounds for WIC participants vs. 6.92 pounds for non-participants) (Kennedy et al., 1982). Data analysis also indicated that the number of food vouchers received

was correlated with increases in the birth weight (Kennedy et al., 1982).

In 1984 Kennedy & Kotelchuck evaluated the effect of the WIC food supplement on birth weight using a case control design. WIC participants were matched with non-WIC counterparts for race, ethnic group, age, parity, marital status and income level. The results indicated that the WIC participants gave birth to higher weight infants than non-participants. When the data were analyzed by ethnic group, results showed that black and Hispanic women benefited to the greatest degree from the program as shown by the decrease in the incidence of low birth weight babies.

Kotelchuck, Schwartz, Anderka, & Finison (1984) studied WIC participation and pregnancy outcomes in a statewide evaluation of the Massachusetts program. Nonequivalent comparison groups were employed but matching on key variables was used in the analysis. All outcome data were gathered from the birth certificates of the cases and their matched controls. The birth certificate provides maternal demographics, prenatal care and pregnancy outcomes.

WIC participation was associated with improvements in gestational age, birth weight and a reduction in low birth weight rate. A 21 percent decrease in the incidence of low birth weight was realized (Kotelchuck et al., 1984, p. 1088). WIC had larger effects on improving birth weight and decreasing low birth weight status in young participants and women of Hispanic origin. Similar benefits were shown for unwed participants and women with lower education levels (Kotelchuck et al., 1984).

Increased duration of WIC participation was found to be associated with increases in average birth weight and decreases in the incidence of low birth weight. The researchers felt that the results indicated the neediest participants benefited to the greatest extent from WIC participation. They concluded that the WIC program is reaching the high risk target group and that overall participation in the program is associated with improvements in pregnancy outcomes in women at

high nutritional risk (Kotelchuck et al., 1984).

Metcoff, Costiloe, Crosby, Dutta, Sandstead, Milne, Bodwell, & Majors (1985) studied the effects of the WIC food supplement on birth weight of infants. The researchers randomly assigned women to a supplement group, non-supplement group and a control group. While unadjusted birth weights for the study and control groups were similar, it was found the supplement had a positive and significant effect with an increase of 91 grams in birth weight after adjustment for gestational age, sex, prenatal care, the interval between pregnancies, smoking and previous history of having a low-birth weight baby (Metcoff et al., 1985). Adjustment for maternal weight at entry into the program showed no effect on birth weight, although added adjustment for smoking status showed a positive and significant effect on the birth weight (Metcoff et al., 1985).

It was also found that maternal age and years of education were related to birth weight, but this relationship did not hold for level of income. This latter lack of relationship was partially explained by the fact that qualifications for participation in WIC were based on a narrow income range. The average effect of the program on birth weight was an increase of 118 grams for non-blacks and 199 grams for blacks. WIC had a larger effect for those mothers who had previous low-birth weight babies compared with women with a normal birth weight history (an increase of 206 grams compared to 112 grams, respectively) (Metcoff et al., 1985).

Rush, Horvitz, Seaver, Leighton, Sloan, Johnson, Kulka, Devore, Holt, Lynch, Virag, Woodside, & Shanklin, (1988) retrospectively studied pregnancy outcomes of the WIC program since 1980, relating participation to the use of health services, birth weight, duration of gestation, and fetal and infant death. The impact of WIC for the total population studied was a mean increase of 22 grams. However, the data showed mean increases of 46.6 grams and 43.7 grams

among less and more educated white women and 26.1 grams and 33.6 grams among less and more educated black women. WIC effects on birth weight were not found to be consistent across various subgroups in the population studied, although important program effects were identified (Rush et al., 1988).

Devany (1992) completed an evaluation of the WIC program and the effects of WIC participation in five states; Florida; Minnesota; North Carolina; South Carolina and Texas. The outcome measure of interest was the incidence of very low birth weight (less than 1500 grams). The database was constructed from the linkage of three state data files -- the Medicaid paid claims files, the WIC program files, and vital records. Analysis indicated that Medicaid mothers who did not participate in the WIC program were two to three times more likely to have very low-birth weight newborns than participants. The incidence of very low birth weight varied with race, with black women having a higher rate of very low birth weight than white women and Hispanic women having generally higher than overall average rates (Devany, 1992).

Stockbauer (1987) also studied the impact of WIC on the incidence of very low birth weight in the WIC population and found a significant decrease in the number of very low-birth weight infants. Increased WIC participation was related to greater reduction in low birth weight and very low birth weight (Stockbauer, 1986).

In addition to the outcome of birth weight, other outcome variables considered by authors include length of gestation which was found to increase with WIC participation (Kennedy & Kotelchuck, 1984; Kotelchuck et al., 1984). Kotelchuck et al. (1984) found a decrease in premature delivery, low Apgar scores, and neonatal mortality.

Improvements in nutritional intake in late pregnancy were found with WIC interventions (Rush, Horvitz, Seaver, Leighton, Sloan, Johnson, Kulka, Devore, Holt, Lynch, Virag, Woodside,

& Shanklin, 1988) with substantial impacts in subpopulations including Hispanic, and African Americans (Kennedy & Kotelchuck, 1984; Kotelchuck et al., 1984; Stockbauer, 1986; Stockbauer, 1987).

The role that WIC participation played in the initiation and duration of breast-feeding was studied. The data were drawn from the 1988 National Maternal and Infant Health Survey by the Department of Health and Human Services. The results of data analysis showed that prenatal WIC participants and eligible non-participants had comparable rates of breast-feeding initiation after controlling for socioeconomic differences. The overall rate of breast-feeding was lower among prenatal WIC participants. Those who reported having received advice to breast-feed their babies were more likely to initiate breast-feeding than income eligible non-participants. Prenatal WIC participants who did not report having received advice to breast-feed were less likely to initiate breast-feeding than income eligible non participants. Maternal age, race, education, and location of residence were associated with the likelihood of initiating breast-feeding. For women who initiated breast-feeding, prenatal WIC participation, or advice to breast-feed were not associated with breast-feeding duration (Schwartz et al., 1992).

Summary

The foregoing review of the evaluations of four prenatal nutrition programs (the MDD, (Montreal) POP, (Victoria) HBP, (Toronto), and WIC, (U.S.)) indicates that the risk factors for low birth weight can be reduced and the pregnancy outcomes can be enhanced. Since these programs provide a broad spectrum of interventions that include counseling about risk factors, dietary advice, and specific food supplementation, the evaluations do not address questions as to the process by which risk-related behaviour is modified and which of the interventions are responsible for achieving the objective of reducing the incidence of low birth weight.

Nevertheless, the merits of such programs seem to be undisputed and it is not surprising that they have been adopted widely.

Specification of Problem Addressed in this Thesis

It was concluded from the review of the literature concerned with the evaluation of prenatal nutrition programs that, while such programs were successful in both reducing the risk factors and enhancing the pregnancy outcome in terms of birth weight and the adoption of breast- feeding, little was known about how the programs achieve these changes. For the most part, the programs were evaluated in quantitative terms and this will also be the case for the Nova Scotia programs as specified by the CPNP the National Evaluation tool. At time of the preparation of this thesis, the National tool was still being revised and tested to ensure that reliable and valid data are gathered and provide appropriate feedback to the national, provincial, and community levels of the program.

It is clear, however, that individual programs need feedback, not only as to whether they are achieving the specific objectives of the program both with respect to risk factors and to outcomes but also as to how the participants feel about the process of the provision of the program. What elements of the program do the participants feel are the most important, what elements do they perceive as affecting on their pregnancy and its outcomes, and what changes might be made to make the program more acceptable in their terms?

In the next chapter, the methodology that was used in the evaluation of the Great Beginnings Project is described.

CHAPTER V

METHODOLOGY

This study was designed to evaluate the Canada Prenatal Nutrition Program, Great Beginnings located in Canning, Nova Scotia as described in Chapter III. The evaluation was to be based on the input and opinions of women currently participating in this project. In order to do this, a qualitative approach was taken. Qualitative approaches play an important role in evaluations for various reasons. They are especially appropriate when the dynamics of program implementation are of interest and when descriptive information is required to improve the program. Qualitative approaches are also used when there is concern for program quality and a need to add depth, detail, and meaning to quantitative findings (Herman, Morris, & Fitzgibbon, 1987). The value of qualitative approaches for the Great Beginnings Project is evident when national evaluation criteria are considered. First, the quantitative data provided by the national tool do not address local program needs or desires. Secondly a qualitative approach can describe the process of program implementation, characteristics of participants, how the program has affected participants, as well as the observed changes, outcomes, impacts and analyses of the program strengths and weaknesses as reported by people interviewed (Patton, 1987).

Qualitative methods allow the evaluator to focus on a selected issue, case or event in depth and detail. Qualitative data are not constrained by predetermined categories of analysis. Quantitative data measure the reaction of a great many people to a limited set of questions, allowing comparison and statistical aggregation of the data, giving a broad generalizable set of findings. In contrast, qualitative methods provide a wealth of detailed data about a much smaller number of people and cases. The detailed descriptions and quotations are collected as an open-ended narrative that does not try to fit program activities or peoples' experiences into

predetermined, standardized categories such as the response choices of a typical questionnaire or test (Patton, 1987).

Hallmarks of qualitative methods include naturalistic inquiry, inductive analysis, direct contact with the field, and a holistic, dynamic, and developmental perspective. Qualitative designs are naturalistic when the evaluator does not attempt to manipulate the program or its participants for the evaluation; rather, the evaluator studies naturally occurring activities and processes. It is, therefore, easier to identify the unanticipated impacts and unforeseen side effects which may vary from what staff or the funding agency expects, and may be very different for each participant (Patton, 1987). The qualitative-naturalistic approach to evaluation sees a program as dynamic and developing as staff learn and clients move in and out of the program. The qualitative approach is particularly appropriate for innovative programs that are developing or changing because there is a focus on program improvement, facilitating more effective implementation, or exploring a variety of effects on participants.

Study Design

A qualitative study was conducted to determine if the Great Beginnings Project was meeting the needs and expectations of a selected group of women enrolled in the program.

Using focus groups, information was gathered regarding client satisfaction with the project, changes that were necessary to better meet the needs of participants, and the parts of the project that were best meeting the needs of the target group.

Data Collection Instruments

Focus Groups. The principal methodology in this study was focus groups. A focus group has been described as an interview with a number of participants at the same time. Participants hear the responses of others' and make additional comments as they hear what people have to say. The

process assumes that an individual's attitudes do not exist in a vacuum, but that people hear others' opinions and rationales and form their own (Marshall & Rossman, 1995). In other words, the decisions people make and the decisions that they form are made in a social context, and are brought forward in the context of discussion with other people (Patton, 1987). It is not necessary for the group to achieve a consensus; nor is a wide range of views and opinions characteristic of a focus group discussion. The objective of a focus group is to get high quality data in a social context, allowing individuals to reflect on their views in the context of the views of others (Patton, 1987).

Focus groups can be used at any stage of evaluation. They can be conducted as part of a needs assessment, to identify program strengths, weaknesses, or needed improvements, or at the end of a program to gather perceptions about outcomes and impacts (Patton, 1987). Focus groups are generally composed of seven to ten people, but can be as small as five or as big as twelve. The participants usually do not know one another, but have something in common, like socio-economic status or membership in a program as in this case. The interviewer creates a permissive environment by asking simple, focused questions to stimulate the expression of views by individuals in the group. These groups are conducted several times with different individuals, in order to identify similarities in the perceptions and opinions as expressed and revealed through systematic analysis (Marshall & Rossman, 1995).

There are many advantages to using focus groups for evaluation. They are socially oriented; they allow observation of participants in a natural, real-life atmosphere, and they allow the facilitator the flexibility to pursue topics that arise during the discussion. The results have face validity in that the method is easily understood and the findings are credible to all parties. This method is low cost, provides quick results and increases the sample size by interviewing more

people at one time (Marshall & Rossman, 1995). Focus group interviews also permit quality control, since participants provide checks and balances to moderate false or extreme views. The group dynamics allow the discussion to focus on those issues which are most important (Patton, 1987).

In discussing the methodology that might be used in the study the project coordinator and the researcher anticipated several benefits accruing from the use of focus groups for this program evaluation. First, focus groups are an economical way of gathering information in contrast to surveys and one-on-one interviews. Secondly, it was felt that it was important for participants to meet as a group for socialization and information sharing in a non-threatening environment. Thirdly, the input obtained from the focus groups could be used to change or reorient the program, a response that would enhance the participants' self esteem and confidence since they would feel they had been listened to.

The disadvantages of focus groups include: the lack of control by the facilitator when dead end or irrelevant issues are discussed; difficulty in analyzing the data as context is essential to understanding the participants' comments; the method requires the use of a highly trained observer; and the participants can vary greatly and may be difficult to assemble (Marshall & Rossman, 1995). Another concern is the limited number of questions that can be addressed with a group of participants. It has been found that eight people usually can answer no more than ten questions in an hour (Krueger, 1994).

The researcher conducted a pilot focus group in which the questions were tested. The following are the original focus group questions and the revised versions of these same questions.

1. Why did you choose to get in this program? What were your ideas regarding the benefits to you?

2. What services does the Great Beginning program provide you?
3. Are there any services you would add to the program?
4. What parts of the program work for you?
5. What changes, if any, would you make to the parts of the program?
6. How did you judge that the program is working for you?

Revised Focus Group Questions

1. What did you hope to Gain from this program?
2. What are you receiving from this program?
3. What do you like about this program?
4. What don't you like about this program?
5. If you could re do this program what if anything would you add?
6. If you could re do this program what if anything would you take away?

Optional

7. What if anything would you change about the food box?

As a result of this discussion changes were made to the questions as it was found that 'why?' and 'are?' questions were difficult to answer and did not stimulate responses easily. This pilot focus group discussion took place with a group of women at a Family Resource Center in Bridgewater, Nova Scotia. This group met regularly at the family resource center and the members were similar in terms of socio-economic characteristics to those participating in the Great Beginnings Project. Feedback was obtained on both the content and format of the questions and modifications made to the questions used in the study focus groups. The views of the pilot group were sought regarding the use of a tape recorder, the researcher's style of conducting the group and asking the questions, as well as the problems inherent in bringing

together a group of women that had never met before.

The focus groups were completed on three consecutive days with three groups of women. Two groups were held in Kings County and one group was held in Hants County. One group had four participants and the other two, five participants. The focus groups were held at the coordinator's apartment in Kings County and a Hants County staff member's home.

Prior to the meetings an informed consent form was provided to each participant for her signature (see Appendix A). The form described the study and uses to which the data would be put. At the meeting the purpose of the study was explained to the participants (Appendix B) and consent forms were signed and gathered.

In order to collect consistent data the researcher facilitated all three focus groups that were conducted for this evaluation. The same questions were addressed to each group. Questions were written on flip chart paper and responses recorded by both the researcher and a scriptor.

In Kings County the participants of the focus groups were given a gift certificate. In Hants County a book was provided by the researcher in appreciation for participating in the focus group. Money was provided by the project to the participants for child care and transportation.

Procedure and Data Analysis

Recording the Data. The primary data of focus groups are the verbatim quotations -- what people say, think, have done and know. In this context, the tape recorder is an invaluable piece of equipment. Tape recorders do not 'tune out' of conversations, do not change what has been said, and they keep pace with what is being said. This increases the accuracy of the data collection and permits the interviewer to be attentive to what is being said rather than being engaged in note taking (Patton, 1987).

Nevertheless, problems arise with the use of tape recorders. First the presence of a tape

recorder may be intimidating to participants. Secondly, a voice activated tape recorder requires careful placement in order to capture the actual words of the participants.

Therefore, focus groups are often facilitated by two individuals with one person conducting the interviews while the other records notes both as to the verbal comments and non verbal happenings. The written notes become essential for transcribing the recordings later (Patton, 1987). A fourth year nutrition student doing her honours research at Acadia University was enrolled as the scriptor and attended all focus groups to take written notes.

In the present study, the focus groups were recorded using a small voice-activated Dictaphone. In the event, the tape recorder did not capture the full range of the group discussions although it had worked well in the pretest. Therefore the written notes of both the focus group leader and scriptor became invaluable. Nevertheless, lack of full transcription limited the opportunity to provide fulsome quotations in support of points being made. At the same time, it was observed by both the researcher and the scriptor that discussion of issues were not, in fact, lengthy and detailed and that comments tended to be brief and to the point with affirmations and denials provided by the rest of the group. It was not felt that a great deal of detailed data had been lost.

Analysis Plan. In content analysis the analyst looks for quotations or observations that go together, and that are examples of the same underlying idea, issue or concept. This may involve pulling together all the data that address a particular evaluation question. The evaluator usually begins by reading through field notes, interviews and case studies while writing comments in the margins indicating what can be done with the different parts of the data. This is the beginning of organizing the data into topics and files.

A title is ascribed after examining the data. If time permits ascribing the titles can be

completed by a representative sample of the focus group participants. In this case this was not completed due to time constraints and problems associated with the logistics of transportation and getting the participants together again. The copy on which these topics and labels are written becomes the index copy of the field notes. It may require several readings before it can be completely indexed (Patton, 1987). Labeling the data and establishing a data index are first steps in content analysis. The contents are to be classified -- organizing and simplifying the complex data into some meaningful and manageable themes or categories is the purpose of content analysis. Inductive analysis indicates that the patterns, themes and categories of analysis come from the data itself. They emerge out of the data rather than being decided upon prior to data collection or analysis. In the analysis the researcher looks for natural variation in the data. In the evaluation particular attention must be paid to variations in program processes and to the ways in which participants respond to and are affected by programs (Patton, 1987).

Field notes and observations were kept together in files according to the group for ease of sorting and to aid in the coding of the data. Some categories for coding became clear while completing the focus groups and other categories were developed once all the data were considered together. These codes and categories were used when reading the transcripts and labeling quotations.

The data collected during the focus groups was transcribed and stored in computer files. Content analysis was completed which "involves identifying coherent and important examples, themes and patterns in the data" (Patton, 1987, p.149). Two copies of all the data were made: one copy for physically cutting and pasting, and one copy for analysis.

The cut and paste method was chosen to sort through the data. A large piece of flip chart paper was pasted to the wall and categories were developed. At this point these categories

coincided with the questions asked. Responses to each question by all groups were pasted on the flip chart paper under the question category. Common groups of quotations began to arise and were labeled as themes.

Preliminary coding categories were generated and the data were reviewed again. New categories were developed and others were discarded. From this the major themes were generated and will be considered in Chapter VI of this thesis.

Once the themes that arose consistently in all groups were identified the data was collapsed in computer files and the categories of questions were eliminated. Finally the themes were divided into individual groups due to differences in groups and stored in computer files.

Upon completion of initial data analysis, a summary of the results of the groups were provided to the participants of the focus groups.

Interpretation of the data involved attaching meaning to the group of quotations and explaining patterns and categories and relationships among the categories.

Ethics Approval

This study was conducted with the approval of the University of Northern British Columbia Ethics Committee (See Certificate of Ethics Approval in Appendix C).

CHAPTER VI

FINDINGS OF FOCUS GROUP INTERVIEWS

This chapter begins by describing the settings in which the focus groups took place. It then goes on to describe the discussions as they evolved around the key themes that were identified in the transcripts of the proceedings. In view of the fact that the participants in the interviews did not fully develop the various themes and that the focus group strategy did not bring out comments and views on some of the major objectives of the program, the chapter concludes with a discussion of why the program was seen in limited terms by the participants.

Settings for Focus Group Interviews

Before discussing the findings of the focus group interviews, it may be helpful to the reader to place those discussions in the context in which they took place. This characterization may help the reader to understand the interaction that took place between the women themselves, and the women and the researcher and the scriptor, to better interpret the findings.

Group One. The first focus group was carried out with four women from Kings County. Four women came to the focus group and brought their babies. The group included single mothers, first time moms and moms with several children. All mothers were known to be on social assistance. Two of the women were picked up by the coordinator of the program and delivered to the focus group. The other two women drove themselves to the meeting.

The focus group meeting was conducted at the coordinator's apartment although the coordinator was not present, having returned to her office. The apartment was on the main floor of an older house that had been renovated to include several apartments. The participants appeared very comfortable in this setting making comments such as,". . . . this apartment is the same size as mine." The floor plan of the apartment was open with the dining, kitchen and living

room areas contiguous to each other. The discussion was held in the living area and a flip chart was set up between the dining area and the living room to document responses as they were given. The filled sheets were then taped to the walls so that participants could refer to the previous responses if they wished.

One of the women was late arriving due to car difficulties but this allowed the women time to chat informally among themselves and with the researcher and scriptor. A comfortable rapport was established in this group before the formal questioning began. The women appeared to be relaxed in this environment and had little trouble conversing with each other or with the researcher. This group was very talkative but easily got off track, especially when one of the babies was fussing. The questioning was stopped several times to allow for diaper changes and feeding.

Three of the women shared the discussion and comments although one participant in particular was very talkative and quick to respond to the questions with the others adding their agreement to her statements. One woman rarely spoke unless specifically encouraged by other participants.

Group Two. This group met in Hants County in a town called Walton which is reached by a secondary road that takes forty five minutes to cover from the highway. Five women attended this group. Two traveled together in a taxi. The other three were either dropped off or drove themselves. All arrived at the same time and there was not a great deal of time for them to chat together before the group interview began.

These participants varied in age, marital status, and living circumstances. Four of the women had already had their babies and one was pregnant. Three of the women were first time moms, while one had had her second child. One was a single mom and the others were married. One of

the participants had been sleeping in a car until two weeks prior to the focus group but all were known to be living in difficult financial circumstances. None of the babies were brought to the meeting.

The meeting was held at the home of one of the staff members. It was a house that had recently been redecorated with hardwood floors and the kitchen was large with the new appliances. The living area had a leather couch and a big screen T.V. with a modern stereo sound system. The participants sat in the living area on couches that in an L shaped configuration. The flip chart was set up in front of the television where the researcher stood and the scriptor sat next to the researcher. The surroundings appeared to be intimidating for this group. One of the participants was heard to exclaim, "Look at the size of that T.V.!!!!!"

The physical surroundings may have had some impact on the willingness of this group to 'open up' but the relative geographic and social isolation of the living circumstances of this group may also have contributed to the difficulties in getting this group to participate actively in the discussions.

The group was left on its own to talk for a few minutes and the majority of the conversation that was overheard focused on stories of labour and delivery. Since there was only a limited time for the group to chat among themselves, a 'get acquainted' game was tried by the researcher to try to 'break the ice'. The group still remained very quiet.

At various points during the discussion, the researcher joined the circle thinking this would maybe put participants at ease but this did not seem to work.

The majority of the responses came from one woman with few substantive comments added by the others. They seldom offered even an affirmation of a participant's response let alone elaborated on it. The group was not at ease in this situation and all efforts to get discussion going

did not work.

Group Three. This group was held at the coordinator's apartment as with the first group. The room was set up identically to that of the first group with the flip chart between the dining and living area. The responses were posted on the walls of the apartment as the pages were filled to allow participants to refer to the previous answers given.

There were four participants, all from different levels of income and situation. Two of the women had other children, while the other two were first time moms. All of the women brought their babies with them.

Two of the participants traveled together while the other two came in their own vehicle. One member of the group was late and those present began sharing ideas before the questioning began. The researcher and the scriptor took advantage of this time to build rapport with the participants.

This group was talkative, articulate, spoke clearly, and with a strong voice. No one individual spoke more than the others and there was usually an expressed consensus when definitive statements were made. This group chatted easily and it appeared to the observers that the women were filling a long felt need to connect and talk with someone in a similar situation to themselves.

Emergent Themes from Focus Interviews

The salient themes that emerged from the three focus group interviews are elaborated in the following sections, using direct quotes from the discussions wherever possible. The themes that were identified were The Good Food Box, Information, Psychological and Social Support, and Suggestions for Enhancement.

The Good Food Box. The Good Food Box was seen as one of the major components of the program although it was identified as only one component of the program. The participants felt

the program was "more than the food box" since it provided not only nutritious food but it was also a vehicle for contact and socialization with the person who delivered the box on a regular basis, and for the provision of other elements of the program. In all three focus groups, the Good Food Box and the benefits, both social and physical, that it conferred, formed a major focus of the discussions that took place.

Nutrition. The participants discussed how the Good Food Box helped them better understand their nutritional requirements for pregnancy. They said that they could identify specific food groups from the contents in the box and that they became more cognizant of their special needs for a healthy pregnancy. The box provided guidance as to ". . . . the kinds of foods you were supposed to eat." They said that receiving the food box increased their awareness of special nutritional needs during pregnancy, it was ". . . . a reminder of nutrition." The sentiment emerged that the food box was the vehicle for providing "the right kinds of foods" to eat during pregnancy without the need for them to fully understand and implement the nutritional requirements. Someone else was making sure they were getting nutritious foods and they did not have to think about it themselves.

Further, the food box added to what was probably an otherwise boring diet. As one participant said, ". . . . the variety is amazing!" In fact, the coordinator, with the help of a fourth year nutrition student, was able to buy different types of food every month and this effort was obviously noted by the group participants. This variety encouraged the women to eat a more nutritious diet with healthy choices that they would have normally been unable to provide.

In addition to the food contents, participants in all of the groups indicated that they enjoyed the recipes provided in the box; stating that ". . . . the recipes that she sends with the food are really good." The women, however, stressed the view that they would prefer ". . . . recipes to

correspond with food in the food box." An attempt was made by the program staff to provide recipes that corresponded with the food provided in the box but recipes may require staples such as those that are found in most kitchens. However, this may not have been the case for some of these women who indicated that they lacked basic cooking skills.

Nevertheless, the recipes were appreciated in that they give a practical way to use the foods provided in the box and the participants indicated that the recipes were used both on an everyday basis and for special occasions. For example, one participant said:

> "Yeah, what was that casserole she sent us? Some kind of tuna rice casserole or something like that. If I have somebody in for dinner. . . that's what they get."

The use of the recipes indicates learning has taken place on a practical level to improve the nutrient content of their diets. The recipes may also have contributed to improving the cooking skills for these women, an effect that the 'spin off' of improving self esteem and confidence as they can now make food that they feel comfortable serving to guests.

Food Choices. The group indicated that they did not like some foods included in the Good Food Box although they stated they do not like to bother the coordinator because they felt she is too busy to worry about their individual likes and dislikes. Most of the concerns centered on the provision of milk. The women did not like either the canned milk nor the tetra pack milkshakes that were provided. As one participant said, ". . . . I mean I don't like the milk. I find it so rich. . . . the milkshakes. . . ."

The women said they would prefer to have fresh milk; ". . . . in the food boxes, instead of canned milk, try fresh." In fact, the issue of providing milk had been discussed at the steering committee level. The committee felt fresh milk was too expensive, would require refrigerated storage not available to the project, and that the financial subsidy inherent in the Food Box should

free up money for the purchase of fresh milk by the participant. Therefore, the option to use canned milk and tetra pack milkshakes was implemented. But as one participant indicated, ". . . . they have milk in those [tetra] boxes I think, maybe that would be good." This idea could be followed up in terms of price and nutrition content at the Steering Committee level.

Convenience and Celebration. The women felt the Good Food Box was of great convenience for them:

> "It's convenient. [I like] the convenience of someone else shopping for you, like the convenience of [having] it dropped off at your door. She brings it right up and sets it in my kitchen."

The fact that the box is delivered to the door appears to make the women feel very special. They felt 'treated' since they observed that many people do not have the luxury of having their groceries delivered to them. They feel they are important or special to the program as an individual.

The women expressed the feeling that receiving the food box was a celebration or a party. As one participant expressed it, ". . . . I look for all the goodies she puts in there." They looked forward to seeing what kind of surprises the coordinator was going to put in the box. This variety obviously improves the spirit and outlook of the participants.

The participants also commented on the timing of the food box. They expressed appreciation for the fact that it comes on time in the week that they need it most. As one participant put it:

> " . . . . Yeah, 'cause the time she brings around the food package I have nothing left for food for the baby, 'cause that's what I usually do, I usually go and buy the baby everything she needs and then I have nothing."

The fact that these women are running out of food before they receive the Good Food Box emphasizes the contribution that it makes to their nutritional intake.

Nevertheless, one particular group felt it would be helpful if the box were delivered the same

date every month.

> "I'd like to know when it's going to be delivered."
>
> "I'd like the food boxes to be delivered at the same time."
>
> "Yeah, a set date for when we are going to get the box."

The women felt that this would allow them to budget the food money for the rest of the month. However, since the coordinator delivers the food package regularly every Monday or Tuesday of the third week of each month it is not clear why a specific date would be greater advantage.

The Good Food Box as Financial Help. The Good Food Box is deemed to be a good value by the participants. The participant pays fifteen dollars for the Good Food Box and in return receives a box of food worth at least thirty dollars, usually exceeding this amount. In discussing the Good Food Box, the participants noted that, ". . . .it really helps with the grocery money." Since grocery money is often considered the money that is left over after the rent, power and phone bills are paid, the food box ensures that there is a commitment of fifteen dollars that is then multiplied.

The financial situation of these women is demonstrated by statements like:

> "We're not on a fixed income and we still don't have enough money."
>
> "I can only buy hamburger each month. I mean after I pay for everything else . . . . I got my money yesterday and after I pay rent and my stuff for her [her baby]. . . ."

In terms of more financial help, one woman responded, ". . . . I would like to have more coupons." On some occasions, coupons had been clipped from the paper for the use of the participants in the Hants County area. This practice became very time consuming and was not done regularly, or by the coordinator in Kings County. The coupons would be a good value and

extend the food budget if used by the participants. The value of coupons and commitment of staff time to such a project needs to be reviewed.

Information About Pregnancy and Infant Care. Information about pregnancy and infant care was a central theme that arose in the discussions. As one woman said, "I got a lot of help, like information I needed about pregnancy." The participants also discussed getting help with day to day problems:

> ". . . .help with little things . . . . I don't know . . .. anything, like a rash. I could call D. if there is some question . . . . she gives great advice."

They felt the coordinator was very helpful in providing information they needed in the form they required: "She is very informative if I have medical questions. She is always bringing back pamphlets, and brochures." The participants felt they were finding out ". . . . what to expect from pregnancy, like how much weight you should gain." One participant said, "I like the magazines we get every month." Another stated, "We got a binder. It's really cool."

The participants appeared to appreciate that the information provided was on a level they could understand. They felt the pamphlets in the box were of high quality: ". . . . there are some really good pamphlets in it. [They are] easy to understand-not big doctor terms." "It's really point blank, like it tells you how it is, instead of sweet stuff." If they could not understand the written pamphlets, they said that the support staff could explain it to them in a way that they could understand.

The participants felt that the range of information they were receiving and the manner of receiving it were very helpful in that the information was tailored to meet the individual needs of each participant. They also appreciated being able to ask for more information on a topic they may need individually: ". . . .we can ask for whatever we want. If we have trouble we can call C.

or M. Our questions are answered." If there was any information that they required they could ask specific question and felt they were receiving accurate answers.

The women expressed frustration with asking questions of professionals and not receiving direct answers to those questions. They expressed appreciation for the program since when a question or concern arose they were able to get an answer to their question from the coordinator. As one woman said,". . . . Well, when you ask a question you get the answer. She doesn't give you the run-around or tell you what **they** expect. . . .she really answers the question."

An important area that was discussed was guidance on how to contact other agencies. For example, one mother gave a specific example: ". . . .how to contact LaLeche League. It's hard to find them." The women appreciated receiving information on other services and programs available in the area: "D. let me know about other programs like . . . . I think it's called the Family Center or something in Kentville and over there at the Apple Tree Landing. I've been referred . . . ." This group felt these referrals were a great help, "It's like an open channel, to everyone you need to know about. It's like the Internet."

Providing information to these women in a practical and flexible way allows better understanding of the responses to these concerns. This group may be suspicious of professionals who, to them, are not easy to access and when they do ask questions, the answer may not provided in a manner they can understand. Access to the coordinator who can provide written, verbal, or practical, 'hands on' ways of teaching and advising was a great asset to these women.

Psychological and Social Support. The groups discussed their need for support in general. They acknowledged that support can come in many forms whether from a phone call, a visit, or even the knowledge that someone is there to listen if the need arises. The women recognized that the program had provided a high degree of support both during the pregnancy, ". . . .it gives

a guideline for you through your pregnancy," and during the post natal period,". . . . it provided reassurance for the first time Mom even though I got on [the program] after my baby was born."

Geographical and Social Isolation. The need for psychological and social support for this population of women may have been highlighted because of their geographical and social isolation. The area served by the program is known as an isolated area and the majority of residents do not live close to a neighbour. Socially, some of these women have been isolated as they are not able to meet with peers due to transportation problems, while others, especially single mothers, have been isolated from their families due to judgments regarding their pregnancy.

The participants acknowledged their feelings of isolation and loneliness living in a rural area, distant from neighbours. As one participant said "I'm lonely, I live out in the woods." In this context, they enjoyed being able call someone like the coordinator, decreasing their feelings of isolation as well as getting answers to questions regarding their pregnancy or baby. The fact that,". . . . everything comes to us, the coordinator, the food box," was very much appreciated.

The Role of the Coordinator. The coordinator was someone who they saw as understanding and caring for their well-being and the well-being of their child, as well as providing terms of food, financial help and improved nutritional status: ". . . . she (the coordinator) gives us a lot of support." It was clear that the coordinator of the program was the key element in the program. In fact, when asked what they liked the most about the program they responded initially with the coordinator's name. They discussed characteristics of the coordinator that made them feel very comfortable. They felt that:

"She was warm and very informative."

"She (the coordinator) made me feel very comfortable. . . the friendship."

"She really makes the program".

"She's really warm, isn't she?"

"I have found a new friend [in the coordinator]."

In addition, the information that she provided had a validity because they knew that the coordinator has a child about the age of these new babies:

> ". . . .and not only that, you know, because, I mean, she has a little one that's basically around the same age as ours and you know she's doing just what I'm doing, you know. [She] probably [has] the same or went through the same thing."

One women appreciated that the coordinator established a friendship before discussing the program:

> "When she, um, when she came to see me about the program she, um, came in, um, she came right in and sat down and me and her, we had a conversation and everything."
>
> "She, like, it was more or less like wanting to sit down for us to get to know each other type thing before anything else."

This approach seemed to be a new experience for these women, that someone was truly interested in them with no ulterior motive. This way of doing things on the part of the coordinator is very well received by the majority of the participants. It helped to establish a rapport from the beginning.

At the same time, this group did not like the feeling that they were bothering the coordinator. Often they would not call because they felt she had so much to do already:

> "I guess the only thing that has ever bothered me is like that I'm afraid that I'm bothering D."
>
> "Yeah, that's a big thing,"
>
> "Where she is the only person she has a lot of people to see."

Other participants affirmed this concern. They emphasized, however, that the coordinator does not make them feel that way though. As one participant said:

> "I feel that way. I feel....she doesn't make me feel guilty for calling her. Like I feel like I am. She doesn't make me feel that way, no not at all."

Home Visits. The home visits were appreciated by the women who expressed the view that they were glad that they did not have to go out to the program but that it was delivered in the home.

The feelings of most participants were reflected by one client who said:

> "I really look forward to C.'s visit every month. I might not have a life, but I look forward to her coming."

This comment reflected the need of these women for psychological support and the fact that the program is meeting it.

The home visits and Good Food Box delivery are an imperative part of this program, as it initiates contact and maintains that contact in a non-threatening manner. The establishment of trust and friendship are initiated with the home visits and delivery of the Good Food Box. It has become apparent that contact is central to support especially for mothers who live in remote and scattered areas.

Suggestions for Enhancement. Various comments were made throughout the focus groups that were considered as suggestions for improving program delivery. These include the following suggestions for program enhancement.

Advertising. One group felt that the program had not been advertised effectively. One participant said, ". . . . I didn't know anything about this program." The group participants

recognized that the program was new:

> "Yeah I knew that. . . . it was new, but, I mean, I was in Dr. K's office I don't know how many times before I had the baby, right, and I didn't see any signs up. I didn't know until, like, the public health nurse phoned me."

One group felt that the physicians in the area had played a role in promoting this program to the point of providing contact numbers:

> "When you find out for sure [that you're pregnant] and the doctors say there's a new program going on in your area. . . .you know. . . . you call this, you know, here's the number."

Although pregnancy provides increased opportunities to contact this target population, there are questions as to whether formal means of advertising are effective. This population is hard to reach. It may not be read the newspaper or look at a brochure in a doctor's or social service agency office. It has also proved difficult to get physicians to become involved in the program steering committee or in referrals to the program. As discussed in Chapter III the majority of the referrals come from public health nurses or by word of mouth.

Extend Program. Participants expressed disappointment that the program ended for them after the baby was 6 months of age. One mother said, "The only thing I was disappointed about was that it couldn't last longer." while another felt the program should "last longer than six months after the baby is born, not only the first 6 months." One mother suggested that ". . . . after the first six months the foods in the box should be geared towards the child."

A number of others felt that they still needed information past the six months and that they can never hear too much information on child rearing:

> ". . . .[We] still need information up to the first year."
>
> "I've had four [children] and I still need guidance."

There are three definite needs that these women perceive to be continuing beyond the scope of this program. These include: information on child rearing, food for the child and food for themselves. They depend on the services provided from the program and have not yet developed other ways to deal with these needs:

> "I mean, yeah, like right now she's [the coordinator] the only one I have to depend on. Like I run out of food or something like that, I call D. . . . .I have nowhere else to go. . . .'cause I mean that has happened a lot:"
>
> "I think it would be nice to continue getting the food packages because you are nursing so I could see them giving up the food packages after. . . ."
>
> "Because you still need the proper food and energy to chase after these kids."
>
> "Yeah, even if the food box isn't there-still be involved in the support program."
>
> "And I would still like to receive the information."

Group meeting. The participants discussed how they had looked forward to support from other mothers when becoming involved with the program and were disappointed that this had not occurred. The type of support that they looked for was having someone to call, to ask questions, or just to talk to:

> "Like in the early weeks before, like when ah... when its 10:00 and he just won't sleep and just like having someone to calm you down when your husband is working late and there's nobody else that you can call."

In the context of the group discussions, the women expressed an interest in getting together as a group to talk and support each other:

> "If you had something, like, you all meeting together, everyone in the program you could, like, get together and talk and it would make you feel better. I think something like that."

They acknowledged that after the program was finished they would "still need support" and that they would not feel comfortable calling the coordinator after the six months was over. One participant said:

> "You know, because I'll feel, like, the. . . .I'm done with the program now. . . .I know I made a friend type thing but. . . ."

Another women responded,

> ". . . .But she'll still call you for coffee anyway. She always does!!!"

And the first women responded again,

> ". . . .Yes, but I won't feel as comfortable."

The participants suggested getting each others' phone numbers: ". . . . yeah, if I had her number. . . .[I could call her]." Calling each other would be the beginning of getting together as a group.

They then went on to discuss how they might meet as a group:

> ". . . .maybe have a group thing that the parents could meet once a week or something."
>
> "Yeah, 'cause like, 'cause you don't really have anytime to get out on your own."

The advantage of meeting as a group became quite clear to one of the participants who realized that, "You'd have more contacts."

Discussion on where they could have meetings then evolved:

> ". . . . even if we turn around and go to each others' houses;"
>
> ". . . . you could even take turns at going from house to house;"
>
> "Yeah, like my place is small but I don't care, come on in. . . I only have a couch and two chairs."

And then the discussion moved on to how the children could be looked after:

"Yeah, like have a daycare for them -- a play group;"

"I really think the group thing, without babies is really difficult though;"

"It'd be nice if you could bring the older ones;"

"Yeah, I have a four year old. Too bad they couldn't have a daycare for the older ones too."

The need to socialize became very apparent at the end of the focus groups when the women continued to sit together and chat, telling stories and offering each other help with their babies. They shared tips on how to deal with rashes and other problems with their babies. They were not anxious to leave.

It appears that this is one area the participants were really looking forward to. They had been looking forward to this from the initiation of the program. It seems to be such a high priority with them that they would take it over and organize themselves. This need to meet together may also be a reflection of the isolation these women feel, both because of the distance between their residences and services, as well as the isolation they feel from having a child, and not being able to leave and get out as freely as in the past.

Clothing, Car Seat and Toy Exchange. The clothes and toy exchange was not well known among the participants and this information was shared during the focus group meeting. Some participants were not aware of this service but felt it was a great idea.

"I know I'll soon have to get a new car seat for her."

"Well get D. to put her feelers out."

"I think it's really nice. The clothing, toys the car seats."

"I have lots of things that I don't wear anymore."

"D. has contacts with lots of people and gets these things."

This is one service that is really valuable to the women. They were more than happy to share their maternity clothes with other participants and definitely could see the benefit of sharing clothes for themselves and the babies. The coordinator is well connected in the Kings County area and therefore is aware of available necessities. This portion of the program has a great deal of potential to develop. The cost of safe car seats, high chairs, play pens and other baby requirements are often well outside the budget of those on a fixed and/or low income. The cost saving and recycling of these items when well coordinated can be a positive activity for all involved.

Baby-sitting Registry. The women expressed concern regarding not being able to find baby sitters that they can trust to leave their children with -- "baby sitters that don't beat your kids and steal." Family members are often care givers for these children initially, but this service is not a sustainable solution to child care. "That's it. I know I'm going back to work and my mom **was** looking after them, right? And now she can't." They expressed interest in networking to develop a list of baby sitters in the area that they all could use. "Maybe [we could start] a baby sitting registry, where you could contact **good** baby-sitters. Reliable. Honest."

Opportunity for Input. These women appreciated being able to have input into the program and having their input acted on. They felt they had been given the option to change things in the Good Food Box if they told the coordinator. "Yeah. . .. you have the option to change it. Didn't D. say that if you didn't like something to tell her and she would . . . ." "Can we put down some good comments too? Like put down. . . like they said we have the opportunity to change it if we want to."

This option to tell the coordinator their likes and dislikes and have the box adjusted had the secondary effect of making the participants feel more important as their suggestions are acted on.

Some of the women enjoyed being able to help other mothers with their knowledge of infants, budgeting, and general information by sharing the experience with the coordinator. As one woman said, "I really like that you can get involved in it too. Like if she doesn't know something, she'll ask you your opinion. You have input into it."

Involvement allows the participants to mold and meld the program to best fit their needs. To be given the freedom to respond to problems with the program and make suggestions for improvement increases confidence and trust in the program and ensures that the program is truly meeting the self-identified needs of those participating. This feeling of helping others appears to increase self esteem and confidence. Some women really felt good about being able to answer questions the coordinator may not have been able to answer.

Areas not Tapped in Focus Group Discussions

As discussed in Chapter IV of this thesis, the focus group interviews did not provide a rich set of data commenting on the participants' expectations of and experience in the program. This was due in part to the failure of the tape recorder to pick up the full discussions but it is clear from the scriptor's and the researcher's notes, that the major themes addressed had been captured and have been described in foregoing sections of this chapter.

In this section, therefore, the extent to which the major goals and objectives of the CPNP as operationalised in the Nova Scotia and the Great Beginnings Project were addressed by the participants and, if not, why not.

The priorities set by the Nova Scotia CPNP Program included: decreasing the number of low birth weight infants, decreased use of alcohol, cigarettes, and illicit drugs, decreased physical,

emotional and verbal abuse to pregnant women, improved nutritional intake, and increased initiation and duration of breast-feeding. The Great Beginnings Project Steering Committee and its coordinator has operationalised these priorities and these are expressed below with a comment as to how these priorities had appeared in the discussions with the focus group participants.

Reducing Low Birth Weights. The objective was to carry out an effective outreach program that would extend prenatal and postpartum support to pregnant women at risk of birthing low weight babies due to socio-economic factors.

The participants recognized that they were receiving support as first time mothers. They appreciated that they were able to get answers to their questions regarding their child and the pregnancy experience. But, in none of the discussions, was there any mention of low-birth weight outcomes or whether they were at risk of such an outcome.

Good Nutrition During Pregnancy and Infant Care. The project wished to increase awareness among pregnant and breast-feeding women of the need for good nutrition and / or improved food intake during pregnancy and breast-feeding, and the nutritional requirements of infants aged 0-6 months.

The women commented that they felt that the Good Food Box formed the basis for their nutritional requirements during pregnancy and that its contents helped them to understand the various food groups that went into a healthy diet. The objective of meeting nutritional requirements seemed to be overshadowed, however, by the fiscal advantage that accrued from receiving the food box and its timeliness with respect to budgeting their limited resources.

Providing a Comprehensive Food Supplement Package. The program proposed that it would provide a comprehensive, cost effective food supplement package that meets or exceeds the nutritional requirements of pregnant women, breast-feeding women and infants aged 0-6 months.

Certainly, the participants indicated that the food box provided nutritional supplements to their usual diets. They did not, however, address the question as to how these supplements specifically met their nutrient needs. Given the complexity of the calculation of both macro and micro nutrients, it may be expecting too much to ask that participants become familiar with the actual calculation of their intake in relation to needs. As discussed in the previous section, the food supplement was as much a financial windfall as it was a nutritional gain. It was important to them that they have something to eat!

Reduction In Smoking, Alcohol, and Drug Abuse. The program aimed to increase awareness of women of the detrimental effects of smoking, drinking alcohol, and drug abuse during pregnancy and breast-feeding, and of the effects of second-hand smoke on infants.

Issues related to smoking, alcohol and drug use were not raised by the women in the focus group sessions. It is not known whether the approaches taken by the program are simply not reaching the participants or whether they preferred not to bring the issues up in the context of the discussion with virtual strangers.

Reduction of Physical, Emotional and Sexual Abuse. The program wished to establish a mechanism for early and continued contact with pregnant women at risk, from early pregnancy, through birth, and during the first 6 months of the infant's life and to ensure that this mechanism can provide every possible support to those pregnant women and mothers of infants whose daily lives are effected by the fear and disruptions caused by physical, sexual and /or emotional abuse.

Physical, emotional, and sexual abuse is hardly a topic that the women would raise in a group setting such as focus group interview where they were meeting people for the first time. None of the participants indicated that such problems existed in their own circumstances although it is interesting that no comments were made about support and help that they may have been

receiving from their spouses or partners.

Success in Breast-Feeding. The program was intended to provide continuing support to women participating in the prenatal and postpartum outreach program such that an increased comfort level and success rate with breast-feeding their babies will occur.

Although a number of the focus group participants were breast-feeding at the time of the focus groups, they did not specifically associate the project with this decision on their part, nor was breast-feeding mentioned as an area for which they had sought advice.

Explaining Why Key Objectives Were Not Addressed

Because so few of the key objectives of the program were substantially addressed in the focus groups, it is worthwhile to speculate on why such discussions did not take place.

The Focus Group Situation and Settings. Although focus groups have great advantages for gathering data for the purposes of program evaluation and the methodology seemed appropriate for the current evaluation task, there were certain factors that, in retrospect, may have contributed to the apparent failure to draw views on salient issues.

First, the participants were asked to gather in an unfamiliar setting chosen by the program and this may have contributed to feelings of insecurity and reluctance to 'open up'. The apartment of a staff member may not have been considered a safe place to express feelings or opinions.

Secondly, even within the small individual focus groups, the participants were not known to each other and it is difficult to assess whether this unfamiliarity placed restraints on the discussion. The program itself may not been seen by its providers as controversial but the fact that these women had never met before may have been intimidating and not conducive to a free discussion about a program for which they had been specifically singled out.

Conduct of the Focus Groups. One cannot escape the speculation that, although the

researcher was experienced in the conduct of focus groups and had carried out a specific pilot group in preparation for the interviews on which the evaluation would be based, there may have been resistance to providing the interviewer with the kind of information that was sought. It is difficult to know whether more specific 'probes' would have yielded more comments on the specific objectives and aspects of the program. Nevertheless, it is the researcher's impression that specific probes would not have yielded a more fulsome expansion on the key issues. It appeared that what views and opinions were to be obtained from these women were, in fact, obtained and that there may have been little extra to add.

Participant Characteristics. It must be remembered that the focus group situation was a new one for these women and that their social background and histories suggested that they had little opportunity to respond at the level that had been expected. Their contact with the program had been sporadic and, although the visits of the coordinator and staff were appreciated, it is not clear how much information in relation to the objectives of the program flowed to them at those times.

Several participants were single mothers who had not completed their grade 12 education. Further, they had limited opportunity to receive or search out information on improving their health or that of their child due to lack of access to a library in the area, access to the Internet, contact with professionals, and even contact with other people.

It may well be, and the interviews support this, that their need for food and expanded income takes precedence over perception of the positive influence the program may have on their health or the health of their baby. The decision to participate in the program may not be based on an informed decision related to pregnancy outcome but rather as a vehicle for not only making their money spread a little further each month but also to address specific questions and to enhance their social lives.

Under these circumstances, the larger goals of the program that have been set by policy makers are in not identified by the participants. The relationship between the program and their health and that of their child may not be easily seen by each individual participant. What they can comment on is what they physically see happening in their lives, a box being dropped off, a person coming to visit, a person providing information, a person taking them to their doctor appointment, or someone referring them to other programs.

These participants may have little experience to draw on when asked to participate in an evaluation exercise. This population is not used to being asked for their opinion and expressing their opinions. This in itself could be an intimidating process.

Expectations of Program Planners and Evaluators. It must be remembered that the goals and objectives of this project were defined by individuals that currently are not living in low- income circumstances. Programs are often developed to meet the needs that middle class professionals feel the clients have, without having consulted the target population. It should not be surprising, therefore, if the participants, when asked to comment on the program, do not express views and opinions that are congruent with the planners and researchers.

In fact, in the present case, while the participants did not identify or comment in detail on the specific objective and goals of the Great Beginnings Project, it became apparent from the focus groups that the program was in fact providing a vehicle for enhancing their nutritional status and for encouraging more information seeking and contact with the larger world of care provision.

Conclusion

Notwithstanding the limitations inherent in the information gathered within the focus group interviews, the views the women had about the program in which they participated are significant in understanding how the program has impacted on their lives. In the next chapter,

recommendations will be formed based on the information provided by the participants in order that the program can be enhanced and improved in the future to meet the needs of this target population.

CHAPTER VIII

DISCUSSION OF FINDINGS AND CONCLUSION

In Chapter VI, the major themes that arose out of the focus group interviews were elaborated in detail and at length. While the observations made by the women stand on their own, it is appropriate to interpret their responses in terms of the objectives of the Great Beginnings Project. To what extent do the views of the women indicate that the goals and objectives of the project as established by the Steering Committee and implemented by the coordinator are being met? In this chapter, the themes as identified by the women are placed in the context of the goals of the project and, in so doing, suggestions as to how the women's observations can be used to enhance and strengthen the program are made.

The Good Food Box

One of the goals of the project was to develop sustainable benefits, including the ability to choose a nutritious diet for pregnancy and lactation. The question arises as to whether the enthusiastic acceptance of the Good Food Box constitutes a sustainable benefit. According to the responses of the participants, the Good Food Box was a 'treat' since someone else did the grocery shopping once a month, it provided surprises, and it served as a reminder of what was needed nutritionally for pregnancy and lactation. In addition, it was also a form of income support and ensured that the women did, in fact, eat relatively well throughout each month.

At the same time, the discussion in the focus groups reflected that a degree of dependency on the program had emerged. For example, when participants ran out of food, they reported that their first course of action was to call their program support person. Further, the women also expressed appreciation that someone was taking care of the nutrition component of their lives, which could be interpreted to mean that they felt relieved of the responsibility. Under these

circumstances there may be less motivation on the part of the participants to learn what constitutes a healthy diet. Since all of the women expressed the wish that the program would continue beyond the six month post natal deadline, it would be interesting to see what impact the provision of the Good Food Box had on their subsequent dietary patterns and budgeting.

While it is not clear whether sustainable benefits were gained from the food box, it is clear that its delivery was a direct assistance to the women at a time when they needed this dietary support and supplement both in terms of the 'good food' and the fiscal subsidy. Further, comments by the women supported the interpretation that learning how to implement recipes and serve tasty food had developed and that this in itself was a 'confidence builder.'

Finally, although not directly related to the long term sustainable benefit, it was noted that the delivery of the Good Food Box also provides the coordinator and staff members with the opportunity to enter the home and do a visual assessment of the living circumstances and identify problem areas. The Good Food Box was therefore more than the delivery of a nutritional supplement but a major focus for a social and professional contact much needed in this isolated region.

Information and Referral

While not a specific objective of the program, the provision of information about pregnancy and infant care was seen as an important component of the program by the participants. Where the information was sought and obtained from the coordinator or program staff, it is difficult to know whether the program contributed to a sustained ability to seek out needed answers to questions. At the same time, the program staff also referred the women to both social and health services when required (referrals included one to a dietitian for an eating disorder and another to a shelter for abuse issues) and it is possible that both the information provided and the referrals

provided a window for the women to be proactive in the future in seeking help and assistance in answering their questions and resolving their problems.

It is clear that the Great Beginnings Project became a focal point, a clearing house, for information and referral needs, a role that is not usually played by the multi-agency system that responds to the needs of this target population.

Psychological and Social Support

One important goal of the project was to decrease the feelings of isolation that were felt by the women. It was known that this target population feel isolated from the mainstream population both geographically and socially. There is no doubt that the project did succeed in linking the participants with the 'outside world,' chiefly through the efforts of the coordinator and the staff. This enhancement of social contact was, in fact, a major 'spin off' from the delivery of the Good Food Box and the contacts that were made in the context of supplying information and making referrals. It must be pointed out, however, the social contact was largely with the coordinator and the program staff and that, particularly in the case of the coordinator, the participants had developed close personal as well as professional links with those providing the program. They indicated that these links might be difficult to break and that a close dependency had developed, as indeed it should in the provision of such a program.

Nevertheless, the women were aware that once their child became six months of age, these visits and contact would be discontinued and there would be no sustainable support available to them.

Given the limitations and policies of the project, this 'phasing out' is inevitable although it did appear that, in the process of the focus groups themselves, the women might wish to continue to telephone and see each other in mutual support groups. This is discussed further below in

discussing the participants' wish to pursue continued contact with each other.

In fact, it may well be that, in the future, the program should incorporate a process by which participants in the program can be brought together for informal socialization and perhaps to achieve more formal objectives in terms of information sharing and establishing various exchanges such as toys, clothes, and baby equipment. It is not clear whether such meetings could be convened for the purpose of distributing the Good Food Box. In fact, given the constraints of time in which the box must be prepared and delivered, this seems unlikely and probably not as effective as the home visit. Nevertheless, such group meetings could include more formal elements such as having a public health nurse present prenatal instruction.

The programming of group meetings would change the role of the coordinator but it is certainly an option that might be examined. The new role would involve the concept of community development, over and above the provision of a highly specific and targeted program.

Home Visits

It has already been commented that the visit to deliver the Good Food Box was also an opportunity for the program staff to assess the home situation. These visits not only fulfilled this function but provided a social contact beyond the specific delivery, a social contact that was much welcomed. Given the geographical dispersement of the area, it would be difficult to increase the number of home visits and, in fact, one a month, may be sufficient to monitor the home situation.

However, when the program is finished, the home visits will not continue and this may be unfortunate, particularly where the women are at risk of abuse or financial and nutritional deprivation. Again, there is an incentive for the women to continue to meet as they suggested and to visit each other in their own homes.

Advertising

The women had indicated in the interviews that they did not feel that the program was well known and that their enrollment in it was either through a specific public health nurse or by word of mouth. In view of the fact that this was the first year of the program, the presence of the program in the area may not have been well established and the situation may well have changed at the time of writing. Nevertheless, this target population is difficult to reach and the net needs to be spread widely through social service agencies as well as health agencies. Since most of these women are in touch with social service agencies this may be a more reliable access point than physicians who may not be contacted until later in pregnancy.

Group Meetings

It has already been indicated that the women had expressed disappointment that the program did not provide for meetings with other participants and that a substantial part of the focus group discussion focused on the mechanisms by which they could get together again in the future. The need to share experiences with other individuals going through the same thing was seen as a high priority by the participants.

It has already been suggested that the project may wish to incorporate group meetings as a component of the project itself. It may also be appropriate as the formal programming comes to an end that the coordinator and staff take appropriate action to facilitate the ongoing communication among the women. The program staff can only encourage the women to implement their desires to meet although, while they are still in the program, certainly a 'founding' meeting might be convened. The beneficial effects of continued meetings would seem to be considerable given the comments of the women in the focus group interviews including: sharing of information and information sources and resources; sharing of agencies and professionals and

the referral mechanisms; reinforcement of that nutritional knowledge that had been gained in the program; pooling of resources for more effective grocery buying; and, of course, providing a social network where none may have existed before.

The Clothes and Car Seat Exchange

The discussions suggested that the clothes and car seat exchange part of the program was not well known but, where it was used by the participants, it was seen as a great help in identifying very concrete needs. The cost of maternity and baby clothes, car seats, and infant furniture are high costs and not easily met within the limited budgets with which these women struggle. It certainly appeared from the discussions that, while the women felt that the coordinator of the project was very effective in identifying items for them, there would be room for exchanges among themselves and taking on responsibility for this service. Again, if the women were to be involved in implementing this kind of exchange, it would provide a further vehicle for socialization and bridging the social and geographical isolation.

Program Objectives and Goals Not Identified by the Participants

In the previous chapter, the question was raised as to why the participants in the focus group interviews might not have addressed some of the central goals of the project such as the reduction of risk factors for adverse birth outcomes including smoking, alcohol, and drug abuse.

This may well have been because the focus group interview and the particular questions and probes did not tap the participants' information on these goals and objectives. But one might have expected to have heard comments to the effect, for example, that ". . . . and I finally gave up smoking when I realized the effect that it would have on my baby." Clearly the emphasis that women placed on the tangible aspects of the services with which they were provided such as the concrete benefits of the Good Food Box, the information that was provided, the referrals that

were made, and the psychological support that they received, may have placed any 'preventive' benefit that accrued to them in the background. Whether or not they did receive such benefits is a matter for further inquiry.

Nevertheless, both the tenor of and the substantive comments made in the course of the focus group discussions suggested that, for these women, need for food on the table, financial subsidy, and psychological support were the fundamental needs addressed by the program. The provisions of these needs may, in fact, prove key to protecting against an adverse pregnancy outcome. Since the literature and experience in other programs suggests that low birth weight and other adverse outcomes are seldom based on a single causal variable, a program that addresses some of the root problems in a disadvantaged segment of society may achieve as much or more than a highly targeted program. In order to enhance the programming in projects such as Great Beginnings there may be a need to further understand the life circumstances in which these women find themselves and to address those circumstances. The fact that the Great Beginnings Project did, in fact, meet the women's basic needs and has provided a base on which to build their nutritional health and help-seeking skills, and satisfy their needs for psychological and social support seems to be a step in the right direction.

The design of the present study did not encompass eliciting the actual pregnancy outcomes nor whether risk factors such as smoking and alcohol consumption were reduced. The point, however, is that the project reached a group of women who are otherwise hard to reach and made a significant impact on their lives by their own account. It is true that this impact did not speak directly to some of the focused goals of the project. Nevertheless, it became a point of entry if, in fact, any of the women had been identified at great risk of adverse outcomes. For example, if a women had been identified with a level of alcohol consumption that placed the infant at risk of

Fetal Alcohol Syndrome a very different type of intervention would have been needed, an intervention beyond the scope of an essentially 'preventive' project like Great Beginnings.

Recommendations for Future Research

In the context of a program evaluation of the type described in this thesis, more questions are raised than are answered. It would be interesting to know whether follow up focus interviews or one on one interviews with the participants would show whether the participants were aware of the more formal and focused goals of the project. However, patterns of smoking, alcohol, and drug use are difficult to elicit reliably within an interview situation although visits to the women's homes for purposes like delivering the Good Food Box provide an opportunity for unobtrusive observation. Undoubtedly, this kind of research needs to be pursued in order to establish the extent to which these risk factors play a part in the lives of this target group.

It is also clear that given the life circumstances of these women, there is a need for long term follow up of both the mother and the child. The project has provided the child with a 'good beginning' with a potential for enriching the social life of the family in the future. But there is the question of whether this is a one time intervention with a short term impact. Only prospective research can answer the questions as to whether sustainable benefits were conferred.

The program interventions of Great Beginnings have been adopted, in part, from the many pregnancy outreach programs that have been initiated in Canada and the U.S. Items such as the Good Food Box have been designed to meet the needs of this particular population and to reach women who were socially and geographically isolated. Other than group meetings, it is difficult to suggest how the program could changed to meet the needs of these women without more in depth studies of their life circumstances, social structures and their sub-culture.

Conclusion

This thesis has described an evaluation of a pregnancy outreach program, the Great Beginnings Project that was delivered in Kings and Hants Counties, Nova Scotia in 1995/96. The findings are based on three focus group interviews with fourteen participants in the program. The results of these group discussions reflect that the program has reached a group of women who are normally difficult to reach by the structured provincial health programs. The project has provided nutritional and financial subsidy at a critical time for the mother and the fetus and for the post partum period. In addition, the project has facilitated placing information about pregnancy, infant and child care in the hands of the mothers in a friendly and comprehensible fashion. The interventions have tapped into an expressed need of the mothers to have wider social networks and it is hoped that the links that have been made will facilitate a degree of sustainability of the overall objectives of the project.

The methodology used in the project did not assess either whether various specific risk factors (such as substance use) for adverse pregnancy outcomes were reduced nor whether the women were aware that the management of risk factors was a major goal of the project. However, the findings suggest that, in reaching these women, the program has provided the kind of nutritional, informational, referral, and psychological support that has assisted them through a critical time in the lives of them and their infants.

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Appendix A
Letter of Informed Consent
Evaluation Of Great Beginnings

The purpose of this study is to provide information to the coordinators of the Great Beginnings project. We will use this information to improve the program.

1. If you agree to take part in the study you will be asked to:

   a. To agree to participate by signing the consent form at the bottom of this page.

   b. Participate in a group meeting. The meeting will last for a maximum of 2 hours.

   c. Give your opinions on this program.

2. All information will be held in confidence and names will not be included in any written work. Only group information and responses will be reported.

5. You will receive a gift in appreciation for your participation.

6. If you have any questions please phone Debbie Reimer at 582-1375 or 542-2482.

Shelley Selig MSc Candidate
University of Northern British Columbia
Bridgewater, Nova Scotia

Debbie Reimer MSW, RSW
Great Beginnings Coordinator
Apple Tree Landing
Canning, Nova Scotia

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I _____ understand why this study is being done and I agree to take part. I understand that I may withdraw from the study at any time and even if I agree to participate I may decide not to answer any individual question.

Date: _____ Signature: _____

Appendix B
Letter of purpose of Study

Dear Great Beginnings participant,

I am a student studying Community Health and I am working on a study with Dr. Johnston of the School of Nutrition and Food Science at Acadia University. I am studying the prenatal program you are in. We need your input into whether the program is working and if you are getting everything out of the program you were hoping. We are also interested in knowing what changes you would make to the program to improve it.

As a participant in the study you will be asked to attend a meeting with at least 4 other people also in the program. We will be doing a group discussion of the program and how you feel about this program.

All information that is gathered at the time of the meeting will be kept strictly confidential and you will be free to withdraw from the study at any time. Any tapes or notes taken at the meeting will be kept in a locked cabinet to which the focus group leader only will have access. All tapes and notes will be destroyed after three years of the paper being passed in. The researcher has signed a confidentiality form that does not allow her discussing program participants in any way that would identify them. Names will not be used in the written paper.

We feel this study is very important to the coordinator of the program and yourselves to allow us to change the program to best meet your needs and the needs of future participants of the program.

If you wish to participate please sign the enclosed letter that Debbie will provide you.

Thank you.
Sincerely,

Shelley Selig

Appendix C
Ethics Approval

UNBC Research Ethics Committee
Certificate of Ethics Approval

Name of Researcher: Shelley Selig

Title of Research Project: Great Beginnings: A Prenatal Program Evaluation

I certify that this project was given ethics approval by the UNBC Research Ethics Committee

Signed: W R Morrison **Date:** 24/11/96

Dean of Research and Graduate Studies