THE QUALITY OF PRENATAL CARE: EXPERIENCES OF WOMEN ATTENDING HEALTHY BABY CLUBS

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The Quality of Prenatal Care: Experiences of Women Attending Healthy Baby Clubs

by

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ABSTRACT

A major challenge for maternal and child health services is the promotion of healthy pregnancy outcomes. In order to improve perinatal outcomes, risks in the prenatal period must be identified and reduced by offering appropriate targeted programs. Clinical and research findings suggest that prenatal care regimens which provide social and behavioral services along with medical care are more effective in improving mothers' health and pregnancy outcomes than traditional prenatal programs. In 1994, Healthy Baby Clubs (HBCs) were established in nine regions of Newfoundland. HBCs are based on a peer support model which provides services to high risk pregnant women through a support network of resource mothers, nutritionists, and public health nurses.

The purpose of this grounded theory study was to describe how HBCs are influencing health-related issues. Interviews were conducted with 20 women attending HBCs in 1999. Results, using the constant comparative method of analysis indicated three theoretical constructs: creating a supportive environment (facilitating access to HBC, providing supports, reinforcing healthy food choices), becoming empowered (acquiring knowledge, encouraging healthy behaviors, increased self-confidence, giving recognition to unmet needs), and evolving social self (valuing social contact, sharing experiences, improved family relations). Findings suggest that HBCs exerted a positive impact on participants' psychological, emotional, and social functioning. The study emphasized the

importance of a collaborative approach and incorporating peer support, when providing prenatal care to disadvantaged pregnant women. The findings from this study provide new insights into the needs of pregnant mothers of low socioeconomic status, so that, prenatal care can target their needs and, in turn, improve perinatal outcomes. The implications of this study for nursing practice, nursing education, and nursing research are addressed.

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CHAPTER 1

Introduction

Although Canada's overall health status is among the best in the world, there exists wide inequalities in the distribution of wealth. In 1994, 17.1% of all Canadians (i.e., >2.1 million) were living in poverty (Canadian Public Health Association [CPHA], 1997). According to the 1996 statistics, the proportion of family incomes <$20,000 in Newfoundland (28.4%) was above the national average (23.9%) and the highest of all provinces (Newfoundland and Labrador Centre for Health Information [NLCHI], 1999). Canadian statistics also indicated that women were at a higher risk for poverty than men, with 2.7 million women living in poverty (CPHA, 1997). In 1995, the proportion of Newfoundland women, ranging in age from 20 to 34, with low and very low incomes was 22.9% and 10%, respectively (Segovia, Edwards, & Bartlett, 1996).

Research findings support a positive association between low socioeconomic status and poor health (CPHA, 1997; Federal/Provincial/ Territorial Advisory Committee, 1996; Mustard & Frank, 1991). Furthermore, there has been consistent research support for the association between poverty and poorer pregnancy outcomes such as prematurity, low birth weight, and small for gestational age infants which can lead to future health problems (Bor, Najman, Anderson, Morrison, & Williams, 1993; Chen & Millar, 1999; CPHA, 1997; Kemp & Hatmaker, 1992; Oderkirk, 1993; Mustard & Frank, 1991;

Wadsby, Sydsjo, & Svedin, 1996). Based on an analysis of morbidity rates in Canadian children, Oderkirk (1993) reported that children from low income families had a disproportionate share of health problems and a disability rate twice the rate found in high income families. Despite a resolution passed in Parliament in 1989 to eradicate child poverty by the year 2000, almost 20% of Canadian children are poor, with Newfoundland having the highest rate of child poverty (CPHA, 1997). The impact of the socioeconomic environment is a powerful but modifiable health determinant. What is required to address these issues is a dramatic change in public policy dealing with health-related matters (CPHA, 1997).

Prenatal health and support has come under the scrutiny of health care providers, researchers, and developers of public policy at different times over several decades. There is ample clinical and research data to support the positive effects of prenatal programs on maternal health and pregnancy outcomes (Blum & Bearinger, 1990; Johnson et al.,1994; Lia-Hoagberg et al., 1990; Roye & Balk, 1996). However, it is also well documented that women considered to be at greatest risk for poorer outcomes (e.g., pregnancy complications, low birth weight and premature infants, greater perinatal morbidity and mortality, etc.) often delay seeking prenatal care until much later in the pregnancy cycle (Curry, 1990; Goldenberg, Patterson, & Freese, 1992; Lia-Hoagberg et al., 1990; Rogers & Schiff, 1996). Pregnant women from low

income families are especially vulnerable.

Identifying and successfully implementing appropriate strategies for promoting maternal health and positive pregnancy outcomes for socially and economically disadvantaged women can be quite a challenge for health care providers. LeHew (1992) emphasized this point by stating that: "We must refocus our main efforts from the futility of providing services to babies already born with birth defects and severe prematurity and providing life-long welfare payments to mothers unable to work and live independently to more positive preventative steps" (p. 299). Clinical and research findings suggest that prenatal programs which provide social and behavioral services along with medical care are more effective in improving mothers' health and pregnancy outcomes than traditional programs (Fraser, Brockert, & Ward, 1995; Irvine, Bradley, Cupples, & Boohan, 1997; Ketterlinus, Henderson, & Lamb, 1990).

It has been conjectured that Healthy Baby Club's (HBCs) provide more effective avenues for reaching at-risk pregnant women, addressing members' needs, enhancing maternal health, and facilitating positive pregnancy outcomes than traditional prenatal programs. The purpose of the current study was to document the meaning of HBCs for pregnant women accessing this community initiative in St. John's, Newfoundland. A second purpose was to develop a greater understanding of participants' support needs and how HBC programs may or may not be addressing these needs.

Background and Rationale

An important factor associated with an increased risk for poorer pregnancy outcomes is inadequate prenatal care (Ketterlinus et al., 1990; Yoder & Young, 1997). Despite having access to free medical care, many women of low socioeconomic status delay seeking professional help until the third trimester (Pettiti, Coleman, Binsacca, & Allen, 1990; Young, McMahon, Bowman, & Thompson, 1989). It has been suggested that low self-esteem, social isolation, and poor communication with partners may be contributing factors (Norbeck & Tilden, 1983; Young et al., 1989). Negative attitudes of these women toward health care professionals and vice versa, as well as compromised communications, may also be barriers to seeking professional help (Colin, Ouellet, Boyer, & Martin, 1991; Lapierre, Perreault, & Goulet, 1995).

It has been argued that the success of preventive and health promotion strategies for vulnerable and high risk populations is highly dependent upon the presence of social supports within the family and community (Berkman, 1995; Heaman, 1995). Support from husbands/partners and maternal mothers has been identified as an important force in facilitating health and positive outcomes for all women during pregnancy (McKim, 1993; McKim, Kenner, Flandermeyer, Spangler, Darling-Thornburg, & Spiering, 1995; Norbeck & Anderson, 1989). Research findings suggest that support from family and peer groups is the most important motivator for disadvantaged pregnant women to access prenatal care

services and practice healthy behaviors (Giblin, Poland, & Ager, 1990; Higgins, Murray, & Williams, 1994; Johnson, Primas, & Coe, 1994; Lia-Hoagberg, Rode, Skovholt, Oberg, Berg, Mullett, & Choi, 1990; Schaffer & Lia-Hoagberg, 1997).

The importance of understanding the social and health needs of disadvantaged women is a preamble to successfully designing and implementing prenatal programs that will reduce the risk factors implicated in poor maternal health and adverse pregnancy outcomes. A number of studies were identified from the literature that investigated the effects of different types of prenatal programs on pregnancy outcomes for this aggregate. Some studies have found evidence for the positive effect of non-professional supports on the adequacy of prenatal care and positive pregnancy outcomes (Bradley & Martin, 1994; Heins, Nance, & Ferguson, 1987; Jones & Mondy, 1990; Julnes, Konefal, Pindur, & Kine, 1994; Rogers, Peoples-Sheps, & Sorenson, 1995). Other studies have reported that disadvantaged pregnant women obtain greater satisfaction and benefits from the support provided by lay people as opposed to health care professionals (Coffman, Levitt, & Deets, 1990; Lapierre et al., 1995; Woodard & Edouard, 1992). Still others report on the advantages of using a model that combines peer and professional support (Lapierre et al., 1995; Way, Grainger, & Bungay, 1998).

Programs that seem to meet with the most success are those that provide care tailored to the needs of the targeted group (Covington, Daley, Churchill, &

Carl, 1990; Galbraith, Stevens, & Klein, 1997; McNair & Brown, 1996; Norwood, 1994). If we are going to positively impact the health of low-income pregnant women and, ultimately, improve infant and child health, then we must understand the content and quality of the health care provided as seen through the eyes of the aggregate.

Significance and Problem Statement

It has been postulated that women who begin childbearing in poverty are more likely to be at increased risk for poorer pregnancy outcomes. The HBC model was developed in 1990 by Daybreak Parent Child Centre to guide the planning and implementation of programs targeting the needs of pregnant women considered to be at-risk due to their life circumstances (e.g., poverty, lifestyle behaviors, education, young maternal age, single-parents, etc.). Health Canada's Prenatal Nutrition Program funded the establishment of HBCs in nine designated regions of Newfoundland (i.e., St. John's, Trinity-Conception, Burin Peninsula, Gander Bay, Fortune Bay North, Exploits Valley, Corner Brook West, Bay St. George, and North Shore Bay of Islands). HBCs are based on a peer support model which provides services (e.g., food supplements, nutrition counseling, social skills training, prenatal education, child care, transportation, lifestyle counseling, etc.) to socioeconomically high risk pregnant women.

It was conjectured that HBCs would constitute more effective avenues for

reaching targeted groups, addressing members' needs, enhancing prenatal health, and facilitating positive pregnancy outcomes than traditional programs. An integral component of HBCs, within the St. John's region, is the application of the peer support model. Within this framework, resource mothers from the community who are in the same socioeconomic group and who have had similar life experiences to the pregnant mother provide peer support by acting as mentors and role models. Resource mothers are expected to participate in training sessions which provide them with the necessary knowledge and skills to give ongoing support and reinforce professional teaching to pregnant mothers during the prenatal and early post-partum period.

An important step in any evaluation process of this peer approach is to explore participants' experiences with program services. The significance of HBC programs for participants must be understood if health care providers are to facilitate positive outcomes in the short and long term. The primary objective of the current study was to identify aspects of the HBC programs which are most and least helpful in meeting the needs of socioeconomically at-risk pregnant women. This objective can best be achieved through face-to-face interviews with those attending HBC programs.

Purpose and Research Questions

Program developers and HBC personnel felt that a more in-depth

assessment was needed of low socioeconomic status mothers' pregnancy experiences, the factors influencing these pregnancies, the quality of the support systems available through HBCs, and the effectiveness of lay women in achieving program objectives. A grounded theory approach was used to identify and describe, from the aggregates point of view, how HBC programs are influencing health-related quality of life issues and concerns. This study has the potential not only to increase our understanding of the positive and negative aspects of these programs but, most importantly, to build upon the identified strengths.

This study addressed the following research questions:

(1) What is the meaning of HBC experiences for pregnant mothers?

(2) What factors have the most/least influence on mothers' perceptions of the effectiveness of HBCs?

CHAPTER 2

Literature Review

An understanding of the factors influencing at-risk womens' decisions to access prenatal services and assume healthy behaviors is a prerequisite for developing appropriate and effective programs. Many studies have focused on the factors affecting initiation and utilization of prenatal programs (Curry, 1990; Goldenberg, Patterson, & Freese, 1992; Lia-Hoagberg et al., 1990; Rogers & Schiff, 1996). Other studies have examined the effects of these factors on perinatal outcomes (Blum & Bearinger, 1990; Johnson et al.,1994; Lia-Hoagberg et al., 1990; Roye & Balk, 1996). This literature review is divided into two major sections. The first section presents a discussion on barriers to initiation and utilization of prenatal services. The second section explores the factors which impact prenatal and pregnancy outcomes for disadvantaged women, especially those living at or below the poverty line.

Barriers Influencing Utilization of Prenatal Care

Prenatal care utilization is a crucial factor in improving outcomes for infants and mothers. The literature groups the factors affecting utilization of health care services into three types of barriers: sociodemographic, psychosocial/attitudinal, and structural/situational. Sociodemographic factors which delay or impede the utilization of prenatal care services include age,

marital status, income level, and education level (Curry, 1990; Higgins & Burton, 1996; Mayer, 1997). The most prominent psychosocial barriers to care include denial of the signs of pregnancy and the need for care, self and/or other ambivalence toward the pregnancy, consideration of abortion or adoption, beliefs that prenatal care is not important, negative family reaction toward the pregnancy, depression, and lack of support from the father (Colin et al., 1991; Lia-Hoagberg et al., 1990; Mayer, 1997; Melnikow & Alemagno, 1993; Sokoloski, 1995; Young et al., 1989). Structural barriers, as perceived by low income women, include access to prenatal care, availability and cost of child care, and financial cost of prenatal services (Higgins & Burton, 1996; Lia-Hoagberg et al., 1990; Melnikow & Alemagno, 1993; Rogers & Schiff, 1996; Young et al., 1989).

Sociodemographic

Sociodemographic barriers of young age, belonging to an ethnic group, single marital status, high parity and low educational attainment have been found to significantly correlate with inadequate prenatal care and low socioeconomic status (Byrd, Dolan-Mullen, Selwyn, & Lorimor, 1996; Curry, 1990; Higgins & Burton, 1996; Mayer, 1997; Sable, Stockbauer, Schramm, & Land, 1990). In contrast to these studies, Rogers and Schiff (1996) found that ethnicity, education, income, and age were not predictors of initiation of prenatal care for low income women.

Using a structured interview and medical chart review, Poland, Ager, and Olson (1987) compared the demographic, medical, and sociocultural factors of post-partum women who received no prenatal care (n = 22), inadequate care (n = 19), intermediate care (n = 35), and adequate care (n = 35). There were no statistically significant differences between the groups in terms of age, race, number of prenatal providers, or marital status. Women of lower parity tended to receive better care than those of high parity. Other researchers have found similar results (e.g. Young et al.,1989; Singh, Torres, & Forrest, 1985; Cooney, 1985, etc.).

In a study designed to identify the barriers to prenatal care, Sable et al. (1990) conducted post-partum interviews with low income women who had received adequate (n = 720) and inadequate (n = 764) prenatal care. Inadequate prenatal care was defined as initiation of care after four months of pregnancy, fewer than five visits for pregnancy less than 37 weeks, and fewer than eight visits for pregnancy greater or equal to 37 weeks. The authors do not report on the reliability or validity of the study questionnaire. The findings indicated that the inadequate care group had a higher percentage of Black, adolescent, single status, high parity, low education and low income women than the adequate care group. Similarly, in a study of poor post-partum American women (N = 157), Scupholme, Robertson, and Kamons (1991) found that age, single status, and low education level were all indicators of inadequate prenatal

care.

Using a case control study design, Melnikow, Alemagno, Rottman, and Zyzanski (1991) reviewed the health records of women delivering in an inner city community hospital which serves an ethnically and racially diverse population. The purpose of the study was to identify and compare the risk factors of low income women receiving inadequate (n = 120) and adequate (n = 120) prenatal care on utilization rates and perinatal outcomes. The findings indicated that women who received inadequate prenatal care either sought care in the third trimester or not at all. Conversely, 80% of those who received adequate care initiated care in the first or second trimester. There was no statistically significant difference between the groups in terms of age, racial distribution, or income. Women who received inadequate care were of higher parity, lower education level, and more likely to use tobacco and alcohol. With regard to pregnancy outcomes, maternal complications were rare, and no significant differences were found between the groups in terms of apgar scores, stillbirths or neonatal deaths. However, women who received inadequate prenatal care were significantly more likely to have infants with lower birth weights (<2500 grams) and very low birth weights (<1500 grams).

York, Williams and Munro (1993) interviewed pregnant women (N = 57) who received inadequate prenatal care despite having access to free care and public transportation. According to sample demographics, these women were

more likely to be from ethnic minority groups (98.3%), to have low income (96.5%), to have less than high school education (67%), and to be multigravidas (81%).

Zaid, Fullerton, and Moore (1996) found that sociodemographic factors were associated with utilization of prenatal services. Significant differences were observed in the attitudes, beliefs and behaviors of Hispanic women who received adequate prenatal care (n = 82) and no prenatal care (n = 36). Although both groups were similar in terms of age, education and parity, women receiving no prenatal care were more likely to be single (44.4%) than poor (28.4%) (family income < $300/month), and have less medical insurance. Study findings are limited by the convenience sample and a large size differential between groups.

In a retrospective chart review of women who had received no prenatal care (N = 270) at St. Vincent's Hospital in Santa Fe, Higgins and Burton (1996) investigated the factors impeding initiation of care. The sample consisted of women, 20 to 29 years (57%), single (72%), non-white (75%), Hispanic (59%), and without insurance (77.7%). Only 31% of the sample were of high parity (four or more children). The majority of subjects (65.9%) failed to give a reason for lack of prenatal care. Of the 156 recorded reasons, sociodemographic factors, ethnicity and adolescent pregnancy surfaced as the most significant barriers to care. Despite the lack of prenatal care, the authors found that sample subjects

had good maternal and fetal outcomes. Study findings were limited to one hospital and by the incompleteness of chart documentation.

Psychosocial

The attitudes of low income women toward their pregnancy and the attitudes of health professionals towards these women present two major psychosocial barriers for this aggregate (Lapierre et al., 1995). The first section reviews findings from studies dealing with recipient perceptions of barriers to prenatal care. The second section compares recipient versus provider views of how low income women perceive prenatal care.

Perceived barriers to prenatal care. In a retrospective case review of patients in a large metropolitan hospital (N = 70) who received minimal prenatal care, Joyce, Diffenbacher, Greene, and Sorokin (1983) found that women identified depression, denial of pregnancy, fear of pregnancy, and attitudes of significant others toward the pregnancy to be greater barriers than financial or transportation problems.

Using a descriptive, correlational design, Poland et al. (1987) compared the barriers to care among a sample of post-partum women who received no prenatal care, inadequate care, intermediate care and adequate care. The findings identified six psychosocial barriers associated with limited prenatal care: attitudes towards health professionals, delays in suspecting pregnancy, delay in

telling others about the pregnancy, perception of the importance of prenatal care, and initial attitudes about being pregnant. Significantly, the inadequate and no care groups had more negative attitudes toward health care providers and the pregnancy and, were more likely to delay telling others about the pregnancy and to place less importance on prenatal care than the adequate and intermediate care groups.

In a descriptive, correlational study, Poland, Ager, Olson, and Sokol (1990) studied the effects of select social, behavioral and biologic factors on adequacy of prenatal care in a convenience sample of mainly Black, low income women (N = 202) two to five days post-partum. During multiple regression analysis, delay in telling others about the pregnancy, attitudes towards health professionals, perception of the importance of prenatal care, attitude toward the pregnancy, and amount of insurance combined to explain 64% of the variance in the quality of prenatal care. Generalizability of results is cautioned as the sample was limited to Black, low income women living in Detroit; and the non-experimental study design makes it difficult to infer causality.

In their descriptive study of low income women who had received inadequate prenatal care, York et al. (1993) also investigated the effects of psychosocial barriers to care. The findings indicated that psychosocial barriers affected the initiation of prenatal care by sample subjects. Significant psychosocial barriers included sadness or ambivalence toward the pregnancy,

embarrassment about the pregnancy, and denial of pregnancy. Sable et al. (1990) found similar results when comparing low income women who received adequate and inadequate prenatal care. Participants identified such barriers as, unplanned pregnancy, not wanting others to know, ambivalence toward pregnancy, fearful to tell parents and baby's father, and embarrassment about being pregnant.

Using a case control design, Melnikow and Alemagno (1993) investigated barriers to prenatal care in a sample of women who received no prenatal care (n = 58), inadequate prenatal care (n = 71), and adequate or intermediate care (n = 123). Using a structured interview, participants were asked about the reasons for obtaining or not obtaining care. Questionnaire items were content validated by experts in the field. Results indicated that certain psychosocial factors limited the use of prenatal services. Most important among these were being worried about what the physician or nurse might say, feeling ashamed about or afraid of the pregnancy, and fearful of physicians. Generalizability of the findings remains problematic due to the small, convenience sample of participants from one hospital. Further, Higgins et al. (1994) reported that women who received inadequate prenatal care were more likely to have significantly lower levels of self esteem and social support, and to report being less satisfied with prenatal care services.

In a phenomenological study, Sokoloski (1995) interviewed Canadian

women (N = 7) from three First Nations tribes (i.e., Cree, Saulteaux, and Ojibway) on their beliefs about pregnancy and factors limiting use of prenatal services. Seven themes were identified: beliefs about pregnancy, beliefs about children, beliefs about spacing children, helpful and harmful prenatal practices, beliefs about prenatal care, and interactions with health-care providers. These women felt that pregnancy was a natural, healthy process not requiring intervention. As well, they reported dissatisfaction with health-care providers due to their perceived authoritarian approach and lack of sensitivity to different beliefs about pregnancy. The authors emphasized the importance of providing culturally sensitive care.

Using a survey design, Mayer (1997) investigated the association between maternal beliefs and adequacy of prenatal care in a convenience sample of post-partum women (N = 2,032) delivering in one hundred fifty-four Texas hospitals. When the sample was compared to the general population, no significant differences were noted with regard to rates of delayed care, low birth weights, or maternal demographics. Data analysis was restricted to information received from low income women. The confounding effects of age, marital status, education, parity, race and health insurance status were controlled for during logistic regression analysis. The findings indicated that unintended births and beliefs that prenatal care was not important were significant predictors of delayed prenatal care. The large sample size from a large number of hospitals

increases the generalizability of the findings.

Roberts, Yawn, Wicks, Field, Garretson, and Jacobsen (1998) studied perceived barriers to prenatal care in a sample (N = 813) of middle to upper class women living in a midwestern community. The women comprising the sample were married or living with a significant other (88%), employed full-time (54%), had spouses who were employed (93%), and had more than 12 years education (75%). Participants completed a self-administered questionnaire at the time of their first prenatal clinic visit on factors making it difficult to receive prenatal care, the importance of prenatal care, expectations of the first prenatal visit, and sociodemographic data. Reliability or validity of the study questionnaire were not discussed. Based on multivariate logistic regression, the findings indicated that late initiation of prenatal care was associated with lower perceived importance of prenatal care and having an unplanned, unintended pregnancy.

Recipient versus provider perceptions. Other authors have documented a discrepancy between health care providers' perceptions of low-income women and low-income womens' perceptions of health care services (Aved, Irwin, Cummings, & Findeisen, 1993; Colin et al., 1991). The evidence suggests that attitudes toward and perceptions of prenatal care may vary greatly between health care professionals and low income women. Such discrepancies between providers and consumers may constitute major psychosocial barriers to

adequate prenatal care.

Colin et al. (1991) found that one explanation for not seeking professional help was the negative attitude of poor women toward health professionals and vice versa. Study participants felt that health professionals misunderstood and judged them and they were concerned about the amount of social power health professionals exerted over their households.

Similarly, Aved et al. (1993) conducted post-partum in-hospital interviews with a convenience sample of women (N = 69) with no physician of record and admitted through emergency departments in eight Sacramento hospitals. Focus group sessions were also conducted with local obstetrician-gynecologists (N = 7) to determine physicians' attitudes about caring for low income women. Study findings indicated that the value given to the prenatal care by low income women contrasted sharply with physicians' perceptions of these womens' attitudes towards prenatal care. Most of the women (64%) reported that the single largest barrier to care was finding a physician willing to accept them, with 96% of those who tried failing to obtain care. Physicians cited administrative and reimbursement difficulties, as well as, resource dependency of low income women as barriers to caring for this population.

Omar, Schiffman, and Bauer (1998) used a multi-method study design and focus groups to describe barriers to prenatal care in a convenience sample of low income recipients (n = 61) and providers (n = 11) of prenatal care from a

small rural county. Participants were married, Caucasian and 24 years of age or older, with 47% of women having received less than adequate care as indicated by the Index of Adequacy of Prenatal Care Utilization. Participants completed the Ten-Item Checklist which categorized barriers as economic, organizational and attitudinal. No information was provided on the reliability or validity of the study instruments. Focus groups were held with providers of prenatal care to low income women (five physicians, two midwives, two registered nurses, and two social workers). Results from comparison of the quantitative and qualitative data indicated that although half of the recipients failed to identify barriers to prenatal care, most of the women received less than adequate care. Although health care providers believed that low income women did not value prenatal care, all care recipients reported valuing prenatal care.

Structural

Financial constraints, lack of child care and transportation have been consistently identified as barriers to the utilization of prenatal services by low income women (York et al., 1993; Higgins & Burton, 1996). Melnikow and Alemagno (1993) found that women who received no or inadequate prenatal care identified such barriers as lack of transportation, lack of child care, homelessness, less education, and limited financial resources to pay for more frequent care. During regression analysis, all of the variables surfaced as

significant predictors of inadequate prenatal care, with the exception of lack of child care.

During post-partum interviews Zaid et al. (1996) found that the most common barriers to prenatal care for Hispanic women were lack of finances, lack of information about where to obtain care, distance of prenatal service, transportation problems, and inconvenient clinic hours. Similar structural barriers to prenatal care utilization by Hispanic women were reported by Byrd et al. (1996). These authors emphasized that prenatal programs targeting this group must be culturally sensitive, incorporating the entire family with waiting areas large enough for extended family members and children.

Using a descriptive design, Rogers and Schiff (1996) examined the barriers to prenatal care in a convenience sample of women initiating late (n = 67) as compared to early prenatal care (n = 138), during enrollment in a prenatal care program in New Mexico. The questionnaire collected data on demographic factors, insurance status, health behaviors, feelings about the pregnancy, and barriers and motivators to receiving prenatal care. Reliability and validity of the questionnaire were not discussed. Women who initiated care late in pregnancy reported financial problems (26%), as the main barrier.

Roberts et al. (1998) found that transportation and child care problems may also delay initiation of prenatal care by middle and upper class women. Other researchers report similar structural barriers but emphasize that the single

most important predicator of prenatal care utilization was financial problems in terms of lack of insurance (Poland et al., 1987; Sable et al., 1990).

Summary

In a review of current literature, Sword (1999) emphasized that understanding barriers to health services utilization by low income women has been hampered by the absence of a consistent theoretical approach. This author also stressed the importance of focusing on the lived experiences of these women to grasp a greater understanding of barriers as opposed to relying on the perspectives of professionals. There are many sociodemographic, psychosocial, and structural barriers that exert an independent and interactive effect on perinatal outcomes. More research efforts must focus on understanding how these barriers can be eliminated so that low income women can enjoy healthier pregnancy outcomes.

Factors Influencing Pregnancy Outcomes

Over several decades, research findings have documented concerns about the limited use of prenatal care services and poor pregnancy outcomes by women from "at-risk" groups (e.g., adolescents, low socioeconomic status, ethnicity, etc.). Considerable efforts have been directed toward documenting how "at-risk" status, sociodemographic risk factors and social support

mechanisms exert a direct or indirect effect on pregnancy outcomes (Culpepper & Jack, 1993; Curry, 1989; Goldenberg et al., 1992; Grindstaff & Turner, 1989).

Based on a review of relevant literature, Culpepper and Jack (1993) proposed a conceptual model that captures the complexity and interactive nature of multiple factors on pregnancy outcomes. All identified factors are collapsed under three mechanisms of influence: (1) immediate determinants (health care utilization, obstetric problems and stress response), (2) intervening factors (health behaviors, environmental factors, and problem recognition), and (3) predisposing factors (personal attributes, and resources). Perinatal outcomes will be discussed based on "at-risk" status, sociodemographic risks, stress and the implementation of social support mechanisms.

At-risk Groups

The literature identifies three main targeted groups (i.e., adolescents, low income women and ethnic groups) believed to be "at risk" for poor maternal health and pregnancy outcomes. Research has shown that women who begin childbearing during their teenage years are more likely to have unstable relationships, to be locked into a life of poverty (Pennbridge, MacKenzie, & Swofford, 1991), and to have a disproportionate share of all adverse pregnancy outcomes (Blum & Bearinger, 1990; Fullerton, 1997; Turner, Grindstaff, & Phillips, 1990). Pregnant adolescents are at increased risk for having low birth

weight and premature babies, and infants who die during the first year of life. Low birth weight is also associated with increased occurrence of small for gestational age infants, developmental delay, birth defects, growth and development problems, prematurity, cerebral palsy, epilepsy, and infant mortality (Dow-Clarke, MacCalder, & Hessel, 1994).

Another group at risk for poor infant outcomes are women from lower socioeconomic groups. There are a number of factors associated with low income status that are believed to increase the risk for perinatal morbidity and mortality. Culpepper and Jack (1993) reviewed the empirical data base that linked poverty with poor perinatal outcomes. Although not identified as an independent risk factor, poverty was found to be significantly associated with inadequate prenatal care, inadequate nutrition, greater stress, lower education levels, unmarried status, and situational and psychosocial barriers. Low income women tend to perceive more barriers to care, have less positive reinforcement for receiving care, have less access to care, have transportation and child care issues, tend to deny the pregnancy, experience higher levels of stress, have lower education levels, maintain less healthy lifestyles, and tend to comply less with recommendations (Bedics, 1997; Curry, 1990; Lia-Hoagberg et al., 1990; Miller, Magolis, Schwethelm, & Smith, 1989; Stout, 1997). Significantly, inadequate prenatal care has been linked to poor outcomes among low income women (Johnson et al., 1994; Melnikow & Alemagno, 1993; Omar et al., 1998;

Sword, 1999; Williams, 1990).

Ethnicity has been identified as another factor contributing to poor pregnancy outcomes, especially in African American, Hispanic and Native American groups (Higgins et al., 1994; Ketterlinus et al., 1990; Muhajarine, D'Arcy, & Edouard, 1997; Woodard & Edouard, 1992). Muhajarine et al. (1997) used a longitudinal design to examine the determinants and consequences of risk behavior during pregnancy in a mixed ethnic sample of women (N = 605) registering for prenatal classes or making contact with the outreach program in Saskatoon. A structured interview format assessed participants use of alcohol, tobacco, drugs and caffeine prior to pregnancy and during the first trimester. The reliability and validity of the interview instrument were not discussed. Study findings indicated that women from Aboriginal and Metis groups were significantly more likely (i.e., 2 1/2 times) to engage in high risk behaviors (i.e., smoking, and use of alcohol and drugs) than those from other groups. Unfortunately, this study did not attempt to examine the relationships between risk behavior, utilization of prenatal services and perinatal outcomes.

Using a descriptive, retrospective design, Higgins et al. (1994) examined levels of self-esteem, social support and satisfaction with prenatal care in a mixed sample of low-risk post-partum Canadian women who received adequate (n = 95) and inadequate (n = 98) prenatal care. Women were interviewed 24 to 48 hours following delivery with the Coopersmith Self-Esteem Inventory, the

Personal Resource Questionnaire (Part 2), and the Prenatal Care Satisfaction Inventory. The researchers reported high internal consistency for the study instruments. The findings indicated that women of Hispanic origin were more likely to receive inadequate care, have poor pregnancy outcomes, and have more maternal complications than those from white groups.

Sociodemographic Risks

The literature indicates conflicting findings on the separate and interactive effects of sociodemographic risk factors (i.e., age, marital status, and education level) on pregnancy outcomes. The confounding effects of poverty makes it even more difficult to determine the exact nature and significance of these risk factors for poor pregnancy outcomes (Lia-Hoagberg et al., 1990; Melnikow & Alemagno, 1993; Nordstrom & Cnattingius, 1996). The following section discusses research findings for each of these factors in this area.

Age. Currently, there is a continuing debate whether young maternal age is an independent risk factor. Research continues to yield inconsistent results as to whether the poor outcomes of teenage pregnancy are attributable to young biological age, associated sociodemographic factors (e.g., marital status, partner support, income and education levels, etc.) (Brooks-Gunn, Plouffe, & White, 1996; Yoder & Young, 1997), or other risk factors (e.g., smoking, inadequate nutrition, alcohol/drug use, etc.) (Larivaara, Hartikainen, & Rantakallio, 1996;

Mayer, Hawkins, & Todd, 1990; Muscati, Gray-Donald, & Newson, 1994; Pennbridge et al., 1991; Stacy, Greer, Haas, & Hellbusch, 1994).

Ketterlinus et al. (1990) conducted an epidemiological study with a sample of women from varying socioeconomic backgrounds (N = 2,918), ranging from 13 to 30 years of age. During logistic regression analysis, the effects of maternal age were not found to be independent of health and sociodemographic factors. The researchers concluded that teenage mothers were more likely to be poor, unmarried, less well educated, and thus, less likely to receive early prenatal care. This sample has a large, heterogenous sample size representative of the greater population thereby allowing for good generalizability of study findings. Based on a review of the literature, Turner et al. (1990) concluded that the negative outcomes of adolescent pregnancy are not largely due to age but are the result of the many interacting sociodemographic and psychosocial variables.

In a longitudinal, prospective study, Steven-Simon, Kaplan and McAnarney (1993) investigated the relationships among infant outcome, weight gain and maternal age in a convenience sample (N = 195) of low income, Black pregnant women between the ages of 12 and 30 years. Study findings revealed that a greater risk for preterm delivery was significantly correlated with conception within three years of menarche, a low body mass index, a past history of physical or sexual abuse, a drug or alcohol abusing partner, and

vaginal bleeding during the first eight weeks of gestation. This study does not control for maternal age and the sample is limited to low income, Black women, thus making it difficult to generalize results.

Using a retrospective-correlational design with a large sample of young mothers (N = 134,088), Fraser et al. (1995) investigated the effects of age (i.e., 13 to 24 years) on adverse pregnancy outcomes, while controlling for select sociodemographic factors. Study findings indicated that young mothers (i.e., < 20 years) were more likely to have poor pregnancy outcomes (i.e., premature, small for gestational age, and low birth weight infants) regardless of marital status or age-appropriate educational levels. Significantly, adequacy of prenatal care did not modify the impact of young biological age on the rate of preterm births.

In an epidemiological study of mothers less than 25 years of age (N = 62,433) giving birth in Sweden, Otterbland-Olausson, Cnattingius, and Goldenberg (1997) investigated whether age-related increases in risk for poor outcomes (i.e., late fetal death, infant mortality, preterm birth, low birth weight, small for gestational age and low apgar scores) were due to differences in socioeconomic conditions, maternal smoking, or height/weight status. The findings indicated that when mothers 20 to 24 years of age were compared to teenage mothers, those less than 17 years of age had higher rates of low birth weight and preterm deliveries, whereas those 18 to 19 years of age had higher

rates of late fetal death, infant mortality, small for gestational age, and low apgar scores. When socioeconomic status was controlled for during regression analysis, the separate effects of age on adverse pregnancy outcomes no longer achieved statistical significance, except for the increased risk of younger age (i.e., ≤ 17 years) for preterm births. As in the Fraser et al. (1995) study, maternal age surfaced as an independent biologic risk factor for prematurity.

Yoder and Young (1997) compared adolescent and older mothers, with equal access to a tertiary care center, on incidence of pregnancy complications, and neonatal outcomes. Multivariate analysis results demonstrated that fetal complications, prenatal care, educational level and socioeconomic status were significant risk factors for high risk outcomes. Young maternal age was not found to be an independent risk factor for prematurity or low birth weight infants. Similarly, Plouffe and White (1996) found that most research findings do not support young age as an independent risk factor but rather sociocultural elements play a key role in the problems linked to teenage pregnancy.

Marital status. Single status is another sociodemographic risk factor that has received mixed support in the literature. Marital status is often viewed in relation to societal norms (Kruk, 1981; Culpepper & Jack, 1993). Despite the fact that single marital status is becoming an accepted norm, single status has been associated with adverse pregnancy outcomes and increased risk behaviors (Ahmed, 1990; Hein, Burmeister, & Papke, 1990; Silins, Semenciw, Morrison,

Lindsay, Sherman, Mao, & Wigle, 1985).

Silins et al. (1985) examined the risk factors for perinatal mortality in eight Canadian provinces (excluding Quebec and Newfoundland) using computer-based vital statistics from 1978 to 1979. Using logistic regression analysis, single status was a statistically significant risk factor even when controlling for maternal age, parity and previous stillbirths. Using a repeated measures design, Ernest et al. (1988) studied risk factors for preterm and low birth weight births in a convenience sample of women (N = 11,623) attending a low birth weight prevention program in North Carolina. Data were collected at three time periods: beginning of the program, 24 to 28 weeks, and following birth of the child. The findings indicated that single status had a limited independent association with preterm low birth weight. Unfortunately, there is a question of sample bias, and therefore questionable generalizability of the findings, as all the women were recipients of prenatal care.

Using vital statistics data on a convenience sample of Black women (N = 23,461) 20 years of age or older, Ahmed (1990) examined marital status as an independent risk factor for poor pregnancy outcomes. When the logit model was applied to the data, the risks for low birth weight and neonatal mortality were greater for unmarried than married women. Marital status remained a statistically significant risk factor after controlling for maternal age, educational attainment and adequacy of prenatal care. This study used a large sample size

but generalizability of results is restricted to this particular ethnic group.

Hein et al. (1990) reported similar results to Ahmed (1990) on the negative impact of single status on pregnancy outcomes. In a retrospective analysis of Public Health Records from the state of Iowa over a ten year period (i.e., 1977 to 1986), these authors compared married versus unmarried women on select factors (i.e., age at delivery, parity, educational achievement, prenatal visits, birth weight, and survival of infant to first birthday). An important factor not studied was socioeconomic status. Results indicated that unmarried mothers were at a significantly higher risk for low birth weight infants, and for neonatal and infant deaths for babies above 2,500 grams. Further, unmarried women were more likely to have had fewer prenatal visits. In contrast, other studies failed to find support for the independent influence of marital status and have shown that the risk imposed by single status is not statistically significant after controlling for factors such as stress, young maternal age, and low income (Culpepper & Jack, 1993; Ernest, Michielutte, Meis, Moore, & Sharp, 1988; Lobel, Dunkel-Schetter, & Scrimshaw, 1992).

Education. Newfoundland and Labrador continues to have the lowest adult literacy rate in Canada, with only 60% of the population 20 years and older completing high school (Federal/Provincial/Territorial, 1996). Despite the improvement in educational levels nationally, the negative impact of low educational attainment for young people in this province presents an

overwhelming concern (West, Bavington, James, Ryan, & Longerich, 1994).

Research results have consistently shown a positive correlation between lower educational achievement and poorer pregnancy outcomes (Muhajarine et al., 1997; Nordentoft, Lou, Hansen, Nim, Pryds, Rubin, & Hemmingsen, 1996; Nordstrom & Cnattingius, 1996). The actual mechanisms of educational level and how it impacts pregnancy outcomes are not clear, nor has educational level been isolated as an independent risk. Further research is needed in this area.

In a prospective study, Nordentoft et al. (1996) examined stress educational attainment, social support, psychological well-being, alcohol and smoking on intrauterine growth retardation and premature delivery in a convenience sample of pregnant women (N = 2,432) admitted to a single hospital. Study participants were asked to complete questionnaires on general health, psychosocial stressors and sociodemographic characteristics. Out of the total sample 212 participants (8.7%) experienced a preterm birth. Univariate and multiple regression analysis found stress and level of educational attainment to be statistically significant predictors of preterm births.

Using a descriptive, correlational design, Nordstrom and Cnattingius (1996) examined the effects of education, socioeconomic status and work environment on low birth weight in a convenience sample of women (N = 3,451) registered for prenatal care in Sweden. Regression analysis indicated that education, socioeconomic status and control over one's work environment were

significant risk factors for low birth weight infants. When maternal characteristics were controlled (i.e., age, parity, socioeconomic status and smoking habits), women with less educational achievement had significantly more lower birth weight infants. Although the sample size was large, it was a convenience sample of Swedish women and therefore the results may be culturally specific.

Stress

The effects of stress on pregnancy outcomes have not been firmly established in research studies. Using a prospective design, Brook et al. (1989) investigated the effects of smoking, alcohol, caffeine, socioeconomic factors, and psychosocial stress on birth weight in a convenience sample of pregnant women (N = 1,513). Data were obtained through a structured questionnaire and the Eysenck Personality Questionnaire, with both reported to be reliable and valid. The authors failed to find support for the direct effect of any social or psychological factors on birth weight.

Using a non-randomized descriptive study, Kemp and Hatmaker (1993) examined health practices and anxiety between low (n = 35) and high (n = 30) risk pregnant women from low socioeconomic groups. The Health-Promoting Lifestyle Profile (HPLP) was used to measure health practices, and anxiety was measured with the State Anxiety Inventory. Strong reliability and internal

consistency were reported for both instruments. The findings indicated that women in the low risk group used significantly more health promoting and protective behaviors during pregnancy. There was no statistically significant difference in anxiety levels between the two groups. With respect to within group comparisons, there were no statistically significant correlations between health promoting behaviors and anxiety levels. Results must be interpreted cautiously as sample size was small, limited to low income women living in the south eastern part of the United States, and only included African-Americans and Caucasians.

In contrast, other studies have found that stress presented a significant risk to preterm birth and low birth weight infants (Lobel et al., 1992; Wadhwa et al., 1993). Using a researcher developed biopsychosocial model of birth weight and gestational age at delivery, Lobel et al. (1992) examined the effects of medical risk and prenatal stress on prematurity. A convenience sample of low income pregnant women (N = 130) were interviewed throughout their pregnancy during prenatal clinic visits. Regression analysis showed that prenatal stress was a significant predictor of preterm delivery and low infant birth weight.

Similar results were found by Wadhwa et al. (1993). In a prospective study, Wadhwa et al. examined the influence of maternal prenatal stress on birth outcomes in a convenience sample of pregnant women (N = 90) who were sociodemographically homogeneous (i.e., greater than 18 years of age, having a

single intrauterine birth, and receiving appropriate prenatal care). Subjects were interviewed during the third trimester using standard reliable questionnaires (e.g. Schedule of Recent Life Events, Hopkins Symptom Checklist, and Perceived Stress Scale). After controlling for the effects of biomedical risk factors, multivariate analysis results indicated that prenatal stress was significantly associated with low infant birth weight and early gestational age. The authors concluded that the risks posed by stress is compounded by other factors associated with women of low socioeconomic status.

The inconclusive findings in this area are supported by other studies (Brook, Anderson, Bland, Peacock, & Stewart, 1989; Cliver, Goldenberg, Cutter, Hoffman, Copper, Gotlieb, & Davis, 1992; Lobel et al., 1992; Wadhwa, Sandman, Porto, Dunkel-Schetter, & Garite, 1993). Culpepper and Jack (1993) conducted an extensive review of the research literature and concluded that stress affects pregnancy through a number of complex mechanisms (i.e., ineffective coping skills, increased risk behaviors and anxiety, and decreased self-esteem). Following a review of current literature, Hoffman and Hatch (1996) also found inconclusive support for the role of chronic stress and acute life stressors on pregnancy outcomes.

Social Support

Based on a review of current literature there are numerous definitions of

social support. The concept of social support has been operationalized in many ways: quantity of connections, quality, utilization, meaning, availability, and satisfaction with support (House, Landis, & Umbersome, 1988; Stewart & Tilden, 1995).

Although a comprehensive theory of social support has not yet been developed, there are a number of theoretical perspectives including, Social Comparison Theory, Social Exchange Theory, Social Competence Theory, Coping Theory and Role Theory (Hinson-Langford et al., 1997; Stewart, 1993; Tilden & Weiner, 1987). The controversy over social support surrounds the question of the quality of the support and whether positive outcomes are due to its received or perceived nature. Although there are few studies using longitudinal and experimental designs to document the outcomes of social support, there are many qualitative studies which validate the link between social support, psychological well-being and health (Hinson-Langford, Bowsher, Maloney, & Lillis, 1997; House et al., 1988; Stewart, 1993). Some researchers have hypothesized that social support may help moderate or buffer the effects of life events upon one's psychological state (Thoits, 1982).

It is believed that social support is a key factor when addressing the prenatal needs of women of low socioeconomic status. Other researchers feel that the quality of support influences the use of health services, as well as, health behaviors and health status (Turner, 1981; Stewart, 1993). It is important

to realize that in order to improve health among vulnerable and high risk populations, we must increase our efforts in providing social support and developing family and community strengths (Berkman, 1995; Heaman, 1995). It is also important to evaluate the effectiveness of social support provided to this group of women.

Professional support. The literature documents changes in the approach to prenatal care over the years. One example of an attempt to provide better prenatal care was the initiation of home visitation for women in high risk groups. Following a review of current literature, there are some inconsistencies in the research findings on the effectiveness of home visitation services.

Olds, Henderson, Tatelbaum, and Chamberlin (1986) used a randomized clinical trial to evaluate a comprehensive program of prenatal and post-partum nurse home visitation. The program was designed to prevent health and developmental problems in children born to primiparous women (N = 400) who were either adolescent, unmarried or of low socioeconomic status. The study sample was large with randomization of control and comparison groups. There was stratification of the sample based on marital status, race, and geographic region. As well, attrition was distributed equally across groups. The findings indicated that women who were visited by nurses during their pregnancy had many positive outcomes (i.e., greater awareness of community services, more frequent prenatal class attendance, more dietary improvements, and reported

talking more frequently to family members, friends and service providers about their pregnancies and personal problems) as compared with the comparison group that did not receive nurse visitation. As well, positive program effects on birth weight and length of gestation were present for infants of adolescents.

Woodard and Edouard (1992), using a retrospective chart review, evaluated prenatal education for aboriginal mothers in Saskatoon (N = 1,266) who were at risk for low birth weight infants. The authors emphasized that there is little evidence that traditional prenatal classes offered by hospitals or community health have affected pregnancy outcomes because few of these classes are based on individual needs or risk factors.

Norbeck, DeJoseph, and Smith (1996) also found positive perinatal outcomes with the provision of nursing support. Low income African-American pregnant women (N = 319) were examined for inadequate social support in mid pregnancy using the Norbeck Social Support Questionnaire (NSSQ). Of these, 114 women were identified to have low social support, with random assignment of 56 to the intervention group and 58 to the control group. The intervention group received nurse support through four standardized face-to-face sessions at two week intervals and telephone contact in the intervening weeks. Results indicated an improvement in birth weight in the intervention group, with low birth weight accounting for 9.1% of births in the intervention group as compared with 22.4% in the control group. The generalizability of these results to other ethnic

groups is hampered as the criteria to designate social support risk status and the intervention were designed to be culture specific.

Using a randomized control design, Kitzman et al. (1997) examined the effects of prenatal and infancy home visits by nurses on pregnancy induced hypertension, preterm delivery, childrens' injuries, immunizations, cognitive development, behavioral problems and maternal life course. The sample consisted of African-American women (N = 1,139) less than 29 weeks gestation, no previous live births and at least two sociodemographic risk factors (i.e., unmarried, less than 12 years of education, unemployed). Nurses made an average of seven prenatal home visits and 26 visits from birth to the child's second birthday. Results indicated that the women visited by the nurses had fewer problems with pregnancy induced hypertension, a reduction in childhood injuries and subsequent pregnancies, as compared to women who did not receive nurse home visitation. However, the intervention was not found to affect preterm delivery, low birth weight, immunization rates, cognitive development, behavioral problems.

Conflicting findings on perinatal outcomes are also evident when support is provided by nurse midwives. Studies have shown positive results including a higher mean infant birth weight when low income women were given support through home visits and 24 hour contact numbers by a certified nurse midwife (Fischler & Harvey, 1995; Oakley, Rajan, & Grant, 1990). Conversely, when

testing the effect of midwife support on the occurrence of preterm birth, Bryce, Stanley, and Garner (1991) found little support for such interventions in women with poor obstetric histories.

There are few studies which examine the impact of pregnancy interventions on children and families beyond the perinatal period. Oakley, Hickey, Rajan, and Rigby (1996) describe the results of a seven year follow-up survey of families who took part in a randomized control trial of midwife-provided social support in pregnancy in 1986-1988. Women who attended prenatal clinics at one of four hospitals in England were randomly assigned to an intervention group ($\underline{n} = 255$), that received social support provided by four research midwives in addition to prenatal care, and a control group ($\underline{n} = 254$) that received prenatal care only. Data analysis at six weeks and one year after the delivery indicated better health outcomes for families offered the social support interventions as compared to the control group. At seven years, families of the intervention group showed significant differences favoring health and development outcomes of the children and the physical and psychosocial health of the mothers. Attrition across all groups was significant in this study due to change or untraceable addresses.

Partner and family support. Perceived support from partners and family has been identified as an important factor affecting prenatal care, health behaviors and perinatal outcomes of low income women. Several studies have

found that support from family and peer groups is the most important motivator for obtaining prenatal care among low income women (Giblin et al., 1990; Higgins et al., 1994; Johnson et al., 1994; Lia-Hoagberg et al., 1990). Partner support also has been shown to be important to all pregnant women, especially low income mothers (Roye & Balk, 1996).

Norbeck and Anderson (1989) found that high life stress, and low partner support was associated with the highest levels of anxiety. As well, partner support from a husband, male companion or infant's father has been associated with a significant reduction in distress and depression, and an increase in self-esteem for low income women (Thompson & Peebles-Wilkins, 1992; Unger & Wandersman, 1988). Overall, partner support appears to be positively correlated with maternal psychological well-being for mothers of low socioeconomic status (Norbeck & Anderson, 1989). The authors concluded that nurses who work with low income pregnant women must emphasize the positive contributions of partners, family and peer group support to providing support and impacting positively on this population group (Casper & Hogan, 1990).

In a descriptive, correlational study, Schaffer and Lia-Hoagberg (1997) examined the role of social support in a sample of ethnically diverse, primarily single, low income pregnant women ($\underline{N}$ = 101) between 28 and 40 weeks gestation. The findings indicated that increased partner support was associated with increased adequacy of prenatal care, whereas peer group support positively

impacted prenatal health behaviors. Interestingly, health care professionals were not identified as sources of social support.

Humphreys, Thompson, and Miner (1998) studied the relationship between breastfeeding intention among socioeconomically disadvantaged pregnant women and maternal demographics, previous breastfeeding experience and social support using a cross-sectional, convenience sample of low income women (N = 1,001). Simple regression analysis was conducted to compare maternal breastfeeding intention with the hypothesis correlates. In terms of social support, breastfeeding intention was positively correlated with hearing about the benefits of breastfeeding from family members and the baby's father but not from health professionals. Health professionals' attitudes and advice were less influential on womens' breastfeeding decisions then the attitudes and beliefs of ones' family and peer support network.

Paraprofessional/peer support. Research postulates that peer counseling of pregnant women from poor socioeconomic backgrounds fosters empowerment and contributes to increased self-esteem, reduced anxiety and improved self care (Lapierre et al., 1995; Sword, 1999). A variety of health promotion programs targeting low income women have used peer workers recruited from the target communities. Studies demonstrate that paraprofessionals, indigenous to the community with varying degrees of training and experience, who participate in maternal child support programs, exert a

positive influence on maternal health habits, health information, and use of prenatal care and post-partum services, as well as increasing birth weights and reducing preterm deliveries (Bradley & Martin, 1994; Heins et al., 1987; Poland, Giblin, Waller, & Hankin, 1992). These programs are usually based on a model in which the paraprofessional serves as a mentor, or role model, to the at-risk mother, providing social support and nurturance as well as education regarding child development and parenting.

Schafer, Vogel, Viegas, and Hausafus (1998) examined the effectiveness of a volunteer peer counseling program for promoting breastfeeding in a sample of women assigned to intervention ($\underline{n} = 143$) and control groups ($\underline{n} = 64$). The sample consisted of rural low income pregnant and post-partum women who qualified for the Women, Infants, and Children's (WIC) nutritional program. Participants in the intervention group received a series of in-home, one-to-one lessons about healthy diet and breastfeeding from trained peers with previous successful personal experience with breastfeeding. The control group received no breastfeeding promotion programs. As compared with the control group, participants in the intervention group had improved dietary intake, and 82% of the intervention group initiating breastfeeding as compared with 31% of the control group. As well, there was improvement in the mean duration of breastfeeding in the intervention group as compared to the control group.

Professional versus paraprofessional support. Research examining the effectiveness of health professionals in comparison to paraprofessionals in providing prenatal care and support to disadvantaged pregnant women have concluded that paraprofessional support was more beneficial (Coffman et al., 1990; Poland et al., 1992).

Poland et al. (1992) in a random sample of low-income women, compared the impact of paraprofessional support to traditional prenatal care on the amount of prenatal care received and birth weight. As with previous studies, paraprofessionals consisted of trained women who had been on public assistance, successfully attained health services for themselves and their infants and had the same educational and ethnic background as the participants. Women attending a public funded prenatal clinic were randomly assigned to an intervention group ($n = 111$) who received paraprofessional care and advocacy throughout pregnancy and during the first year of the infant's life. A comparison group ($n = 111$) matched for ethnicity, parity and trimester entering prenatal care was also selected. Results indicated that women followed by a paraprofessional had significantly more prenatal appointments, and infants of higher birth weights than the matched comparison group. It was felt that the intensity of contact with the paraprofessional contributed to the amount of prenatal care received.

As part of the Canada Prenatal Nutrition Program evaluation process in Newfoundland, Way et al. (1998) conducted a secondary analysis of data

recorded on standardized forms of women (N = 333) who had participated in HBCs from the Fall of 1995 to February 1, 1998. The mean age of low-income women attending HBC was 22.9 years, with one-third of participants 19 years of age or less. Study findings demonstrated that most participants achieved expected norms (e.g., pregnancy weight gain, infant birth weight, gestational age, breastfeeding initiation and duration, etc.) and modified key lifestyle factors (e.g., smoking and alcohol reduction or cessation, use of vitamin/mineral supplements, regular exercise, etc.). Importantly, the average low birth weight (i.e., ≤ 2500 grams) rate (5.9%) compared favorably with the provincial rate (5.8%) for this same time period (NLCHI, 1999). Although a number of factors surfaced as key predictors of outcomes (i.e., age, HBC length, marital status, smoking behavior, physical activity, and food supplements), it is difficult to assert with any degree of confidence what particular aspects of HBC programs facilitated positive maternal health and pregnancy outcomes.

Community/group support. Empowerment has become the primary goal of many health promotion and health education programs targeting populations that are low income, alienated or otherwise disadvantaged. Populations, such as pregnant women of low socioeconomic status, that have experienced a lifetime of inferior medical care, poor living conditions and lack of opportunity may perceive themselves as having little power to alter the conditions of their lives (Simons-Morton & Crump, 1996). It has been well

documented that health is significantly affected by the extent to which one feels control or mastery over one's life (CPHA, 1997) and that empowerment programs can promote participation of communities in gaining control over their lives and their community. Common themes which have been identified in community empowerment are: a social action process, people being subject of their own lives, connectedness to others, critical thinking, personal and social capacity building, and transformed social relations (Lugo, 1996; Wallerstein & Bernstein, 1994). These empowerment themes have not only been brought forward in paraprofessional support literature but also in studies regarding the importance of group support for low income pregnant women.

Lugo (1996) described the outcomes of a resource sisters program case study for low income pregnant women. The program was designed to enhance the natural skills of women from the community to assist other women and foster problem solving, provide outreach through in-home visits and develop ongoing peer support groups. The program attempted to bring women together, within a peer support group, so that pregnant mothers would feel safe discussing issues of importance to them, addressing long term problems in their lives, developing solutions and long term support among women in the community. Five themes emerged from an analysis of data pertaining to participants' descriptions of the importance of the program, including: "a source of education, a source of information and a place where one can be linked to resources, a support group

in which one can share problems and feelings with others, a social support group in which one can make friends, and a program to realize personal benefits (such as help getting a high school diploma, a job, or an apartment)" (Lugo, 1996, p. 285). Participants also noted that the group involvement played an important role in their lives and increased their social skills. Study findings reinforced the importance of bringing women of similar life circumstances and backgrounds together to encourage peer support, problem solving and empowerment.

Rising (1998) found similar results during a pilot program conducted with ethnically diverse, medicaid eligible pregnant women (N = 111). Women were placed in groups of 8 to 12 based on delivery dates which met ten times during the prenatal period. Integral to the program design was the desire to provide participants with an opportunity for social interaction. Results, based on focus group data illustrated the importance of sharing among the women that lead to an increased level of confidence in their knowledge about pregnancy while empowering them to take control of their care. Women in the program were concerned about one another and worried when someone was absent. They assisted each other with child care and transportation and 98% of women stated that they enjoyed being with other pregnant women in the group. The importance of being with other pregnant women who were faced with similar experiences and shared the same problems was repeated during the focus

groups.

Focus groups have also been conducted with pregnant women of African American populations and with women of low education and income level to assess satisfaction with prenatal care. Results indicated that these women wanted to be able to talk with each other through support groups as this would give them one of the few opportunities to socialize with other women facing the same life experience. The importance of social support from a peer, and knowing someone would be there were all important factors (Bolla, DeJoseph, Norbeck, & Smith, 1996; Handler, Raube, Kelley, & Giachello, 1996).

Summary

High-risk status, sociodemographic risks and social support are important factors affecting pregnancy outcomes of low income women. Evidence has shown that socioeconomically disadvantaged women delay initiation of prenatal care and this impacts pregnancy outcomes. Much research has also been completed on the significance of social support. Not only has support been acknowledged as an important factor but the source of support is believed to be extremely important. For low income pregnant women support from peers has been shown to have the greatest impact on perinatal outcomes. It is now time to develop research based programs focusing on paraprofessional support and evaluate outcomes.

Discussion

The literature repeatedly acknowledges the risk of poor perinatal outcomes for women surrounded by a life of poverty. This risk is not based on socioeconomic status alone, but rather it is compounded by the many barriers to prenatal care experienced by these women and the way traditional prenatal services have been offered. The documented link between socioeconomic status, health, social support and perinatal outcome reinforces the importance of developing appropriate intervention strategies for at-risk women.

Family and peer groups have been found to be the most important motivator for women of low socioeconomic status to receive prenatal care. Conversely, professional support has not been readily identified by these women as the most meaningful support impacting upon their lives. Despite this finding, many prenatal care services have been provided by health care professionals. It is only in recent years that a research-based, collaborative approach, involving professional and paraprofessional support, has existed. The era of paraprofessional (i.e., trained peer) support has begun and it is now that we are beginning to understand the significant positive results it has for women of low socioeconomic status. Paraprofessionals are able to provide peer mentoring and support for these women. As well, research has begun to understand the importance of social interaction among individuals of similar life circumstances. It is this community focus and involvement that is empowering individuals to

make healthy behavior changes while buffering life's stressors.

Community based programs are now being developed and implemented combining professional and paraprofessional support, with the paraprofessional at the center. As programs target socioeconomically disadvantaged pregnant women, the need to understand the content and quality of health care provided, as seen through the eyes of the aggregate, becomes imperative. Although an immense amount of research has been conducted analyzing perinatal outcomes in relation to various education and support programs with women of low socioeconomic status, most have studied this phenomenon from an epic rather than an emic perspective. The lack of qualitative studies in this area is immediately apparent and the need for research, based on the lived experiences of these women, is acknowledged. This present research contributed to an understanding of prenatal care provided through the HBC program, thereby adding to existing research and filling the research gap identified.

CHAPTER 3

Methodology

Grounded theory methodology was utilized, as outlined by Glaser and Strauss (1967), to generate a theoretical model that captured women's experiences with HBC. This flexible methodological approach allowed data to emerge that provided meaningful insights into program strategies perceived to be most and least helpful in facilitating movement towards healthy pregnancy outcomes. Wilson and Hutchinson (1996) emphasize that, grounded theory is "a highly useful approach to generate much needed knowledge of complex phenomena that are directly linked to the human world we seek to understand" (p. 124).

Research Method

The grounded theory approach is attributed to Glaser and Strauss (1967) whose basic premise is that "generating grounded theory is a way of arriving at theory suited to its supposed uses" (p.3). The central idea behind this methodology is that theory is generated from and grounded in the data; it involves generation of theory, not verification of previously hypothesized theory (Sheldon, 1998). The theory of symbolic interactionism, focusing on the meanings of events to people in natural settings, underpins grounded theory.

Grounded theory provides a way of studying, understanding and creating

new perspectives on human behavior (Chenitz & Swanson, 1986). This method explores the richness and diversity of human experience and facilitates understanding of behavior based on how the participants see it, learn about their world, learn an interpretation of self in interactions and share their definitions (Streubert & Carpenter, 1995). Furthermore, the grounded theory approach is well suited to providing nurses with an understanding of social behavior so they can enhance patient care (Sheldon, 1998).

A fundamental feature of grounded theory is the simultaneous collection, categorization and analysis of data, a process known as the constant comparative method of analysis. Theory generation is inductive so that categories emerging from the data are constantly compared with those that have emerged from earlier data. As categories emerge from the data they are also used to direct and advance further data collection, a process known as theoretical sampling. Data collection continues until data saturation occurs. Furthermore, the deliberate sampling of subjects who are able to explain through experience the phenomenon being studied works to ensure the validity of the study (Glaser & Strauss, 1967; Polit & Hungler, 1995).

This qualitative study used a grounded theory method to generate a theoretical model that captured womens' experiences with HBC in the St. John's region. Simultaneous data collection, analysis and theoretical sampling facilitated identification of conceptual categories, their properties and

descriptors, and relevant incidents. The flexible methodological approach allowed rich data to emerge that provided meaningful insights into program strategies perceived to be most and least helpful in facilitating movement towards healthy pregnancy outcomes. It was also possible to document gaps in this service in relation to identified needs.

Population and Sample

The target population was all women attending HBCs in the St. John's Region from Brighter Futures (Buckmaster's Circle Community Centre, MacMorran Community Centre, Bell Island Family Resource Centre) and Daybreak Parent-Child Centre. The accessible population was restricted to women meeting the following inclusion criteria: 1) attending HBC for at least three weeks; 2) mentally competent - able to understand the interview process and study purpose, and give informed consent to participate in the research process; 3) fluent in the English language; and 4) 19 years of age and over.

A non-probability sample of 20 women from the accessible population (approximately 80) participated in the study. A total of 29 potential participants were contacted from December 1998 to September, 1999. Nine of those contacted refused to become involved in the study (six following initial telephone explanation of the study and three by not keeping the scheduled appointment on two occasions). The sample, representative of HBC sites, consisted of subjects

from Buckmaster's Circle Community Centre (n = 7), MacMorran Community Centre (n = 4), Bell Island Family Resource Centre (n = 5) and Daybreak Parent-Child Centre (n = 4). Because the objective of qualitative research is to obtain data that are comprehensive and insightful, the large volume of narrative data generated by the interviews precluded enlisting a large number of participants.

Procedure

Prior to commencement of the study support was received from the Brighter Futures Coalition of St. John's (see Appendix A). Potential participants were identified through ongoing consultation with the HBC program coordinators, Cheryl Coleman for the Brighter Futures' sites and Dorene Browne for the Daybreak Parent-Child Centre (see Appendix B). The program co-ordinators were given a summary describing the proposed study (see Appendix C). Eighteen participants were approached by the program co-ordinators who briefly explained the study and ascertained their willingness to be contacted by the researcher for a more in-depth overview of the study. Those expressing an initial interest in the study received a telephone call from the researcher who explained the study more fully and addressed any questions or concerns. If they agreed to participate, an interview time and place was scheduled. Two participants were approached by their resource mother who briefly explained the study. Due to the fact that these participants did not have a telephone, the

resource mother acted as an intermediary, and scheduled the interviews based upon the participant's request.

Eleven of the interviews were conducted in the participants' homes, at times mutually convenient to the women and the researcher. The interviews were conducted in the living room or kitchen, usually in private, yet, in some instances the participant's young children or significant other was nearby. Eight of the interviews were conducted in a private quiet room following a meeting at the HBC. One interview was conducted in a private room at Memorial University School of Nursing. Informed, written consent was obtained prior to the beginning of each interview (see Appendix D). With participants' permission, all interviews were audio-taped, and ranged from 45 to 75 minutes.

Given the importance of the interview process in eliciting a rich data base in qualitative inquiries, training sessions were conducted with the researcher prior to data collection by my thesis supervisor who has an extensive theoretical and experiential basis in qualitative research. The training sessions emphasized the importance of paying attention to what was being conveyed by the verbal reports, probing for clarifications of participants' meanings, and being sensitive to emotional responses that could indicate participant discomfort and/or difficulty with certain topics. In order to reinforce the basic premises of the training sessions, the thesis supervisor participated in the first four interviews.

Interview Schedule

Interviews were conducted using a semi-structured interview schedule (see Appendix E). The interview schedule, developed for this study, was designed to explore key aspects of study participants' experiences while attending HBC. Probes and question content comprising the interview schedule were based on relevant literature. Although interviews were guided by the topics identified in the interview schedule, many additional questions were generated from the thematic content emerging during each interview and the ongoing data analysis (see Appendix F).

Ethical Considerations

Prior to the commencement of the study, permission to conduct the study was requested and received from the Human Investigation Committee (HIC), Memorial University of Newfoundland (see Appendix G). Initial contact with potential study participants was made by an intermediary. Once initial consent was given to the intermediary, each participant was contacted by the researcher, the study more fully explained and an interview time was scheduled. At the time of the interview the researcher provided the participant with information regarding the purpose and nature of the study. The researcher answered all questions posed by the participant and informed written consent was obtained prior to the beginning of each interview (see Appendix D). Participants were

assured that their participation was voluntary, and that they could withdraw from the study at any time.

Appropriate measures were taken to ensure that confidentiality of all data was maintained. All tapes and transcriptions were coded, and kept in a secure place. A log of names and matching codes are stored in a locked filing cabinet, accessible only to members of the research team (the researcher and supervisory committee), and will be destroyed once the study is fully completed. Participants were also informed that all information collected would be described in a manner that would prevent identification of the source, and that no direct benefits were anticipated.

Data Analysis

Theoretical sampling was used during data collection and analysis according to the theoretical needs and direction of the research (Sandelowski, 1995). The taped interviews were transcribed verbatim within a seven to ten day period and checked for accuracy. The constant comparative method of analysis as defined by Glaser and Strauss (1967) was then applied to each data set by two or more raters/coders (the researcher and members of the research team) working independently. The research team met frequently for debriefing sessions during data collection to discuss major themes and identify the conceptual categories and properties being generated by the initial joint coding

and analysis. During the initial phase of data analysis, each member of the research team conducted a thorough examination of the interviews. This process produced a number of substantive thematic codes which were examined for similarities and differences. From this initial phase twelve themes were identified and quotations from the data were compiled according to these themes.

Following the first phase of data collection and analysis, the research team worked together to accomplish the following: (1) collapse the categories into a parsimonious set reflective of participants' experiences of HBC; (2) confirm the conceptual categories, their properties, and the relative importance attached to both by study participants; and (3) propose a conceptual model to capture inherent relationships between and among major categories. During the second phase of data analysis, quotations from the interview transcripts were grouped according to the appropriate conceptual category. At this stage the range and variations of category properties were initially realized. As data collection and analysis continued, the defining category properties and their indicators were further clarified and collapsed based on continuous input from the research team.

Data collection continued until theoretical saturation was assured by each member of the research team. Through continuous data analysis and collaboration, the research team reworked the data so as to verify, refine and

collapse conceptual categories and their properties. Each category and property was continuously compared to each other to ensure that they were mutually exclusive. At this point it was evident that there existed three main categories, yet, one core category, the process of "becoming empowered". The other two categories, creating a supportive environment and evolving social self, and their properties clearly influenced and revolved around this core category.

Reliability and Validity

Credibility

Credibility measures how vivid and faithful the description of the phenomena are and provides the standard for judging the truth value. HBC participants are considered the experts and therefore the most credible sources of information. As patterns emerged from the data, additional questions and probes were added to the interview schedule so that they could be verified and confirmed with other respondents. As well, objectivity during data analysis was maintained by exploring alternative explanations for data generated, in collaboration and consultation, with members of the research team who were considered clinical experts in the field of maternal-child health.

Fittingness

According to Sandelowski (1986), a study meets the criterion of

fittingness if the "findings of the study, whether in the form of description, exploration, or theory, fit the data from which they are derived" (p. 32). This means that the findings are well grounded in the life experiences studied. Fittingness is achieved by supplying illustrations of the respondents' own words from transcribed data so that the readers of the study view the findings as meaningful in terms of their own experiences. This allows readers to judge how well the findings are grounded.

Auditability

This concept refers to the consistency of the research process or the ability of another researcher to follow the "audit trail" used in this study. The audit trail comprises all the decisions made by the researcher at each step of data analysis. This trail allows another researcher, using the original data and the audit trail, to arrive at conclusions similar to those of the investigator (Beck, 1993). These criteria are met by presenting generous amounts of original data plus full discussion of decisions made during data analysis. The interviews were audio-taped, thus preventing loss of data due to investigator recall, thereby permitting auditability of data collection procedures (May,1991).

CHAPTER 4

Findings

Study findings are presented in two sections. The first section describes the theoretical constructs (i.e., creating a supportive environment, becoming empowered, and evolving social self) that were generated from an analysis of the transcripts of study participants. The second section presents a discussion on the potential interrelations among the constructs and how they capture pregnant moms' experiences with healthy baby club programs.

Meaning of Supports for Healthy Outcomes

The interview transcripts provided a rich data base on participants' experiences with Healthy Baby Club programs. This section presents a detailed discussion on the dominant theoretical constructs (i.e., creating a supportive environment, becoming empowered, and evolving social self) generated from the thematic analysis of study data.

Creating a Supportive Environment

Participants' stories of their experiences with HBCs portrayed an image of a social world that was a source of emotional, tangible, and informational support. It was apparent that these women perceived that the staff were constantly striving to create a supportive environment from which it was possible

to derive a sense of comfort and, most importantly, to feel good about themselves and their pregnancy. The creating a supportive environment category emerged from participant descriptions of steps taken to facilitate access to HBC programs (contact source, transportation services, child care services), to provide access to supports (resource mothers, nurses, nutritionists, coordinators, other pregnant moms), to create a relaxed environment, and to reinforce healthy food choices.

Facilitating access to HBC programs. The most common source of information about HBC programs were people living in the participant's neighborhood. One woman described how she found out about the HBC program in her area:

> A lady that lives near me, just down the road told me about it. One of the resource mothers came to interview her about the program, and then she told me about it. I told her that I had never heard about the HBC before but thought I'll join it and try it out. . . .it was the resource mother that gave me the number to call.

Other participants received information about the program from friends or relatives:

> A friend of mine goes to the breastfeeding clinic. . . . I mentioned it to her that I was pregnant. The coordinator for the Healthy Baby Club is the same coordinator for the breastfeeding club. She *[friend]* mentioned it to *[coordinator]* who called me.
>
> My aunt was in it. She goes to the Healthy Baby Club too, so she referred me to it.

Besides friends and family, health care providers often informed participants

about HBC programs. Several participants identified physicians and public health nurses as their information source:

> She *[physician]* told me about the program and the Public Health Nurse. She asked if it would be okay to give my phone number to the nurse. I said yes, so she *[public health nurse]* called me.
>
> When I went down for my visit, she *[public health nurse]* asked me if I would be interested going to the Healthy Baby Club.
>
> The public health nurse told me about it *[Healthy Baby Club]*. I wasn't going to go. But the health nurse suggested it and put my name down and that's how I got to going.

Whether the information about HBCs came from formal or informal supports, most of these women were unaware of such programs in their neighborhoods prior to this pregnancy.

Once the women were contacted by the HBC staff, information was received on key aspects of the program. The majority of participants spoke positively about the measures taken by the HBC staff to facilitate access to group meetings. Without transportation and child care assistance, some participants would have found it difficult to maintain regular attendance. One woman described how helpful it was having access to transportation services:

> I called them to pick me up because of my leg. They are going to pick me up tomorrow morning but normally I walk. . . .Now I do get the bus to drop me off because there is no way that I would be able walk back so I think transportation is great too. That's another thing that's good.

Although everyone did not require transportation services, it was a comfort knowing that these services would be made available if they were needed. The

following comments illustrate this: "If I didn't have any transportation, they *[HBC staff]* cover the taxi but I never had a taxi down there yet"; "All I would have to do is call my resource mother and tell her that I didn't have a ride and she would arrange one for me."

The provisions made for those who had young children at home were also viewed positively by study participants. One woman described her use of child care services in the following manner: "There's child care there. I bring her with me unless, sometimes her dad looks out for her for me." Another woman summarized her views on child care services thus:

> I can't see anybody complaining about the program. I mean it don't cost anything, I won't speak for people with small children, but they have asked if you want child care. I don't know how that works because I never got into it because I didn't need it. . . .People can't say, "Well, I don't have a babysitter". . . .or "It's going to cost me money" because it don't. It costs you nothing! So I can't see how anybody can complain.

Providing supports. Participants gave high ratings to the amount and type of support provided by HBC staff. From the comments made by these women during the interviews, it was obvious that they believed that participating in HBC programs was having a positive impact on their overall well-being. Many participants talked about how the caring approach of the staff made them feel comfortable and more at ease with pregnancy-related concerns or worries. The important value placed on emotional and informational support is captured in the following statements:

> It *[attending group sessions]* puts my mind at ease so I'm able to do things. And I won't be so worried about what I have to do with the baby.
>
> I find if you need anything or if you have a problem, that has to do with your pregnancy, they are there to help you.
>
> It is because everyone here cares about you and you learn so much stuff.
>
> She *[public health nurse]* gets in with us in the discussions. . . .She tells us what she has learned in her life. That's good because she is sharing her experiences, it's not just out of a book. They are all easy to talk to.

The willingness of the staff to help with problems and concerns while portraying a personal interest in their welfare seemed to be an important force facilitating adjustment to the pregnancy. This aspect is reflected in the following statements: "They're all the same to me. They treat me the same. They make me feel really comfortable and I can ask them anything"; "It's a big difference believe me. I had a really hard time with my first pregnancy because I didn't have that kind of support".

Without exception, resource mothers (i.e., peers with training provided by HBCs) were identified as the most important source of support by these women. Many participants talked about the comfort and support derived from knowing that someone was there to call upon if they needed them. The following statements convey the message that resource mothers were seen as an invaluable source of informational, tangible, and emotional support:

> No trouble, like 4:00 in the morning, if there is something wrong they say, give them a call. Like I got a home phone number. The resource mother, she said if there is anything you need just to let her know. It's good to

> know that the person is there if you got any troubles. . . . Everything else is good too, but knowing there is somebody there, you don't have to be alone.
>
> If there's a week that you didn't have the money to get something, well, you'd never run out of milk because they give you seven litres a week. But if there was some reason that you did, you'd be able to pick up the phone and call them *[resource mothers]*. I think the biggest thing for me is that they are there to talk to.
>
> The resource mothers are good. Anytime you need something you can give them a call and they will try to help you out in any way they can.
>
> If I need anything she *[resource mother]* is there, that's nice to know. . . .If I am worried about anything I know I can talk to her. If I had a really rotten day I would call her.
>
> I would be able to call her *[resource mother]* if I had a problem or anything. I never did it yet but I can if I did have a problem.

The perceived availability of resource mothers was a source of comfort for these women. As many participants indicated, what was most important was knowing that someone was there to answer their questions, give them advice, and help them work through difficult times.

Participants developed an increased awareness of and appreciation for the support provided by resource mothers as they spent more time interacting with them. Participants' satisfaction with resource mothers was shaped by their availability when problems surfaced and constant demonstration of interest and concern.

> The resource mothers are good. . . .She *[resource mother]* actually walked from her house all the way down to my house to attend the first meeting with me so I didn't have to go alone. That shows how dedicated

> and devoted she is to what she is doing. The resource mothers are always here when you come to the meetings and they greet you at the door. It is so nice to see a familiar smiling face when you walk in. Most times they sit through the meeting with us. It's not like they drop us off and go about their business. They're there with you and they are just as interested in what we are learning as we are.
>
> She *[resource mother]* phoned me today to see how I was doing. . . . She'll phone me tomorrow and let me know when the cab is going to pick me up. She's good like that. She'll phone once in a while and see how I'm doing and see how my doctor's appointment went. I find her really good to talk to.
>
> She calls me every week. It's nice knowing that she is thinking of me and cares about how I am feeling. She's always there for me.
>
> The resource mom, she's great. She calls me every week. Sometimes two and three times a week. Just to see how I'm doing and how I'm feeling. . . .She's a really nice lady. She's really sweet. She just came for a visit to fill out the little charts. She was only here for about twenty minutes. But it was nice that she came all the same. If I'm going through anything in particular I'll talk to her about it but most days I'm feeling great.

As the above comments suggest, participants were appreciative of resource mothers receptivity to questions, as well as their willingness and interest in giving the time to address concerns.

The supportive and caring approach displayed by resource mothers was seen as a major force reducing anxiety and facilitating comfort. One participant described resource mothers' supportive and caring manner thus:

> She's *[resource mother]* very helpful. . . .I tell her if I'm concerned about something. . . .She is a great listener and usually after I talk with her I feel a lot better.

Another young woman commented on the quality of the relationship developed

with her resource mother: "She *[resource mother]* is supportive and she listens. She's more like a friend. She is my friend". In short, resource mothers were valued the most for demonstrating a caring attitude, promoting understanding, providing a listening ear for worries and concerns, and providing tangible assistance when possible.

Conducive atmosphere. Many participants identified the presence of a relaxed environment during the group meetings as a significant force promoting acceptance of HBC programs. The following comments illustrate how responsive the staff were to participants' questions and concerns:

> If I brought up a question, then we start talking about that subject for so long. That's what I find too, if you bring it up they won't say, "Oh, well, next week we got to cover that anyway".
>
> If you have any questions the nurse will gladly answer them. So it kind of makes you feel more relaxed. I'm not a talker but if I have any questions I'll ask them. Even if I don't bring them into the group, I'll ask *[resource mother]* afterwards. I don't keep it to myself. . . .if you have any questions or anything like that you would just go to the group and ask and then everyone else would hear the answer too.
>
> I know that the nurse is here and I can ask her anything and if something happens before I come to the club I can ask her about it and ask her if it's normal or if I should go see the doctor or whatever. This is an excellent program!
>
> They are really open down there. Just ask them any kind of question and they'll give you the answer. It's very good.

Comments about the HBC staffs' openness to questions and concerns emphasized the importance of not only being flexible but also approachable.

For the most part, participants were satisfied with the staffs' degree of attentiveness to their needs. Several women were quite appreciative of efforts made to address their questions:

> If they don't know the correct answer they'll tell you that they don't know it. And then they say, "Well, we'll check it out and see if we can find the right answer".
>
> They always answer. If they can't answer they will go and get the answer.
>
> If there was something that she *[public health nurse]* wasn't sure of, she would check it out for us and let us know next week. She would try to get us a book or a pamphlet on it. I think she did a pretty good job.

Besides the flexibility and degree of responsiveness to questions and concerns, participants were especially happy about being asked for their input on different aspects of the program. One woman conveyed her perceptions in this manner: "At the end of the group meeting they ask if you enjoyed it or not. Like everyone is pretty open. If we found it boring or if it was too long we would discuss it and tell them".

In addition, some participants were especially appreciative of the gifts received as a result of attending group meetings. Several women articulated their satisfaction with this aspect of the program very well:

> Every week they give us diapers or they give us little boxes of detergent or wipes. I almost got a box of diapers there already.
>
> We used to get little gifts. Everybody used to pick a number and she would get you stuff for yourself - mint cream. . . .I got a nice cream for myself. . . .Every week she would have something out there for us. That was really cute.

> At the end of each session they give us gifts which is not necessary. . . . Stuff like little toys and bubble bath. . . .I think that's really, really great. It's amazing that they do provide it . . . .I wasn't expecting this at all.

Reinforcing healthy food choices. Study participants were generally satisfied with and appreciative of the more tangible supports provided by HBCs. Aspects of the program which were seen as especially beneficial were the food supplements and nutritious snacks. The other "extras" (i.e., gifts) were also viewed positively.

Most participants indicated that the food supplements and nutritious snacks reinforced their understanding of the importance of making healthy choices during pregnancy. Participants indicated that the food supplements had a positive impact on their eating habits. The increased nutritional practices of these women is reflected in the following statements:

> I know I wouldn't have had that much oranges and eggs. . . .I drank my milk right up.

> With my first pregnancy I could only afford to buy a couple of cartons of milk when I went grocery shopping every two or three weeks. So, when the milk was gone it was gone. Now since I started the HBC there is always milk in the house and I can drink three or four big glasses a day or more. I like milk and it's good for you.

> It's *[food supplements]* been pretty helpful.

> It *[food supplements]* came in really handy.

Besides the weekly food supplements, participants spoke positively about the snacks provided at each group session. One participant summed up her

feelings about this aspect of the program thus: "They offer so much down there, especially the snack. I never heard of a place, especially prenatal classes, that offers snacks and stuff. . . .The snacks are really good down there".

Although HBCs provided standard food supplements, there was a certain degree of flexibility exercised to accommodate the likes/dislikes and tolerances/ intolerances of participants. Most of these women looked favorably upon any attempts by the staff to substitute food products.

> I don't like oranges but I used to eat one a week because they're a supplement and they wanted us to eat them. I tried. . . .they started to make me sick, so they're *[HBC staff]* going to change that so I don't have to eat oranges no more. . . .We're going to try grapefruit.
>
> Oh, if I didn't like the oranges or if I was allergic to the oranges, I would get some ham or kiwi's. And if I was allergic to the milk, they would give me orange juice or something. So it's really good that way.
>
> I find it really good. The oranges, I got sick of eating, so they gave me orange juice instead. I was on homogenized milk but that was making me sick and they gave me chocolate milk. They are really good in that way. They'll talk to the nutritionist down there and if she thinks it's okay. . . . then they'll change it over. But chocolate milk is just as good as white milk anyway.
>
> I don't get eggs because I don't like them, so I get turkey roll and ham instead. . . .They ask you if you can eat the food and if you can't then they will try to find something that you can eat. If you can't eat oranges then they will give you orange juice. With me, I can't stomach white milk so they give me so much white and so much chocolate and I mix it half and half. They do try to make it as convenient as they can for you.

The staff's willingness to discuss possible alternate supplements seemed to reinforce the importance of incorporating certain food products into ones diet.

This sentiment is captured in the following statement: "They *[healthy baby club staff]* try to do everything they can to help you eat better".

Summary. It has been well-documented in the literature that prenatal programs that are responsive to the needs of targeted groups, especially vulnerable and high risk populations, will achieve greater success in facilitating access to these programs and, ultimately, realizing positive health outcomes. Significantly, study participants highlighted the measures taken by the HBC staff to create a supportive environment that was responsive to their needs and concerns and, most importantly, made them feel valued, as well as motivated to assume greater responsibility for their health. It was also apparent from participants' stories that resource mothers were often viewed as the most significant source of support.

Becoming Empowered

A common theme emerging from the data was how study participants developed a greater understanding of the potential benefits for self and the unborn baby from engaging in healthy behaviors (i.e., lifestyle modification). As participants' assumed and increased healthy behaviors and received positive reinforcement for doing this, they began to feel better about themselves. The enhanced sense of self-responsibility was attributed to knowing that (i.e., helpful information and knowledge deficits) and knowing how (i.e., practical skills).

The becoming empowered category emerged from participants' descriptions of acquiring new knowledge, receiving reinforcement and encouragement for healthy behaviors, developing increased self confidence, and becoming more aware of unmet needs. The new knowledge property was comprised of general information, nutrition knowledge and cooking skills, and relevant information about pregnancy/delivery and infant care. In conjunction with the acquisition of new knowledge and practical skills, most participants spoke about the positive reinforcement and encouragement received from HBC staff, as well as other pregnant moms, for considering breastfeeding as a viable option and modifying unhealthy behaviors. By participating in a supportive environment that facilitated learning, a significant number of participants indicated that they felt more self-confident and more aware of needs or concerns that required attention.

Acquiring new knowledge. With increased recognition of the importance of maintaining a healthy lifestyle both for themselves and their unborn babies, all participants began to realize that there was always something more to learn. The data suggest that most participants became increasingly aware of personal knowledge deficits regardless of previous experiences with pregnancy and infant care.

Many participants described how they became more aware of what they didn't know and the importance of making lifestyle adjustments. One woman's

comments captured how she felt about having learned new things since becoming involved in HBC programs: "I thought I knew more than I did, but, actually I didn't. That's the most important *[thing]* I have learned a lot more." Another woman's comments conveyed a similar sentiment:

> There's a lot of things that I learned that I didn't know. Even though I had another youngster I knew a bit about raising youngsters. We talked about raising youngsters, we talked about when you're pregnant, what's the consequences when they're inside your belly.

Other participants described not only learning new things but also recognizing and accepting the need for change.

> There will be a lot of changes from what I used to do with the other kids. Things are going to change a lot when I have this baby because I've been learning a lot from here and a lot from other moms' experiences. I have learned things that I didn't know before.

Whether or not participants were experiencing a pregnancy for the first time or had children at home, all believed that their expanding information base was helping them cope better with the pregnancy, and prepare them for labor and delivery.

Most participants highlighted the benefits of knowing more about the nutrition content of different foods and how to incorporate this information into meal preparation at home. Several participants talked about how they had learned useful things:

> That's one thing that I never had on my first pregnancy was oranges. Nothing about the need for a lot of milk and a lot of eggs. They teach you about what to eat and what to drink. I was amazed and that about it.

> It's all about nutrition, you shouldn't have any junk. We learned about milk and fruit and other healthy foods.
>
> The part that I liked was when we went to the grocery store and we looked around the store and saw what was good for your health.
>
> The way you eat and how much weight you gain. Before you knew you had to eat healthy but you didn't know what kind of healthy foods you needed. If you drink a litre of milk every day, there's plenty of vitamins for your baby there.
>
> About the fruit and vegetables and how much we should have a day and all of that. I have learned the importance of eating healthy, so that the baby can grow.

While nutrition knowledge was a positive force facilitating acceptance of the need for change, participants viewed learning how to use this information during meal preparation as of equal or even greater importance. One woman commented thus: "It's more the skill. They talk about how we can use our milk and eggs." Another woman discussed the usefulness of learning how to prepare more nutritious meals: "You do cooking, and they teach you ways to use your supplements. If you're one of them that cooks with your supplements, they just give you some ideas like what you can do." A number of women articulated similar benefits from acquiring practical cooking skills: "They show us how to cook healthy food. That is something I needed to learn"; "You learn something new everyday. . . .They give you the recipes for the stuff that you make."

Besides the increased nutrition knowledge and enhanced cooking skills, all participants' clearly articulated the benefits of having developed greater

insight into the norms of pregnancy and labor/delivery. One woman described how she became more aware of different things in the group sessions.

> I learned, what happens when you become pregnant, like the different changes that happen to your body and to the baby. There are so many things that I didn't know about labor and that helps you a lot. I'm still nervous about what's going to happen. You expect stuff now that you know so much about it. You know you are going to have pain and what might happen if you have a difficult pregnancy and that kind of thing. I didn't know you had to rest or that you bled for probably six weeks after. *[Laugh]* I didn't know nothing like that.

Other participants also spoke about the usefulness of different information in preparing them for different pregnancy and labor/delivery events.

> I've come a long way. I wouldn't have known what to expect during the first part of my pregnancy. I wouldn't have known how to look after myself. I just learned a lot from here and I think when I go in labor I'll know what to do now.
>
> Everything about pregnancy because I didn't know anything. So at least now I know what to expect at the hospital.
>
> If you want to know anything about being pregnant, delivery, after the baby is born, this is the place to come and find out.
>
> I know more about pregnancy and about having a baby.

Feeling better prepared for labor/delivery and having more insight into the normal changes during pregnancy was a common theme identified from the interview transcripts of study participants.

Many participants also discussed the importance of having been given information on how to care for a new baby. For those participants who were about to become mothers for the first time, this type of information was seen to

be especially helpful for the early postpartum period.

> I'm not around babies much. I probably held a baby once or twice in my life. Today they put on a tape about how to give a baby a bath. Like a newborn baby, when the umbilical cord falls off. So that's helpful, because I don't have a clue about how to do anything like that.
>
> I was nervous at first. I was frightened, like when I get to bring him home. But it's like anything I need help with they're there.
>
> Everything about the baby and what to do when you take him home and get used to him and do your housework but take care of the baby first and don't beat yourself out.

A number of participants gave special reference to their increased understanding of the positive benefits of breastfeeding and how to deal with the barriers to successful breastfeeding.

> I didn't know anything about breastfeeding. I knew what it was and that is it basically. I didn't know there was a proper way to do it and an improper way or anything like that.
>
> I did learn a lot about breastfeeding which I didn't know about before. I learned a lot about taking care of myself while I'm pregnant and afterwards. What it's going to be like when I come home, where I already have a child. I know it's going to be hard.
>
> They have breastfeeding classes if you're breastfeeding. I'm going to breastfeed, we're learning that now. You know, how to hold the baby and certain positions and stuff like that

Although these women entered the HBC program with variant knowledge and experiential bases, all of the participants were open to learning new information and recognizing, as well as considering, the need for change in how they normally performed certain things (e.g., cooking, choice of nutritious foods,

preparation for labor/delivery, caring for a newborn infant, etc.).

Encouraging healthy behaviors. Encouraging healthy behaviors was defined in terms of having the necessary information on healthy choices but still retaining the freedom to do or not to do. A number of participants commented on the approach taken by HBC staff to facilitate positive attitudes toward breastfeeding and healthy lifestyles while emphasizing the importance of personal choice.

The following excerpts capture how some participants viewed the HBC staff's approach to breastfeeding:

> Like they *[HBC staff]* never pressured me. They just gave me information on it and we watched videos and that. But I didn't want to breast-feed, even before I came here. They gave me the pros and cons of it and they told me the good of it. And if I wanted too, I still got the choice to do it.

> Everyone talked about how they felt and if they wanted to breastfeed or not. She *[public health nurse]* left it up to us to decide for ourselves. There was no pressure either way. She told us it was up to us.

> Before they even started talking about it they said, "This is something that is your choice. We want to show you how good it benefits your baby, but if you choose that you want to bottle feed then that's your choice". Which was great, like you know, it's your decision. . . . Everyone knew in the group that breastfeeding was way healthier than bottle feeding. But whatever the girls decide to do is their decision. Like I decided to bottle feed, for my own personal reasons and stuff.

As participants began to assimilate the information received on breastfeeding, some expressed a desire to pursue this option but were also uncertain about whether or not breastfeeding was for them.

> I knew that breastfeeding was good for the baby but I didn't know the many reasons why it was good for the baby and she *[public health nurse]* went right into detail with it all. I'm not sure but I'm actually thinking about breastfeeding. I'm just going to have to try it out for a little while and see how it goes.
>
> I might try it *[breastfeeding]*. They're trying to persuade me to do it. But I don't know. It's not me, kind of thing.
>
> Since I've been going over there I've been hearing a lot. So I've given it *[breastfeeding]* a thought. . . .It's in my mind to try it. . . . They *[healthy baby club staff]* said why don't you try it for the first three days it's the best thing you can give your baby. . . .It's just talked about and it's your decision.

Regardless of the ambivalence about or acceptance of breastfeeding, all of the study participants were aware of the benefits for the baby and had considered them as they moved toward finalizing their decisions.

Participants also talked about what they had learned about healthy living. While some found it difficult to change their behaviors, others considered the need for change and made the necessary modifications. The reluctance to significantly modify behaviors versus the determined acceptance of the need for change is captured in the following excerpts:

> Some days I smoke more than I should and some days I don't smoke hardly anything. I try.
>
> I haven't touched a smoke in years. Not since I found out I was pregnant on the first one. I smoked but when I found out I was pregnant I gave it up. And since I had her I still haven't touched them.
>
> I try to eat a bit better most times. I still like my junk food. But I eat way better. I try and get in a lot of calcium. I am not a milk person or a cheese person but I eat that since I have been coming here.

> I smoke. And to me, I don't eat great. Like I'm a person that might have breakfast or might not. I might have dinner and I might not. I'm a person that likes to be on the go and right now, since I've been pregnant, I am eating right. I have my three meals a day, plus, I'll even have a snack at night. Probably cheese and crackers, it might be an orange, it might be a banana. But after the baby is born, I would like to get back to my routine because I am finding this hard. There's days that I just feel that I don't want breakfast but, I know I will have it even if it's a small bowl of cereal. I simply don't eat right. . . .I pick up healthier things but I also pick up junk food.
>
> And it's all because of the class. . . .If you don't eat healthy, I mean the baby isn't getting what it needs. I'm underweight myself and I was never a big eater. I'm still not but I'm choosing my variety of foods properly. . . .I drink orange juice and I never drank that before. Whole wheat bread, grains, vegetables, fruit, yogurt and stuff like that. I never used to eat that before. All I used to eat was junk. . . .I'm eating a lot more healthier.
>
> I eat salads and I have potato and carrot. I never really ate those things before. I'm trying to get into the habit of cooking now too. I think I'm eating better and feeling better too.
>
> I smoked all throughout my pregnancy which I shouldn't have. I tried to quit but I'm finding it hard. . . .She *[public health nurse]* said that when the mother is smoking the baby may have allergies or could get asthma or anything could happen. She was very nice about it and she was happy that I had cut down.

All of the participants commented on the degree to which they had made lifestyle changes - some more so than others. Without exception, all acknowledged that they were aware of what was best for themselves and their unborn babies.

Increased self-confidence. There were a number of participants who indicated that they experienced increased self-confidence as a result of attending HBC programs. The supportive environment of the HBC allowed these women to derive comfort from the helpful information received from the staff and

other participants. The reverse was also true with some women indicating that their self confidence was enhanced when they were helpful to others by sharing relevant personal experiences with them. The value placed on the comfort and encouragement derived from the group meetings is captured in the following statements:

> It makes you a little bit more confident being able to talk about your pregnancy to others who are pregnant. You can talk about weight gain, if you are gaining too much or if everything is normal and that makes you feel a little bit better about things.
>
> If you have a problem and you want to talk about it, everybody will help you through it. We'll all discuss it and, more or less, it helps with self esteem and self confidence.
>
> I feel a lot better about my pregnancy and I am not so worried about things.
>
> Going to the Healthy Baby Club and feeling that I'm helping the baby more. . . .I feel better about myself because I am helping the baby be healthy.
>
> I guess where I already have a little girl, I already had the experience, it helps the other girls. It makes you feel confident about your own self and your pregnancy.

As these women became more confident about knowing pregnancy norms, they felt better about themselves because they believed that they were doing things to promote a healthy outcome.

Giving recognition to unmet needs. It was readily apparent from the interview transcripts that study participants became more cognizant of learning needs with increased participation in HBC programs. The most important areas

identified were the need for continued support into the postpartum period, greater participation in cooking sessions, more varied supplements, and greater involvement in planning group sessions.

With regard to the postpartum period, a few participants recognized the importance of having support to reduce potential worries or concerns about infant care. This aspect is reflected in the following statements:

> It would be nice for them *[pregnant moms]* to drop in after the baby is born. Now they just leave. There should be a day or a couple of days set aside just for the mothers and babies. . . .Some of them, even older ones, seem like they are confused after they have the baby. . . .They're afraid, because the baby is changed but is still crying. They are wondering, "What am I doing wrong?" You need a bit of extra help or support when you first bring the baby home.

> I think we should have something there for when the baby is born. We're going to want to know different things especially when the baby comes. I don't know how to make a bottle or how to hold a baby right or how to burp them. I don't know how to bath them, I'd be too nervous. I'd like for someone to show us what to do. . . .It's not much sense in waiting until after the baby is born because it's going to be new to us.

> I don't know if there is anything set up for moms and newborn babies. That would be a nice little program.

Some participants indicated that they could benefit from being more involved in the cooking classes. One young woman talked about how her cooking skills needed improvement: "We need to learn how to bake and cook for going out on our own with the babies especially when the baby gets older. . . . Most people don't know how to cook and bake and stuff like that." Another woman expressed a similar sentiment:

> I know how to cook the things that I normally cook, but it's always the same things. I would like to try different things at home, but it is expensive buying the foods especially if you might not like it. It would be nice to try something different and then I would know if I like it and if my husband and little girl like it.

There were a number of participants who expressed a desire to be more involved in planning group sessions. One common suggestion for improving the sessions was the incorporation of more practical and/or fun games and activities. This aspect is reflected in the following statements:

> I would enjoy it more if there were more hands on things to do. Rather than sitting and going over things or having movies, it would be good if there were more activities. It gets tiring sitting for so long. The craft day we had a little while ago was really fun. . . .That was a really enjoyable meeting. If we had a few more like that I think it would be beneficial.

> I think all of us would like to do other things, instead of sitting from 9:30 to 11:30 just listening to the nutritionist or the nurse. Lots of us would like to do crafts. Even if we sit down and make baby pictures. Just something different every week.

> If we could make something different every week. Something for us to be doing. Probably one week a girl would have an idea of doing a craft, and I'd have a thing for next week, like baking.

Although these activities were important for some participants, others expressed dissatisfaction with the timing of information in relation to the stage of their pregnancy. The following excerpts capture these concerns:

> If your new coming into the group I think you should stay on the one thing and talk about it, like for new people they should start on a new level. It would be nice if they could find a bunch of women that were pregnant the same time. That way, you don't have the same things going on all the time and you learn about one thing the first week and something else the next week.

> Some people are ready to deliver and others aren't and then you have to do the birthing videos for the people that are ready to go. Then there are new people entering the group and videos are being played that they're not ready to see. A lot of people are nervous during the first baby and stuff.
>
> The ones that have been there a while, like there's me and couple of others, we should be put separate so that we can go ahead and discuss the next stage of our pregnancy. The new ones can start at the beginning. The whole crowd of us can go at the same time but if there is a movie or something that we have already seen then we could do something else.

Some participants felt that HBC staff could benefit from taking more time to elicit input from group members. Although most participants were satisfied with group activities, some offered suggestions on how things could be improved.

Summary. With increased participation in HBC programs, study participants became increasingly aware of how feelings and behaviors could have negative repercussions for their health (i.e., physical, emotional, psychological, and social). Equipped with a new and expanding knowledge base coupled with encouragement and ongoing support from others, participants' stories portrayed a strong determination and commitment to engage in healthy behaviors that would help them achieve the best possible health outcomes.

Evolving Social Self

The descriptive commentary provided by participants' interview transcripts

captured movement toward a more secure social self. The positive impact of HBC programs on participants' social health was reflected in actions and behaviors that surpassed previous daily norms. Valuing social contact, sharing of experiences, and improved family relations were dominant themes in the evolving social self category.

The valuing social contact property was comprised of perceived benefits derived from interacting with others while becoming aware of personal needs, like the importance of having time out from worries/concerns and having access to supportive persons. The property dealing with sharing of experiences included statements which suggested that study participants were experiencing reaffirmation of the self and building a positive self concept. The improved family relations property was comprised of descriptors which suggested that participants were experiencing greater support from significant others as a result of participating in HBC programs.

Valuing social contact. Most participants spoke about how much they valued the social interactions, the developing friendships with other pregnant moms and resource mothers, and the giving and receiving of support. Several women commented on the importance of interacting with group members: "When you're home and you're by yourself all the time you don't have that interaction with other pregnant moms"; "The Healthy Baby Club has done a lot. My first pregnancy wasn't too bad but I think that it is the opportunity to be around other

pregnant moms that makes the difference"; "I come down here and socialize with other people and the resource mother". Although the social function was valued, participants' placed equal importance on sharing a common bond with others in similar situations (i.e., pregnancy).

The support provided by group members emerged as a significant component of the group process. How participants perceived the group support influenced the degree to which they felt comfortable communicating during group sessions. One woman contrasted her initial feelings with the later comforting presence of others:

> At first when I went I was not too comfortable because I didn't know anybody. Now, everyone knows everyone's first name. . .and we're more like sisters now. We're all more comfortable and they help you with any problems you have.

This movement from initially feeling insecure in the group to increased self-confidence was highlighted by several participants:

> I was very nervous at first but the people were nice. I think that's probably what brought me back. The resource moms were friendly and I just enjoyed the other girls that were here that were pregnant. They were fun to be around.

> I was kind of shy at first, when I started going there. But after a while I started talking to them and that, right.

> I'm pretty much to myself but, it was more comfortable being around a bunch of pregnant women and talking about pregnancy things and stuff.

> I come right out and say whatever is on my mind. I feel comfortable now because I know everyone.

> I'm usually very quiet. I usually keep to myself. I'm only gradually starting to talk to everybody and getting involved. . . .It's just the way I am. I usually am more to myself and gradually I'm getting to know people more and I'm starting to speak up a little more. . . .I'm starting to talk a little bit more than usual now.

While most participants eventually derived comfort from the openness and support experienced during group sessions, some never quite adjusted because the size of the group was too overwhelming (i.e. approximately 20). One participant expressed her concerns in the following manner:

> There was talk that they were going to split the group but I don't know if they'll do that or not. . .Truthfully I think that it's just too big to get that same kind of support. The other group that I went to was really small, and people were always saying this is what is happening to me now, and I got no sleep last night, and stuff like that but, this group isn't like that. Most people just go in and sit down and usually don't say much actually.

Most participants viewed the group meetings as a time out from worries and concerns at home. For some it was the only meaningful break from an otherwise monotonous routine, whereas for others it provided an escape from household and child care responsibilities. The following excerpts capture how participants defined "time out":

> It is the high point in my week. It is the only thing I actually do during the week. I come to the meetings and spend an hour and a half with the group and I really enjoy it. It is a combination of everything. It is a chance to get out of the house and be around other people. . . .It is a chance to do things that you would not normally do at home.
>
> This is my time. I get some free time away from the kids.
>
> I find it really helpful. When I go down there I forget all about my problems. That's why I wish that they had it everyday. Even two or three

> times a week.
>
> The only thing is I look forward to getting out like that on that Friday. Like it's a break just for me. It's my time.
>
> It's the only time I get out of the house. I don't do anything else besides go to the doctor or come here.

There were some who recognized that the group support would not continue indefinitely, dreaded the loss, and were looking for ways to continue with this type of support. Some participants articulated this very well.

> I enjoy it. I can come down here every Thursday and the only thing that's going to kill me now is when I have the baby and I can't come back.
>
> I don't like getting up at all but I look forward to going there and it's going to be kind of strange when I'm going every week and then all of a sudden I have my baby and I don't go anymore. I don't know if that can be changed.
>
> I am going to miss everything from here.
>
> I will miss the group for sure. Going to the group gives me something to do. It is probably the only time I leave the house. We all learn but we enjoy just getting together. It gives us someone to talk to. You get out of the house and talk and learn what they are going through.

Sharing of experiences. A common message conveyed by study participants was that the mutual sharing of pregnancy-related experiences provided them with a heightened sense of comfort and security about the pregnancy and becoming a mother. That is, adjusting to the pregnancy and motherhood was somehow enhanced because of being there for each other and helping each other. Several participants commented on the positive impact of

sharing experiences with others:

> They're there, we go around and stuff like that and we share everything together and talk about everything. It's just good! There's not too many places that would do that for you. I mean talk to you about your pregnancy and how you're doing. Even the nurses, when they see you, ask how you are doing with your pregnancy and that. It's good.
>
> It helps us all. What I know I give to the ones that don't know much and then what they know, they help me.
>
> If your thinking there is something wrong with the baby, but really there's not, we're all going through it. More or less it's pregnancy pain where the baby is growing. It helps us through. We won't be worrying as much, we won't be stressed out over it as much.
>
> It is because that kind of makes you feel like you're relaxed and you know that its normal. You think that you are going crazy until somebody else is saying, "You know I got these really bad pains and I don't know if I should go to the doctor." And someone else will say, "Well, yeah." And someone else will say, "God, that's nothing to worry about."
>
> You learn a lot from others as well. That's the whole purpose, in my view, of this group is to share your own information and to relate. Somebody that you can relate to that's been through it. I think it's great. I know that it's helping other mothers. Most of these moms they've never been through it and just being through it yourself helps.
>
> When I came I heard stories about waking up in the middle of the night and going to the bathroom all before I was actually going to the bathroom like I am now. So I got to hear their stories and I kind of knew what to expect from them too. It's different coming from a pregnant woman than it is from the nurse.
>
> We always talk about what good and bad stuff happened that week. . . .if we had ultra-sounds done or doctors appointments. . . . Other people have older kids. They talk about the difference about being pregnant now and having another child and how that's going to affect them.

As the above passages indicate, the specialness of the group was attributed to

developing an appreciation for the boundaries of normal, experiencing decreased anxiety and lessening of fears, and learning from each other. What was of equal importance to the participants was the safety in knowing that what was shared would remain confidential. A couple of participants articulated this aspect quite well:

> I mean some people let personal things go which was great because that was what made the group special, listening to everyone else's little problems or little funny things that happened to them.
>
> Because I know the people that are down there, whatever we say in the group don't go no further than the group.

Improved family relations. Another important outcome of participating in HBC programs was the perception that family relations had been improved. A number of participants indicated that significant others were learning more about pregnancy-related matters or were more accepting of the pregnancy because of their involvement with the program. The following excerpts capture participants' perceptions of the program's impact on other family members:

> Mom knows that I'm getting more involved and it's showing her that I want to learn more about the baby and stuff like that. Mom knows herself that I didn't know nothing about babies or anything.
>
> I find that we're not fighting as much. He doesn't want no stress on me because where I'm pregnant. I lost four before. I had four miscarriages.
>
> Mom thought it was great actually. When I told her all of the stuff that I learned, she said, "go on," she didn't even know, there was one thing, I don't remember off the top of my head but you know if you do this or whatever, that things could happen. Whatever it was, she said I didn't think that. I mean even my mother learned a few things. I used to always

> talk about it, like not the personal issues about it, but, what I used to learn.
>
> We have an open relationship. . . .Now we're both learning more and we're both looking forward to it.
>
> We seem to talk more about the baby and I tell him what I have learned.
>
> It's easier to talk about the pregnancy with my dad now. I used to think the pregnancy was my thing and he didn't need to know. But now we talk about it and he's fine with it. Dad gets me up every Tuesday morning to go. I come home and he has dinner ready for me.

Summary. It was apparent from participants' comments about the group meetings and contacts with resource mothers that their social well-being had improved since becoming involved in the HBC programs. As participants indicated, group meetings not only provided a forum for socializing but also an opportunity to give support to, as well as receive support from, others in a similar situation to themselves (i.e., other pregnant moms). Besides having time out from worries and concerns at home, some participants found that as communications with significant others improved they had an extra source of support at home during their pregnancy.

Interrelations Among The Themes

The current study explored how pregnant women with limited social and financial resources were experiencing HBC programs. Based on the data presented in this report, the research team concluded that the supports provided

by HBCs were perceived by study participants to exert a positive influence on their health practices and overall level of well-being. Without exception, these expectant mothers attributed more positive feelings about the self and an increased potential for a healthy pregnancy outcome to becoming increasingly aware of health needs and healthy behaviors, as well as improved health practices.

One of the central objective's of the current study was to identify aspects of HBCs which were found to be most and least helpful by program participants. As participants in HBC programs, these women reported receiving informational, emotional, and tangible support from a number of sources (i.e., resource mothers, public health nurses, coordinators, nutritionists, and other pregnant moms). These supports were perceived to be useful in promoting understanding, facilitating acceptance of healthy choices, lessening worries and concerns, increasing opportunities for social interaction, fostering acquisition of practical skills, and increasing accessibility to essential food products.

The data suggested that the supportive environment of HBCs was a crucial factor promoting comfort and helping program participants feel better about themselves. The group meetings and resource mothers were identified as key factors in shaping and reaffirming the self. As these women adjusted to the HBC environment and developed a sense of belonging with members of the group, they acknowledged and appreciated the support derived from each other.

What was highlighted as being especially helpful was the opportunity to share experiences with other pregnant moms who came from the same area as themselves and were living under comparable conditions. Resource mothers were also seen as performing a central, supportive role both within and outside of the group context. The value placed on resource mothers seemed to stem from participants' perceptions that these women performed important social and supportive functions. That is, resource mothers were seen as friendly contact sources, communicators of interest and concern, conveyers of useful and practical information, and providers of tangible assistance. Besides resource mothers, other staff members, especially public health nurses, were seen as demonstrating caring behaviors, facilitating learning, and taking the time to listen to personal needs and concerns.

As a result of becoming involved in HBC programs, participants' stories indicated that they experienced a sense of empowerment as the meaning of healthy behaviors for the self and unborn baby were assimilated, understood and, to a certain degree, implemented into daily living. Although everyone recognized the importance of healthy behavior, some participants were more motivated than others to make recommended lifestyle changes. Two things surfaced as being very important for these women: a) having the necessary information to make an informed choice, and b) the freedom to choose actions that best suited them. The non-pressured approach of the HBC staff coupled

with positive reinforcement for any changes, no matter how minor, was greatly appreciated by these women.

Perceptions about increased emotional well-being (e.g., decreased worries and concerns, enhanced coping, adjusting to the changing norms of pregnancy, etc.) and psychological functioning (e.g., increased awareness of health needs and health practices, greater self-confidence, feeling more in control of things or having a greater sense of responsibility, etc.) were key outcomes of participating in HBC programs. Although seen as characterizing the empowerment process, these components of health did not occur in isolation from increased social functioning. The HBC environment provided the context for social activities and developing relationships, as well as a conducive forum for acquiring new knowledge and skills, developing positive attitudes toward improved health practices, and experiencing an enhanced sense of emotional well-being. Among other things, encounters with HBC staff and pregnant moms from similar and different social worlds (e.g., pregnant moms, resource mothers, health care providers, etc.), during and separate from group meetings, served to allay fears, reinforce healthy choices, and engender comfort.

It is apparent that the three constructs (i.e., creating a supportive environment, becoming empowered and evolving social self) interact and evolve around each other. Neither construct, operationalized independently, would allow for such positive influences. Participants' stories indicate that the positive

influence of the HBC on participating was due to a combination of supports, ability to make independent choices and expand social functioning (see Figure 1).

The supportive environment created by HBC staff allowed these pregnant moms to feel accepted unconditionally with their concerns being important and valued. The unconditional support inspired feelings of self worth which empowered them to feel free to make healthy lifestyle choices while enhancing their social functioning. The empowerment process occurred as a direct result of these moms feeling supported. Thus, there is no direct linear relationship, but a circular, ever evolving, realm in which each construct interacts and influences to varying degrees the other two constructs.

In summary, the findings suggest that HBC programs exerted a positive impact on participants' psychological, emotional, and social functioning. Although this conclusion is based on the experiences of a small number of program participants, the women who comprised the study sample did forge a link between supports and increased health status. The support and care provided by HBC staff helped these women recognize the need for change while encouraging them to expand the scope of their health practices. Positive interactions with the HBC staff, on both a personal and professional level, enhanced participants' comfort and ability to deal with problems. The scope of lifestyle modifications didn't happen all at once and required encouragement and

support from others. In the end, all acknowledged that a great deal of responsibility rested with the self (e.g., openness to learning, following recommended health practices, etc.).

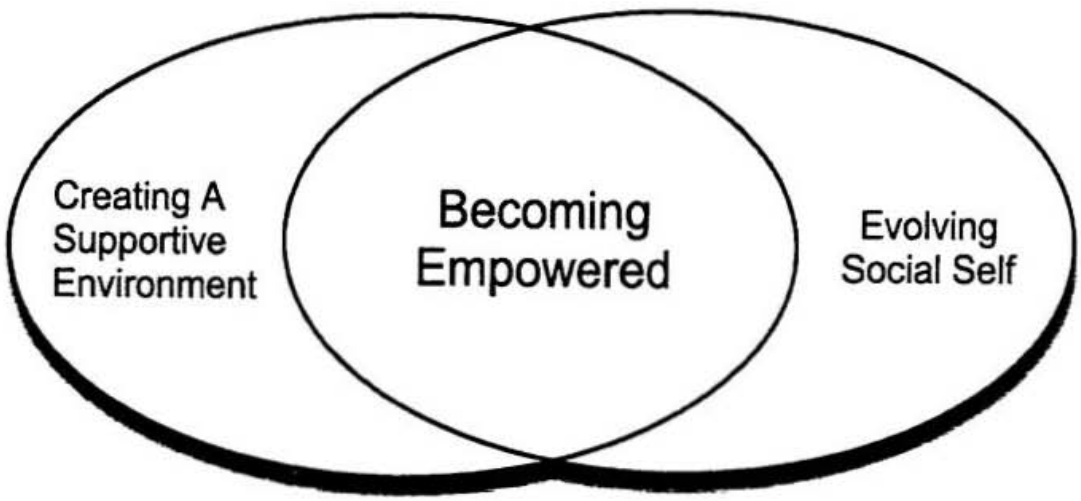

Figure 1. Experiences of Women Attending Healthy Baby Clubs

CHAPTER 5

Discussion

This qualitative study used a grounded theory methodology to explore the experiences of women attending HBC's in the St. John's region. This research illuminates the need for a supportive, social environment while demonstrating the positive behavioral, learning and social impact on the lives of these women. The discussion highlights the similarities and differences between the findings of the current study and those presented in the literature. The presentation is organized according to the three core theoretical constructs generated during data analysis.

The Quality of Prenatal Care

While this study's findings provide new insights into and a greater understanding of low income womens' experiences with prenatal care and the support mechanisms needed to address their needs, there is also support for research findings presented in the literature. The current study's findings reinforce the importance of prenatal support from family, peer groups, and health care professionals. Creating a supportive environment, through the elimination of barriers to care, fosters healthy behaviors and a healthy social self which positively impact perinatal outcomes. Three dominant constructs were identified that interacted with one another to exert positive prenatal experiences: (1)

creating a supportive environment, (2) becoming empowered, and (3) evolving social self.

Creating a Supportive Environment

Participants' stories contained an appreciation for the supportive environment of the HBC. These women felt not only welcomed but also comfortable knowing that the staff were there to provide emotional, tangible and informational support. The mothers described the ongoing and non-judgmental support provided by the staff, while constantly receiving reassurance and answers to their questions and concerns. Participants also stressed the importance of measures implemented to facilitate easy access to and utilization of services. The women identified child care, transportation and social supports as barriers that would have prevented them from attending the programs. In short, any ambivalence toward the pregnancy by the self or others was alleviated by the support provided by HBC staff and peers (i.e., other pregnant mothers) attending the group meetings.

The literature identifies the inadequate prenatal care utilization by women of low socioeconomic status and the many sociodemographic, psychosocial, and structural barriers affecting such utilization (Culpepper & Jack, 1993; Goldenberg et al., 1992; Higgins & Burton, 1996; Lia-Hoagberg et al., 1990; Roberts et al., 1998). Several authors have identified the link between barriers

to prenatal care, inadequate care and poor outcomes among low income women (Bedics, 1997; Curry 1990; Johnson et al., 1994; Lia-Hoagberg et al., 1990; Miller et al., 1989; Omar et al., 1998; Stout, 1997). Although research has been undertaken to identify the barriers to prenatal care utilization among low income women, studies have not assessed the effects of removing or modifying these barriers (Lia-Hoagberg et al., 1990; Melnikow & Alemagno, 1993; Joyce et al., 1983; Young et al., 1989). Sword (1999) argues that understanding barriers to health services utilization by low income women requires research that takes into account the lived experiences of these women.

The HBC program also provided incentives such as food supplements, token gifts and a healthy snack. Not only did the supplements provide healthy foods that the mothers would, in many cases, not have access to on a regular basis, but in addition reinforced healthy behaviors. It was important to the mothers that they have some flexibility in the choice of food supplements (i.e., substitution of chocolate milk for white milk). The gifts provided incentives and the mothers looked forward to receiving these items. Also, a healthy snack was provided at each meeting and all of the mothers commented on the importance and enjoyment of the snack and the concomitant social interaction. The literature does not discuss the impact of incentives such as small gifts, food supplements or snacks, on prenatal care initiation and utilization by low income women.

This study demonstrates the positive effects of a program when it is developed and implemented to meet the needs of its target population. The participants repeatedly identified that the health care professionals, resource mothers and HBC staff were responsive to their needs. For example, group sessions were based on the learning needs of the members present. Participants were asked for their input when planning sessions. As well, the women reported always feeling free to ask any question or discuss any concerns regardless of the topic planned for that session. In turn, this unconditional support enabled them to assume greater responsibility for their health. Repeatedly emphasized throughout the literature is the need for prenatal programs to be tailored to meet the needs of this high risk group (Covington et al., 1990; Woodard & Edouard, 1992).

The support provided through the HBC was undeniably linked to healthy behaviors, lifestyle changes, prenatal physical and emotional health by all mothers in the study. The current study illustrates that support provided by the Program Co-ordinator, HBC nurse and nutritionist were invaluable in creating a supportive environment. Health care professionals were seen as an important informational support and did provide support for behavior change and learning through a non-judgmental attitude and positive reinforcement.

There has been much research on the role of social support and how such support impacts the lives of this vulnerable group. The documented link

between social support and health has led to increased emphasis on preventative efforts that focus on building on family and community strengths (Berkman, 1995; Heaman, 1995; House et al., 1988; Stewart, 1993).

Resource mothers, women indigenous to the community, serve as a mentor to pregnant mothers by providing social support and nurturance, as well as, education regarding child development and parenting. The HBC was an effective means for providing prenatal education and support. The participants in this study felt that the resource mother was an invaluable support and always there when needed. Although the peer support model envisioned that resource mothers would play a key role in reinforcing the knowledge and practical skills provided during the group sessions, most of the study participants did not consider this aspect to be as valuable as the emotional support.

The results of this study concur with previous research. Research findings emphasize the important role played by peer support in meeting the specific needs of pregnant women from poor socioeconomic backgrounds, fostering empowerment, increasing self esteem and self care (Heins et al., 1987; Lapierre et al., 1995; Poland et al., 1992; Schafer et al., 1998; Sword 1999).

Becoming Empowered

The current study demonstrates the importance of health care professionals' attitudes towards this client population. The open support,

communication, non-judgmental attitude and continuous positive reinforcement from the public health nurse and nutritionist were identified by all mothers as being motivating factors empowering them to adopt more healthy behaviors and learn how to make healthy lifestyle changes. The mothers in this study felt accepted unconditionally by the health care professionals and did not feel threatened by their different social status. Instead all mothers felt that information was presented on a level they could understand. The health care professionals and all staff involved with the HBC were felt to be supportive and understanding of these mothers' concerns. The mothers highlighted the fact that they were able to make their own judgements and decisions appreciating the non-pressuring approach of HBC staff. The negative attitudes of health care professionals can cause a detrimental barrier for seeking prenatal care for women of low socioeconomic status (Colin et al., 1991; Lapierre et al.,1995). Omar et al. (1998) found that there existed a discrepancy between health care providers' perceptions of low income women and low income womens' perceptions of health care services. Similarly, Aved et al. (1993) found that although low income women reported valuing prenatal care, physicians perceived that these women did not value the care they received. Colin et al. (1991) reported that low income women felt that health care professionals misunderstood them and exerted social power.

This study sought to provide an understanding of the needs of low income

women, the findings demonstrate the need for reinforcement of practical knowing (e.g., food choices, cooking, infant care, etc.) as well as, acquiring new knowledge for lifestyle changes (e.g., nutrition, smoking, breast-feeding, etc.). As well as the identified need for prenatal education, these mothers requested more information on infant care needs in the post-partum period. There were also requests to strengthen the links to postpartum programs after the birth of the baby. This research illustrates that these processes can only occur when there exists a supportive environment and an environment for the social self to evolve. The literature, while discussing the need for learning and positive lifestyle changes, does not provide insight into what learning is required or how this knowledge is acquired and put into action.

Evolving Social Self

Women in the study found that their relationships at home improved while attending HBC. As they began to learn more about their pregnancy they would discuss these issues with their significant others. Also, they developed an increased self esteem and self confidence in their abilities to care for themselves, their family and their unborn child. This also helped their relationships at home. The HBC also welcomes significant others to attend with the mother providing a source of support at the group meeting, yet, many of the mothers' partners were not involved in the HBC and it is unclear whether or not

this was the woman's choice. Support from husbands/partners has been identified as an important factor affecting pregnancy outcomes of all mothers and especially those from disadvantaged groups (Norbeck & Anderson, 1989; Roye & Balk, 1996; Thompson et al., 1992; Unger & Anderson, 1988).

Peer support was also important as this impacted on the healthy development of the women's social self. The value and benefit of attending the group meetings, being able to talk with other women from the community who are facing pregnancy along with similar life stressors, was repeatedly emphasized by all women. They achieved a sense of themselves, had more positive feelings about themselves and their life circumstance and found support from each other. This group atmosphere was invaluable to these women. They found the group support was such a positive experience that they did not want it to end following the birth of their baby. They expressed a need for continued contact with the mothers from the group after the baby was born. The results of this study parallel the results of Lugo (1996) and Rising (1998) who identified the importance of bringing women of similar life circumstance together, within a peer support group setting, to foster empowerment, problem solving and healthy behavior choices. However, these studies did not combine this group experience with the positive effects of paraprofessional support. Research regarding the importance of this construct is lacking, but, it represents a significant aspect of effective prenatal care and healthy pregnancy state.

Interrelationships Among Major Constructs

The HBC program is designed to reduce the factors that cause delayed or inadequate prenatal care by low income women. Participants identified many barriers to prenatal care (e.g., transportation, child care cost, ambivalence toward pregnancy, inadequate social supports, etc.). The program allowed free access to care. The commitment of HBC staff fostered a positive feeling within these mothers regarding their pregnancy. They felt important and were given a sense of control over their life and their life circumstance. The impact of structural, psychosocial and sociodemographic barriers on utilization of prenatal care and pregnancy outcomes are discussed throughout the literature (Goldenberg et al., 1992; Lia-Hoagberg et al., 1990; Aved et al., 1993).

The importance of eliminating these barriers was significant for these women. As they began to overcome their own ambivalence and insecurities through the support they received they began to develop a sense of themselves. As their self concept increased so did their perception of their pregnancy. They emphasized being able to make their own decisions, empowering them to take control over their lives and their learning. As the supportive environment allowed them to become increasingly comfortable with each other so did their social self evolve. The interaction of these factors empowered them to assume healthy lifestyle changes and there became an increased interest in practical knowing.

The importance of a supportive environment and strong support networks for women of low income status has been substantiated in the literature (Giblin et al., 1990; Johnson et al., 1994; McKim, 1993). The process of empowerment, contributing to increased self-esteem and reduced anxiety and improved self-care has been evidenced (Lapierre et al., 1995; Sword, 1999). Studies investigating the link between support, empowerment and improved social self are lacking but, this study points to a very important interaction between these three constructs in improving outcomes for women of low socioeconomic status.

Summary

Much of what has been found in the present study does reflect what is previously reported in the literature, yet this study operationalizes the important findings of other studies and demonstrates that when a supportive environment is created, barriers are eliminated and the social self can evolve so that the empowerment process may lead to behavior change. When all of these principles are incorporated into a program, effective positive pregnancy outcomes can be achieved for pregnant women of low socioeconomic status.

CHAPTER 6

Limitations and Implications

This chapter begins by outlining the limitations of the study. The implications of this study for nursing practice, education and research will be discussed. A summary of the study will conclude this chapter.

Limitations

A limitation of the present study is that the theoretical sampling was confined to those attending HBC within the St. John's region. The HBC operates in eight other regions of the province. It is not known whether women attending HBC in a rural region have similar experiences to those attending HBC in urban regions. Therefore, only a beginning substantive theory on the experiences of women attending HBCs could be derived. Although participants were recruited from each of the four HBC sites within the St. John's region, sample size was small and limited to women 19 years of age and older. Adolescents are another vulnerable group who attend HBC and it is not known whether their experiences are similar to the young adults attending HBC. Therefore, the substantive theory produced is only applicable to women 19 years of age and older attending HBC within the St. John's region. It is recognized that additional sample variability may have allowed for a greater diversity of conceptual categories and thus, increased applicability of theoretical findings.

Implications of the Study

This study has implications for nursing practice, education and research. Each will be discussed to further our knowledge and understanding so that prenatal care can be offered to this vulnerable group that is effective in promoting healthy pregnancy outcomes.

Implications for Nursing Practice

The present inquiry has revealed that social support is a significant factor helping low income women cope with pregnancy. The degree of support experienced impacts upon their desire to receive prenatal care and promote healthy behavior change.

The nurse was an effective advocate and support person as she displayed an open non-judgmental attitude. She received these women unconditionally and gave positive reinforcement for any effort made to improve themselves. It is important for nurses caring for this population to be empathetic to and understanding of the challenges that these women face. As well, the nurse provided information and learning opportunities that were relevant and timely for these expectant mothers. The nurse was open to answer questions at any time and was cognizant of worries and concerns of the women. Flexibility on behalf of the nurse was also important. Participants were given information and encouraged to make their own decisions which were supported by the

nursing professional. Nurses must learn to talk amongst these women, making the learning fun through active participation by the group instead of lecture type learning format.

Nurses working with this client population must realize the importance and impact of support given by a peer group member of one's community (i.e., resource mother). The resource mother was viewed as an essential member of the group, a friend one could call on at any time and someone there to help if the need arose. Her role was valued primarily for the emotional and experiential support that she provided. Nurses must give their time and expertise so that the resource mother can be educated to provide the needed support, learning and encouragement to those mothers while exploring opportunities for their role to evolve.

The group atmosphere was viewed as particularly important especially in the area of providing support. It is essential that these mothers be given time to discuss their experiences allowing them to feel a sense of comfort and belonging. The opportunity for social interaction was an essential component of the HBC for all women. The participants felt that they would like to have a more frequent opportunities for input and feedback and greater involvement in session planning. Therefore, the nurse must take this into account when planning sessions.

Implications for Nursing Education

The findings of this study have implications for nursing education. Due to the fact that socially and economically disadvantaged women are at risk for poorer pregnancy outcomes the successful implementation of nursing care to meet the needs of this group presents a challenge. In order for nurses to provide effective care to this population they must have an understanding of the life challenges faced by this group and their needs. Nurse sensitivity can be increased through contact with this client population and a review of current literature. This study would allow insight into the needs of these women and how their needs can be met so that healthy pregnancy outcomes are encouraged. Nurses should listen to the stories of these women, so to explore the experiences that foster the empowerment process.

It is imperative that nurse educators teach students to be unconditionally supportive and open to the questions and concerns of these mothers. Nurse educators must guide students to work collaboratively with paraprofessionals and with the community as a whole. Nursing students must become involved in the learning process with these women, encouraging them to seek care while eliminating the barriers to such care. It is only through a continuous evaluation of the content and quality of health care, child care, family support and education that we can work towards interrupting the cycle of poor health and poverty.

Implications for Nursing Research

Based on the current study it became apparent that future research is warranted in several areas. Future studies need to include an exploration of women's experiences with HBC in rural areas of the province to investigate whether there are commonalities and/or differences with regards to womens' experiences. As well, due to the fact that adolescents are part of this client population, research exploring the experiences of pregnant adolescents attending is warranted. It is important to investigate the experiences of this group to ensure that the HBC is promoting positive pregnancy outcomes.

Due to the fact that social support was an important element fostering a healthy pregnancy, it is imperative that the role of the resource mother be further explored. Research examining the resource mother role, based on experiences of resource mothers, is required so that the relationship can be more fully understood. As well, partner support is another support arena that needs to be investigated. Many of the mother's partners were not involved in the HBC. It is unclear whether or not this was the pregnant mother's choice. Such research could explore this involvement and facilitate ways to bridge this gap in support.

Furthermore, the mothers found the group support such a positive experience that they did not want it to end following the birth of their baby. They expressed a need for continued contact with the mothers from the group after the baby was born. There were also desires to strengthen the links to

postpartum programs after the birth of the baby. Therefore, research investigating the support needs of mothers from a postpartum viewpoint would ensure continuity and consistency of care for this group.

Conclusion

The purpose of this study was to describe socioeconomically disadvantaged pregnant mothers' experiences with HBCs and identify factors believed to exert the most/least influence on program effectiveness. Using the constant comparative method of analysis, three constructs surfaced to capture participants' experiences with and the perceived effectiveness of HBC programs: creating a supportive environment, becoming empowered, and evolving social self. The findings suggest that HBC's exerted a positive impact on participants' psychological, emotional, and social functioning. The study emphasized the importance of a collaborative approach and incorporating peer support, when providing prenatal care to disadvantaged pregnant women. As well, the findings provide new insights into the needs of pregnant mothers of low socioeconomic status, so that, prenatal care programs can target their needs and hopefully improve perinatal outcomes.

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APPENDIX A: Letter of Support from Brighter Futures Coalition

Brighter Futures Coalition of St.John's & District
39 Campbell Avenue
P.O. Box 28146
St.John's, NF A1B 4J8
Ph. 739-8096 Fax 739-8097

futures@seascape.com
www.brighterfutures.publib.nf.ca

1998 10 28

Dr. Chris Way
School of Nursing
Memorial University of Newfoundland
St. John's, NF
A1B 3V6

Dear Dr. Way:

We are very pleased to support your proposal for a qualitative evaluation of the St. John's Healthy Baby Club Project. As you are aware, we are very interested in having an independent team conduct face-to-face interviews with participants in the project. We hope to learn how the project is benefiting the participants and to identify any areas for improvement. We look forward to being able to use the results of the evaluation to help strengthen the work of the project.

Thank you for the work of your team to-date. We wish you every success with your proposal.

Sincerely,

MIKE WADDEN
CHAIR, HEALTHY BABY CLUB
ADVISORY COMMITTEE

JOHN FLOOD
CHAIR, BRIGHTER FUTURES
COALITION-ST. JOHN'S DISTRICT

APPENDIX B: Letters to HBC Co-ordinators

November 3, 1998

School of Nursing
Memorial University of Newfoundland
St. John's, NF
A1B 3V6

Doreen Browne
Program Coordinator
Daybreak Parent-Child Centre
3 Barnes Road
St. John's, NF

Dear Ms. Browne,

I was asked by the St. John's Health Baby Club Advisory Committee to form a research team to conduct an independent evaluation of the St. John's Healthy Baby Club Project. As part of this mandate, a qualitative study is being proposed that will involve interviewing participants at the Daybreak site. I have enclosed a brief summary of the proposed study for your information.

I am seeking your assistance in identifying and acting as an initial point of contact for pregnant mothers currently involved in Healthy Baby Club programs at Daybreak. I am particularly interested in interviewing those who meet the following criteria: 1) attending HBC for at least three weeks; 2) mentally competent - able to understand the interview process and study purpose, and give informed consent to participate in the research process; 3) fluent in the English language; and 4) 19 years of age and over.

Complete anonymity is assured, and participants will be given an interpretive summary of their interview transcripts to review and confirm for accuracy. The proposed study will be reviewed by the Human Investigation Committee (HIC), Memorial University of Newfoundland.

If you require further information about the study, I may be reached at 745-0682 (home), 737-6872 (office).

Sincerely,

Christine Way, B.N., PhD.

November 3, 1998

School of Nursing
Memorial University of Newfoundland
St. John's, NF
A1B 3V6

Cheryl Coleman
Program Coordinator
Brighter Futures - St. John's District
St. John's, NF

Dear Ms. Coleman,

I was asked by the St. John's Health Baby Club Advisory Committee to form a research team to conduct an independent evaluation of the St. John's Healthy Baby Club Project. As part of this mandate, a qualitative study is being proposed that will involve interviewing participants at the three Brighter Future sites. I have enclosed a brief summary of the proposed study for your information.

I am seeking your assistance in identifying and acting as an initial point of contact for pregnant mothers currently involved in Healthy Baby Club programs operated by Brighter Futures. I am particularly interested in interviewing those who meet the following criteria: 1) attending HBC for at least three weeks; 2) mentally competent - able to understand the interview process and study purpose, and give informed consent to participate in the research process; 3) fluent in the English language; and 4) 19 years of age and over.

Complete anonymity is assured, and participants will be given an interpretive summary of their interview transcripts to review and confirm for accuracy. The proposed study will be reviewed by the Human Investigation Committee (HIC), Memorial University of Newfoundland.

If you require further information about the study, I may be reached at 745-0682 (home), 737-6872 (office).

Sincerely,

Christine Way, B.N., PhD.

APPENDIX C: Summary of Nursing Research Study

Summary of Nursing Research Study

Title: The Quality of Prenatal Care: Experiences of Women Attending Healthy Baby Clubs

Investigators: Dr. Christine Way, Michelle Earle-Crane, Edna McKim, Ann Manning

Objectives of the Study:
1. To identify and describe the meaning of Healthy Baby Clubs (HBCs) for pregnant women accessing this community service.
2. To develop a greater understanding of participants' support needs and how HBC programs may or may not be addressing those needs.
3. To identify relevant information which help strengthen the ability of existing programs to more adequately address the needs of at-risk pregnant women.

Rationale for the Study: The identification and successful implementation of appropriate strategies for promoting maternal health and positive pregnancy outcomes for socially and economically disadvantaged women can be quite a challenge. It has been conjectured that HBCs will provide more effective avenues for reaching targeted groups, addressing members' needs, enhancing maternal health, and facilitating positive pregnancy outcomes than traditional prenatal programs. The proposed research study will provide a clearer understanding of participants' experiences with HBCs and greater insight into their support needs.

Brief Description of the Study: The proposed study will use a grounded theory method during data collection and analysis to generate conceptual categories and a theoretical model that captures participants' experiences with HBC programs. A purposive sample of 20 to 25 participants is normally adequate, however, theoretical needs and direction of the research will determine the final sample size. Each participant will be interviewed on one or two occasions. The first interview will elicit commentary on experiences and support needs; the second, if needed, will be used to confirm the research team's interpretive summary of the main points addressed in the first interview.

Procedure for Obtaining Consent: It is requested that program coordinators will inform HBC participants about the study and seek permission for a member of the research team to contact them. Those expressing an initial interest in the study will receive a telephone call from a member of the research team who will explain the study more fully. Informed, written consent will be obtained prior to the initial interview.

Proposed Starting Date: December 15, 1998.

APPENDIX D: Informed Consent

FACULTY OF MEDICINE - MEMORIAL UNIVERSITY OF NEWFOUNDLAND
AND
HEALTH CARE CORPORATION OF ST. JOHN'S

Consent To Participate In Health Care Research

TITLE:	**The Quality of Prenatal Care: Experiences of Women Attending Healthy Baby Clubs**
INVESTIGATOR(S):	**Christine Way, Michelle Earle-Crane, Edna McKim, Ann Manning**
SPONSOR:	**St. John's Healthy Baby Club Project**

You have been asked to participate in a research study. Participation in this study is entirely voluntary. You may decide not to participate or may withdraw from the study at any time.

Information obtained from you or about you during this study, which could identify you, will be kept confidential by the investigator(s). The investigator will be available during the study at all times should you have any problems or questions about the study.

Resource mothers, nutritionists, nurses, or any other person involved with HBCs will not have access to your taped interviews or any other information that could potentially identify you as a source.

Purpose of study: The purpose of this study is to develop a greater understanding of pregnant moms' experiences with HBC programs. The study has the potential to increase our understanding of which aspects of these programs are most and least helpful to participants. The information derived may help program organizers and staff provide more appropriate and useful services to address the needs of pregnant moms.

Description of procedures: You are being asked to participate in two interviews which will be conducted at a place and time that is convenient for you. Interviews will be audio-taped (with your permission). The tape will be transcribed word for word, and will be used solely to help the interviewer recall the details of your conversation. During the first interview you will be asked to reflect upon and describe your experiences with HBCs. During the second interview, you will be

given a summary of the first interview and asked to confirm whether or not it accurately reflects your experiences. You will also be given an opportunity to provide any additional information at this time.

Duration of participant's involvement: The first interview will take approximately 60 to 90 minutes to complete. The second interview will be scheduled within two months and will last about 30 minutes.

Possible risks, discomforts, or inconveniences: There are no expected risks from participating in this study. You may refuse to answer any questions which make you feel uncomfortable and ask to terminate the interview at any time. All information that you provide will be kept strictly confidential, secured in a locked file, and accessible only to members of the research team.

Benefits which the participant may receive: You will not benefit directly from participating in this study. However, the information that you provide may help HBC staff develop a better understanding of participants' needs.

Liability statement: Your signature indicates your consent and that you have understood the information regarding the research study. In no way does this waive your legal rights nor release the investigators or involved agencies from their legal and professional responsibilities.

Any other relevant information: Findings of this study will be available to you and individuals involved with HBCs. Findings may be published, but you will not be identified. The investigators will be available throughout the study to address any questions or concerns.

Signature Page

Title of Project: The Quality of Prenatal Care: Experiences of Women Attending Healthy Baby Clubs

Name of Principal Investigator: Christine Way

To be signed by participant

I, , the undersigned, agree to my participation or to the participation of (my child, ward, relative) in the research study described above.

Any questions have been answered and I understand what is involved in the study. I realize that participation is voluntary and that there is no guarantee that I will benefit from my involvement.

I acknowledge that a copy of this form has been given to me.

(Signature of Participant) (Date)

(Signature of Witness) (Date)

To be signed by investigator

To the best of my ability I have fully explained the nature of this research study. I have invited questions and provided answers. I believe that the participant fully understands the implications and voluntary nature of the study.

(Signature of Investigator) (Date)

Phone Number

Consent for audio-taping during interviews

(Signature of Participant) (Date)

(Signature of Witness) (Date)

APPENDIX E: Interview Schedule

Interview Schedule

Interview Script

I am interested in your experiences with Healthy Baby Clubs from when you first started up to now. I would like for you to take some time to reflect upon these experiences and tell me in your own words what the HBCs means to you. You can share any thoughts, feelings, and ideas about your experiences. Feel free to talk about whatever comes to mind.

Examples of Probes/Questions to Facilitate the Interview

1. Could you think back to when you first attended HBC programs and describe what it was like for you then?

2. Thinking back to the time before you became involved in HBC programs and what it was like for you then, could you describe any changes that you have experienced? **(Probes: How has it affected relationships with family, friends, etc? How has it affected things in your life? How has your involvement in HBCs affected your confidence about the pregnancy and your ability to manage things after the baby is born? Etc.)**

3. How do you feel about your involvement with HBC programs in general? What are some of the positives? Negatives?

4. Reflecting upon what you have learned since joining HBCs, what do you consider to be most important? How has this changed the way you look at things? **(Probes: What particular experiences left you feeling good about things/yourself? Can you recall one thing that helped you cope better with problems or difficult situations in your life?)**

5. How would you rate the overall services that you receive while attending HBCs? What would make them better for you? Are there particular aspects of these services that could be improved? **(Specific areas to probe, if not mentioned: practical aspects - travel time and cost, transportation, child care, weekend/evening activities; emotional/psychological aspects - interpersonal relations with HBC staff: resource mother, public health nurse, nutritionist; group meetings; home or hospital visits).**

6. Are there any other comments or thoughts that you would like to share with me about your experiences with HBCs?

APPENDIX F: Additional Probes

Healthy Baby Club - Additional Probes/Questions

1. **Nutrition aspect** - How useful is the information provided by the nutritionist in helping you choose healthier foods? How do you find the food supplements? Were you aware of this particular aspect before becoming involved with the HBC program?

2. **Public health nurse** - How involved is the PHN in the sessions? Does she do home visiting?

3. **Gaps in services** - Would you like to have more sessions than is currently offered? Is the current ½ day per week adequate? Would you like to have more flexibility with regard to HBC activities (i.e., time of day)? Have you received any information on the postpartum period? For example, have there been any group sessions that focused on feeding, bathing, or general care of the infant? Are you aware of any sessions that would be made available to you after the baby is born? Would you be interested in participating in such sessions?

4. **Friendships/Continuity** - Do you socialize with other mothers outside of the group sessions? Do you have any contact with other mothers following the birth of their babies? For example, do those who have delivered ever attend the group sessions?

5. **Level of involvement/Nature of activities** - How do you find the group sessions? Would you like to see any changes in the format (i.e., variety of activities - knitting, computers, crafts, etc.)? Would you like to become more involved in planning for upcoming sessions? Are you asked for your opinion on the usefulness of the information being presented and the activities planned from week to week? How open are those persons involved in planning the sessions to your feedback?

6. **Group Sessions** - How do you feel about the addition of new members to the group from time to time? Do you find that this disrupts or interferes with the closeness of the group? How well are the sessions offered in terms of where you are in your pregnancy? Do you find that many of the sessions are repeated? And, if so, do you have any suggestions about ways to avoid this from happening?

APPENDIX G: Letter of Approval from the Human Investigation Committee

Memorial
University of Newfoundland

Human Investigation Committee
Research and Graduate Studies
Faculty of Medicine
The Health Sciences Centre

1998 11 30

Reference #98.187

Dr. Christine Way
School of Nursing
Memorial University of Newfoundland

Dear Dr. Way:

At a meeting held on **November 19, 1998**, the Human Investigation Committee reviewed your application entitled "**The Quality of Prenatal Care: Experiences of Women Attending Healthy Baby Clubs**" and granted full approval.

The Committee would also like to take this opportunity to commend you on the presentation of your application.

I wish you success with your study.

Sincerely,

H.B. Younghusband, PhD
Chairman
Human Investigation Committee

HBY\jglc

C Dr. K.M.W. Keough, Vice-President (Research)
Dr. R. Williams, Vice-President, Medical Services, HCC

Memorial
University of Newfoundland

Office of Research and Graduate Studies (Medicine)
Faculty of Medicine
The Health Sciences Centre

1998 11 30

TO: **Dr. Christine Way**

FROM: Dr. Verna M. Skanes, Assistant Dean
Research & Graduate Studies (Medicine)

SUBJECT: Application to the Human Investigation Committee - #98.187

The Human Investigation Committee of the Faculty of Medicine has reviewed your proposal for the study entitled **"The Quality of Prenatal Care: Experiences of Women Attending the Healthy Baby Clubs"**.

Full approval has been granted for one year, from point of view of ethics as defined in the terms of reference of this Faculty Committee.

For a hospital-based study, it is **your responsibility to seek necessary approval from the Health Care Corporation of St. John's**.

Notwithstanding the approval of the HIC, the primary responsibility for the ethical conduct of the investigation remains with you.

Verna M. Skanes, PhD
Assistant Dean

cc: Dr. K.M.W. Keough, Vice-President (Research)
Dr. R.Williams, Vice-President, Medical Services, HCC

St. John's, NF, Canada A1B 3V6 • Tel.: (709) 737-6762 • Fax: (709) 737-5033 • email: rgs@morgan.ucs.mun.ca