

Ecology of Women's Voices in Prenatal Care

by

Carmen Dodsworth

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We accept this thesis as conforming
to the required standard

.....
(Marvin McDonald, Ph.D., Thesis Supervisor)

.....
(Irene Klassen, R.N, Second Reader)

.....
(Jose Domene, Ph.D., Thesis Coordinator)

.....
(Faye Thompson, Ph.D., External Examiner)

TRINITY WESTERN UNIVERSITY

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ABSTRACT

A qualitative study was conducted to highlight mother's voices on the significance of formal healthcare services for self-care during pregnancy. Women's perceptions of personal risks and of available resources are highly influential in the developmental transition into motherhood and in the way experiences with healthcare affect the course of this process. Participants were asked to share how these experiences either helped or hindered their prenatal self-care efforts. Critical incident method from a feminist perspective was used to guide the analysis process and allow for the richness of the data to emerge. Thematic analysis and the development of a shared narrative focused on commonalities in the experiences of the pregnant women highlighting ways in which service systems serve to constrain and foster women's voices. This process is critical in giving voice to women as a first step of justice as voice is crucial to the process of empowered identity development. Six major themes emerged from the collective voice of the women interviewed. These included: "Accessibility of professionals and services needs to be obvious and within reach;" "Service System Practices that Normalize Pregnancy and Delivery;" "Relationship with Professionals Should be a Personal Connection;" "Power and Empowerment;" "Life Experiences that Influence Women's Care Choices;" and "Advice." The ecology of women's voice, or the ways in which women access healthcare services, gives insight into women's internal appraisal processes related to prenatal service systems and self-care. This emerged as a critical piece of understanding needed in order to reach women in a manner that fosters a healthy transition into motherhood. While the shared narrative gives voice to women as a means of informing healthcare professionals, there is also a diversity in the data which can be

acknowledged in future by asking questions of multiplicity of voice. In light of the ecology of women's voices emerging from this study, Motivational Interviewing (MI), a promising healthcare intervention, is an appropriate technique for professionals within prenatal services. Fostering agency in pregnant women through MI must be accompanied by the recognition that healthcare systems may themselves oppress women. This oppression can lead to a muting of women's voices and to inhibition of healthy identity development.

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CHAPTER I: INTRODUCTION

Not only are we inadequately informed about what pregnancy, birth, and new motherhood really involve, we also lack freedom to describe what we have seen for ourselves along the way. The culture often insists on our keeping the full range of our feeling and discoveries a secret.

Naomi Wolfe, 2001

Pregnancy is a discrete moment in the life of a woman in which all her hopes, fears, and definitions of her own being are called into question. At a glance one might consider pregnancy to be nothing more than the preparation for parenthood; however the implications are loftier than this. "Women's unique capacity of bearing children has been the overriding determinant of her relationship to men and of her role in society" (Rollins, 1996, p. 377). It is a time of great change, a time when many decisions need to be made. Adjustments involving work, finances and family life will likely be considered in the prenatal period, as will changes in self-care and the ways in which a woman engages with the healthcare system. Researchers, policy makers, and care providers alike must be actively assessing the effectiveness of the care system in meeting the needs of pregnant women in British Columbia. The first step in working towards the resolutions of deficiencies in the healthcare system begins a long time prior to implementing change. Each year the healthcare system spends millions of dollars dealing with preventable prenatal complications. The needed lifetime support cost associated with one Foetal Alcohol Spectrum Disorder individual was roughly \$1.4 million dollars in Canada in 1999 (Key & Lindgren, 1999). The perplexing question is how to support women in overcoming barriers to optimal self-care in pregnancy?

It is important to recognize the complexities of the issues surrounding prenatal healthcare. There are a multitude of perspectives or thought traditions that can be used to understand these complexities. Each gives a very different account of the needs of pregnant women and the role of healthcare providers in responding. Western biomedical tradition operates primarily on the basis of assessment and treatment of the physical body. Alternative care has grown on feminist tradition which views pregnancy as a natural course to be experienced and focuses on both the physical and emotional. Both critical and community health psychology offer a platform on which to examine women's interactions with the health system and how to affect change based on this understanding. The different traditions may be valid in their own right and difficult to argue against, therefore an undisputable resource is the self-care experiences of pregnant women relating to healthcare providers.

Purpose

Service enhancement and development must be highly accountable to the group that it is focused on. A thorough review of the literature and empirical research enabled Pick, Poortinga, and Givaudan (2003) to construct a roadmap for building culturally sensitive health promotion programs. The hangers of the overarching structure of program development and implementation, as outlined by Pick et al. are context (economic factors, beliefs, values, norms), person (self-efficacy, attitudes, dispositions, traits), situation (skills dealing with communication and decision making, knowledge and individual beliefs), and behaviour (actual behaviour, intentions, and stages of change). It is vital that the context of the person and their beliefs be understood in order to fully grasp constraints on behaviour prior to any attempt at implementing the appropriate

intervention. While considering each of the above mentioned areas, program implementation is broken down into stages five stages as follows; need identification and problem definition, development of intervention, pilot program, advocacy and dissemination, and up-scaling or revision. There is a high level of accountability in this model as the demonstration of rationale and effectiveness is a vital responsibility of program developers.

Within this framework both the rationale behind and the future orientation of this project is transparent. This examination of the experience of expectant mothers in British Columbia has served as a needs identification process in the service of health promotion for pregnant women. This study examined the factors in the healthcare system that help and hinder optimal health behaviours in pregnant women, and has given voice to the collective and individual experiences of these women. The voice of women depicts the process of self-appraisal as related to prenatal service experiences.

In a literary sense the broader context of this study is the literature that has come before. An understanding of voice in relation to pregnancy can be sought by examining current research. Literature also gives another dimension for understanding the context of an expecting mother. In this way one may step into the world of pregnancy, learning information, struggles and triumphs of a so-called 'typical' pregnancy. Leaning on Spencer's Phenomenological Variant of Ecological Systems Theory (PVEST) enables pregnancy to be framed as a developmental transition into motherhood. Self-care can be seen as a reflection of the emerging identity of motherhood and in this process self-appraisal is deeply embedded in the ecology of this development (Spencer, Dupree, Harpalanai, & Munoz-Miller, 2003).

Pregnancy is a complex and varied experience in women's lives. Although widely perceived in western culture as a time of joy, it can also be a time of stress even in the absence of complications relating to pregnancy. It is a time of change and a time when despite everything else that is ongoing in life, the pregnancy woman is expected to maximize self-care. Service experiences can set the tone of a woman's prenatal self-care, and as such need to be understood on the basis of values, assumptions and the services' ability to effectively support women. The shelves of bookstores are lined with a quorum of information regarding prenatal self-care, however not all of it is pertinent or correct. Key issues, which may need sorting out for many expecting mothers, are those that will have the greatest impact on the developing foetus, both positive and negative. It is important to dissect this information, particularly in the areas of smoking, alcohol, prenatal weight gain, exercise, nutrition, and social support and stress in order to separate fact from fiction. As Pick et al. (2003) highlighted, it is important to understand the context within which peoples' experiences emerge.

Research Question

The goal of the present research is to bring to light events within healthcare services that help or hinder expecting mothers' own self-care initiative and motivation. The purpose of this inquiry is to help shape prenatal policy and practices to fit well with the collective voice of women who have experienced pregnancy and birth in British Columbia's healthcare system and advocate the priority of adjusting health practice into health promotion paradigms rather than a deficit paradigm for pregnancy.

CHAPTER II: LITERATURE REVIEW

The broader context of this study is the environment of current prenatal services available in the Fraser Valley. The personal context is in both the collective and individual stories and experiences of women who have used these services, and the meaningful ways in which they felt both undermined and supported in their self-care efforts. Understanding both the prenatal system and the ways in which individual women access it is a vital step in effecting positive change on prenatal services. The ecology of women's voice is used as a descriptor of the process of women engaging prenatal services. Another perspective, often thought of as contrary to the notion of voice is the biopsychosocial model of understanding which sees health and illness as the culmination of a variety of factors, as the name would suggest. From this train of thought has burgeoned the field of health psychology, which strives to promote health and reduce the risk of disease through the application of clinical interventions and multidisciplinary work within a medical setting. Health psychologists often work to teach behaviours congruent with a healthy lifestyle, and mitigate the effects of stress through the utilization of social support and coping skills (American Psychological Association, 2003). A particularly useful intervention, called motivational interviewing (MI), is supported by a number of favourable outcome studies that are pertinent to increasing healthcare compliance. Through adaptation and explanation of the specifics of MI, it is shown as being promising in the area of prenatal self-care.

Understanding Values of Different Health Promotion Traditions

In a descriptive analysis of the relationship between community service-providers and the members of the community Nelson, Pancer, Hayward, and Kelley (2004), stress

the importance of clarifying different values and assumptions of health professionals, and the practical implications of such values, in order to foster a productive collaborative approach to healthcare. It is noted that this critical step is often overlooked, resulting in the undermining of the system that collaboration and policy is attempting to enhance. Partnerships between professionals are only effective when they meet the needs of the individuals and community in which they serve. Obstacles to achieving this vary from reluctance of citizen participation in program development and feedback, to professional disunity. Nelson et al. (2004) emphasize the critical need for citizen involvement, placing the onus on professionals to adjust their mindset to that of power sharing and democracy rather than professionals as experts. Empowerment of the individuals that professionals and the broader system serve is essential. Another obstacle to the collaboration of healthcare professionals is the incongruity of the value base of different helping traditions. The numerous traditions are too vast to cover in their entirety for the purpose of this research, instead three common vantage points are highlighted; western biomedical, alternative care, and integrative care. There is tension between these traditions that undermine the broader system and can have deleterious effects on pregnant women's self-care strategies. If this is the case between professionals, then it cannot be taken for granted how much more so this is the case between professionals and the individuals they serve. Visiting the discourse of the current prenatal system places the helping and hindering self-care experiences of pregnant women in context. It is these experiences that this project seeks to bring to light.

Western biomedical approach to pregnancy. In an explosive commentary on the effects of modern discourse on healthcare Donnelly and Long (2003) illuminate Western

rootedness in Cartesian mechanism and Descartes' dualism has created a self-undermining medical system, which has created a false distinction between mind and body rendering this system unable to effectively treat many of today's illnesses. This failure to see a person as a whole is apparent in many of today's common medical approaches to pregnancy. "In Western culture, pregnancy has been 'Medicalized.' That is, it is not viewed a natural event that will run its own course with little interference, but one that is akin to illness and needs medical intervention" (Rider, 2000, p. 407). Research indicates that societal views on pregnancy have followed course, supporting views that pregnant women are less ambitious, more fragile, and setting a precedent that an expecting woman is fair ground for unsolicited advice. Positively people have been noted to be more helpful to pregnant women, although it is not uncommon to hear of a pregnant woman being bombarded with seemingly innocent survival stories from the already experienced at labour (Rider, 2000). The culmination of all prenatal care and expectations is experienced at the time of birth. The attitudes and discourse of western biomedical ideologies are strongly reflected in labour. "Women in America are told that the hospital is the safest place to give birth and that the way the hospital delivers is the safest way to deliver. That is untrue. *What to Expect when You're Expecting* warns strongly about the dangers of home births and does not support backed-up independent midwifery as a reasonable option" (Wolfe, 2001, p. 153). North American women who choose to deliver in hospitals are told, in prenatal classes or at the time of labour and delivery, that they must dilate at a certain rate of progression in order to avoid interventions. This is known as the Friedman curve for dilation, and whether the interpretation is literal or suggestive, the pressure is apparent on the labouring woman (Wolfe).

The Friedman curve for dilation, birthing position, foetal monitoring, all of which are constraints and based on previously contrived criteria focused on the physical elements. Many women reluctantly take part in these medical rituals even if the reasons are unclear. These practices are reflective of the medical approach to pregnancy and delivery that focus on the body as a separate entity from women's minds. It is becoming clear that this failure to acknowledge the cognitive, emotional and spiritual elements of pregnancy may be detrimental to the physical progression of labour.

The mind-body connection in childbirth may, according to an increasing number of studies, be so strong that this demand that a woman dilate within a certain amount of time, with Pitocin or a C-section [caesarean section] hanging over head, can actually become "iatrogenic"- that is, the treatment can cause harm; in this instance, the very pressure can help *stop* a woman's contractions –causing the very 'condition' that surgery or other interventions are then called upon to "cure" (Wolfe, 2001, p. 163).

While research supports claims that the use of a doula shortens labour, reduces epidural use, complications and therefore indirectly lowers caesarean delivery rates, relatively few women in the United States choose to use one (Key & Lindgren, 1999). Despite the growing awareness of the need for de-medicalised approaches to working *with*, not on, prenatal women the more alternative methods of care remain widely unmentioned in mainstream rhetoric and general information brochures and websites.

Values of alternative care traditions. While alternative methods of prenatal care are more recognized today, there is still a sense of resistance to adopting a progressive demedicalized approach to prenatal services. Difficulty in affecting positive change on a

system built on a western biomedical ideology is sadly not the exception to the rule. Public health initiative must devote an equal energy between development of greater options and diffusion of ideas, with the latter often proving to be a grandiose task. (Myers, 2003). What is commonly known as alternative methods of care, including doulas and midwives, is a result of a movement that began in the 1970's to remove birth from a sick patient treatment approach to a more women-centered experiential approach. Alternative caregivers' approach prenatal care as a whole person, attending to the physical, emotional, and psychological, elements of pregnancy. Outcome studies have been positive for these methods of care, finding birth outcomes to be as favourable as physician-attended deliveries (Rollins, 1996). Where mainstream care is focused on the concrete and objective, alternative values are linked to practice through the lived experience of women. Ethical practice in midwifery is focused on human relationship, individuals in context of their own values and beliefs, and empowering the voice of women. In short, alternative care is in line with feminist virtue ethics and opposed to the disembodied approach of western biomedical practitioners in conceptualizing pregnancy and the pregnant woman (Thompson, 2003).

Integrative care. Boon, Verhoef, O'Hara, and Findlay (2004) discuss the current trend in integrative healthcare and stress the critical importance of a conceptual framework, in order to facilitate the individual consumer of such services choosing the model of care that is best suited to them. Placing different multidisciplinary approaches along a continuum makes the differences in values, philosophies, process, and outcomes of various levels of integration understandable. Of paramount importance is the need for the expectation of a patient's involvement in their care to be curtailed to the individual

within their own social and cultural context (Boon et al., 2004). That is to say, that not all pregnant women will desire to be involved to the same degree as each other, and an individual woman's participation should be allowed to fluctuate throughout the gestational period. Clearly this indicates a call for highly personalized prenatal care. There are a number of prenatal services available, but not all are welcomed into the community. Boon et al. identified a need for policy maker to consider different services in the delivery of effective healthcare, rather than a broad blanket approach. "This will necessitate an identification of which health needs are best met by each practice model and a comparison of health outcomes and costs associated with different practice models for similar patients. A healthcare system that incorporates different models for different types of care delivery needs to be flexible; especially if patients are allowed to choose the type of care they believe best suites their needs (Boon et al.). Myers (2003) has also emphasized the importance of being receptive to people's needs when developing public health practice. If the wants of pregnant women can be identified as having a successful relationship with their healthcare providers that enables them to identify their personal needs, then integrative care may be a step in the right direction. Partnerships between doulas, hospitals, and obstetricians have begun in Canada and the United States, in which doulas work towards, among other goals, facilitating a positive working relationship between women and their doctors. Specifically doulas encourage communication and bridge any existing gaps in prenatal healthcare as experienced by pregnant women (Gilliland, 2002). Acknowledging the strengths of various health traditions empowers prenatal healthcare consumers to make choices that are right for them, whether it be coherence to a particular stream of health service or the combination of different

approaches. However, in order for this empowerment to ensue, professional bodies must relinquish power first to women and then to each other.

Feminist Research Traditions Amplifying Women's Voice

Themes of feminist research are foundational to understanding the perspective of this study. "Feminist research in psychology is a perspective rather than a methodology, the goal of which is the empowerment of women" (Rollins, 1996, p. 16). Themes of feminist paradigms include: social context, diversity of perspectives, multiplicity of methods, relationship as a person, and striving to be inter-active in approach to both participants and readers (Rollins, 1996). In order to understand the stories that women share it is paramount to appreciate the context in which the stories developed, that is, to hear the women's voices. To professionals rooted in hard science the notion of voice may feel awkward and perhaps uncomfortable. Professionals belonging to the social sciences, on the other hand, have been made acutely aware of its importance by the works of Carol Gilligan. Gilligan made her own voice known by raising awareness to the fact that women do not develop through life, or experience it, the same as men. While her first works were dedicated to the application of women's relational nature specifically to moral development, this identification of women's own personal uniqueness has been unstoppable since. Beyond this, 'voice' points to the unique inner dynamics of individuals that, given a proper and respectful approach, can be heard and understood through research. This is important as it allows for research on human behaviour and motivation to be informed by and extremely personal element of the participants. Feminist research methodology diverges from other traditions by allowing the participants to shape and guide the research, as many times as is needed, in order to truly

grasp the voices echoing lived experience. While not all are convinced, feminist research has continued to grow and develop. Gilligan, Spencer, Weinberg, & Bertsch (2003) speak of the 'polyphonic' voice of a person, meaning that embedded deep within each individual are multiple ways of seeing and experiencing the world in which they live. Furthermore Gilligan et al. (2003) highlight the need for researchers to enter into a relational way of being with participants so as to capture insight without allowing the structure of research to mute or distort one's voice, as much as can be expected.

Across the spectrum different health promotion traditions allow for the inclusion of women's voice into practice to varying degrees. While there are exceptions, by and large the more traditional and medical a healthcare provider is, the less importance they are likely to place on women's voice. A balance does need to be found, as alternative care may not be the right fit for some women who nonetheless desire to be heard. It must also be noted that a failure to hear women's voice does not eliminate the influence that voice has on women's healthcare choices and experiences. On the contrary the collective and individual voice of pregnant women may be one of the most influential pieces of prenatal self-care choices. Spencer's PVEST model identifies self-appraisal as a key factor in identity formation (Spencer et al., 2003). While there are multiple levels of context it is noted that a women's perception of risk or vulnerability is weighed against available resources in this process. Therefore any insights into women's internal processes of appraisal in connection to self-care services are closely linked with their identity development. Ecology of women's voices is, in a sense, the appraisal that unfolds as the emerging identity of motherhood develops. Service experiences will be critical in the appraisal process and as such are highly impacting in identity development.

Ecology of Women's Voices in Healthcare

To see pregnant women in context it is important to understand the dynamic ways in which they engage the prenatal healthcare system. This relationship between the individual pregnant woman and the broader system, with all of its dynamic elements, is the ecology of voice. It is important to recognize that there are both internal and external forces that influence pregnant women's perceptions of choice, comfort and satisfaction with care, and ability to care for herself with in the context of prenatal health promotion services. When analyzing the effectiveness of community residents' involvement in health promotion and prevention services a number of barriers have been identified. While some are particular to a specific population, they provide a reference points for needs identification. Particularly salient to prenatal services are issues of power, inaccessibility, information, skill and communication (Nelson, Pancer, Hayward, & Kelly, 2004). Each of these factors are deeply rooted and intertwined in a rhetoric reflecting struggles that are centuries old. Scholars, philosophers and practitioners alike have, and continue to, debated over the fluid notions of power, feminism and the place of medicine in childbirth. Whilst too complex to delineate for the purpose of this research, it is nonetheless important to acknowledge the feminist thought that women's interactions with prenatal healthcare services are reflective of their place in society. That is, it is wrought with gender orders that limit true choice and power through the unsubstantiated medicalisation of birth and discrediting of relational approaches (Cahill, 2001).

Power and the healthcare system. Critical Health Psychology takes a particularly relevant angle at health promotion and the study of why people maintain health or illness, in particular by focusing a great deal of attention on the issue of power. In light of this

critical health psychologists believe an essential step in research is found in having an awareness of the underlying values of different professional traditions (Prilleltensky & Prilleltensky, 2003). As power applies to healthcare it is further recognised that due to potential of the abuse of power within the system monitoring must exist (Prilleltensky & Prilleltensky, 2003). The difficult issue facing health professionals is how to assist individuals in maintaining and achieving optimal health without defining for such individual what it means to be healthy. Society is ridden with value-laden labels such as 'wellness' and 'health' and yet how these notions are conceptualized in a meaningful way varies between individuals. Failing to listen to the individual and the meaning that they ascribe to their experiences causes them to be isolated and marginalized by a system that is supposed to support (Donnelly & Long, 2004). Healthcare professionals are perplexed by the task of how to address the macro-scale issues through policy without losing touch with the individual in practice. Prilleltensky & Prilleltensky (2003) emphasize the need for a course correction when addressing the role of power and assumptions about health and note that these basic tenets of Critical Psychology call for professionals and policy makers to take a stance of deference to the voice and strengths of individual clients. Power of the healthcare system is expressed at many levels from social policy to ways in which professionals conceptualize prenatal care, all holding in common the direct and indirect pressure they place on individual pregnant women.

Power and the interface with the broader system are evident in the collaborative efforts of multidisciplinary teams in assisting women with their prenatal self-care. The tension between mainstream and alternative care is evident in the growing body of research dedicated to role definition. In particular is the value conflict that comes into

play when alternative caregivers practice on traditionally medicalised grounds, as is the case in midwives attending hospital births. When a midwife attends a birth and an obstetrician is called in, there is a felt conflict that often results in the midwife taking a position of subservience to the obstetrician. In some cases the midwife is seen as aligning herself with the birthing woman and acting as an advocate of the woman's values (Thompson, 2003). This workplace/ service provider ethics conflict necessitates clear role definition as it can leave a woman feeling lost in a broad system of policy.

Professional power, relationships, and the identity of women. Power is an important piece of prenatal care, as expressed by the voice of women. Differentials in this area need addressing considering that such differentials may cause pregnant women to silence themselves, and their questions, in prenatal visits. It is safe to assume that this is not for lack of questions, nor is it for lack of knowledge on the part of the professionals, rather it is indicative of a breakdown in the helping relationship. It must be recognized that pregnant women are generally not used to feeling so uncertain and therefore "they need appropriately tailored support from their midwife in order to appropriately maintain and construct the appropriate self-identity" (Earle, 2000, p. 239). When women enter pregnancy they are embedded within their personal context of values, beliefs, and attitudes that are perhaps too easily pushed aside for the sake of professional opinion. Thompson (2003) noted that to see the elements of power simply look at the practical ways in which professionals and pregnant women deal with the individual beliefs. In Faye's study of the narrative experiences of mothers and midwives for the purpose of examining ethical conflicts in prenatal practitioners'; practice, abuse of power in relationship was the central theme that emerged. It was a failure to engage with women

stemming from traditional bioethics that was cited as the genesis of this abuse of power (Thompson).

Self-identity in pregnancy is another facet of pregnant women's voice relating to the issue of power. At this level women's voice has many implications for the structure of prenatal care and demands a dramatic shift in the way that prenatal care is conceptualized. The ecology of emerging identity places focus on women's self-appraisal as being pivotal in a healthy developmental transition into motherhood. While examining the nature of antenatal care and the maintenance of self-identity in pregnancy Earle (2000) noted that central to pregnant women's identity is the need to be both normal and unique in their pregnancy. While this paper focused solely on self-identity, Earle noted that control was another major theme that emerged. It is argued that self-identity is reflective in its very nature and this is a major contributor to the need for both similarities and uniqueness. Similarity needs expressed themselves in the women's desire to know that their pregnancy was progressing as expected and that the heightened anxiety around first time pregnancy was typical. Midwives were able to meet these needs by providing women with information and routine monitoring of their pregnancy. Needs for their own uniqueness were met through the personalizing of care, practically this was through the use of name, being remembered, and a sense that the expectant mother knew her midwife and could predict the manner in which she would respond to seemingly trivial questions. Sutherns (2004) completed a study designed specifically to hear the voice of women in order to understand how they evaluate and experience prenatal care and while this study was geared to rural women, the findings support notions of power, relationship and women's identity as being important to pregnant women's voice. Specifically the women

spoke of the need for relational care, embodied by a single care provider, who took time to answer questions and develop a personal approach supportive of each woman's uniqueness.

Information and accessibility of services. A unique challenge facing the broader medical system is dissemination of information. A two-year study conducted by Campbell, Thompson, and Lavender (2002), has answered this task by producing information sheets geared towards informing women at the early stages of pregnancy in order to assist them in decision making process regarding their care. A difficulty noted was that the average literacy level of the population is grade 9, yet there was positive feedback for evidence-based information. Women also requested the answers to non-evidence based information, more experiential, such as what to anticipate once their baby is brought home with them. It was further suggested that evidence-based information regarding prenatal care options be made available at doctor's offices, clinics, and hospitals, in general those places that women are likely to attend in their first trimester

Capturing the voice of the individual is the first step, allowing voice to impact at the societal level is the second. Community Health Psychology makes an important stand against other facets of health psychology charging that in the literature "community development and social change are seldom mentioned as health promotion strategies (Murray, Nelson, Poland, Maticka-Tyndale, & Ferris, 2004, p. 324). Murray et al. (2004) further note that the inclusion of social and gender issues need to be recognized as influential in health. Pregnancy is unique to women as individuals and as a collective group. Social status impacts the experiences of pregnancy and prenatal self-care is a term that must be defined by the individual for this reason. For some women self-care

embodies meeting basic needs for survival with pregnancy making this need even more critical. For others, of higher socio-economic class prenatal self-care is defined by choice; what services will make this pregnancy more bearable, memorable, and enjoyable? In the middle it is a give and take, choosing one service may eliminate the other for lack of expendable resources, or in balance with work and pregnancy. Egerter, Cubbin, & Kristen (2004) used delayed or no prenatal care as measure indicative of social disparity in healthcare. This research indicated that the likelihood of no first-trimester care increases the lower a woman's income, education, and neighbourhood affluence. The researchers recognized that social position is reflected by a number of indicators including education, economic resource, and gender, and that these factors influence an individual's ability to influence their situation and access social resource. Making prenatal care more affordable is important, providing play areas and including support persons in the care experience are practical means to this end. Opportunity to see the same health-care provider is effective in raising the perceived benefits of prenatal care, meaning that, "a woman seen by the same healthcare provider is more likely to develop a trusting relationship that will increase her continuation of care" (Rollins, 1996, p. 390).

Accessibility of healthcare services encompasses finding information, continuous care, and the right to choose the professionals involved in pregnancy. As highlighted, the working relationship a pregnant woman develops with each healthcare provider is most effective when she is empowered and free to find her voice. Difficulties arise when the power balance is thrown off, often resulting in devastation of the trust-based relationship women have with healthcare professionals. An extreme example of this is the 1996 withholding of services by the obstetricians in Windsor/Essex County, Ontario, the

aftermath of which gave rise to a study aimed at giving voice to women's experiences. McMahon et al. (2002) suggested the following meaning domains as identified by the women; their health in jeopardy, uncertainty and diminished personal control, disillusionment and disenfranchisement, assignment of blame, reappraisal of the healthcare system/government and/or the medical profession. It is clear that inaccessibility of prenatal services is detrimental to the well being of pregnant women. It is also reasonable to suggest that women who suffer failures in competence on the part of prenatal health professionals are susceptible to similar distress reactions.

Decision making about prenatal care. This research is focused on women's experiences with prenatal health services that either assisted or diminished their self-care efforts. Pregnancy is constructed as being a normative stressful event that is a discrete moment in time in which the motivation for self-care is likely enhanced, or at the very least highlighted. For the purpose of this study pregnancy is considered to be normative in that it is a natural, and often anticipated, course of life rather than a tragic unexpected turn of events. While pregnancy is often joyous, it also a time of stress in the life of an individual and family in which important decisions must be made. Specifically, a pregnant woman must make judgments about entrusting certain professionals with her care and also how they will expend their self-care energy. Entrenched within these choices is a framework of stress (the event of pregnancy), appraisal (what are my options?) and coping (what actions will I take?) that informs each woman's decision-making process. Balneaves and Long (1999) proposed an embedded decision-making model in light of the decision process of women diagnosed with breast cancer. This model intricately combines two well-established theories; The Conflict-Theory Model of

Decision (Janis & Mann, 1977), and Lazarus and Folkman's (1984) transactional framework. While the embedded decision-making model is highly complex and difficult in application it is yet another reminder of the importance of individual voice as it informs personal decision. This framework "moves beyond the pejorative dichotomy of 'good/bad' decisions that reflect normative views of treatment choice. Instead, the treatment decision-making process is personalized and made meaningful to each individual ... "(Balneaves & Long, 1999, p. 1329).

In addition it must be noted that appraisal is a critical piece of decision-making. When faced with decisions regarding prenatal services and choices regarding self-care, women can only act on the information readily available. Prenatal services are only useful if they are known, obtainable, and deemed a reasonable option, that is, the personal cost of using a service is appropriate to the benefit redeemed. Awareness of resources is the lifeline of community resources. Gaps in generational social networks which services have relied on, via 'word of mouth' advertising, is insufficient in today's urban societies. Women to women mentoring was a ecological foundation of past times, and services today need to recognize and fill the void that has been left by disconnected families and communities. Women today rarely use a service because their mother or aunt used it; in fact many women find themselves in isolation from pivotal generational family figures at the time of their first pregnancy. Resources, such as doctors, that women are likely to access in discovering their expectant state need to serve as a well-spring of information regarding the local prenatal services that are available to women. Family physicians have been implored to take the lead in patient education, which has been defined as "the process of influencing patient behaviour and producing the changes in knowledge,

attitudes and skills necessary to maintain or improve health” (Leawood, 2000, p. 1712). It is important that healthcare service providers acknowledge the changes in societal structures and address the gaps in information dissemination that are left behind. Without these adjustments being made, women seeking prenatal healthcare options are left to pay the price.

Before change can be affective on our system of prenatal services pregnancy must be understood through the experiences of the individual and the collective voice of women. Again, the challenge for researchers, policy makers, and professionals alike is to hear the collective voice of prenatal women without forsaking the impact of such things as socio-economic status on the individual woman.

Public Health Services Available to Pregnant Women of the Fraser Valley

Prenatal public health services vary between individual public health units in the Fraser Valley. The following services are available to women in the Langley area.

Best Babies of Langley provides ‘at risk’ expecting mothers with support and information. Women may participate as soon as the pregnancy is detected through to six months postpartum. Contact is made by referral from a family doctor, friends, self, food bank etc., or through a pre-registration form that is filled out by mothers at the Langley Memorial Hospital during an orientation visit. The criteria for participation in this group are any or all of the following; low income, social isolation, drugs and/or alcohol use, diabetes, previous pre-term delivery or complicated gestational history. Weekly group sessions are held where a healthy lunch is provided and participants are given vitamins and vouchers for food. Public health nurses provide individual counselling at the mother’s home or the public health unit. During these sessions the nurse has a flow sheet

of information to work through depending on the client's trimester. If drugs and/or alcohol are being used the model employed is harm-reduction, and ultimately there is an attempt to connect the client with the methadone program.

At the time of this research free teen prenatal classes were also held for expectant mothers under the age of twenty-five. Mothers were invited to bring their partner or a friend to the group, which was run by public health nurses. This group covered basic nutrition, foetal growth and development, and labour and delivery. This group is no longer running due to funding shortages.

A labour and delivery class is also offered at Langley Memorial Hospital. This is a single class offered to those who plan to deliver at the hospital, and is taught by nurses from the hospital. The fee for this class is waived for those who are unable to pay.

A series of prenatal classes, which was offered to non 'at-risk' pregnant women through Kwantlen College, has been cancelled as of August / September 2003. The cost of the program was \$115 per couple. Douglas College now offers a similar program, which teen mothers may attend. The program covers foetal development, basic nutrition, and labour and delivery. It is offered for a fee.

During the course of this research the Fraser Valley public prenatal services also endured the retirement of the full time nutritionist. Unfortunately this position will not be replaced due to funding.

Both public and private services are in place to provide information, support, and structure, and are offered on a sliding scale depending on the woman's socioeconomic status and the type of service desired. As important as having the services available to expecting women, is having an effective and efficient means of helping pregnant women

optimize self-care in challenging circumstances. While many pregnant use services to help them make the desired behavioural changes in order to improve their self-care, there are others that continue to make poor lifestyle decisions during the critical gestation period. Helping the latter group is of paramount importance for prenatal healthcare services alike.

Fraser Valley illustrated ecology of women's voice in healthcare. The literature serves as a backdrop to this study what the services in the Fraser Valley make concrete to pregnant women. Embedded within the list of services are countless stories of the ways in which women in the Fraser Valley interact with the healthcare services available to them. While progressive by some measures in that midwifery is covered by BC HealthCare, the public services are sadly lacking in alternative measures. This study is aimed at creating a forum for the unique and collective voices of women who have engaged with prenatal healthcare services in the Fraser Valley for the purpose of enlightening professionals and examining different approaches of providing support. Providing a basic explanation of services enables readers to place this research within the service context out of which it has grown. Specifically this study focused on the ways that prenatal services both helped and hindered pregnant women in their self-care efforts. In this study self-care is defined as actions taken by pregnant women to increase or maintain health through out the gestational period, as well as those geared towards alleviating 'symptoms' of pregnancy such as nausea, fatigue, etc.. In order to provide a context for the notion of self-care it is important to recognize some of the common related challenges that a pregnant woman may face in her journey. These challenges, while not affecting all expecting mother to the

same degree and may even vary throughout a specific pregnancy, are noteworthy events in the journey towards self-care.

Challenges to Self-Care During Pregnancy

There are many lifestyle adjustments during pregnancy that an expecting mother may face, and which of these she chooses to tackle depends on personal priority, beliefs, information, and supports rendered useful and available. Adjustments to lifestyle include everything from cessation of habits be it smoking or non-nutritious foods, to the curtailing or maintenance of healthy patterns in spite of changes brought on by pregnancy. While some challenges have almost become synonymous with the term pregnancy others are more individualized and yet wherever on the continuum a particular challenge may fall, each remains very pertinent for the expectant mother who faces it.

Smoking during pregnancy. The detrimental effects of smoking during pregnancy have been well accounted for. This list includes low birth weight, increased risk of miscarriage, still birth, sudden infant death syndrome, cognitive impairment, vaginal bleeding, abnormal placental implantation, premature placental attachment, and premature rupture of the membranes (Eisenberg, Murkoff, & Hathway, 1996; Health Canada, 2000). Yet, sadly each year there are women who make the choice to continue throughout their pregnancy. One qualitative study examining the barriers to smoking cessation in pregnancy found that the role of meaning of smoking played an important role, as did the interpretation of facts relating to smoking. The author concluded that public health nurses through their relationships, have great preventative capabilities in delivering smoking cessation interventions and that training of such techniques should be made a priority (Tod, 2003). A study examining the effectiveness of self-help smoking

cessation material, involving over 1500 women who smoked at the onset of pregnancy, illustrated that the role of professional intervention cannot be overlooked in the area of prenatal smoking cessation. While the material was deemed acceptable by both midwives and pregnant women, it was labelled as ineffective by the randomized controlled study as the intervention group had a quit rate of 19%, not significantly different from 21% quit rate of those who received normal midwifery care (Moore et al., 2002). Rodriguez, Bohlin, and Lindmark (2000) studied health behaviours of pregnant women, looking specifically at the psychosocial predictors of smoking and exercise. Social support and hostility were found to effect health behaviour directly by influencing perceived stress levels. Therefore, women who perceived more stress, generally had lower social support, and were less likely to exercise and more likely to smoke. Effects of age are also seen in smoking studies, as young mothers are more likely to smoke however an older pregnant smokers report smoking a higher number of cigarettes per day. Smoking is also linked with alcohol consumption and this can make it difficult for research to control for this confounding variable (Health Canada, 2000). Another important predictor of health behaviour in pregnancy was health awareness.

Alcohol use and pregnancy. Many women in Canada drink socially, and often this occurs before a pregnancy is detected. It is for this reason that estimates of babies exposed to alcohol in utero are as high as 25% in Canada (Koren, Nulman, Chudley, & Looke, 2003). The impact this teratogen on foetal development depends on the gestational age, with first trimester consumption affecting structural and anatomical development while in the remaining trimesters alcohol causes growth and functional impairment. The resulting deficits range in severity; miscarriage, growth restriction and

foetal alcohol symptom disorder considered most detrimental. A less severe impact of foetal alcohol exposure is the development of some FAS symptoms, which is known as foetal alcohol effects (Dzakpasu, Mery, & Trouton, 1998). Children with FAE face a unique challenge in that their condition is not visible in their structural development, as it generally is with foetal alcohol symptom disorder. This lack of visibility can leave a child at a further disadvantage as their cognitive and behavioural disabilities are not always understood, or even acknowledged. It is not known how much alcohol can be safely consumed in pregnancy without adversely affecting the developing foetus, and women are often advised to avoid alcohol all together for the course of their pregnancy. In 2002 there were an estimated 280,000 Canadians laden with the task of living with foetal alcohol symptom disorder, a task that will cost the country approximately \$420 billion in lifetime support; for each of these individuals the cost is incalculable (Blondin-Andrew, 2003). The deleterious effects of alcohol on these children range from structural abnormalities of the face to cognitive dysfunctions, which manifest as complex neurobehavioral patterns. Common patterns seen in children diagnosed with foetal alcohol symptom disorder include attention deficit hyperactivity disorder, inability to foresee consequences and learn from prior experiences, immature behaviour, lack of organization, poor abstract thinking and adaptability, impulsive behaviour, and communication problems (Koren et al.). Developing an accurate report of alcohol related birth defects and is one of the goals of the Canadian Perinatal Surveillance System, a multi-disciplinary team seeking to gather accurate data on all recognized pregnancies in Canada. This initiative may bring healthcare professionals one step closer to

understanding and heading-off one of the leading causes of preventable birth defects and developmental delays among Canadian children (Dzakpasu et al.).

Prenatal weight gain. Suitor (1999) did an extensive review of the literature regarding pregnancy recommendations and found that pre-pregnancy body mass index (BMI) is an extremely important piece of the gestational weight gain puzzle. Hulsey, Bondo, Hulsey, & Newman (2005) found that 8% of very low birth weight rate could be attributed to inadequate weight gain in pregnancy and that 19% of very low birth rate births could be attributed to a BMI that is outside the recommended range at conception. Pre-pregnancy obesity has been found to be a significant contributor to foetal size and it is obesity, as opposed to pregnancy weight gain or glucose intolerance, that greatly increases the risk of developing pre-eclampsia (Yogev, Langer, Xenakis, & Rosenn, 2005). While the link between obesity and caesarean rates has been made by some (Suitor) others have concluded that any increase notices is reflective not of obesity rather an increase in glucose intolerance (Yogev et al.). A BMI greater than 29 at the onset of pregnancy puts a woman at an elevated risk of having a child with a neural tube defect (NTD) in spite of folic acid intake (Werler, Louik, Shapiro & Mitchel, 1996). An instructional pamphlet that the Fraser Health Authority issued the recommends that women gain between 15-40 lbs based on their pre-pregnancy weight, suggesting 'underweight' women gain 28-40 lbs while 'overweight' women aim for 15-25lbs (Fraser Health Authority, 2002). Exceptions to recommended weight gain still need to be made for obese women, who should have their weight monitored carefully by trained professionals. Unfortunately there is nothing that can be done to change pre-pregnancy weight once a pregnancy is detected, and even for women who are within the normal

BMI range, weight gain in pregnancy can be a source of stress. Attempting to control weight gain to a regimented rate of increase can be difficult and frustrating to many expecting moms. Without the proper support, this stress can build and become a source of anxiety. In a study reviewing the practice of implementing the recommended weight gain guidelines, Cogwell (1999) interviewed 2,300 women via questionnaire and found that almost half of participants reported receiving no instruction or inappropriate advice regarding weight gain during pregnancy. Even more fundamental was the revelation that women's target weight was very close to recommendation when advice was given. It is important that professionals assist expecting mothers in finding a way to minimize unneeded stress in pregnancy, as it can lead to poor health behaviours. Prenatal professionals must actively facilitate women in managing both the emotional and physical aspects of weight gain in pregnancy, thus reducing such unneeded stress.

Exercise during pregnancy. Exercise is linked closely to weight gain in the mind of many pregnant women and for an uncomplicated pregnancy exercise within guidelines is not contraindicated. Included in a comprehensive guide to prenatal care issued from a team at the University of British Columbia Faculty of Medicine is the directive that pregnant women can reasonably engage in 30 minutes of moderate activity most days of the week (Kirkhan, Harris, & Grzybowski, 2005). A study by Magnann (2002) on the effects of prenatal exercise involving 750 low-risk pregnant women engaged in regular prenatal care concluded that moderate to heavy exercise reduced infant size at birth. Most importantly, the smaller babies had less fat mass and suffered no negative effects and researchers further hypothesized that this reduction may reduce risk of adult obesity. This same study also noted that exercising women had more upper respiratory colds and

influenza, higher incidents of labour induction, and had longer first stage labour. It was also noted that fewer umbilical cord abnormalities were found in the exercising group, however no significant difference was found in neonatal death, pregnancy-induced hypertension or diabetes, anaemia, or antenatal hospitalization. Weissgerber, Wolfe, and Davis, (2004) further stated that regular and occupational prenatal exercise may be pivotal in reversing or preventing pre-eclampsia, which affects 2-7% of pregnancies and is a leading cause of maternal and foetal mortality. As encouraging as this might sound there is a gaping lack of conclusive data in the area of prenatal exercise, which has left many practitioners with only potential negative effects. Health Canada has taken the cautious stance in acknowledging that while regular exercise appears to improve general health the risks and benefits have not been sufficiently understood (Health Canada, Family-Centered Maternity and Newborn Care, 2000). The areas of specific concern are: musculoskeletal changes, maternal and foetal fat temperature, hemodynamic, oxygen demands, and energy demands (Wang & Apgar, 1998). Women are cautioned to monitor heat and exhaustion, keep up fluid intake, and avoid exercise that involves risk of falling (Water skiing) or lying in a supine position. Exercise is often put forth as a great way to counter fatigue, nausea, constipation, backache and to help in labour and delivery as well as increasing the speed of recovery to prepregnancy form (Province of British Columbia, 1998; Eisenberg et al., 1996). Exercise, however, is rarely mentioned as a vital component to optimal prenatal health. Clarke and Gross (2003) study the effects of low-risk pregnancy on exercise patterns and found that 39% of participants who had engaged in weekly exercise prior to conception did not maintain this activity level in pregnancy. Authors found that the women in their study generally perceived rest and relaxation to be

more pertinent during pregnancy. Furthermore, while 96% of participants had received information on the topic of prenatal exercise during their pregnancy, at 16 weeks the majority of this information came from books and magazines, and at 25-38 weeks the source of the information was primarily family and friends. The utilization of exercise as an effective coping strategy to reduce stress and increase one's overall sense of well-being is not forefront in the literature. In 1996, Dr. Karen Nordahl, clinical associate instructor at University of British Columbia's Faculty of Medicine, founded the 'Fit to Deliver' program in response to the lack of relevant, current and accurate information available to pregnant women (Nordahl, Kerr, & Peterson, 2000). Complete with a PARA med-X for pregnancy, which is an extensive review of current physical and nutritional levels to be filled out and signed by a women's primary healthcare provider for the purpose of individualizing information. This program gives a list of contraindications to, and guidelines for, exercise during pregnancy, including instructional pictures. Also included are sample menus and a copy of Health Canada's food guide. Dr. Nordahl promoted exercise, sighting shorter labour, more energy, less nausea, fewer caesarean sections and forceps deliveries as tangible benefits of exercise. Vague concepts, such as "increasing workouts by 5-10%" (p. 3), and recommendation of maximum oxygen uptake score (MOU) as assessment of current fitness, may decrease the usefulness of such a comprehensive guide. Conversely, overly simplistic advise such as responding to lower energy levels with the directives "Eat a balanced diet. Do not overexert yourself." and "Rest when you feel tired" (p. 17) may be just as detrimental to the application of this program (Nordahl et. al). Ultimately the usefulness of such informational programs as this is contingent on the useful participation of prenatal care providers. Prenatal

professionals and their level of engagement with pregnant women are the vital components, without these elements relevant information regarding the risks and benefits of prenatal exercise becomes very difficult to apply.

Nutrition in pregnancy. Another issue tied closely to the issue of maternal weight gain in pregnancy is nutrition. Adding to the complexity of achieving optimal nutrient intake during pregnancy is the issue of food safety, primarily surrounding items such as; artificial sweeteners, caffeine, delicatessen foods, herbs, seafood, eggs, fruits and vegetables, dairy, meats and leftovers. Researchers from the University of British Columbia have compiled guidelines for evidence-based prenatal care including food safety issues (Kirkham, Harris & Grzybowski, 2005). By coding studies as patient oriented and consistent to disease oriented and opinion the dietary guidelines noticeably point to a clear lack of conclusiveness in the literature as none of the research reviewed received a patient oriented coding. Conversely, literature geared to expecting mothers makes it very clear that eating well is one of the most vital aspects of prenatal self-care. Complications linked to under nourishment are listed as delayed brain development, retarded foetal growth, anaemia, preeclampsia, and premature labour (Eisenberg et al., 1996). Specific nutrients that have received a note of special importance include mixed carotenoids, vitamin E, magnesium, zinc, selenium, and calcium. A diet that includes recommended doses of this list of nutrients may combat a host of conditions including preeclampsia, decreased placental microcirculation, congenital anomalies, spontaneous abortions, pregnancy-related toxaeimias, extended pregnancy or prematurity, malformations, low birth weight, and pregnancy induced hypertension (Utley, 1999). Although this list is not exhaustive, it could be of significance to at least some of the

19,930 or 13,409 live births in British Columbia in which maternal (i.e., hypertension / eclampsia, diabetes etc.) or prenatal (i.e., retarded foetal growth) complications respectively were noted (BC Vital Statistics Agency, 1999). Prenatal nutrition is a complicated issue and may even be an indication of stress and support. Hurley, Caufield, Sacco, and Dipetro (2005) found that pregnant women who felt more fatigued, stressed and anxious consumed more foods while decreasing their intake of micronutrients. The suggestion was then made that psychosocial factors be considered as a piece of prenatal nutrition care. When looking at ways to deliver effective prenatal care to women, including nutrition counselling, the importance of understanding women within their context cannot be emphasized enough.

Stress and social support. While pregnancy is regarded as a joyous time in a woman's life, it is also recognized as a time of immense change and challenge. Ranking 12th on Holmes and Rahe's (1967) Impact of Events Scale, pregnancy can be a great source of stress. The experience of pregnancy includes changes to many attributes the woman once considered relatively stable in her life, including that of her appearance and many of her relationships. Sexuality during pregnancy may undergo many changes and profoundly impact a pregnant woman's relationship with her partner. Pregnancy and the postpartum period have been shown to exacerbate or be the genesis of sexual difficulty for many couples. A difference in desire between partners is a common difficulty (Blitzer & Alder, 2000). It is important to recognize that the onset of pregnancy may disrupt one of the key support systems for pregnant women. The stress an expectant mother experiences during pregnancy is not all benign. DiPietro, Hilton, Hawkins, Costigan, and Pressman (2002) studied foetal heart rate as an indication of foetal neurobehavioral

development and found an increase in foetal activity of women who perceived their pregnancy as more stressful. The foetal heart rates were lower when women had a positive and uplifting view of their pregnancy. This is an important finding as it adds credibility to current thought that a pregnant woman's emotional state impacts the environmental nature of her womb, which in turn impacts the developing foetus. Researchers have speculated that even minute changes in foetal development may have immense effects in postnatal psychophysiology and behaviour (Dipetro et al.). Prenatal stress has been linked to adverse birth outcomes including low birth weight or a weight of less than 5.5 lbs and premature births, which are those prior to 37 weeks gestation (Stanton, Lobel, Sears, & Deluca, 2002). Both of these complications are serious to the individual and the healthcare system. The distress of giving birth to a struggling baby is immense, particularly if the newborn is placed in the neonatal intensive care unit for any duration. Lobel, Devinent, Kaminer, and Meyer (2000) took a closer look at the impact of prenatal maternal stress on birth outcomes of medically high-risk women, and also found an important underlying factor to be disposition. Mainly, women who were less optimistic delivered significantly lower weight babies and view their pregnancy as more stressful. Those who were optimistic were more likely to engage in health behaviours such as exercise. The researchers concluded that stress itself has minimal impact on pregnancy rather it is optimism, particularly the lack of, that is more profoundly linked to poor birth outcomes. Similarly Rodriguez, Bohlin, and Lindmark (2000) concluded that psychosocial factors such as social support and hostility were strongly linked to health behaviours in both direct and indirect manners.

A key to alleviating some of the stresses of pregnancy may be found in the role of social support. It appears as though the support network available mutes an expectant mother's perception of stress, which directly affects health behaviours (Rodriguez et al., 2000). Health Canada (2000) has issued National Guidelines for maternity care in Canada, and acknowledges the role of family and social support. Standard of care included assessing psychosocial history, which encompasses: lifestyle, interpersonal relationships, levels of stress/anxiety, adequacy of personal/ family support, financial status and working/ living arrangements. Professionals are guided to use a standardized form for gathering this information, which is touted as a means of developing rapport as well as ascertaining if assistance is needed in addressing psychosocial issues. Further attention is also given to assessing for and intervening in the case of suspected domestic violence, an immensely important issue that is too broad to go beyond recognition in the current study. Furthermore, a women's socioeconomic status may determine the level and type of prenatal support and services that she feels is accessible to her, as previously outlined in this literature review. It is clear that pregnancy will remain to be a stressful event, but what is also apparent is that there are tangible ways to manage the stress effectively through both intervention and prevention.

It is evident in current literature that there are many obstacles to women who want to optimize their self-care during pregnancy. Each woman will experience the difficulties in an individual way and may need individual attention to overcome the challenges. While nothing will completely alleviate each struggle, many women turn to services in both the public and private sector for assistance.

There are many different approaches or resources available to professionals aiding women in lifestyle adjustment. These approaches stem from diverse traditions and as such hold different conceptualizations of the obstacles to prenatal self-care. When everything else is stripped away, it is the professionals and their personal effect that will be felt by the individual woman as either deterring or aiding her in achieving success over personal barriers.

Professional Intervention in Prenatal Self-care

Motivational interviewing (MI). Motivational interviewing increases readiness for change through a client-centred approach aimed at resolving ambivalence about altering one's behaviour (Miller & Rollnick, 1991). Key techniques used in motivational interviewing are reflective listening, rolling with resistance, agenda setting and asking permission, and self-motivational statements (eliciting change talk). Ultimately all are used in a way that enables the patient to discover for herself how their current behaviours may be incompatible with core values and personal goals (Resnicow et al., 2002). The rationale for including MI as a piece of this study was the promising results of various studies which have demonstrated increased compliance and patient satisfaction, practical program successes, and clinical effectiveness in health promotion during pregnancy and birth.

Patient non-compliance with healthcare initiatives is one area that MI has demonstrated effectiveness. Smith, Heckemeyer, Kratt, and Mason (1997) conducted a pilot study with overweight women diagnosed with non-insulin-dependent diabetes mellitus. Patients took part in a 16-week behavioural weight control program alone or with an additional three sessions of MI. The MI group demonstrated better glycemic

control, a greater likelihood to monitor blood glucose, and higher session attendance. Berg-Smith et al. (1999) found that children with high cholesterol levels showed a higher level of adherence to medical programs and reported a higher level of satisfaction with the intervention itself when MI was added to treatment. In another study psychiatric patients demonstrated greater compliance with medical professionals and higher participation in care when MI was utilized (Kemp, Hayward, Applewhaite, Everitt, & David, 1996).

Confidence in the ability of MI is further bolstered by previous examples of program success. Resnicow et al. (2001) found that participants who received telephone MI from registered dieticians or dietic interns reported an increase in fruit and vegetable intake at follow-up. The dieticians and dietic interns had only received one training sessions in MI, which may speak to the ability of MI to be taught and learned. Another study found that three or fewer sessions of MI has been shown effective in significantly reducing problem drinking in pregnancy. Results are fairly stable over a period of up to one year and are similar to results achieved through more extensive treatments (Miller, 2002).

In terms of clinical effectiveness, MI has been shown to be an effective intervention for smoking cessation during pregnancy resulting in significant decrease in the number of cigarettes smoked daily (Glasgow, Whitlock, Eakin, & Lichtstein, 2000), and significantly higher quit rates during the prenatal and postpartum period (Valanis et al., 2001). A number of studies have shown the effectiveness of MI in reducing drinking in pregnancy. Hankin, Sokol, Canstrelli, and Shernorr (2000) found that the heaviest drinkers reduced their alcohol consumption the greatest amount, and that drinking

amounts were significantly reduced in subsequent pregnancies. A positive relationship was also demonstrated between MI and better birth outcomes. Chang, Goetz, Wilkins-Haug, and Berman (2000) found that adding a MI feature to traditional standard care increased the number of abstinence rates of pregnant women. Handmaker, Miller, and Manicke (1999) showed that women who received MI, when compared to women who received an information pamphlet, showed a greater reduction in alcohol use in pregnancy. The women who had been reaching the highest blood alcohol level showed the most drastic reduction in the amount of alcohol consumed. Having demonstrated effectiveness in both high and low risk situations, MI then becomes a promising intervention to assist women to make healthy lifestyle choices in pregnancy contributing to positive birth outcomes.

Adaptation of Motivational Interviewing to Prenatal Self-Care

Motivational interviewing (MI) works within the stages of change model, which is consistently assessing where the client is at and empowering the client to make responsible choices (Hohman, 1999; Zimmerman, Olsen, & Bosworth, 2000). Using Zimmerman et al. as a template, the present writer has adapted protocol questions to apply more readily to the prenatal setting (see Appendix A). The clinician uses skilled questioning to understand the clients' orientation towards change and raise awareness of the possibility of behaving differently. In the precontemplation stage the patient is not thinking about making change. An expecting mother may continue to drink or fail to exercise, believing that their foetus is immune to complications. The mother may have an external locus of control and lack general health information. The key motivational focus of this stage is on the personalization of information. The clinician may use specific

examples of the woman's developing foetus, what stage it is at and the risks of exposing it to certain substances. It is key that empathy and reflective listening be used to develop rapport and gently allow for the mother to move into the next stage, the contemplation stage.

In the contemplation stage information giving is vital. In a nonconfrontational manner the mother is given further information regarding self-care during pregnancy and the effects of noncompliance on her developing foetus. The mother is given a forum and encouraged to weigh the benefits and risks of her behaviour. A key technique is to develop discrepancies between the positives and negatives of self-care, through the use of reflective statements. The motivational focus is the discrepancy between personal goals and beliefs and current behaviour. The clinician may point out that the woman desires the best for her child's health and is willing to work at it and yet finds smoking to be very personally enjoyable in spite of the risks. As the expecting mother begins to weigh the risks and benefits, the counsellor subtly draws her into discussing her feelings about change. It is important that change talk and self-motivating statements be elicited from within the mother, rather than be generated from the clinician. When this occurs the mother is shifting into the preparation stage.

In the preparation stage the clinician must remember two key principles of MI, avoiding argumentation and rolling with resistance. In the preparation stage, the mother is able to visualize making small changes. In the case of a mother with gestational diabetes, they may begin to see the benefits of measuring blood sugar levels and imagine that they could do it once a day. It is important to avoid labels that are emotionally charged, which could increase resistance and rarely evoke change. Before the mother is able to begin

making change she must feel that it is possible. The counsellor focuses on developing small and manageable steps and in doing so helps the woman to maintain her motivation. Instead of setting a goal of making better food choices the counsellor may work with the woman to define actual behaviours that are encompassed by the goal of better food choices, such as drinking 8 glasses of water a day or only eating fast food once every two weeks. Once she is able to visualize herself taking tangible steps, the expecting mother is ready to move into the action stage.

In the action stage the woman is taking definitive steps towards change. When working with women in this stage the motivational focus is on reinforcement in order to prevent the loss of momentum due to discouragement. By asking the mother what is helping and what has been more difficult than expected about exercising regularly a forum is opened to deal directly with obstacles and to encourage the things that are helpful. Focus can also be given to the gains the woman has personally felt as a result of making a change, such as having less difficulty sleeping or less back pain due to moderate and regular exercise. Once the changes in behaviour have been established the expecting mother moves into the maintenance and relapse stage.

In the maintenance and relapse stage it is important that the clinician support the self-efficacy of the client. The mother must be able to manage the change over the course of the gestation, too lofty of a goal and she is likely to relapse. The key motivational focus in this stage is to keep the mother engaged in the process of change. Continue to draw on past successes and work through difficulties. By gently evoking discussions around setbacks, the counsellor can reframe such incidents as learning experiences. The counsellor may ask the woman what she learned about herself when she stopped

exercising for a period of time, it may be that the woman actually found she craved it or that her energy level dropped significantly during that period. In this situation the counsellor may commend the woman for getting back into exercise after a period of abstinence, as this requires much determination. By employing these strategies the counsellor may help the woman to keep focused and avoid a complete relapse of behaviour through gestation and even beyond.

There are many lifestyle challenges facing pregnant women, both collectively and individually. Personal support for making and maintaining adjustments to pre-pregnancy lifestyle are foundational in paving the way to success. Both support of self through disposition and self-belief, as well as support by others by way of social and family support are important. The professional community, while not without challenges, is also a valuable resource available to women in assisting with lifestyle adjustments. Changing perspectives, habits, and ways of being is a grandiose task facing prenatal professionals and pregnant women. While encumbering for some the benefits of such changes are ineffable to each healthy newborn child and their mother.

Conclusion

Pregnancy is a defining time in the lives of women and a time in which the healthcare professionals are pivotal. Shifts in the climate of societal discourse have made room for the evaluation of different healthcare traditions. Understanding into the most effective ways to support women in their prenatal self-care initiatives are offered through the field of Health Psychology. Mainstream medical practices are deeply rooted in dualistic philosophy that promotes the separation of mind and body as two different entities. Alternative methods of care argue against this, naming this a false distinction

that inhibits women's ability to be truly met by the professional community. With a divide in place, women are left to be treated by a system that is not designed for them and fails to hear their voice. The ecology of women's voice identifies ways in which pregnant women engage with the healthcare system. While this voice comes from within external forces, both individual and systematic, influence it. Each pregnant woman has a diversity of voice, which allows for the notion that at different times women may host an array of beliefs and thoughts as a result of lived experience. Pregnant women's experiences and their voices are continuously engaged in a reciprocal relationship, and will deeply impact approaches to self-care. Challenges include specific lifestyle adjustment, social barriers, and even the process of engaging with healthcare services.

The spectrum of healthcare traditions is represented by the services available to pregnant women in the Fraser Valley, and being pregnant in the Fraser Valley means making decisions around the type of care that is most appealing. A process of elimination must make some decisions as time, socio-economic status, and availability of information can be determining factors. The Fraser Valley, while progressive by some standards, is also built on Cartesian philosophy and as such alternative care methods are not always offered as equal and/or viable options. Prenatal experiences, regardless of tradition, are shaped by elements meaningful to individual women such as relationship, effectiveness and being heard.

Developing effective prenatal healthcare must be at the top of priorities for governing official. Preventable birth defects and developmental delays are somewhat inconceivable by today's standard. From a governing point of view they cost billions of dollars and from an individual perspective they are a life sentence. Researchers and

policy makers must be devoted to the task of assessing the effectiveness of the care system in meeting the needs of pregnant women in British Columbia. This assessment must be held accountable to the group that it is focused on, and as such great lengths must be taken to fully understand the context of pregnant women in order to grasp the constraints to overcoming barriers to self-care. This research was designed as a needs assessment of the current prenatal healthcare services in the Fraser Valley, for the purpose of understanding women's experiences with healthcare providers that both helped and hindered pregnant women in their self-care efforts. In order to understand the collective voice of pregnant women, researchers must first pay heed to the voices of individuals. By seeking to understand the individual beliefs and experiences first, the collective voice of women is allowed to grow from this understanding. There have been no previous studies focused on the women in the Fraser Valley experiences with prenatal professionals, and as such the current study could not be successful in a literature review alone. This research was necessarily qualitative in nature as this approach allowed for the women's voice to guide and direct the research, so as to place emphasis on individual's stories.

Research Question

The challenges to pregnant woman in optimizing their self-care are abundant. Current literature lists several key barriers such as smoking and alcohol use, weight gain and exercise, nutrition, and stress and social support. Available literature also highlights the importance of listening to the voice of mothers who have personally experienced their own set of challenges with health services and self-care during pregnancy. The current study sought to bring to light the experiences of women in the healthcare system that

either assist or impede optimal self-care of pregnant woman in British Columbia. Women were asked to retrospectively examine the key inhibitors or facilitators of their self-care and to share these experiences in an interview format (Appendix B). While many different occasions came to mind, women were asked to focus on those that dealt with healthcare services in a direct way. Of particular importance was the effect that the event had on health behaviours pertaining to pregnancy (Appendix C). By instituting these key boundaries this research has taken the personal stories brought forwards by mothers and used them as a needs assessment of prenatal services available in British Columbia.

CHAPTER III: METHODOLOGY

This chapter of the text is focused on describing the methods used to collect, analyze, and draw meaning from the stories of the participants. Several steps were taken to ensure the themes were methodologically supported. These steps are detailed below.

Research Question

The research question of this present study was: What experiences with healthcare providers both helped and hindered pregnant women in the lower mainland with their self-care efforts? The purpose of this study was three fold: (a) to understand the self-care service experiences of pregnant women in the Fraser Valley, and (b) use this understanding as a needs assessment of the current prenatal services (c) assess MI for effectiveness in helping pregnant women to overcome barriers to health behaviours in pregnancy.

Design

Critical incident technique was first used in 1954 by John Flanagan, and has since been established as a reliable and valid form of qualitative research. The interview protocol for this type of study is well defined and allows for individuals to be observers of their own experiences. Critical incident technique is foundation building in nature, allowing for the expansion and exploration of new constructs useful within the counselling paradigm (Woosley, 1986). Critical incident is a set of principals that allows for inductive classification of incidents taken from verbal communication through rigorous content analysis. A key objective of critical incident is to draw inferences from data for the purpose of improving performance. This study served to assess the needs of healthcare services in British Columbia, based on the personal experiences of expectant

mothers, and as such the critical incident technique was utilized. This method is well suited to a needs assessment study as it allows for examination of people's experiences by making use of descriptive inquiry. Constant and in-depth analysis of participant's story was used to uncover major themes that appeared critical to each woman's account of her prenatal experiences. Furthermore, the insight gleaned from the formation of major themes was then used to examine alternative approaches to prenatal service techniques, specifically MI. The identification of meaningful themes is meant to imply the need for useful changes to the existing system.

Examination techniques used in critical incident study results in three levels of classification and understanding, and are based on defined principles of content analysis. The first step involves breaking down the dialogue into separate incidents as guided by the focus of the research. Next the incidents are constructed into 'categories' based on a shared focal point. This lengthy and cyclical process involves the expansion and collapsing of categories both with specific interviews, and between multiple interviews. The final stage of analysis involves grouping together multiple categories, based again on a shared focal point, for the purpose of forming broader themes. In accordance with the goals of this research the data was analyzed within the context of the broader healthcare and service system. The comparative analysis was used as a means of gaining insight into women's experience, and not as a contribution to theory development.

The process of drawing meaning from the data involves immersing oneself in the participant's stories in order to create collective categories and themes. A vital step in this process is the reflection on what appears to be emerging from the data, while being critically aware of one's own bias and interpretation inherent in the research process.

Practically, this involves taking the essence of the narrative and comparing it with other aspects of the participant's story, as well as with other participants' stories. In the current study this process was necessarily feminist in approach, as conscious effort was made to allow the women's stories to guide the shape of the categories and direction of research. This can be understood as an awareness that was brought to this research that acknowledged the researcher as part of the process and actively sought to remove the power differential that exists. Pivotal to defining the feminist approach taken by the current researcher is the recognition that this research was done for women, not on women. The technique of breaking the women's stories down into specific critical incidents, then allowed for the incidents to be grouped together in meaningful categories. This involves an in-depth, line-by-line analysis of each transcript as a means of coding and numbering each critical incident that emerged. The coding of each critical incident was facilitated by questioning: (a) What was the onset of the incident (continuous or discrete) (b) Who was involved (type of professional) (c) What was the outcome (impact on prenatal self-care). Following this the categories were examined for defining characteristics and dimensions, and through this understanding they were then joined into themes in a meaningful and systematic fashion. This process involves intimate knowledge of data, in conjunction with a reasonable understanding of each participant. Critical incident analysis is cyclical in nature, allowing the analysis itself to be influenced by the emergent meaning. It is also highly intuitive and while this is unavoidable in critical incident research, many techniques have been used to diminish the potential negative effects of human intuition in research, all of which will be explained in detail.

The critical incident method of inquiry was the most suitable for this study for a number of reasons. First, it is a meaningful and flexible method, which has been shown relevant to describing and improving on clinical practices in medical settings (Keatinge, 2002). Secondly, very little research to date has focused on the prenatal self-care experiences of non-high risk individual women. This is a gross oversight as these women are consumers of the health services and neither are they immune to difficulties in pregnancy. Focusing on a select group of pregnant women allows for the individual experiences to be better understood. This is a vital step in needs assessment as it allows for the context of the stories to be appreciated and accounted for. Critical incident is also compatible with feminist theory as it values the participants as the experts on their experiences.

Consultation of the literature provides a basis for understanding the current atmosphere in the prenatal healthcare system as well as highlighting the challenges to optimal self-care during pregnancy. Motivational interviewing was examined for a goodness of fit as a potential intervention to aid health-care workers in supporting expecting mothers in British Columbia. This study focused on the experiences of the expecting mothers specifically what factors in the healthcare system these women perceived to have helped and hindered optimal health behaviours in pregnancy.

Selection Criteria

Participants were asked to make retrospective observations regarding their experience of factors in the healthcare system that helped and hindered optimal self-care during pregnancy. Because the observations were made retrospectively an inclusion criterion was that the mothers had given birth within the two years prior to the interview

date and that the women must have received prenatal care in British Columbia.

Pregnancy and the birth of a child is a significant life event and therefore recency was not an anticipated issue. It has been said that the sample size be set based on the complexity of the construct and that researchers continue to gather data until redundancy appears (Woosley, 1986). Recognizing the limitations in research, such as time and availability, redundancy or saturation is reached when no new data is being found through further investigation or interviews (Strauss & Corbin, 1998). For this study redundancy was reached when 15 participants were interviewed.

The sample was drawn from mothers in the Fraser Valley area. Recruitment for this project was accomplished through brochures placed in local health services, and through networking with local health professionals (Appendix D). Ethically, health professionals cannot release information regarding potential participants; rather information was given to the professionals to pass along to clients. The principal researcher also attended local public health groups for new mothers in which a brief presentation regarding the study was given and mothers were invited to initiate contact if they were interested in participating. The information presented included a justification for and an explanation of the study, an outline of required commitment on the part of the participants, and contact information. As an incentive all participants were given the option of being entered into a draw to receive a \$50 gift certificate to a local baby store. All fifteen participants chose to be entered into the draw. When redundancy was reached and it was certain that no further interviews were needed, a draw took place and as a result of that draw the winner received the certificate by mail.

When initial contact was made, there was a brief discussion to ensure that the potential participant met inclusion criteria for the study. Sixteen women volunteered for the study, and fifteen women qualified. One potential participant was not included, as she did not meet the age of majority in British Columbia. The criteria for inclusion in the study were as follows:

1. Over 19 years of age, and able to give informed consent.
2. Had given birth in the previous 24 months.
3. Received prenatal care in British Columbia.
4. Did not experience a major medical condition that drastically altered prenatal care.

The specific experiences studied were those pertaining to the participants' prenatal care experience and were ascertained by using questioning to focus participants on critical experiences and draw out details of their stories (Appendix B).

Procedure

Data was collected by interview, carried out by the researcher. Interviews held at a location suitable to the participants, and were decided on a case- by-case basis.

Fourteen of the interviews were completed at a personal residence as this allowed for a discussion to take place while the participants' child(ren) were otherwise occupied. One participant chose a local coffee shop as a meeting place for the interview. Prior to use of any recording device interviews began by going over the informed consent, purpose of the study and a reminder of the draw for the \$50 gift certificate (Appendix E). Once the participant had opportunity to read and sign the informed consent, they were asked if they would like to use a pseudonym for the purpose of remaining anonymous in the final

written research report. Each woman was also given a checklist of services used and self-care concerns during pregnancy (Appendix F) as a means of preparation for the interview. The interviews were tape-recorded from this point on. The interviews were directed in such a way to focus on the factors of the healthcare system, which were significant to optimal self-care during pregnancy, so as to prevent the information gathered from becoming too broad (Appendix C). It was important not to impose unneeded preconceived ideas onto the women and as such the term 'self-care' was not defined. None of the fifteen participants requested further clarification as each woman had a well defined notion of what prenatal self-care meant to her. A number of participants, however, did ask for clarification of the term 'healthcare service', and it was defined as being 'a public or privately employed professional whom you accessed directly in relation to your pregnancy, during the course of your pregnancy'. This definition was sufficient and no one asked for further clarification. Once recorded the interviews were transcribed in preparation for data analysis.

Data Analysis

The data was analyzed in the context of needs assessment, with a broader frame of reference being the potential adaptation of MI as a means of ameliorating the factors that negatively impacted expectant mothers' self-care. Motivational interviewing as a promising intervention for healthcare compliance makes assumptions about what hinders people. In order to effectively establish an intervention protocol the specific incidents must be well understood.

At the onset of analysis, protocols for data inclusion as distinct incidents were clearly defined: The incident directly involved a professional or paraprofessional in some

aspect of the woman's pregnancy in a way that impacted her self-care. To properly analyze the experiences shared by the participants, the data was broken down into incidents looking specifically at the general context (the relationship and context of healthcare service), the specific context (what immediately preceded the incident), the source (what made the incident helpful or hindering), the agent (who made the incident helpful or hindering), and the outcome (what was the resulting health behaviour or lack there of).

At the onset of analysis it was noted that in order to pay needed attention to the context of the women, incidents involving the descriptor of a tone of relationship with a service provider be included when the woman identified such relationship as impacting her prenatal self-care. That is, the definition of service-incidents was expanded to include the coding of continuous relational events as well as indirect service experiences that were significant to women's journey of prenatal self-care. This was an important step of analysis as it allowed for the research to be guided by the individual and collective voices of the women, making the data rich and meaningful. For ease of analysis and for contextual information other incidents were noted through the analysis so that three types of incidents were found to be; direct service experiences (service experience) with professionals pertaining to pregnancy and influential to prenatal self-care, indirect service experiences (self-care incidents) in which women were affected in self-care, and experiences that did not involve a service (non-service incidents). The service experience experiences were either discrete or continuous, as in the case of descriptions woman gave denoting the nature of their relationship or demeanour of a professional, and were unified by direct contact with a professional with regards to prenatal care. The indirect service

experiences were just as impacting and related to both prenatal self-care and professionals, however in a more indirect manner. Included in the indirect service experiences category were incidents, for example, in which women mentioned a desire to use a service but did not follow through for lack of awareness of how to search for this service.

The connection to service or professionals was the distinguishing element between incidents coded as indirect service experiences versus those that were non-service incidents. Where this connection was made in the indirect service experience events those that were non-service incidents could not be connected, meaning that when a woman described an incident in which distance from family became a challenging aspect of prenatal self-care the event would be coded non-service incidents. Again, the indirect service experiences were included as data, rather than placed as separate information, as a statement of the importance of the context of the women's lives in properly understanding and hearing their voices. The non-service incidents, while coded as a means of clarity in analysis, were not included in the overall incident count or in the formation of categories or themes. The reasoning for this is that the incidents were too broad and as such detracted from the focus of this research, being ways professionals and services help and hinder women's prenatal self-care initiatives. In this study it was however useful to categorize the tone of relationship between the healthcare provider and the expectant mother. Incidents were further gathered into categories and then themes based on similarity of dimensions. The final results of this research are a summary of themes and the categories within them (see Chapter IV: Results). Quotes from each category are used for the purpose of clarity and demonstration of the support for each

category drawn from the data. This further illustrates the analysis of data through the meaning offered by participants', rather than the researcher's expectations.

Reliability and validity. While qualitative research is recognized as being intuitive in nature, it is imperative that any evaluation criteria be explicitly stated and defined (Strauss & Corbin, 1998). Reliability refers to the consistency of the categories that were created grouping similar incidents together using inductive reasoning and trial and error. The first issue in reliability is related to discrepancies in the method of data collection. One researcher did the data collection for this study and the method was interview for all fifteen participants, as such discrepancy is not a concern.

One of the techniques used to check validity in the current study was ensuring the comprehensiveness of the categories. Two interviews were set aside prior to analysis representing 17%, or 83 of 486 total incidents found. Using the remaining 13 interviews 39 categories were formed, consisting of 18 helping categories, 16 hindering categories, and 5 ambiguous. The remaining 83 incidents were then classified into the existing categories, without the need for the creation of new categories. This indicated that the categories were comprehensive and that no further data collection was needed.

Another threat to the validity of the current study is the nature of analyzing human conversation taken from semi-structured interviews. To ensure that the categories and themes formed accurately reflected the stories that participant's shared, women were invited to give feedback through follow-up phone calls. This step entailed reviewing the categories and themes, and asking if the women felt that any clarification or correction was needed to accurately represent her experiences. In total 12 of the 15 women were contacted for follow-up; the remaining three had disconnected their phone with no

forwarding number. All of the 12 participants reported positively during their follow-up, with no need for amendment. A number of the participants were interested in categories that had not been applied to their transcript, adding verification by relating stories of others' they were aware of as examples of particular categories.

The preliminary findings were also presented, in an informal fashion, at a local mother's group. This researcher was invited to do so, and no identifying information or notes were made during this time. The feedback given from the mother's, all of whom had received prenatal care in British Columbia, was in support of the findings. None of the existing themes or categories was challenged, and a number of women commented that although they had not thought of some of the categories before, they supported them as being true. This informal feedback session was another verification of the validity of the categories and themes formed in this research.

Validity was further ensured through the cross-validation with existing literature. The current research is well connected to the literature, as demonstrated in Chapter V. The findings are further reported in a comprehensive manner in Chapter IV, including brief summarizations of themes and prototype quotes of each category. Themes and categories were formed to highlight prenatal self-care experiences that were both facilitating and impeding to women's self-care initiatives. Additionally, insights in to the ways in which pregnant women access the healthcare system have been identified.

Reliability, as it pertains to critical incident technique, refers to the ability of the categories or themes to remain stable when different coders are used in the classification process. In essence, reliability is the consistency of the categories. Once the categories and themes were suitably established, two independent judges (i.e., a graduate student

and a M.A. counsellor) were asked to sort the incidents into categories to determine if the categories were replicable. The statistic used to calculate interjudge agreement is kappa, which is chance corrected (Howell, 1997). An independent rater kappa of 75-80 % was accepted as above acceptable based on guidelines established by Anderson and Nilsson (1964). In the current study, the categories were not required to be mutually exclusive; rather exclusivity was required at the thematic level. For this reason the judges were asked to record up to three categories when needed. Neither judge exercised this option in the majority of incidents coded, listing a single choice in 77% and 82% of the time. When questioned the judges reported that they were able to find a category that stood out as being vastly more suitable than others, and therefore did not find it necessary to list multiple categories. A hit was recorded when the judges coded the category previously chosen by the researcher. If the judges chose categories of another theme, then it was counted as a miss. The judges scored a total of 60 incidents, representing each of the 39 categories. The two judges scored 92% and 93% in agreement, meaning 55 and 56 incidents respectively, were placed in the same categories by the judges as the researcher. Additionally, the category listed was placed as the number one choice for the judges in 49 and 53 of the 60 incidents, representing 82% and 87% agreement. This agreement is considerably high especially when it is noted that neither judge had any experience in the field of nursing or prenatal care. Providing additional background information to judges in the case of a category being chosen in the top three, but not in the first position, resolved discrepancy so that there was 100% agreement with judges. Lack of knowledge regarding prenatal self-care was found to be the determining factor when judges did not list the expected category within their top three choices. When the researcher provided

additional information regarding standard of practice or specifics pertaining to prenatal care, 100% agreement was achieved. While agreement is important, qualitative data must be understood not so much in terms of reliability, rather in terms of the importance of the findings (Heppner, Kivlighan, & Wampold, 1999).

After the analysis of fifteen interview transcripts, 486 incidents were identified. This data was then compiled into meaningful categories and themes in order to give an accurate representation of the participants' voice. While this data is extremely complex care will be taken to report the results in a clear and concise manner. Brief explanations of categories will be given with prototype excerpts from an interview to enable the reader to grasp what is being implied.

CHAPTER IV: RESULTS

After the previously described screening procedures, 15 participants were interviewed in April, 2004. All of the interviews were used in the analysis stage of this research. Participants were informed of the study through a brief presentation at a local health unit drop-in group, or through contact with other participants. A total of 16 women identified themselves as interested in participation in the current study, one of which did not qualify, as she was not age of majority. The remaining 15 women participated in the study, and all 15 interviews were transcribed and used in the data analysis. All of the 15 mothers interviewed identified the father of the pregnancy of focus as their current partners and were living with them at the time of interview. Ages of the women ranged from early 20's to mid 30's. Four of the participating women had one child, nine women had two children, and the remaining two women each had three children, one of the latter was a non-biological child. The mothers naturally shared information regarding previous pregnancies in relation to the most recent pregnancy, and as such a total of 27 pregnancy and birth experiences were shared. None of the women had previous children living outside of their care. At the time of interview one of the participants was expecting. At the time of follow-up this participant had given birth to her third healthy child, and another participant was expecting her second child. This was not a culturally diverse sample, as only one participant identified herself as belonging to an ethnic minority. The women did represent a wide variance in socio-economic-status, ranging from low-income and needing social assistance to the upper class.

From the 15 interviews a total of 486 incidents were elicited. Of these 247 were identified as helpful, 156 as hindering and 83 as ambiguous incidents in women's

experiences of prenatal self-care. Ambiguous incidents were counted as such when women described experiences that shaped their self-care and influenced their approach to pregnancy and services in a manner that is not identifiable as either positive or negative. These were intentionally included in the main body of this study as a means of honouring the women's voices. Incidents were identified as helpful when women described the outcome of the event or relationship quality, as assisting them in their ability, understanding or positive regard towards prenatal self-care. Hindering incidents were those that women described as diminishing to their sense of ability, safety, or regard towards prenatal self-care. The incidents were grouped into a total of 39 categories, 18 of which were compiled of helpful incidents, 16 of hindering incidents, and the remaining 5 were ambiguous incident groupings. The categories were then collapsed into six themes, five of which contain positive, negative, and ambiguous incidents; the remaining theme is uniformly ambiguous. The following is a detailed guide through the six themes and their included categories.

Themes Women Highlighted as Important Elements of Prenatal Self-Care Services

Six themes were compiled of 39 categories and 486 incidents. Five of the themes include helpful, hindering and ambiguous categories; one theme is entirely ambiguous categories. The themes are listed in the order that they took shape during the analysis process, and as such importance is not reflected. The number of incidents in each category and the number of participants who identified it as true to their story is also given. Caution is warranted against placing more weight on categories with higher incident or participation rate; rather it is merely a point of reflection. When viewing the results it is key to look at each category individually and then as a theme subsequently,

and in doing such the voice of the individual woman and the collective voice of women can be brought into focus. The following tables (see Tables 1 to 4) outline the formation of the six major themes, from the 39 categories. A description of each theme with categorical quotes as a means of clarification follows.

Theme One: Accessibility of Professionals and Services Needs to Be Obvious and Within Reach (four categories)

Professionals can be impacting by making themselves readily available to women, particularly in between appointments when questions arise. Women's concerns weigh heavily on them when they are not able to access care when it is most needed. Resources are only effective if they are a reasonable option for women, and do not have a high personal cost to using them. Without the strong, mentoring, social networks of past generations, women are often limited by a lack of general awareness of services.

Theme One: a. Professionals were there when I needed them (11 incidents, six participants). Seeing care professionals regularly and/or knowing that professionals are accessible in between schedules appointments is important.

...I didn't see her but she was always available to me by phone, which is another thing that I like, I could page her and leave a message and she would get back to me within a couple of hours, anytime.

(Donna)

Theme one: b. Professionals were not there (two incidents, two participants). Not feeling able to access professionals regularly and /or in between appointments can be hindering to women's self-care. Some women experienced a useful service as not being adequate as a result of limited time where professionals were available.

Table 1

Major Themes Identified as Important in Prenatal Care by Women Who Have Recently Given Birth

Theme	Category frequency
1. Accessibility of services needs to be obvious and within reach	4
2. Service system practices that normalize pregnancy and delivery	14
3. Relationship with professionals should be a personal connection	8
4. Power and empowerment	6
5. Life experiences that influence women's care choices.	5
6. Advice	2
Total Categories	39

Table 2

Frequency and Participation Rates for Categories of Hindering Incidents

Categories of hindering incidents	Incident frequency & rate (%)	Participation frequency & rate (%)
1. Professionals were not there	2, 1%	2, 13%
2. Pregnant women feel personally limited in accessing resources	13, 8%	9, 60%
3. There is a lack of general awareness of services	11, 7%	6, 40%
4. Quiet resignation about uninvolved professionals	11, 7%	7, 47%
5. Prenatal classes cannot prepare women for labour	10, 6%	8, 53%
6. How professionals were unhelpful in raising weight, exercise, or nutrition issues.	6, 4%	5, 33%
7. Failures of individual professionals in managing physical elements of women's care	20, 13%	10, 67%
8. Negative Impact of Physical Set-up or Location of Service	3, 2%	1, 7%

Frequency and Participation Rates for Categories of Hindering Incidents (Table 2 continued)

Categories of hindering incidents	Incident frequency & rate (%)	Participation frequency & rate (%)
9. Hindered by group atmosphere	3, 2%	1, 7%
10. Professionals' personal characteristics and / or lack or shared life experience that hindered women's relationship and care experience	6, 4%	6, 40%
11. Broad or extreme failure can cause experiences of dislocation	18, 12%	7, 47%
12. Relationship establishment hindered by common service practices	14, 9%	8, 53%
13. Lack of establish relationship with professional	8, 5%	4, 27%
14. Practices that took choice away from women	12, 8%	8, 53%
15. Being dismissed or brushed off by professionals	7, 4%	4, 27%

Frequency and Participation Rates for Categories of Hindering Incidents (Table 2 continued)

Categories of hindering incidents	Incident frequency & rate (%)	Participation frequency & rate (%)
16. Failure by multiple professionals in one instance	12, 8%	5, 33%
Total	156, 100%	15

Note. There were a total of 486 incidents: 156 hindering, 247 helpful and 79 ambiguous.

Table 3

Frequency and Participation Rates for Categories of Helpful Incidents

Incidents that facilitate prenatal self-care	Incident frequency & rate (%)	Participation frequency & rate (%)
1. Professionals Were There When I Needed Them	11, 4%	6, 40%
2. Professionals Being Receptive to Women's Hesitations Concerning Services, Professionals or Directives	7, 3%	4, 27%
3. Professionals Teaching Women is Important and <i>May Positively Impact the Woman's Labour Experience</i>	15, 6%	6, 40%
4. How Professionals were Helpful in Managing Weight, and Nutritional Issues	8, 3%	7, 47%
5. Professionals Competence in Managing Physical Elements of Pregnancy, both Normative and Critical	29, 11%	13, 87%
6. Socializing and Normalizing Experiences Provided by Services.	10, 4%	6, 40%
7. Services That Helped Meet Basic Needs	9, 4%	2, 13%

Frequency and Participation Rates for Categories of Helpful Incidents (Table 3 continued)

Incidents that facilitate prenatal self-care	Incident frequency & rate (%)	Participation frequency & rate (%)
8. Positive Impact of the Physical Set-up or Location of Service	4, 2%	3, 20%
9. Feeling Welcomed by Group Services	1, 0.4%	1, 7%
10. Professionals' Personal Characteristics and / or Life Experience That Made Women Feel More Connected and Comfortable	12, 5%	11, 73%
11. Professionals' Personal Investment in My Care that Goes Beyond the Expected	19, 8%	7, 47%
12. Relationship beyond professional that encompassed my emotional and physical care	24, 10%	9, 60%
13. Established Relationship with Professional Positively Impacted Care	16, 6%	8, 53%
14. Professionals that supported my unique choices and beliefs	17, 7%	11, 73%

Frequency and Participation Rates for Categories of Helpful Incidents (*Table 3*
continued)

Incidents that facilitate prenatal self-care	Incident frequency & rate (%)	Participation frequency & rate (%)
15. Took the time to be with me and answer my questions	14, 6%	9, 60%
16. Collaboration of Professionals in Providing Care	19, 8%	9, 60%
17. Privileged Access to Resources	11, 4%	7, 47%
18. The Powerful Voice of My Past Pregnancy Affects This Pregnancy	21, 9%	9, 60%
Total	247, 100%	

Note. There were a total of 486 incidents, 156 hindering, 247 helpful, and 79 ambiguous.

Table 4

Frequency and Participation Rates for Categories of Incidents that Reflect the Ecological of Women's Voices^a

Ecology of prenatal self-care incidents	Incident frequency & rate (%)	Participation frequency & rate (%)
1. Women's Inner Voices Guide Care Choices and are Often Unspoken (inner ecology)	16, 20%	9, 60%
2. Labour Dreams and Inspirations Influence Care Choices (experiential)	8, 10%	7, 47%
3. How my Partner's Silences Me and Experience of Care (relational)	17, 22%	9, 60%
4. What I wish I knew When I Was Pregnant	23, 29%	12, 80%
5. Next Time I Get Pregnant I Will Be Sure To...	15, 19%	10, 67%
Total	79, 100%	

^aThe incidents in these categories do not overlap with the incidents fitting in the helping and hindering categories.

...the group was good but it was one day a week for two hours, so you had to get all your questions in this one, two-hour span, which never seemed like enough.

(Nikki)

During prenatal visits women were given an impression by their care provider regarding the appropriateness of contact in between sessions, which directly impacted how women deal with the cares and concerns that arise in time between appointments. Generally, women who were unsure of how their care provider would respond to additional contact chose alternative methods of handling their concerns, often baring their questions without professional assistance.

I may have gone to the doctor except I knew that my prenatal was coming at the end of the week or something, so I just, I always let things go to see how things pan out.

(Rhonda)

Theme one: c. Pregnant women feel personally limited in accessing resources (13 incidents, nine participants). Some services are rendered unreachable to women if they evaluate the personal cost of using it too high.

I didn't want to go to Langley and the hospital sounds even nicer...because your husband can stay over night...um, but I just didn't want to go, you know, twenty minutes away to see the doctor.

(Shannon)

Theme one: d. There is a lack of general awareness of services (11 incidents, six participants). Without the social connections of past generations pregnancy women today

miss out on resources that they are simply unaware of, that is, services are simply not obvious enough.

I felt that the resources just weren't obvious enough in the places where I was going for my prenatal care, like the doctor's office or that sort of thing. You know, nobody said 'Here's a list', (laughs), you know?

(Donna)

Theme Two: Service System Practices that Normalize Pregnancy and Delivery (14 categories)

Professionals should provide assurance and directly address women's concerns and hesitations regarding their pregnancy and self-care. Effectively managing care and teaching women how to take care of themselves is the heart of care. Some information in the current system is irrelevant and women often feel letdown by a tacit but false pretence that they can be taught how to prepare for labour. Professionals who focus instead on teaching self-care may help women through pregnancy and this sometimes positively impacts labour experiences. When professionals are not competent, involved, and helpful women will often quietly accept that they cannot expect more. However, demonstration of these attributes is greatly appreciated and increases confidence in care provided by the system. Services that provide connections with other women and in some case the provision of basic needs are important pieces of prenatal services.

Theme two: a. Quiet resignation about uninvolved professionals (11 incidents, seven participants). The stories of pregnant women often echo with acceptance of uninvolved professionals who do not proactively attend to their care.

...but he didn't really discuss it [diet] with me. I think that they just watch your weight and if you are gaining weight reasonably they are fine with it...Yah, I thought most of the stuff I learned about pregnancy was on the Internet or in books.

(Gemma)

Some women had experiences with professionals that made them physically or emotionally uncomfortable and yet they failed to raise their discomforts with such professionals. Generally this was due to an acceptance that service delivery cannot, or should not be required to change.

...I was nervous to go for a massage because I didn't want to lay on my stomach, you know?...And with massage they put you on your stomach...and even through that whole hour I was nervous because I could feel him kicking...

(Shannon)

Theme two: b. Professionals being receptive to women's hesitations concerning services, professionals or directives (seven incidents, four participants). Women who did not quietly accept their malaise with prenatal services and providers found voice to their concerns and hesitations. When women's concerns around service safety during pregnancy were met by a care provider's attentive ear, the women in turn felt greater satisfaction and heightened trust in their care.

I wanted to know what was in it [supplement] and so they [naturopath] wrote down the ingredients for me...I think I looked them up on the Internet.

(Loriann)

Theme two: c. Prenatal classes cannot prepare women for labour (ten incidents, eight participants). Although not uniformly negative women who spent self-care time trying to prepare for an unknown, such as labour, often expressed that they may have found more benefit investing their time focusing on something that could have made a difference, such as infant care classes.

I found prenatal classes a complete waste of time because you don't know how you are going to handle it until you get there and the information they give you is not something that you can use.

(Gemma)

Theme two: d. Professionals teaching women is important and may positively impact the woman's labour experience (15 Incidents, six participants). When women were given information and taught by professionals they were more able to care for themselves and in some cases felt more equipped to handle labour.

...the first [yoga instructor] was like 'We are going to do the session for our pregnancy, what is going to help us with our pregnancy as we are getting more sore and achy', but then at the end of the class we would have a meditation time. During this she would be focusing on what would be happening first of all for us to relax, and *then* what kind of things would be happening when you would go into labour so you could visualize that too.

(Richelle)

Theme two: e. How professionals were unhelpful in raising weight, exercise, or nutrition issues (six incidents, five participants). Sarcasm and a lack of clear instruction

around weight, exercise, or nutrition corrections left women deflated and often unwilling or unsure how to change their behaviour.

So I gained nine pounds at one appointment and nine pounds at the second one, and she was like 'wooo, we are going to have to put you on a diet!', and I thought, diet, I am already...cause looking back I remember thinking, I am eating so good I don't know what's going on! (animated) But I mean it wasn't brought up again...Well it was said in passing...it was said sort of as a joke.

(Rhonda)

Theme two: f. How professionals were helpful in managing weight, and nutritional issues (eight incidents, seven participants). Professionals who made nutritional and exercise information personal and applicable to pregnant women enabled the women to affect positive changes in their self-care.

Well weight was my biggest concern and when I went in there it was the first thing that I spoke to my midwife about. And she talked about ways that I [could] manage. I was also, I lost 30 pounds when I was pregnant with her, I didn't gain anything. And I did that just with diet and exercise, yah I was taking 100% better care of my body when I was pregnant and even now...But I mean she [midwife] was very supportive of that.

(Heather)

Theme two: g. Failures of individual professionals in managing physical elements of women's care (20 incidents, ten participants). Women were set back in their self-care efforts when professionals gave misinformation, didn't accommodate, or failed in clinical aspects of care.

...I think I just went to one [massage therapist], and it was actually kind of scary situation because I was on my back and I got faint. I felt so sick because it was later in my pregnancy so I was heavier. And I had known...that if I am on my back too long, I just really feel nauseous...but I went in there and told her...like she raised me up a *bit* and stuff, but still it got to me. ...And I felt really bad for her I was like I had to interrupt and say 'I can't do this', and sit up and get a cold cloth...

(Shannon)

Theme two: h. Professionals competence in managing physical elements of pregnancy, both normative and critical (29 incidents, 13 participants). When professionals are able to be helpful in managing physical elements of pregnancy, women gain a sense of confidence in their care.

The second time around with the midwife we were able to balance my diet out *before* it got to that [constipation].

(Donna)

Theme two: i. Socializing and normalizing experiences provided by services (ten incidents, six participants). Women were encouraged by service experiences that provided normalizing and social experiences.

So it was nice to have somebody come who had spoken to a lot of people who had babies and stuff like that. And to reassure you that everything is o.k. and that you are doing fine. And it was nice to have somebody and actually be able to meet people in the community to help you out with that kind of stuff too.

(Alana)

Theme two: j. Services that helped meet basic needs (nine Incidents, two participants). For some women prenatal self-care encompassed a struggle to meet basic needs, any assistance in this effort was positively impacting.

It was good because at the time my husband wasn't working...and you know it is not always easy to find money for everything and the vitamins and the coupons [provided by group] helped *a lot*.

(Alana)

Theme two: k. Positive impact of the physical set-up or location of service (four incidents, three participants). Some women as enhancing their comfort and ability to participate in services cited the physical environment of services.

I think it even goes down to how their [midwives'] office was set up. They were in a farm house and you walked in and you sat in what obviously used to be the living room, and it was still set up like a living room....and I think all of those things for me helped you to feel more relaxed and comfortable in that this isn't just a medical procedure. So how they set up even their practice made it very welcoming.

(Jacqueline)

Theme two: l. Negative impact of the physical set-up or location of service (three incidents, one participant). Some women were disheartened by the set-up of some prenatal services and found this to be an obstacle in their participation in such services.

And in one area at one end of the building is where the adults went and the young babies that didn't leave their parents, at the other end was a child minder and the kids went there. But like you know the distance I didn't care for because you

know, I don't go to groups to get away from my kids, I go to support me in how to look after them.

(Nikki)

Theme two: m. Feeling welcomed by group services (one incident, one participant). An inviting atmosphere helped women to feel more apart of groups. It was voiced as setting the tone for the relationship that a woman could develop with a particular service. Women were given first impressions and rarely sought to disprove them.

Just the women in the group were so outgoing as well, the expectant parents like the group was very close.

(Nikki)

Theme two: n. Hindered by group atmosphere (three incidents, one participant). Groups that did not make a concerted effort to help women establish within the group were less effective in helping.

The one [group] in Camloops seemed very impersonal almost. Like they wanted to get to know you, they just never opened themselves up to it totally...it just seemed a little colder, it didn't seem as welcoming [as other groups]. But it was also a bigger organization.

(Nikki)

Theme Three: Relationship with Professionals should be a Personal Connection (eight categories)

Personal presence of professionals can be warm, giving, encompassing both emotional & physical realms, respect and trust. Women have to be patient to see how the

relationship will develop, and whether it can become an effective working relationship that encourages them to engage in their care. Professionals can break personal connections, when they are mean, arrogant, or callous. Institutional practices are clearer when they get in the way of effective working relationships with professionals.

Theme three: a. Professionals' personal characteristics and / or life experience that made women feel more connected and comfortable (12 incidents, 11 participants).

Women felt more connected to care providers who displayed positive personal attributes, such as 'niceness', as well as those that enabled them to feel like they could relate to the caregiver.

She [outreach worker] is just so *nice*! Like she is just so soft spoken and nice and honest. Yah, I just, she is genuinely nice person and that helped. She is very relaxed.

(Alana)

Theme three: b. Professionals' personal characteristics and / or lack or shared life experience that hindered women's relationship and care experience (6 incidents, 6 participants). Women experienced disconnection from professionals who were abrupt or aggressive in their mannerism, and from those who they felt they could simply not relate to for lack of common life experience.

I would ask him [doctor] 'what [exercise] can I do?',....but I don't think they [doctors] have an appreciation for it [exercise] unless they are active themselves....but I didn't go further, I just sort of winged it.

(Gemma)

Theme three: c. Professionals' personal investment in my care that goes beyond the expected (19 incidents, seven participants). When professionals' actions exceed women's expectations of standards of care, women feel a heightened sense of relationship and confidence in their care.

I ended up pushing for 2 hours before I had her and he [doctor] ended up staying in the room with me for the whole time. It was kind of neat. Most of the times that I have ever known the doctors come in and see how dilated you are and tell you that you still have a ways to go type thing, leave and come back....and when it was all done I said to the nurse 'He was here the whole time?', and she said 'Yah! Why was he here the whole time, they *never* do that!'. Yah, I had no worries about anything [next pregnancy] because I felt I was in totally capable hands.

(Richelle)

Theme three: d. Broad or extreme failure can cause experiences of dislocation (18 incidents, seven participants). Experiences of inconsistency or tension in the medical system, abandonment by a professional, and /or extreme callousness in times of high stress left women feeling alone and unsure of their support from the larger institution.

...you assume that when you are going to see a doctor you are getting the best knowledge and experience of what they have to offer, but when one doctor is refuting the other doctor and saying that I should have been in emergency for four hours that is scary.

(Debbie)

The only thing unnerving with the medical system...he [doctor] told me that my percentage was basically extremely high for losing this baby. And he did an

ultrasound as soon as possible but I would have to wait until Monday morning and he said 'We don't do ultrasounds on the weekend unless it is life or death situation.' and I was kind of going 'Isn't this life or death for the foetus? You know this is life or death for that little thing inside of me.' It was unnerving to have to wait 24 hours....it caused me anxiety.

(Debbie)

Theme three: e. Relationship beyond professional that encompassed my emotional and physical care (24 incidents, nine participants). When relationships with professionals move beyond a clinical focus, women felt extremely supported in their self-care efforts.

She [midwife] became the mother I kind of needed.

(Susan)

He [doctor] has his own kids and he shares his own stories, so that makes me more comfortable telling him about my crazy life.

(Josy)

Theme three: f. Relationship establishment hindered by common service practices (14 incidents, eight participants). Practices that may be deemed acceptable often left women feeling as though they were working against institutional barriers in establishing a relationship or receiving continuous care from one professional.

I was referred to the maternity clinic and I was not happy with the fact that I did not know who was going to be delivering my baby and it could have been any one of eight doctors or something. And you know there is no relationship building and stuff.

(Loriann)

Theme three: g. Established relationship with professional positively impacted care (16 incidents, eight participants). Over time women develop working relationships with professionals that enables them to assert themselves better and allows the professionals to read the women more accurately.

She [doctor] was supportive in that she has been my G.P. for fifteen years.

(Lynette)

...and what he [doctor] said to me was 'Listen, no one is giving you any merit badges for living through this nausea.', (laughs), and I was like, 'O.k., you're right'. It was like he really hit the nail on the head as to why I wasn't taking it [anti-nausea medication].

(Jacqueline)

Theme three: h. Lack of establish relationship with professional (eight incidents, four participants). At the start of a relationship pregnant women often had difficulty feeling known by professionals and were therefore inhibited in asserting their needs or asking questions.

...I did not, before Mila was born, have a close relationship with my doctor. I didn't have a doctor who knew me and knew what was good for me.

(Gemma)

...I didn't go back to my doctor and say 'Are there alternatives?', maybe I should have done that, I don't know. But I don't see regular doctors that often to have that kind of relationship either, you know what I mean? Like, I don't know... what kind of relationships other people have with their doctors, I just didn't even think about going back to my doctor...

(Shannon)

Theme Four: Power and Empowerment (six categories)

Professionals' relationships can empower women to find their own voice through educating, teaching, and encouraging women in their own unique beliefs and choices. When professionals are dictating, dismissive, and unavailable women are aware of and uncomfortable with their lack of control. Accepted institutional practices rob women of the opportunity to make real choices, and assert their unique selves in conjunction with services and professionals. Professionals who work together give women tangible examples of not being lost in the broader institution, which otherwise has difficulty meeting the individual needs of many women.

Theme four: a. Practices that took choice away from women (12 incidents, eight participants). Although not uniformly dis-empowering, most women felt at the very least a felt lack of control over their care when no real choice was given to them.

I saw the first one [doctor] and I was very disappointed and I didn't care for her very much at all...because right off the bat she said 'Who are you having in the delivery room?', and I said 'My husband and my mother and if my two girlfriends from the island can make it they are going to be there.', [she said] 'oh no no! You can't have them, you can only have two!'...and I started to cry! I was like 'What do you mean I can't?', [she said] 'Oh, well they can take turns if you want, but they can't all be there.'...I was just devastated!... and I said, you know I feel like my whole plan has just been shattered!

(Heather)

Theme four: b. Professionals that supported my unique choices and beliefs (17 incidents, 11 participants). When pregnant women's self-care efforts and personal choices were understood and supported by professionals, they felt a deeper connection with that professional and a heightened sense of power.

In the hours before I had said that I just want a really hands off birth, I want to let my body do it, I totally believe in my body's ability to do it, and they [midwives] were like 'O.k., we believe in you!' and I was like 'Thank-you!'

(Susan)

Theme four: c. Took the time to be with me and answer my questions (14 incidents, nine participants). Professionals who made time for answering questions left women feeling like they mattered.

With the midwives...I liked that we spent *a lot* of time talking, every appointment was a minimum of 45 minutes.

(Jacqueline)

Theme: d. Being dismissed or brushed off by professionals (seven incidents, four participants). Women who were not given adequate time to discuss their self-care carried unanswered questions throughout their pregnancy.

Yah, and your doctor doesn't necessarily have a lot of time to converse with you...and then when I did [ask questions], a lot of them it was kind of 'oh'...you know he just kind of brushed them off because he didn't have the time...

(Gemma)

Theme four: e. Failure by multiple professionals in one instance (12 incidents, five participants). Institutional failures to hear women's voice point to inadequacies of the broader system to support individual pregnant women with regards to a specific need.

Nobody was able to answer [my] questions about, um, what level of activity that I could have....Nobody was able to be specific enough for me with their response...I didn't persist...I just accepted that they didn't know and that I would have to find out for myself.

(Gemma)

You know they have a young parent group for single mothers or mothers under 25 and I wished I was under 25 so I could just go and know that there is this service for you or this service for you. You know to have that through social services. I thought 'I am a young mother too! I am 28 (laugh)', and I don't think that it is just the young mothers who need the help...because we are married and I am not young and it is hard.

(Alana)

Theme four: f. Collaboration of professionals in providing care (19 incidents, nine participants). Women who saw collaborative efforts of professionals felt more confidence in their care and the institution in general.

So I requested with the obstetrician for my doctor to be there [at the birth] and he said 'No problem', ...It's like, you know, you have your doctor there and you have your specialist who was a very nice guy and um, it was excellent.

(Amy)

Theme Five: Life Experiences that Influence Women's Care Choices (five categories)

Women's life experiences both prior to and during pregnancy influence their prenatal self-care choices. Their thoughts about services, past experiences, and labour hopes offer great insight into their many voices and motivations. Spouse's may need encouragement to work past inhibitions about alternative care choices and actively participate in prenatal services, however once onboard they bring great enthusiasm and an appreciated dynamic to the prenatal experience.

Theme five: a. Women's inner voices (perceptions) guide care choices and are often unspoken (20 incidents, 11 participants). Pregnant women carry with them attitudes about service options or scope of care, which are often unspoken and have no clear genesis, and yet inform their choices nonetheless.

[I thought] it was either home delivery with a midwife or deliver in the hospital with a doctor. I didn't know you could get a midwife and deliver in the hospital.

(Debbie)

The midwives, because they were only focused on labour, you didn't consult them on anything else, right like any other medical thing they wouldn't know anything about, except those related to pregnancy and labour. So I was having sciatic nerve issues...and I don't think that I got any information from them [midwives], and I wonder, you know, like if they wouldn't want to say anything because it is related to another part of the body, and whether, I imagine...that it is a really fine line for them because if they recommend something else they can probably be sued really easily, right? I would assume.

(Jacqueline)

Theme five: b. Privileged access to resources (11 incidents, seven participants).

Informal access to healthcare professionals is a resource that enhances self-care primarily through the provision of information and reassurance.

I work in the emergency department so anyone that knows you are pregnant is a source of information. Doctors and nurses alike.

(Lynette)

Theme five: c. Labour dreams and inspirations influence care choices (eight incidents, seven participants). When seeking the services of different care professionals, whether a particular professional will support a women's labour plan is often a primary concern.

...so I actually decided to go with my doctor because the friend that referred me to him had her baby in his presence and she described how he was in the delivery room and that was exactly what I wanted. Like the just sit back and let me do my job approach, really suited me just fine and that he wasn't going to do anything unless it is absolutely needed to be done.

(Josy)

He's been my doctor since I was born and...when I got pregnant, and my views on what I wanted in labour and him not doing episiotomies, I was hoping I wasn't going to have to change doctors because of his views on things. I wasn't going to like that.

(Richelle)

Theme five: d. How my partner silences me and impacts my experience of care (17 incidents, nine participants). Many women expressed a desire to try alternative care

methods but did not as a result of their spouse's concerns, however a spouse's participation in prenatal care increased satisfaction with care.

And actually I thought about a doula, but he [husband] didn't really want a stranger coming in and interrupting what he thought was between us.

(Debbie)

The first time around we had a doula and she was really good at helping him [husband] get involved and that sort of thing.

(Donna)

Theme five: e. The powerful voice of my past pregnancy affects this pregnancy (21 incidents, nine participants). In subsequent pregnancies women felt much more assured of themselves, and less depended on the emotional support of professionals, who were often much less directive in their care.

I already went through one and I was like 'Well this is what they say, but this doesn't really work for me, so this is what I am going to do.

(Amy)

I felt a lot more free and a lot more educated after going through everything with Isaac [i.e., first born], and so I just, if I didn't want to do something I just said I don't want to do that.

(Josy)

I am trying to think of the second time. It is funny, the second time they [professionals], they don't really tell you anything. I guess they just assume that you already know it from the first time. They usually only bring it up if you ask a question.

(Rhonda)

Theme Six: Advice (two categories).

Women's voice of their own prenatal experiences is currently an untapped resource that mirrors inner resolve and offers insight into their own priorities. Through difficulties and triumphs of past pregnancies mothers are an invaluable source of wisdom for the newly pregnant. Women's voices and advice shaped by their situations and personal experiences.

Theme Six: a. What I wish I knew when I was pregnant (23 incidents, 12 participants). Reflecting on their own stories women acted as guides for the newly pregnant by encouraging them to find their own voice, be less compliant and demand more of their caregivers.

...just make sure you are comfortable with your doctor. That you can ask them anything, um, and just go with your gut instinct on things too.

(Rhonda)

There is so much information out there and to arm themselves with knowledge. You know, family doctors are not very forthcoming with it, but if you know the right questions to ask they can get it. And trust your gut. Not just take things, don't just follow directions blindly if it doesn't feel right, second-guess it.

(Donna)

Theme six: b. Next time I get pregnant I will be sure to...(15 incidents, ten participants). Learning from their own experiences women often stated that they would return to care providers in pursuit of established relationships, be more relaxed and

progress in areas of their prenatal self-care that proved challenging during their last pregnancy.

So I think what has tainted me, in my next pregnancy, or educated me, or inspired me, I don't know, is that I have to look after myself better.

(Susan)

I would probably go back to the doctor because I have established the relationship with them and....I am not a creature of change. I do what I know works for me. I think if I had gone the midwifery route I would have carried on that entirely.

(Debbie)

Distillation of Women's Experiences as a Common Narrative

It is true that we each face our own uncertainties, trials and triumphs, which are special not only to us, but to each pregnancy we experience. Yet, our collected experience is united enough that there is truth to a statement of experience that serves to unite our voice. In pregnancy, especially our first, we need support and relationship in equal terms. We fight against our own insecurities of the stereotype of a crazy pregnant woman, and often dampen our own voice for the sake of others' perceptions. We want to know that our pregnancy is unique, and yet that in these experiences that we are not alone. Somehow, we enter our childbearing times without the social woman to women networks that past generations enjoyed. We enter pregnancy without mothers, sisters, and friends in proximity, without having shared their experiences of childbearing we face an uncertain time. This isolation makes it difficult to be in touch with our own voice. We want, but often don't demand, a strong support from our care professionals. It is hard to feel like the personal aspects of our pregnancy matter in a medical system. Those who

take time to address our worries, reassure us, and prepare for what is ahead are like a greatly needed compass. The medicalizing of pregnancy and childbirth is confusing. We, as women, were designed to bring children into the world. It is a complete outpouring of our being and while there is nothing unnatural about it, care professionals and their 'treatment' of pregnancy challenges this. Tests and clinical diagnostics have their place, and often bring about reassurance that our baby is developing well. However, when this is the only focus, the system is self-defeating in that our emotions, thoughts, and spirits are left out of our care. By this traditional approach we are left with a multitude of voice that has not been heard. One of the only tangible focal points, somewhat accepted by the medical community, is our labour experience and so we spend a great deal of time planning, learning, reading, and dreaming of what it will be like. Anything that threatens our control over this monumental event is devastating, and needs to be handled with care and caution, but often is not. However, through this and other struggles during pregnancy we often find our own voice and inner resolve to demand more from our care providers. We seek established relationships and are not as willing to silence ourselves. If we can gain this through our pregnancy experience, then perhaps our collective voice can gain volume and momentum and reach those who have yet to become pregnant. In a woman-mentoring-women approach, we hear our own voice and encourage others to speak.

Summary

Analyses of interviews from 15 participants identified 486 critical incidents that yielded 39 categories and six major themes. The 18 categories contain 247 incidents that were helpful to women in their prenatal self-care efforts; 16 categories contain 156 incidents that impeded pregnant women's self-care efforts. The remaining 83 incidents

formed five categories that were ambiguous encompassing helping and hindering incidents. The following chapter is dedicated to connecting these findings to existing literature and outline future prospective

CHAPTER V: DISCUSSION

A total of 15 women were asked to share their stories of prenatal service experiences, within British Columbia, that aided and hampered their prenatal self-care efforts. Through the use of Flannagan's (1954) critical incident technique, individual experiences were extracted from the narratives shared by participants. From the 15 interviews, 486 incidents were recognized, 247 were helpful incidents, 146 were hindering, and 83 were determined to be ambiguous. Additional incidents were noted but not included in the incident count, nor were they included in any further analysis, as they did not related to prenatal services. The 486 incidents were formed in to 39 categories, 18 of which were helpful, 16 hindering and a further 5 ambiguous. The inclusion of women's advice into the main data was an intentional action meant as identifying women's voice and connection with each other as being relevant and critical to prenatal self-care. Cross-validation of the results with literature is important as a means of demonstrating the validity of this study and appropriate use of the critical incident technique (Anderson & Nilsson, 1964). Pivotal themes suggested that for all of the women in the sample prenatal professionals were highly influential in their self-care successes. Themes also suggested that several factors interfered with women's self-care efforts. Many of the categories exist in counterparts, meaning that there are mirroring positive and negative incidents. This coincides with reason, as for each woman who shared an experience of a professional's competence; there was a countering story of a professional who made an error in managing care. Despite a lack of research examining women in British Columbia's prenatal self-care service experiences, the findings of this research are consistent with some of the broader literature. Findings will be examined in

terms of helping and hindering elements to prenatal care, and an explanation of the ecology of women's voice as it pertains to prenatal self-care service experiences is offered. Motivational interviewing is examined as a potential prenatal care intervention in light of the findings of this study.

This study is a needs assessment of a specific area, being the Fraser Valley of British Columbia. In light of this, the findings will be reviewed in terms of salient findings, which warrant further discussion. Pregnancy is a highly personal and complex time in women's lives.

Connection of Major Themes to Existing Literature

Accessibility of services needs to be obvious and within reach. Inaccessibility and information have been noted as being important elements in effective healthcare service delivery (Nelson, Pancer, Hayward, & Kelly, 2004). The different dimensions of accessibility as outlined by the participant's of this study ranged from connection in between appointments, barriers to accessing services, to general awareness. The first two dimensions listed are similar, with the first pertaining to individual professionals while the other concerns specific services. When choosing the type of prenatal service, consideration needs to be given to the issue of accessibility. Boon et al. (2004) noted the need for health services to help consumers identify their needs, within their cultural and social context, clearly calling for the implementation of personalized care. When a pregnant woman identifies accessibility of a professional between appointments, via phone or pager, then it follows that her prenatal care professionals need to be willing for this, or to refer to a health tradition that is. It should be noted that not all of the women who sighted experiences in which their professional was accessible to them in-between

appointments were seeing midwives, as might be expected. The reported incidents of this types of accessibility was, however, more standard with such alternative caregivers.

Expectantly women in this study highlighted personal accessibility of services as being an obstacle in their prenatal self-care service use. It has been stated in previous literature that women's socioeconomic status is a factor in accessing prenatal care, with the likelihood of prenatal care decreasing with lower socioeconomic means (Egerter et al., 2004). A number of the participants in the current study identified personal barriers such as cost, distance, or time as deterring them from accessing services that they wanted to draw on. Given the importance of continuous prenatal care this barrier must not be overlooked. Affordable, accessible prenatal care must be a priority for policy makers. It must be highlighted that this sample represented a diverse range of socio-economic status however inaccessibility of services, due to personal barriers was a category that traversed this sample. While literature has primarily connected barriers to the lower socioeconomic groups, the voice of the women who participated in this study identified it as being broader than one social group.

The crux of issues around accessibility of prenatal services as found in this study pertains to a lack of general awareness. Pregnant women in the Fraser Valley often find themselves isolated from the consciousness raising experiences of past generations, that is, they often do not spend a great deal of time with other pregnant women. Without these social networks, pregnant women find themselves unsure of what is available to them. A number of women in this study stated that it was only after entering in to the public health services, in the form of 'new mother drop-in groups' that they spoke to other women and learned from these women's stories about different services. This lapse of

awareness of services relating to changes in societal structures has received attention in the literature. The new mothers in the current study made it clear that this is an important obstacle that needs further addressing.

Literature has spoken to the importance of receiving continuous, early, and regular prenatal care (Rollins, 1996; Egerter et al., 2004). Barriers to accessibility as named by the participant's of the current study are, blocked during in-between appointments, personal barriers, and a lack of awareness.

Service system practices that normalize pregnancy and delivery. Earle (2000) understood that newly pregnant women are not used to feeling the notable amounts of uncertainty that pregnancy can bring, and as such they desire to be both normal and unique in their pregnancy. The value that participant's in the current study placed on socializing and normalizing service experiences is not surprising. Women voiced a longing to feel connected to other women and were greatly appreciative of any experience that offered this opportunity. In some cases women valued a service more for the social element than the actual information given. In other cases women felt more connected through an indirect social experience, by having a service provider who had spoken to different women in the community.

Professional error or incompetence is disheartening for pregnant women to face. While women in this study had various experiences with this type of service failure, incompetence regarding weight issues was distinct. Cogwell (1999) found that almost half of 2,300 participants received no or inappropriate advice regarding weight gain during pregnancy. Overall women in this study voiced a similar reality; with most women reporting no advice or negative service experiences relating to weight gain. The primary

identification was that service providers took a sarcastic approach to correcting pregnant women when they had deviated from the recommended rate of weight gain. Furthermore, women stated that weight gain was not raised aside from these sarcastic incidents, and that no clear direction was given.

An element of this theme that has received little attention in the literature is the impact of the physical set-up or location of services. Some women stated that they placed greater or less importance on directives, depending on where they were situated. Still, others described the atmosphere of their care practitioner's office as facilitating their ability to engage in the care process, or as deterrent to choosing a particular professional for prenatal care.

Relationship with professionals should be a personal connection. Six major themes were celebrated by the women in the current research as being critical to their prenatal self-care efforts. While each of these themes are distinct, relationship in particular is infused throughout the findings. That is to say that women who had developed a strong working relationship with a healthcare provider were likely to be less affected by experiences of disempowerment, assuming that they were not a frequent occurrence. Likewise, when professionals with whom women had an established relationship exhibited a lack of sensitivity in raising weight directives, women reported feeling less affronted and able to recover more rapidly.

The effectiveness of and importance of individualized, relational care has been noted in literature (Boon et al., 2004). Sutherns (2004) studied the voice of women in prenatal care and identified relational care, as embodied by a single professional, as being significant. What has not received attention in the literature is how these effective,

relational, working relationships are established between pregnant women and their care providers. Women in the current study identified multiple dimensions as being important, including; personal characteristics and/or life experiences of professionals', professionals actions going beyond expectations, inclusion of emotional and physical aspects of prenatal care, and time.

Personal characteristics and /or life experiences of professionals' affected women's ability to identify with certain professionals. This is an important finding in that it is relatively easy for professionals to respond to, for example, some women noted that having a professional take five or ten minutes during the early stages of prenatal care to share some personal information (i.e., if they had children, engaged in sports) made it easier to engage with such professional. For professionals who are not as comfortable with this notion, perhaps it is as simple as hanging a family picture on the wall.

Going beyond women's expectations of standard of care and the inclusion of physical and emotional elements of prenatal care, require more input from health professionals. While 'going beyond' may be difficult to ask of health professionals as a means of engaging women in relational care, the inclusion of emotional aspects into prenatal care is not. Women in this study were very clear that professional's who addressed, or even acknowledged, their emotional well-being were extremely supportive of women's self-care efforts. There was not a single incident reported in this study in which a woman responded negatively to a professional encompassing emotional well-being into their approach to prenatal care.

In this study, time as an element of relational care was recognized in a fashion that has received little attention in literature. Often time is identified as being important in

the sense that women need to feel as though professionals have time to spend with them during prenatal encounters (Sutherns, 2004). While this is true in the current study (see Power and Empowerment), time also refers to time over the course of pregnancy. Women identified that even if there were many elements of their prenatal care that they were displeased with they were very likely to return to a specific caregiver in subsequent pregnancies. The explanations that women offered regarding this is essentially that they had invested the time to establish at the minimum a working relationship with a professional, which they did not want to have to do again. Once a relationship was established, women felt less inhibited and were more likely to ask questions. Additionally, women expressed that they were more likely to be increasingly forthright with professionals in subsequent pregnancies and less in-need of 'relational' care, although it would never be stated as a deterrent.

Relational care is not only important in that it helps women to engage and feel comfortable in their prenatal care, but also due to the fact that a breakdown of relationship can be detrimental to pregnant women. McMahon et al. (2002) studied women's reaction to withdrawal of prenatal services in a rural Canadian area, and identified the 'disenfranchisement' with the medical community as being a significant reaction. In the current study, in the absence of widespread crisis such as service closures, women sadly identified similar experiences, named 'dislocation'. Experiences of dislocation are important to understand as they have the power to alter the course of a women's prenatal care. When women experienced dislocation they identified it as feelings of uncertainty with the medical community, lack of confidence in their care, abandonment and insecurity in not knowing whom to turn to. This type of significant

reaction occurred in two types of situations; when women were experiencing a personal crisis, such as a threat to the vitality of their pregnancy, or when professionals or the system itself appeared in crisis to the pregnancy women. Personal crisis resulted in feelings of disenfranchisement when professionals responded to the crisis with extreme callousness or abandonment. While this is fairly explicit and likely to be identified as erroneous by many professionals, the second source of disenfranchisement is subtler. Divergence between professionals, either direct or through conflicting advice, similarly resulted in women feeling letdown by the professional community in general.

Power and empowerment. Critical health psychologists have recognized how pivotal power is in healthcare relationships. Specifically health psychologists have called healthcare professionals to task in the careful monitoring of this power, in part through the examination of the assumptions and values that specific practices are based on (Prilleltensky & Prilleltensky, 2003). Women in the current study expressed feelings of disempowerment when health professionals took an expert-patient approach to self-care. Often this was realized through the practice of routine testing, such as glucose tolerance tests, that women were 'directed' to complete, without any discussion around choice, cost or benefits. Women expressed different reactions to such approaches from feeling demeaned or affronted to a lack of control in the very least. It must be clear that many of the participants in this study preferred the professional to provide guidance around decision-making as they valued the professionals' knowledge. That being said, these same women were appreciative of being informed and given space to make their own choices around prenatal self-care. Experiences in which this was the case increased

women's self-efficacy beliefs and instilled a sense of support from their health-care professionals.

The marginalization of people through false distinctions in the healthcare industry, such as 'good' and 'bad', has been identified in literature (Donnelly & Long, 2004). In this climate of labels, women are at risk to feel unsupported and disempowered when making choices with their self-care that are not 'mainstream'. The antidote to this disempowerment is a supportive relationship with healthcare professionals, which makes room for women to express their unique selves without judgment. Unfortunately, there is a discrediting of relational approaches to prenatal care as they are viewed as separate and not as effective or appropriate in the current climate of medicalized views of pregnancy (Cahill, 2001). Furthermore, Cahill (2001) has identified gender orders as limiting true choice and power for pregnant women. This is a critical error for the system as in the current study 100% of incidents in which health professionals supported choice and unique beliefs were reported as facilitating women's prenatal self-care efforts. Not in all cases did this result in the women declining a directive, instead it was a negotiation and it resulted in women feeling supported. In medical emergencies, such as bleeding, women reported understanding in the lack of discussion however it became extreme failure in which dislocation occurred, this is a piece of the previous category.

Women in the current study identified the experience of seeing professionals working together, provided that there was a previously established trusting relationship with one of the professionals, as being empowering and bolstering confidence in their prenatal care. Conversely, experiences in which tension within the system of professionals was experienced left women feeling at a loss of power. The importance of

collaborative efforts on the part of healthcare professionals has been mirrored in the literature. Thompson (2003) identified the felt conflict between obstetricians and midwives as being detrimental to pregnant women's well being. Collaboration, power sharing and democracy have been listed as being principles on which the health community should be based (Nelson et al., 2004).

One of the primary sources of disempowerment, as cited by women in this study, is the lack of engagement on the part of a healthcare professional. Specifically, women felt a lack of empowerment on occasions where healthcare professionals did not take time to answer questions by rushing women out the door, or not giving adequate thought to answers given. This was particularly detrimental when multiple professionals did not take time to give in-depth perspective to a woman's specific queries resulting in feelings of letdown by individuals and the broader network of professionals. Failure to engage has been recognized as being the primary source of abuse of power within healthcare relationships (Thompson, 2003). Taking the time to be with pregnant women and answer their questions has also been named as central to effective prenatal care (Sutherns, 2004).

The theme of power and empowerment is central to women receiving effective and supportive prenatal care. Mainly women expressed a desire to be supported in their unique selves and included in the process of decision-making. The facets of equalizing power do not necessitate an alternative approach to prenatal care, however it does require that professionals regardless of their philosophy engage actively in relationship with pregnant women.

Life experiences that influence women's care choices. It has been recognized by the researchers that most of the contents of the current theme could easily be included as

an attachment to the findings of this study. While the theme detailing women's life experiences that influence their care choices is highly experiential and therefore is not anticipated to be supported in literature in any depth, it must not be considered any less pertinent in terms of prenatal self-care service experiences. The inclusion of personal ecology information as data is critical to professional development by giving light to the ways in which women choose to access the healthcare system when pregnant. Personal ecology accounts for five categories, three from the current theme and two from the theme that follows (advice). This is an important note as the personal ecology categories are discussed in-depth in the following section (Finding Voice), and as such will only receive mention in the discussion of this theme. The categories from the current theme are; women's inner voices guide care choices and are often unspoken, labour dreams and inspirations influence care, how my partner silences me and impacts my experience of care, informal access to resources, and the powerful voice of my past pregnancy affects this pregnancy. It is the latter two, facilitating categories, which will exemplify this theme in the current discussion.

Experiences of informal access to resources as well as service experiences during subsequent pregnancies were helpful to pregnant women's self-care efforts. In essence these incidents both speak of access, one through greater opportunity and the other through greater demand on services. Women, who were able to access services informally, as in the case of one participant who worked in a hospital, had the sense of being heard with regards to their questions and concerns. These women reported less anxiousness and a greater sense of support in that they did not have to carry their questions between appointments. The sentiments of these women are mirrored by the

theme of accessibility, previously discussed, in which women sighted a greater sense of confidence in their care when able to access professionals between appointments. Women pregnant for their second or third time were able to influence the direction of their care more effectively than during their first pregnancy. As previously mentioned women in this study generally opted to return to their primary caregivers, almost regardless of their level of satisfaction, due to their increased confidence in their ability to demand that their needs were met. The impact of subsequent pregnancies and informal access to care are not attended to in the literature, likely due to their commonsensical nature.

Women's life experiences impacted the ways in which they accessed their prenatal self-care services. While having privileged access to care or being experienced in pregnancy is helpful to women in their self-care service experiences, other elements of this theme are ambiguous in nature. The ambiguous factors, are no less important and will be discussed under the Ecology of Multiple Voices section of this chapter, which is more suitable as it is written to give voice to the ways in which women engage the healthcare system.

Advice. As a closing to the interviews in which the data for this study was collected women were given opportunity to offer advice to the newly pregnant and/or anticipate how their behaviour may change in future pregnancies. The advice given was focused on engagement with prenatal self-care services and ambiguous in nature, and mirrored each woman's personal story. Again, this is highly experiential data, which has received little attention in the literature and yet is very important as it gives further insight for the purpose of professional data. Women mirrored their previous sentiments, reinforcing the need for relational care and lending support to other women in demanding

they find their voice. As women shared their encouraging statements the damaging effects of the absence of generational networks became evident. Women today are often pregnant within a social vacuum of sorts, not living in proximity to a close personal connection to lend solid experiential advice. Many of the participants in this study moved away from their family of origin, for career and /or family reasons. Whatever the reasons, it is clear that within this space, professionals must step in order that women not be left with nothing but their hesitations and uncertainties.

After interviewing 15 women regarding their prenatal self-care service experiences, six major themes were formed from 39 categories. Each theme is significant in that it lends assistance to professionals seeking to develop more effect prenatal services, building on the strengths of the current system. The themes each give concrete ways in which service professionals can increase a women's experience of support, therefore enhancing her self-care efforts. On a more philosophical level, the women also offered great insights into their own personal experiences as they related to the impact of prenatal services on women's voices.

Finding Voice

The concept of voice immersed as an important piece of this research early in the interview process. By allowing the research to be guided by the participants, this concept became pivotal in both understanding and capturing the richness of the women's experiences. Of course, voice is a way of understanding that is well established within feminist research and literature, and has been well represented by Carol Gilligan who has spoken of the importance of voice and the delicate awareness that researches must hold so as to hear people without forcing them into preconceived notions. Gilligan further

allows for multiplicity of voice explaining that within each person is a compilation of different voices that combine to form the voice of a person at any given time (Gilligan, Spencer, Weinberg, & Bertsch, 2003). The themes and categories that developed (see Tables 1 to 4) enabled the participant's stories to be broken down into comprehensive units of understanding. While voice is understood to be infused throughout these units, it is imperative that we seek to know why the experiences were helpful or hindering to women's self-care in pregnancy.

Helping and Hindering Incidents and Women's Voice

Examining the facilitating and hindering categories from the vantage point of women's voice reveals an even greater depth to the current data. Defining whether an incident is helpful or obstructive to pregnant women's self-care can be achieved by asking in what sense her self-care reflects her connection to voice?

Hindering incidents. The effects of the medicalisation of pregnancy have been noted as being detrimental to women (Rider, 2000). Donnelly & Long (2003) fault the false mind/body dualism of the Cartesian philosophy with creating a medical atmosphere fixated with the need to label and therefore silence users of the system. It is this atmosphere that medical practices have been permitted to disembody people from their experiences (Thomson, 2003). Hindering incidents from this study are those that separate women from their own voice (see Table 2). These incidents silence women through the depersonalizing of care and distort their voices through the creation of false consciousness. Women feel uncomfortable, pushed aside, and indeed marginalized. They have expressed that these incidents create within them insecurity and uncertainty about what is best and what they want. Women carry their hesitation and for the most part go

along with many of the directive given to them, however uncomfortable they may feel.

This is a symptom of women separated from their voice. The medical community speaks in terms of compliance, which translates into silence. More important than compliance is connection and engagement, enabling women to hear their voice and become advocates of self without fear of judgment.

Helping incidents. The antitheses of disconnection from voice are those events that help women get in tune with their own voice (see Table 3). These experiences help women undermine, resist and contest the medicalization of birth. Women spoke about helpful professionals that believed in the women's ability to grow and birth a child. Sadly in many of the interviews women questioned whether childbirth was still viewed as a natural process, reflective of the medical communities distortion of women's ability to hear themselves and be heard. Helping incidents were those that were consciousness raising, such as the experiences of women spending time with other women, making room for a collective voice to grow louder. Hearing the collective voice of other women made room for women to allow for their voice to guide their care choices. Collective voice reminded women that it is acceptable to be unique and make decisions based on their uniqueness with our judgment. These incidents paid respect to women as relational beings, and allowed them to hear that this is not insignificant not is it contrary to appropriate prenatal care. Helping incidents are those events, which undermine the ways that women silence themselves. One participant expressed that it was only in her second pregnancy that she became in tune with herself again, and as a result she knew it was appropriate to demand care from professionals.

The stories of women who received prenatal care in the Fraser Valley offers insight into the ways in which women's voice is impacted by prenatal service experiences. Helping and hindering incidents can be thought of as either connecting or cutting women's connection to their voice. While the helping and hindering incidents focus on the ways the system impacts voice, the ecology of multiple voices (i.e., ambiguous incidents) speaks to the ways in which women access the prenatal service system.

Ecology of Multiple Voice Incidents

The notion of ecology as it pertains to this research developed as a descriptor of the process of women engaging the healthcare system (see Table 4). Ecology of identity development is linked to the women's internal process of self-appraisal in connection to service experiences. The first response to the women's voices is to minimize interference with their own self-appraisal. It is understood that systems that impose oppressive forces on women will interfere with healthy transition into motherhood, whether it be for the first, second or subsequent time. The second response is to understand that fostering or strengthening identity development for pregnant women is the context within which self-care makes the most sense. That is, there is health promotion in recognizing ecology so as to prevent disempowering experiences and support self-care as a reflection of the emerging identity of women as mothers. Critical incident in its pure form does not allow for the inclusion of thoughts and emotions into the data unless it is imbedded within an 'incident' of sorts. However, a feminist approach to critical incident allows for the personal ecology to be included by highlighting the ways in which women want to be

heard, which is imperative for professionals to understand. This places the inner voice of the expecting mothers' on par with their physical experiences.

Women's inner ecology. The intersection of experience and background, the persona and the social, define women's inner ecology. Although often silent, this inner working is critical to a woman's approach to prenatal self-care. In obvious form socio-economic class affects a woman's past experiences with both care providers and self, and ultimately influences not only her care choices but also her very definition of self-care. Some women in the study defined self-care, as meeting basic needs such as food, clothing and shelter. In these instances this understanding is pivotal in helping define care. For other women self-care was more focused on managing symptoms so that they could endure working through their pregnancy. Others still approached self-care with an attitude of 'getting the most out of pregnancy'. Professionals must not make the mistake of ignoring the inner ecology of pregnant women, nor must they assume the women's experiences will be obvious or spoken. This inner ecology shapes a woman's approach to care providers and such professionals must take the time to inquire and be curious about pregnant women's unspoken perceptions.

Experiential ecology. The voice of anticipated labour experience is a strong undercurrent that pushes and pulls the course of prenatal self-care. In all of the facets of pregnancy this is the one area in which the women were most able to find their voice. It took the shape of dreams, inspirations, and guided how they decided whom they would seek their prenatal care from. In this, pregnant women sought out care providers who were supportive of their labour plans. Practically this usually meant the absence of intervention unless absolutely necessary, avoidance of the hospital in early labour, and in

some cases the number of personal support people that the expectant mother hoped to have with her during the birth. It is important that professionals not downplay how central this is to many women. Care providers should take time to hear and respect expectant mothers' experiential voice. In the event that it should become necessary to take birth plans from a pregnant woman, professionals should approach this as a significant event, with the sensitivity and seriousness that it deserves.

Relational ecology. All of the participants in this study were currently living with the father of their child(ren). Two participants experienced physical separation during pregnancy due to economic reasons but were still in relationship with the father during the pregnancy. As a result of this relational ecology became distinct. A primary tenet of this category was that many women would have liked to access alternative methods of care delivery, such as midwifery, but did not as per their partner's desires. Theoretically, this could be included in the hindering categories but it is not because it is more connected with self in that relationship with a significant other is much more central to self than the relationship with professional caregivers. Again, drawing on *The Listening Guide* helps cultivate ways to recognize multiple voices for each person and highlights that an expectant mothers' partner is not just an external constraint it is an internal struggle. Relational voice recognizes that an expectant mother may desire to do something, or not, because of her partner's wishes. It is also perfectly legitimate that these wishes are not always spoken, in that an expectant mother may avoid a caregiver that she simply knows by virtue of her relationship, her partner would not approve of. In the majority of cases the partner did voice his direct disapproval of the expectant mother's curiosities, usually due to his belief that an alternative caregiver would be doing

'his job'. None of the women stated that any major conflict arose from these differing view points in the end, in the majority of cases, the alternative methods were not chosen out of respect for the partner's wishes. In contrast, when the expectant mother's partner was actively involved in care experiences her sense of satisfaction was extremely high. It is important for professionals to address the curiosities of pregnant women when it comes to care choices. Alternative care providers, such as doulas and midwives must recognize that actively involving pregnant women's partners may be the definitive difference between her choice of professionals. Providing information to the public that addresses the concerns of partners might remove some of the resistance. Early in relationship establishment, it is important for care providers to include pregnant women's partners and provide a supportive place to have a discussion about the role of professionals and partners. This could help bring partners past the point of silencing pregnant women, and lead right to the realm of heightened satisfaction with care.

Generational ecology. In light of all of the helping and hindering experiences, generational ecology is the distillation of experiences with a forward momentum. When boiled down to their elements, these categories brought forward a strong sense of pregnant women's personal resolve to find and hold on to their inner voice. This task is considerably more evasive on today's society in which newly pregnant women are often pregnant in isolation from other women who have journeyed through their own prenatal experience. Women spending time with women one way to help connect each to their own inner voice through shared experience and validation of unique self. In a commuter society this network is often lost and the healthcare system must be called to fill in the

gaps left by generations past that have moved away, leaving a gap in women's network of support.

Benefits of Research and Needs identification

This study is a foundational step in developing effective interventions to optimize women's self-care during pregnancy. It serves as needs identification and problem definition, both of which are critical steps in Pick et al.'s (2003) development of culturally sensitive healthcare initiatives. Motivational interviewing is a previously established intervention that works with patients' resistance to healthcare initiatives. The application of such an intervention towards obstacles in prenatal healthcare is a promising utilization of the data gathered in the present study. Building on the factors which assist women in their responsible self-care, while focusing interventions at the inhibiting factors will help increase the effectiveness of prenatal health services. Women's self-care during pregnancy is of critical importance and the birth and health of the unborn child hinge on it. Increasing healthcare effectiveness is an important goal as it works to lower healthcare costs and reduce the number of preventable birth complications, while increasing overall patient satisfaction.

Women's Voice and Motivational Interviewing

Motivational interviewing is "an empathetic patient-centered counselling approach for increasing readiness by resolving ambivalence about behavioural change" (Miller & Rollnick, 1991). Ultimately the techniques of MI are used in a way that enables the patient to discover for herself how their current behaviours may be incompatible with core values and personal goals (Resnicow et al., 2002). The rationale for addressing MI is the promising results of various studies, which have demonstrated increased compliance

and patient satisfaction, practical program successes, and clinical effectiveness in health promotion during pregnancy and birth.

Motivational interviewing recognizes that change is fluid, multidimensional and influenced both by social interactions and professional's personal style. Motivation is modified by distress, critical life events and cognitive evaluation. These tenants fit well into typical experiences of pregnancies, as it is a very dynamic and demanding life event. The impact of social supports, and decision-making regarding prenatal care has been identified in this study as being important. Where MI is particularly salient in application to prenatal care is in the instruction to professionals to avoid labelling, blaming, or taking an expert stance. Each of these traps was identified by women in this study as being very damaging to effective working relationship establishment with professionals. As an outline in helping professionals understand motivational changes and ways to nurture agency in clients, MI appears valid in prenatal care.

Where MI falters is in the notion that prenatal care receivers are lacking in motivation to change or care for themselves. While this may be the case for 'high-risk' pregnancies, which the women in this study were not, non at-risk pregnant women did not express a lack of motivation or understanding of the importance of prenatal care. This was expressed repeatedly in the interviews when the women stated that they had a desire to initiate better self-care, however needed support and education from the services to do so. Women did express that they had a great desire for highly personalized engaging care in which they could receive for individualized information to assist them further in their prenatal self-care efforts. Motivaitonal interviewing as a technique, rather than a principle, may be detrimental in non at-risk pregnancies as it could serve to further

separate the individual from the professional. Women expressed resistance on the part of the professionals, not the other way around.

Again, it needs to be distinguished that the women in this study were not high-risk and were in and of themselves a highly motivated group of women who were very interested in their pregnancies, as expressed by the women during the interviews. Regardless of socio-economic status, each of the 15 women interviewed described a desire to follow through with self-care behaviours during their pregnancy. As previously discussed the difference was in each women's definition of self-care, often as a reflection of her socio-economic standing. Again, reflecting the motivation carried across this group of women, none of the women in this study reported having experienced MI, and likewise none of the women stated that they had a lack of interest in self-care during pregnancy. MI, as a philosophy of non-judgmental and non-confrontational approach to care can fit well into the personalized care that women desire. When used as a means of engaging pregnant women and assisting them in working past their blocks to self-care, MI is appropriate. When used as a technique to ensure 'compliance', then the frame of reference from which MI is used will again serve to separate women from their inner voice and guide.

Implications for Practice and Research

This study contributes in-depth information related to the nature of women's prenatal experiences specifically related to helping and hindering service incidents. This is valuable information as it identifies the needs of pregnant women in the Fraser Valley, an understanding of which is critically important to effective service delivery. This research suggests that understanding women's relational nature, and desire for

empowerment are fundamental factors in the way pregnant women engage with the healthcare system. Furthermore, it has been brought to light that the complexities of women's inner ecology must be addressed in appropriate assessment of service needs.

While level of 'medical' involvement desired varied substantially between women, all of the participants voiced a focus on relational care. Relationship then becomes paramount in any intervention sought to increase effectiveness of self-care directives. With recognition of this, the distinction between mainstream and alternative approaches to prenatal care may need to become more diminished in practice.

The fundamental application of the current findings relates to the systemic and professional approaches to prenatal care in the Fraser Valley. Women centered prenatal care must be cultivated to more accurately reflect women's ways of knowing. Relational care must not be put aside for medical approaches, which leave women feeling disconnected from their voice. Relational approaches have been seen as interfering with medical directive when realistically the relationship forms the foundation from which medical approaches can be effective and complimentary. The expressed voice of women in this study has been that there is not a desire to replace medical means of prenatal care, however the lack of relationship and empowerment must be addressed. Professionals need to work with pregnant women, not on them, and include them as equal and active members of the prenatal team. It is, after all, their voice and their responsibility.

Future Research and Limitations

This study has served as a needs identification of prenatal services in the Fraser Valley, by focusing in-depth on the experiences of women who have engaged with such services. While the experiences of pregnant women is a logical place to begin this

research, the story can only be half told. Future research should focus on the experiences of professionals in identifying obstacles and facilitators of service delivery. Rather than blaming service professionals for a lack of 'personalized care', researchers must focus next on the difficulties professionals face in this realm.

Social supports have been identified as being critical to prenatal self-care and future research may seek to understand this more. Worthwhile information could be gleaned from a similarly in-depth study examining the ways in which support systems of pregnant women interact with professionals. This would be important information as a number of women in the current study identified their spouse's aversion to alternative care as being a significant deterrent of seeking such services.

While this study has been designed to glean a vast amount of information from women to gain a certain depth of study it is also recognized the sample size serves as a limitation to generalizing of the findings. This is a limitation and yet it has provided a framework on which a future, quantitative study could be based.

The sample of women in this study varied across socioeconomic status, however a diversity of ethnic background was not present. The data may not accurately reflect the Fraser Valley as a result of the homogeneity of participants. Through the use of interpreters, future studies may apply the same focus on critical service experiences that help and hinder women's prenatal self-care. This focus is important, as it allows for the inclusion of immigrant women in the collective voice of pregnant women. Importantly, the thematic analysis and shared narrative focus on what is common in the stories to give voice to the women. This is the first step of justice, as it can be used as a standard of evaluation for the services set to meet the needs of pregnant women. Future studies may

ask the questions of multiplicity, that is, how should we interpret the shared narrative as an arena of intersectionality? There is a diversity of these stories to be acknowledged in future studies by seeking to understand what are the distinct voices of women saying?

It is also recognized that the passage of time between the experiencing of these events and this study may influence the data as it is based on recollection. While participants are experts of their own experiences and report with the meaning they have attributed to them, future studies can address this by focusing on pregnant women as participants, rather than new mothers.

Conclusion

Present knowledge of women's experiences with prenatal services is limited in the inclusion of in-depth information regarding these experiences regardless of the type of professional involved. The purpose of the present study was to serve as a needs assessment in identifying which elements of prenatal care women found to be particularly influential in encouraging their self-care. A personalized application of MI can implement these results in a constructive manner. Major themes identified included: accessibility of services, services experiences that normalized pregnancy, prenatal care should be personal relationship, power and empowerment, and advice. Many of the themes have been identified and supported in previous literature. However, the unique contribution of this study lies in the amplification of women's voice in relation to prenatal service systems and professional roles. Women-centred service model centers on women's experience while drawing on medical supports. This is an important inclusion and documentation, as it calls for a shift in the fundamental approach to prenatal care, from medical and uniform to individualized and personal. Promoting self-care is a shared

policy objective that promises to foster agency in women's self-care while also helping curb excessive healthcare costs. In essence the most effective service experiences are those that serve to support pregnant women in connecting to their own voice. Health promotion is truly recognizing ecology in a way that will prevent undermining experiences and support self-care as a reflection of the emerging identity of women as mothers.

References

- Anderson, B., & Nilsson, S. (1964). Studies in the reliability and validity of the critical incident technique. *Journal of Applied Psychology, 48*, 398-403.
- American Psychological Association (2003). What is Health Psychology? Division 38. Retrieved Nov 18, 2003 from http://www.health-psychology.org/articles/what_is.php
- Balneaves, L. G., & Long, B. (1999). An embedded model of stress and coping: Implications for exploring treatment decision making by women with breast cancer. *Journal of Advanced Nursing, 30*(6), 1321-1331.
- Berg-Smith, S., Stevens, V., Brown, K., Van Horn, L., Gernhofer, N., Peters, E., et al. (1999). A brief motivational intervention to improve dietary adherence in adolescents. *Health Education Research, 14*, 399-410.
- Blitzer, J., & Alder, J. (2000). Sexuality during pregnancy and the postpartum period. *Journal of Sex Education & Therapy, 25*(1), 49-59.
- Blondin-Andrew, E. Hon. (2003). *Message by the Secretary of State for Children and Youth*. Retrieved September 6, 2005, from http://www.phac-aspc.gc.ca/dca-dea/programs-mes/fas-fae_msg_e.html
- Boon, H., Verhoef, M., O'Hara, D., & Findlay, B. (2004). From parallel practice to integrative healthcare: A conceptual framework. *BMC Health Services Research, 15*(4).
- Cahill, H. (2001). Male appropriation and medicalization of childbirth: An historical analysis. *Journal of Advanced Nursing, 33*(3), 334-343.

- Campbell, E., Thompson, S., & Lavender, T. (2002). Providing women with evidence-based information. *British Journal of Midwifery*, 10(12), 728-731.
- Chang, G., Goetz, M.A., Wilkins-Haug, L., & Berman, S. (2000). A brief intervention for prenatal alcohol use: an in-depth look. *Journal of Substance Abuse Treatment*, 18(4), 365-369.
- Clarke, P., & Gross, H. (2003) Women's behaviour, beliefs and information sources about physical exercise in pregnancy. *Journal of Midwifery*, 2(2), 133-141.
- Cogwell, M. E. (1999). Medically advised, mother's personal target, and actual weight gain during pregnancy. *Obstetric Gynaecology*, 94, 616-622.
- Dipetro, J., Hilton, S., Hawkins, M., Costigan, K. A., & Pressman E. K. (2002). Maternal stress and affect influence foetal neurobehavioral development. *Developmental Psychology*, 3(5), 659-668.
- Donnelly, T., & Long, B. (2003). Stress discourse and western biomedical ideology: Rewriting stress. *Issues in Mental Health Nursing*, 24, 397-408.
- Dzakpasu, S., Mery, L. S., & Trouton, K. (1998). Alcohol and Pregnancy-Facts Sheet- Canadian Perinatal Surveillance System-Public Health Agency of Canada. Last Updated, March 3, 2004. Retrieved September 6, 2005, from http://www.phac-aspc.gc.ca/rhs-ssg/factshts/alcprg_e.html
- Earle, S. (2000). Pregnancy and the maintenance of self-identity: implications for antenatal care in the community. *Health and Social Care in the Community*, 8(4), 235-241.

- Egerter, S. A., Cubbin, C., & Marchi, K. S. (2004). An approach to studying social disparities in health and healthcare. *American Journal of Public Health, 94*(12), 25.
- Eisenberg, A., Murkoff, H. E., & Hathway, S. E. (1991). *What to expect when you're expecting* (2nd ed.). New York: Workman.
- Fraser Health Authority. (2002). *Healthy eating for pregnancy and breastfeeding*. Prepared by Food & Nutrition Services, BC Women's. Revised by Fraser Health Authority, Fraser South Public Health Nutrition Program, 2002.
- Gideon, K., Nulman, I., Chudley, A.E., & Loocke, C. (2003). Fetal alcohol spectrum disorder. *Canadian Medical Association Journal, 169*(11), 1181- 1185.
- Gilligan, C., Spencer, R., Weinberg, M.K., & Bertsch, T. (2003). On the listening guide: A voice-centered relational method. In P. M. Camic, J.E. Rhodes & L. Yardley (Eds.), *Qualitative research in psychology: Expanding perspectives in methodology and design* (pp. 157-172). Washington, D.C: American Psychological Association.
- Gilliland, A. (2002). Beyond holding hands: the modern role of the professional doula. *Journal of Obstetric, Gynecological, and Neonatal Nursing, 31*(6), 547-554.
- Glasgow, R., Whitlock, E., Eakin, E., & Lichtstein, E. (2000). A brief smoking cessation intervention for women in low-income planned parenthood clinics. *American Journal of Public Health, 90*, 786-789.
- Government of British Columbia (1999). *Selected Vital Statistics and Health Status Indicators* (Ministry of Health Planning, Division of Vital Statistics). Retrieved April 15, 2004 from <http://www.gov.bc.ca/stats/annual/1999/tab17.html>

- Handmaker, N. S., Miller, W. R., & Manicke, M. (1999). Finding of a pilot study of motivational interviewing with pregnant drinkers. *Journal of Studies on Alcohol*, 60(2), 285-287.
- Handmaker, N. S., & Wilbourne, P. (2001). Motivational interventions in prenatal clinics. *Alcohol Research and Health*, 25(3), 219-229.
- Hankin, J., Sokol, R., Canstrelli, J., & Shernorr, N. (2000). Protecting the next pregnancy II: impact on birth weight. *Alcoholism: Clinical and Experimental Research*, 24(1), 103-109.
- Health Canada (2000). *Perinatal Health Indicators for Canada: A resource manual*. Ottawa: Author.
- Health Canada (2000). Family-Centered Maternity and Newborn Care: National Guidelines. Minister of Public Works and Government Services, Ottawa, 2000. Retrieved June 20, 2005 from http://www.phac-aspc.gc.ca/dca-dea/publications/fcmc04_e.html
- Heppner, P. P., Kivlighan, D. M., & Wampold, B. E. (1999). *Research design in counseling* (2nd ed.). Belmont, CA: Wadsworth.
- Hulsey, T., Neal, D., Bondo, S., Hulsey, T., & Newman, R. (2005). Maternal prepregnant body mass index and weight gain related to low birth weight in South Carolina. *Southern Medical Journal*, 98(4), 411-415.
- Hurley, K. M., Caulfield, L. E., Sacco, L. M., Costigan, K. A., & Dipietro, J. A. (2005). Psychosocial influences in dietary patterns during pregnancy. *Journal of American Diet Association*, 105(6), 964-966.

- Hohman, M. M. (1998). Motivational interviewing: An intervention tool for child welfare case workers working with substance-abusing parents. *ChildWelfare*, 77(3), 275-290.
- Holmes, T. H. & Rahe, R. H. (1967). The social readjustment rating scale. *Journal of Psychometric Research*, 11, 213-218.
- Howell, D. (1997). *Statistical methods for psychology* (4th ed.). Belmont, CA: Wadsworth.
- Keatinge, D. (2002). Versatility and flexibility: Attributes of the critical incident technique in nursing research. *Nursing & Health Sciences*, 4, 33-39.
- Kemp, R., Hayward, P., Applewhaite, G., Everitt, B., & David, A. (1996). Compliance therapy in psychotic patients: Randomized controlled trial. *British Medical Journal*, 312, 345-349. Retrived August 18, 2005, from <http://bmj.bmjournals.com/cgi/content/full/312/7027/345>
- Key, S. W., & Lindgren, M. (1999). Canadian government provides funding for prenatal nutrition. *Women's Health Weekly*, 14.
- Kirkham, C., Harris, S., & Grzybowski, S. (2005). Evidence-based prenatal care: Part I. General prenatal care and counseling issues. *American Family Physician*, 71(7), 1307-1316. Retrieved August 17, 2005, from http://www.findarticles.com/p/articles/mi_m3225/is_7_71/ai_n13795442
- Koren, G., Nulman, A., & Loocke, C. (2003). Fetal alcohol spectrum disorder [Electronic version]. *Canadian Medical Association Journal*, 169(11), 1181-1190. Retrieved August 18, 2005, from <http://www.cmaj.ca/cgi/content/full/169/11/1181>

- Leawood, K. (2000). AAFP core educational guidelines: Patient education. *American Family Physician*, 62(7), 1712-1715. Retrieved August 1, 2005 from <http://www.aafp.org/afp/20001001/core.html>
- Lobel, M., DeVincent, C.J., Kaminer, A., & Meyer, B.A. (2000). The impact of prenatal maternal stress and optimistic disposition on birth outcomes in medically high-risk women. *Health Psychology*, 19(6), 554-553.
- Magann, E.(2002). Antepartum, intrapartum, and neonatal significance of exercise on healthy low-risk pregnant working women. *Obstetric Gynecology*, 99, 466-472.
- McMahon, S., Drake, M.,Horsburgh, M., Malinowski, A., Rosenbaum,J., & Lynnette, L. (2002). Withholding of obstetrical services—lessons from survivors. *Guidance & Counselling*, 18(1), 23-32.
- Miller, W. R. (2002). Rediscovering fire: small interventions, large effects. *Psychology of Addictive Behaviours*, 14(1), 6-18.
- Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behaviour*. New York: Guilford Press.
- Moore, L., Campbell, R., Whelan, A., Mills, N., Lupton, P., Misselbrook, E., & Frohlich, J. (2002). Self help smoking cessation in pregnancy: Cluster randomized control trial. *British Medical Journal*, 325(52), 1382-1385. Retrieved August 17, 2005, from <http://bmjournals.com/cgi/content/full/331/7513/373>
- Murray, M., Nelson, G., Poland, B., Maticka-Tyndale, E., & Ferris, L. (2004). Assumptions and values of community health psychology. *Journal of Health Psychology*, 9(2), 323-333.

- Myers, B. A. (2003). Getting people to want sliced bread; An update on dissemination of the guide to community preventive services. *Journal of Public Health Management Practice, 9*(6), 545-551.
- Nelson, G., Pancer, S. M., Hayward, K., & Kelly, R. (2004). Partnerships and participation of community residents in health promotion and prevention: Experiences of the highfield community enrichment project (better beginning, better futures). *Journal of Health Psychology, 9*(2), 213-227.
- Nordahl, K., Kerr, S., & Petersen, C. (2001). *Fit to deliver: An exercise program for you and your baby*. Vancouver: Fit to Deliver.
- Pick, S., Poortinga, Y. H., & Givaudan, M. (2003). Integrating intervention theory and strategy in culture-sensitive health promotion programs. *Professional Psychology: Research and Practice, 34*(4), 422-429.
- Prilleltensky, I., & Prilleltensky, O. (2003). Towards a critical health psychology practice. *Journal of Health Psychology, 8*(2), 197-210.
- Resnicow, K., DiIorio, C., Soet, J. E., Borrelli, B., Hecht, J., & Ernst, D. (2002). Motivational interviewing in health promotion: It sounds like something is changing. *Health Psychology, 21*(5), 444-451.
- Rider, E. A. (2000). *Our voices; Psychology of Women*. Belmont, CA: Wadsworth / Thomson Learning.
- Rodriguez, A., Bohlin, G., & Lindmark, G. (2000). Psychosocial predictors of smoking and exercise during pregnancy. *Journal of Reproductive and Infant Psychology, 18*(3), 203-226.

- Rollins, J. (1996). *Women's minds women's bodies. The psychology of women in a biosocial context.* Upper Saddle River, NJ: Prentice-Hall.
- Smith, D., Heckemeyer, C., Kratt, P., & Mason, D. (1997). Motivational interviewing to improve adherence to a behavioural weight-control program for obese older women with NIDDM. *Diabetes Care, 20*, 52-54
- Southern, R. (2004). Adding women's voices to the call for sustainable rural maternity care. *Canadian Journal of Rural Medicine, 9*(4), 239-244.
- Spencer, M. B., Dupree, D., Harpalanai, V., & Munoz-Miller, M. (2003). Vulnerability to violence: A contextually-sensitive developmental perspective on African American adolescents. *Journal of Social Issues, 59*(1), 33-49.
- Stanton, A. L., Lobel, M., Sears, S., & DeLuca, R. S. (2002). Psychosocial aspects of selected issues in women's reproductive health: Current status and future directions. *Journal of Consulting and Clinical Psychology, 70*(3), 751-770.
- Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research. Techniques and procedures for developing grounded theory.* Thousand Oaks, CA: Sage.
- Sutor, C. W. (1999). Nutrition for women in their childbearing years: A review of the literature and a summary of expert recommendations. *Nutrition in Clinical Care, 2*(1), 11-45.
- Taylor, J. M., Gilligan, C., & Sullivan, A. M. (1995). *Between voice and silence - women and girls, race and relationship.* London, England: Harvard University Press.
- The Province of British Columbia, Ministry for Children and Families. (1998). *Baby's best chance: Parents' handbook of pregnancy and baby care* (5th ed.). Toronto: Macmillan Canada.

- Thompson, F. E. (2003). The practice setting: Site of ethical conflict for some mothers and midwives. *Nursing Ethics, 10*(6), 588-601.
- Tod, A. M. (2003). Barriers to smoking cessation in pregnancy: A qualitative study. *British Journal of Community Nursing, 8*(2), 56-64.
- Utley, D. D. (1999). Health prenatal nutrition. *Total Health, 21*(3), 60-63.
- Valanis, B., Lichtenstein, E., Mullooly, J. P., Labuhn, K., Brody, K., Severson, H. et al. (2001). Maternal smoking cessation and relapse prevention during healthcare visits. *American Journal of Preventive Medicine, 20*, 1-8.
- Wang, T. W. & Apgar, B. S. (1998). Exercise during pregnancy. *American Family Physician, 57*(8), 1846-1857. Retrieved August 17, 2005, from http://www.findarticles.com/p/articles/mi_m3225/is_n8_v57/ai_20570146
- Weissgerber, T., Wolfe, L., & Davies, G. (2004) The role of physical activity in preeclampsia prevention. *Medicine and Science of Sports Exercise, 36*(12), 2023-31.
- Werler, M. M., Louik, C., Shapiro, S. & Mitchel, A. A. (1996). Prepregnant weight in relation to risk of neural tube defects. *Journal of the American Medical Association, 275*, 1089-1092.
- Wofe, N. (2001). *Misconceptions: Truth, lies, and the unexpected on the journey to motherhood*. New York: Doubleday.
- Woolsey, L. K. (1986). The critical incident technique: An innovative qualitative method of research. *Canadian Journal of Counselling, 20*(4), 242-254.

Yogev, Y., Langer, O., Xenakis, E., & Rosenn, B. (2005). The association between glucose challenge test, obesity and pregnancy outcome in 6390 non-diabetic women. *The Journal of Maternal-Foetal and Neonatal Medicine*, 17(1), 24-29.

Zimmerman, G., Olsen, C. G., & Bosworth, M. F. (2000). A 'stages of change' approach to helping patients change. *American Family Physician*, 61(5), 1409-1417.

Retrieved August 17, 2005, from

http://www.findarticles.com/p/articles/mi_m3225/is_5_61/ai_61432790

APPENDIX A

Motivational Interviewing Adapted to Prenatal Interview Protocol Questions

Precontemplation Stage

- “How would you know if your diet was a problem for you?”
- “What would have to happen to make you think that drinking is a problem for you?”
- “Have you tried to make changes in your self-care before?”
- “If you did decide to make some changes in your self-care regiment, what would some advantages be?”
- “How does your level of activity compare to other mothers that you know of?”

Contemplation Stage

- “What would be some advantages to being more active during pregnancy?”
- “What would be some consequences of not being active in pregnancy?”
- “What are some barriers that keep you from making changes in your diet today?”
- “What could help you with one of those barriers you just mentioned?”
- “What services could assist you in quitting smoking?”
- “What has helped you to eat well in the past?”
- “What information do you need to learn to help you change?”

Preparation Stage

- “What strategy have you decided to use in changing how you handle stress?”
- “What will you do when a high stress situation arises?”
- “How can you prepare yourself in advance for high stress situations?”
- “When have you decided to make this change?”

Action Stage

- “What have your successes been in increasing your prenatal check-ups?”
- “What has been difficult in increasing your prenatal care?”
- “Have there been difficulties that you did not expect in changing your diet?”
- “What have you learned from these difficulties?”
- “What else do you need to continue your success in increasing prenatal care?”

Maintenance Stage

- “What have been the most helpful and the least helpful factors in reducing your caffeine intake in pregnancy?”

Relapse Stage

- “What are you learning about yourself in this process of changing your alcohol use in pregnancy?”
- “What have you learned from your experiences that have helped you to get back on track in your exercise program?”

APPENDIX B

Critical Incident Interview Protocol Questions

Establishing the Aim

- “When you were pregnant what services did you use that made it easier or harder for you to take care of yourself?”
- “Can you think of a story that directly involves a prenatal professional?”
- “How did your experience of finding the right prenatal professional affect your ability to care for yourself during pregnancy?”
- “How did your experience of prenatal services play into your diet during pregnancy?”

The Critical Incidents

- “Can you describe a particular experience that helped or made it harder for you to take care of yourself during pregnancy?”
- “Can you give an example of how that experience changed the way you cared for yourself during pregnancy?”
- “How did you act differently right after you had this experience?”
- “In what ways did this event affect other experiences you had with prenatal health services?”
- “Can you describe another event that had an effect on your self-care during pregnancy?”
- “How is the event you are now sharing different from the other examples you have shared?”

Closing Questions

- “What advice would you offer to expecting mothers?”
- “If you get pregnant in the future, would you behave differently?”

Debriefing

-“How was the experience of sharing your story?”

-“Is there anything about the experience of being interviewed that you would like to talk about?”

-“I will be phoning you to discuss a summary of this interview and you will have further opportunity to share any thoughts about your experience of sharing with me. If anything comes up for you in the mean time that you feel you need to talk about please don't hesitate to contact me.”

APPENDIX C

Critical Incident Interview Checklist

Criteria

The incident had something to do with the healthcare system, including but not limited to:

-Health professional, pharmacist, naturopath, counseling psychologist, doula, midwife, general practitioner, obstetrician/gynecologist, public health nurse, genetic counselor, labor and delivery nurse, chiropractor, nutritionalist, physiotherapist, prenatal exercise instructor.

Is connected to self-care.

-Diet, exercise, nutrition, stress management, sleep, drug use, smoking cessation, alcohol use, use of prenatal supplements, management of pregnancy symptoms, regular prenatal check-ups, weight management, elimination of environmental hazards, work and pregnancy, safe prescription drug use, herbal remedies, labor and delivery preparation.

Sufficient information of incident gathered.

-What actually occurred? How often did this occur and what was the level of impact of this incident?

-Time, as in gestational age at time of incident.

-Place. Did the incident occur at the doctor's office, public health unit, exercise class, etc.?

-People involved. What health professional was involved in the incident, was the expectant mother alone or with partner, friend, parent, etc.?

Relevance.

-Did the incident help or hinder self-care?

-What was it about the incident? What were the expectant mother's thoughts, feelings, and actions at the time of the incident?

APPENDIX D

Expectant Mothers: Taking Care of Ourselves During Pregnancy

Looking for new moms!

Being pregnant is hard work and while there are many services available to expectant mothers, some are more useful than others.

I am a Masters' student at Trinity Western University's Counselling Psychology Program and am interested in learning more about the experience of pregnancy. I am conducting a study to find out what prenatal services are most and least helpful to pregnant women in British Columbia. We will get together for about one to one and a half hours to give you the opportunity to share your experiences of prenatal services and their effects on your self-care during pregnancy. A time and location for this meeting will be set at your convenience. There is also a follow-up call to make sure that I have interpreted your experiences accurately. The confidentiality of participants is ensured.

Each participant will have the opportunity to have their name entered in a draw for a \$50.00 gift certificate to Toys R' Us!

If you are interested in sharing your experience with me, or would like more information about this study, please call Carmen Dodsworth at (604) 536-6766 or e-mail me at cdodsworth@agape.twu.ca.

APPENDIX E

April 1, 2004

Expectant Mothers': Taking Care of Ourselves During Pregnancy

A research team from Trinity Western University's Counselling Psychology Department is interested in finding out what services are most and least helpful to pregnant women during pregnancy. We will be asking mothers to think about their own experiences of pregnancy and share their stories in an informal one-on-one interview. The interview will be arranged before hand through telephone contact. The sharing interview will take about one hour or an hour and a half. Each participant will also receive a follow-up phone call to review a summary of the interview and also gives each participant an opportunity to give feedback to the research team. Confidentiality of each participant is ensured. On completion of the study, each participant will be offered a summary of the study. Participants' responses may be put in anonymous form and kept for further analysis after this study is completed.

In return for taking part in this study each participants' name will be entered into a draw to receive a \$50.00 gift certificate at Toys R' Us. Further benefit to the study includes the opportunity to put into words past experiences and gain insight that may help the participant build on self-care strengths in future pregnancies. Occasionally some participants may feel discomfort when discussing past experiences, particularly if they were negative. Each participant has the right to refuse to participate or withdraw at any point in this study without any consequences. If you have any questions about ethical issues involved in this project you may contact Ms. Sue Funk in Trinity Western University's Office of Research at 604-513-2142.

If you have any questions about this study Carmen Dodsworth at 604-536-6766 or cdodsworth@agape.twu.ca, or the project supervisor Dr.McDonald in the Counselling Psychology Program at 604-513-2034.

Informed Consent

- I have read and understood the description of the study and I willingly consent to participate in this study.
- I acknowledge that my responses may be put in anonymous form and kept for further analysis after this study is completed.
- I would like to have my name entered in a draw for a \$50.00 gift certificate at Toys R' Us.

Participants' Signature

Date

APPENDIX F

Checklist of Services Received During Pregnancy

Please indicate which of the following services you accessed during your pregnancy, for reasons dealing directly with your pregnancy.

- pharmacist
- naturopath
- counselling psychologist
- doula
- midwife
- general practitioner
- obstetrician/gynecologist
- public health nurse
- genetic counselor
- labour and delivery nurse
- chiropractor
- nutritionist
- physiotherapist
- prenatal exercise instructor
- other(please specify)_____

Please indicate what elements of self-care you found important to you during pregnancy.

- diet
- exercise
- nutrition
- sleep
- drug use
- smoking cessation
- alcohol use
- use of prenatal supplements
- management of pregnancy symptoms
- prenatal check-ups
- weight management
- elimination of environmental hazards
- work and pregnancy
- safe prescription drug use
- herbal remedies
- labour and delivery preparation
- other (please specify)