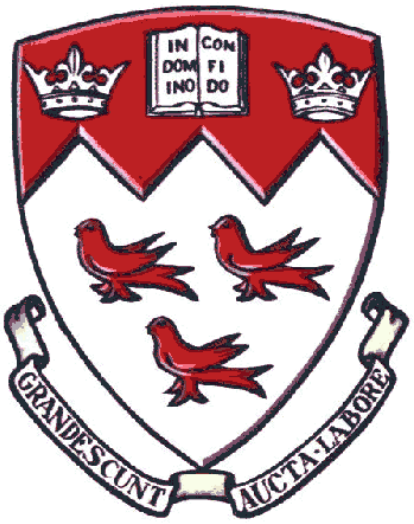

UNDERSTANDING WOMEN'S PREFERENCES, CHOICES AND EXPECTATIONS OF GROUP VERSUS INDIVIDUAL PRENATAL CARE

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ABSTRACT

Context: The intent of group prenatal care is to enable better preparation for pregnancy and birth. It is essential to understand the factors that influence women to choose group versus individual prenatal care. This sub-study of a larger implementation project aims to explore women's preconceptions, choices and expectations of care among both Canadian-born and immigrant women choosing between group and individual prenatal care.

Objective: The objectives of this study were: (1) To understand the preconceptions women have of group prenatal care; (2) To explore the factors that influence women to choose group versus individual prenatal care; and (2) To describe the differences in expectations and choices of prenatal care between Canadian-born and immigrant women.

Methods and Participants: This study adopted a qualitative descriptive approach. Participants of the study consisted of Canadian-born and immigrant pregnant women receiving individual (n = 6) and group (n = 6) prenatal care at an academic primary care clinic serving a multicultural population. Inclusion criteria included: age 18 or older, low-risk, singleton pregnancies, followed by a staff family physician, and fluency in French or English. Purposeful sampling was used to attain variation based on age, parity and elapsed time in Canada. Individual semi-structured, in-depth interviews were conducted either at clinic, home, or preferred location; interviews were audio-recorded and transcribed verbatim. A hybrid deductive-inductive approach was used to thematically analyze the data.

Results: Nine main themes emerged from the interview data and presented as per the three study objectives. 1) Three main themes were identified for women's preconceptions of group prenatal: a lack of understanding and unfamiliarity with group prenatal care; perceived benefits that attract women to group prenatal care; and concerns with a group format of care that may deter women from choosing this model. 2) Four themes emerged related to factors influencing women's choices of prenatal care: feelings about pregnancy; prenatal care preferences; perceived need for and access to social support; and past experiences with healthcare providers. 3) Two themes emerged that illustrated two key differences in expectations of prenatal care between Canadian-born and immigrant women's choices: overall expectations of prenatal care and cultural preferences in regards to type of healthcare provider and individual versus group care.

Conclusions: Findings through this study indicate that a group prenatal care model is attractive to women seeking holistic care typical of midwifery. It appears that a group format of care may

offer additional social support for some women seeking additional help, if their friends and family are less available in their social networks. In order to promote the model, providers of maternity care services should enhance efforts to inform women of the option to receive this type of care and address the concerns some women may have with privacy and adequate one-on-one time with the physician.

RÉSUMÉ

Contexte: Les soins prénataux en groupe devrait permettre aux femmes de mieux se préparer pour la grossesse et l'accouchement. Il est essentiel de comprendre les facteurs contextuels qui influencent les femmes à choisir un groupe par rapport aux soins prénataux individus. Cette sous-étude d'un projet de mise en œuvre plus grand vise à explorer l'acceptabilité pour les patientes des soins prénataux en format de groupe et les différences entre les attentes de soins des femmes nées au Canada et des immigrantes.

Objectif: Les objectifs de cette étude sont de trois ordres: Premièrement, comprendre les idées préconçues que les femmes ont des groupes de soins prénataux; deuxièmement, explorer les facteurs sociaux et culturels qui influencent les femmes dans leur choix des soins prénataux en groupe ou individuels; et troisièmement, décrire les différences dans les attentes et les choix reliés aux soins prénataux entre les femmes nées au Canada et les immigrantes.

Méthodes et participants: Cette étude a adopté une approche descriptive qualitative. Les participants de l'étude se composait de femmes nées au Canada et immigrants enceintes recevant individuelle (n = 6) et le groupe (n = 6) les soins prénatals dans une clinique universitaire de soins de première ligne desservant une population multiculturelle. Les critères d'inclusion requis aux participants de 18 ans ou plus, ont à faible risque, les grossesses uniques, être suivie par un médecin de famille du personnel et de démontrer la maîtrise du français ou de l'anglais. Tenace échantillonnage a été utilisé pour atteindre la variation fondée sur l'âge, la parité et le temps écoulé au Canada. Des entrevues semi-structurées ont été menées en profondeur et individuellement avec les femmes, à la clinique, à leur domicile ou à leur lieu de prédilection. Les entrevues ont été enregistrées sur bande audio et transcrites mot à mot. Une approche déductive-inductive hybride a été utilisé pour analyser les données thématiquement.

Résultats: Neuf thèmes principaux ont été extraits des interviews et présentés selon les objectifs de l'étude. 1) En ce qui concerne les idées préconçues des femmes par rapport aux soins prénataux en groupe, trois thèmes principaux ont été identifiés : un manque de compréhension et de familiarité avec les soins prénataux en groupe; les avantages perçus qui attirent les femmes vers les soins prénataux en groupe; et les préoccupations face au format de groupe qui peuvent dissuader les femmes de choisir ce modèle. 2) Les facteurs qui influencent les choix des femmes en matière de soins prénataux sont résumées en quatre thèmes principaux : sentiments au sujet de la grossesse; préférences de soins prénataux; besoin perçu et l'accès au support social; et les

expériences précédentes avec les prestataires de soins de santé. 3) Concernant les attentes des femmes face aux soins prénataux et les différences entre les choix des femmes nées au Canada et les immigrantes, deux thèmes principaux ont été identifiés : les attentes générales face aux soins prénataux et les préférences culturelles en ce qui concerne le fournisseur de soins de santé et le choix des soins individuels par rapport aux soins de groupe.

Conclusions: Les conclusions de cette étude indiquent que le modèle de soins prénatals de groupe est attrayant pour les femmes qui cherchent des soins holistiques typique de sage-femme. En outre, un format de soins en groupe est particulièrement bénéfique pour les femmes avec un faible soutien social qui pourrait pas obtenir de soutien de leurs amis ou de la famille qui peuvent soulager l'anxiété et le stress qui accompagne souvent la grossesse. Afin de promouvoir le modèle, des efforts devraient être prises pour informer les femmes de la possibilité de recevoir ce type de soins et de répondre aux préoccupations des femmes peuvent avoir avec la vie privée et suffisamment de temps en tête-à-tête avec le médecin.

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I could not write this section without acknowledging the initiative taken by my thesis committee members, Dr. Maxine Dumas Pilon, whose leadership, scientific curiosity and determinedness to improve healthcare led her and Anne Mirca Dupiton to implement group prenatal care and devise a research study, which formed the basis of this thesis. Thank you both for helping me engage the physicians and being there at every step of the way. Most importantly, thank you for providing feedback related to the findings and clinical relevance of this project.

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Ultimately, I hope this research benefits healthcare delivery and improves the prenatal care experience for mothers-to-be.

My deepest gratitude goes to my family and friends, without whom I would not be the person I am today. To my mother, Siba Turjman, who instilled discipline and fostered my love for learning from an early age, and to my father, Bernard Redding, who cheers me on daily and provides me with the strength and courage needed to pursue my dreams. I will forever be indebted to you for your love, support and compassion. To my best friend, endless supporter and the person who keeps me grounded, thank you! Your presence, patience and faith in me is the reason I have persevered.

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PREFACE & CONTRIBUTIONS

This thesis is based on a sub-study of a prospective, cohort study entitled: "Impact of Group Prenatal Care on Women's Experience and Knowledge Compared to Individual Prenatal Care", developed by Dr. Maxine Dumas-Pilon, Anne Mirca Dupiton and Dr. Jeannie Haggerty.

Development of the interview guide was carried out jointly by the author and Dr. Susan Law. Consent forms were also developed by the author with assistance by Rebecca MacDonald and Suzanne Descent, who helped translate the consent form into French. Participant recruitment was performed by the author according to the study protocol developed by the author in joint collaboration with Dr. Jeannie Haggerty. Dr. Maxine Dumas-Pilon, Anne Mirca Dupiton and Dr. Haggerty helped in the setup of the recruitment process. Interviews were conducted by the author, along with the assistance of Dr. Susan Law and Ilja Ormel. Coding and analysis of the data was carried out by the author with guidance from Dr. Susan Law and Ilja Ormel. The thesis paper was researched and written by Nour Redding, with editorial support from Dr. Jeannie Haggerty and Dr. Susan Law.

1.0 INTRODUCTION

1.1 Background

The provision of prenatal care is firmly established worldwide as part of standard preventive care in pregnancy and childbirth to reduce risks and optimize opportunities for healthy pregnancies and childbirth. Hence, issues of access and mechanisms to promote prenatal care are of particular concern in primary care. Usual prenatal care in North America consists of a series of planned visits where physicians engage in risk assessment and serial surveillance to detect potential pregnancy complications, and provide education and support to prepare women for delivery and motherhood. In Canada, the delivery of prenatal care mirrors the delivery of other medical services: 10-to-20 minute clinical encounters between a woman and her physician, with an emphasis on clinical preventive maneuvers that leaves limited time for education and support. Many women meet their needs for education and support by attending childbirth education classes offered independently from their prenatal care. While these classes prepare women for delivery and motherhood, they are not integrated with prenatal care and this can lead to women receiving conflicting information or being prepared for a delivery experience that does not match their physician's preferred clinical approach. In response to the need to integrate the medical and educational prenatal services, Sharon Rising proposed a group prenatal care model in 1994, known as *Centering Pregnancy*, in which women learn about pregnancy and childbirth with other pregnant women and also have the opportunity to receive individualized medical care from healthcare professionals (Rising, Kennedy, & Klima, 2004). The Centering Pregnancy model, initially implemented in Connecticut, USA, seeks to promote patient- and relationship-centered care that engages women and their partners, fosters agency and empowers women for labor and delivery (Massey, Rising, & Ickovics, 2006; Bell, 2012).

Numerous studies indicate that in comparison to individual prenatal care, Centering Pregnancy – or group prenatal care – is associated with better pregnancy and delivery outcomes, including lower pre-term birth rates and fewer intrapartum interventions. (Ruiz-Mirazo, Lopez-Yarto, & McDonald, 2012; Sheeder, Yorga, Kabir-Greher, 2012; Thielen, 2012). National studies in the USA and Canada indicate that rates of preterm births, Caesarean deliveries and obstetrical interventions during labor have increased in the past two decades (Public Health Agency of Canada, 2008). For instance, preterm birth rates in Canada have increased from 6.4% in 1981 to between 7.5% - 8.2% by 2010 (Public Health Agency of Canada, 2008; Public Health

Agency of Canada, 2013). Consequently, there is considerable interest in offering group prenatal care to women.

In March 2013, an academic primary care clinic in Montreal began offering women the option to receive Centering Pregnancy group prenatal care. This pilot project included a research study with two components: a quantitative study and qualitative study. The quantitative study aims to assess the psychosocial outcomes of care associated with Centering Pregnancy using longitudinal surveys, which will assess birth readiness, birth and pregnancy knowledge and attitudes, psychological distress, extent of social support, experience and acceptability at three points during pregnancy and postpartum. The qualitative portion – the object of this thesis – aims to explore the choices between group and individual prenatal care and expectations of care among women receiving care at the center.

Given that this urban, community teaching hospital serves a diverse, multicultural community, it is essential to explore the acceptability of the model among women who frequent the clinic. A previous research study conducted at the hospital predicts that between 50 – 75% of the births are by women of immigrant origin (Handley-Derry, 2013). The influence of culture on women's perspectives of pregnancy, prenatal care and childbirth has been well documented over the past decades (Small, Rice, Yelland, & Lumley, 1999; Nigenda, Langer, Kuchaisit, Romero, Rojas, Al-Osimy, et al., 2003; Carolan & Cassar, 2010). Research has additionally found that factors associated with cultural preferences influence choice and utilization of maternity services among immigrant women (Grewal, Bhagat, & Balneaves, 2008; Higginbottom, Hadziabdic, Yohani, & Paton, 2014). Consequently, it is expected that acceptability of group prenatal care may vary based on ethnic and immigrant background.

1.2 Study Objectives

To identify if group prenatal care is an acceptable model of care between both Canadian-born and recent immigrant women, it is essential to understand their needs and expectations. Consequently, this study aims to expose women's understanding and preconceptions of group prenatal care. It also aims to understand the factors that influence low-risk, pregnant women to choose group versus individual prenatal care. Finally, through individual interviews, the study will explore whether choices and expectations of prenatal care are different between Canadian-born and immigrant women. The study findings will generate new knowledge on the factors that

influence women to choose one model of prenatal care versus the other. In addition, they will help providers understand how to better improve and promote group prenatal care.

2.0 LITERATURE REVIEW AND CONTEXT

This chapter presents a review of the literature outlining the recommended guidelines that have come to shape the provision of prenatal care as we know it today along with the historical origins of prenatal care. Subsequently, the Centering Pregnancy group prenatal care model will be described and research pointing to the positive birth and psychosocial outcomes associated with group prenatal care will be examined. Thereafter, information on Canadian demographics and the role of culture in shaping women's choices of prenatal care will be discussed. Contextual information related to the different routes available to access prenatal care in Quebec will be described. Finally, the implementation of group prenatal care at an academic primary care clinic will be presented.

2.1 Present-Day Standards for Prenatal Care

The American College of Obstetricians and Gynecologists (ACOG) defines prenatal care as a plan of care that addresses medical, nutritional, psychosocial, and educational needs of the pregnant woman and her family in order to maintain and improve the health and wellbeing of women, infants and families (2012). These components are similarly echoed in the World Health Organization's (WHO) "Principles of Perinatal Care" (2002). Canada first published national guidelines for maternal and newborn care in 1968; revisions took place in 1974, 1987 and 2000. Since 1987, the guidelines integrated the family-centered care principle and came to be known as the *Family-Centered Maternity and Newborn Care National Guidelines*. These guidelines are designed for health professionals offering maternity care with the aim to positively impact health from preconception to postpartum through the lifetime of children, women and families (Health Canada, 2000). According to these guidelines, the fundamental principles that shape family-centered maternity and newborn care are informed choice, continuity of care, evidence-based care and respect for individuality.

According to both US and Canadian guidelines, recommendations for the basic prenatal care timeline indicate that the first visit should be during the first trimester with monthly visits up until the 30th week. After the 30-week gestation mark, visits should occur every 2-3 weeks (SOGC, 1998; ACOG, 2012). Starting from the 36th week of gestation up until delivery, visits are scheduled on a weekly basis. During each visit, which typically lasts between 15 to 30 minutes, maternal blood pressure and weight are measured, urine is screened while fetal heart

tones and fundal height is recorded. ACOG guidelines (2012) indicate that prenatal care should consist of four elements: risk assessment, serial surveillance, health education and psychosocial support. Historically, risk assessment, which entailed a physical examination of the woman and the fetus, was the primary objective of prenatal care services (Gregory & Davidson, 1999). In addition to physical examinations, this component of care identifies a woman's pregnancy risk by obtaining her medical, personal and obstetric history during the first prenatal care visit (SOGC, 1998; ACOG, 2012). Doing so allows the provider to assess if a woman has chronic conditions that require specialized care, counselling for any tobacco, alcohol or drug use, social services for domestic violence or other social problems and genetic testing and counselling for diseases (Kotch, 2005). In addition, routine laboratory and diagnostic tests are normally prescribed in the initial visit (ACOG, 2012). Serial surveillance refers to successive observations of the woman and fetus to ensure that they are reaching developmental milestones (Kotch, 2005). For most women this entails regularly weighing women, measuring fundal heights, carrying out urine analysis and anatomic ultrasounds to detect abnormalities (Kotch, 2005; ACOG, 2012). Health education provides women with the knowledge needed to best prepare for childbirth and parenting. Topics of discussion normally consist of the physical and psychological changes that accompany pregnancy, health behaviors needed to promote health of mother and fetus, environmental and occupational hazards as well as information about family planning, breastfeeding and childcare (Gregory & Davidson, 1999; Chalmers, 2001; WHO, 2002; Kotch, 2005). Finally, psychosocial support helps women deal with the social, cultural and emotional needs that arise during pregnancy (Kotch, 2005).

2.2 Historical Overview of Prenatal Care

Historically, prenatal care as we know it today was significantly different. Traditionally and across many cultures, pregnant women were revered and their dwelling places were deemed sacred (Taussig, 1937, as cited in Thompson, Walsh and Merkatz, 1990). Ancient texts often made references to the appropriate provision of care to pregnant women (Thompson, Walsh and Merkatz, 1990). Pregnancy and prenatal care was largely a social function that was attended by women – relatives, friends and neighbors (Strong-Boag and McPherson, 1986; Oakley, 1980; Oakley, 1984; King, 1990; Baillargeon, 2009; Henley-Einion, 2009). Prior to the standardization of prenatal care in Canada, for instance, "female relatives, neighbors and friends regularly pooled resources and knowledge in efforts" to aid pregnant women (Strong-Boag and McPherson,

1986). Speaking about the situation in the Western frontier of Canada at the turn of the century, King (1990) describes how women at the time relied on one another for support.

> More important than available professionals was a close circle of other women and female friends, who provided a personal and social support system for the pregnant women a ready source of medical advice handed down from the oral tradition and continued in manuals of domestic medicine (p. 83).

The birth of prenatal care was envisioned by Dr. J. W. Ballantyne (1861–1923), a lecturer at the University of Edinburgh (Oakley, 1984). Dr. Ballantyne argued that "the first step … in the direction of successful treatment of the unborn infant must be successful treatment of the pregnant mother … for, when we come to consider it, we realize that about the physiology of pregnancy … our knowledge is very imperfect … As a matter of fact, the profession does not understand the physiological changes of pregnancy" (1902, p. 465, p. 471). Unlike other clinics that typically only received women in labor, Dr. Ballantyne conceived a pro-maternity hospital that would welcome women with poor obstetric history, complications during their current pregnancy or working women who required a place to rest (Oakley, 1984). It should be noted, however, that Ballantyne's main objective in the development of prenatal care was to understand and treat pathological pregnancies (Oakley, 1984).

Dr. Haig Ferguson (1862–1934), a family doctor for 20 years combined his medical expertise in maternity practice to co-found and direct the Lauriston Prematernity Home in 1905 to provide board and medical supervision to unmarried pregnant girls (Al-Gailani, 2013). Through his work at the Home, Dr. Ferguson observed that prenatal care could lower the rates of preterm births, increase birthweight and decreased neonatal mortality using preventative care (Oakley, 1984). Being a strong believer in the responsibility of obstetricians to preserve the mother's life and health, Ferguson relayed his findings in a letter to the Edinburgh Royal Maternity Hospital and the first outpatient prenatal care clinic was subsequently conceived in June 1915 (Oakley, 1984). Advancements in the realm of prenatal care were also being made in Australia and the USA. Milk depots, an idea originating from Pierre Budan's (1846–1907) work in 1892 to improve infant nutrition in France, began to spread throughout Britain, cities in the USA and Canada, such as New York and Montreal (Oakley, 1984; Thomson et al., 1990; Baillargeon, 2009). These changes to prenatal care and infant nutrition accompanied declines in infant mortality rates. By 1915, the infant mortality rate in the UK had dropped to 110 per 1,000

births from a rate of 151 per 1,000 in 1901 (Oakley, 1984). Infant mortality in Canada dropped from 93.4 deaths per 1,000 live births in 1926, when Canadian statistics first became available, to 74.7 deaths between 1931–1935 (Baillargeon, 2009). The first half of the 20th century continued to witness a decrease in infant mortality rates across many Western countries as social conditions improved and prenatal care was widely deployed (Oakley, 1984; Thomson et al., 1990; Baillargeon, 2009).

The ensuing decades saw a shift of attention to reduce maternal mortality rates. Changing standards of care were also observed with an increase in the number of prenatal care visits, recommendations for earlier attendance for prenatal care and the introduction of regular blood tests (Oakley, 1984). Height and weight measurements were also introduced as procedures during the prenatal visit (Oakley, 1984). Hospitalized childbirth became the norm for most Western women. In 1926, for instance, the percentage of hospital births for Canada was 17.8% (Mitchinson, 2002). By 1950, 76% of births in Canada took place in the hospital (Mitchinson, 2002). These statistics are comparable to other nations such as Britain, the USA and New Zealand experiencing the same developments (Thomson et al., 1990; Mitchinson, 2002; Baillargeon, 2009; Nuttall, 2013; Bryder, 2013; Earner-Byrne, 2013). Technological advancements during the 1950s – 1970s led to the routine use of ultrasound imaging in prenatal care and electronic fetal monitoring during childbirth (Oakley, 1984; Thomson et al., 1990). Despite the fact that these changes in the provision of prenatal care were accepted by most women, a subset of women using maternity services in Britain and parts of the USA were dissatisfied with the healthcare they were receiving and joined together to voice their concerns with the medicalization of pregnancy (Oakley, 1984). Similar to other movements that expressed dissent with the wider political climate in the 1960s and 1970s, many women wrote books to express their frustration with their childbirth experiences (Oakley, 1984). These women along with a few men advocated for minimally invasive, natural forms of childbirth by regulating pain during labor and delivery. This ideology forms the basis of the National Childbirth Trust (NCT) founded in Britain in 1956 (Oakley, 1984). The NCT recognized that in order to have a satisfactory childbirth experience, women needed to improve their knowledge of childbirth and learn how to relax and breath during labor by attending prenatal classes. Other childbirth education classes were being established elsewhere. The renown Lamaze Method, for instance, was developed in 1951 by the French obstetrician Fernard Lamaze to ensure that “every woman

gives birth confidently, free to find comfort in a wide variety of ways, and supported by family and healthcare professionals who trust that she has within her the ability to give birth" (Walker, Visger, & Rossie, 2009). The Lamaze Method was introduced to the United States by Marjorie Karmel in the late 1950s. Soon thereafter, Lamaze course content was integrated into childbirth education in many US hospitals. This self-help healthcare movement encouraged women to fight against the "capturing of the womb" by medical professionals and take ownership of their care to gain the self-confidence needed to deliver as naturally as possible (Oakley, 1984; Henley-Einion, 2009).

In addition, the self-help movement led to the revival of midwifery and homebirths and the development of a midwifery model of care that encourages women to make decisions in collaboration with their midwives who are trained to facilitate uncomplicated labors and provide women with support and advice (Romalis, 1981; Rothman, 1982; Oakley, 1984; Henley-Einion, 2009). While midwifery remained an option of care throughout Europe, it only regained momentum in North America during the 1980s. In the early 1990s, Ontario became the first Canadian province to provide formal education and training for midwives with other Canadian provinces following the same course. Midwifery provides women with longer prenatal visits and more time for education and counselling (Shroff, 1997). By receiving care from a midwife, a woman can choose to deliver in a birthing center, at home, or in some cases, at a hospital (Shroff, 1997). Regardless of the choices women make, midwifery exists to increase women's self-confidence and encourage them to believe in the strength and power of the female body to deliver naturally and reserve medical interventions for emergency situations (Page, 1993).

2.3 Centering Pregnancy

Centering Pregnancy, or group prenatal care, was developed in 1994 by Sharon Schindler Rising, a nurse-midwife who realized that the predominant model of prenatal care lacks adequate teaching and social support (Alexander & Kotelchuck, 2001). To resolve this problem, of care – *health assessment, education* and *support* – to form the multifaceted model of group care. The inspiration for Centering Pregnancy originated in Rising's previous work experience as the director of the University of Minnesota Childbearing Childrearing Center in the 1970s (Rising, 1998; Rising et al., 2004). This center provided low-risk pregnant women and their partners an opportunity to receive care from midwives, be supported by other couples of similar gestation and subsequently continue childrearing in a comprehensive setting (Rising et al., 2004). Care

was provided through individual visits, support groups, formal educational workshops and discussions (Rising & Lindell, 1982). Both professionals and consumers were satisfied with the model and outcomes indicated that the model was a success (Rising, 1982). Rising recognized that group visits provide women with values such as, "learning from others, community building, attitude change and insight development, mutual support, and problem-solving skill development", which are otherwise not accessible through individual prenatal care (Rising, 1998). Thus, Rising standardized the group prenatal care model by basing it on a set of essential elements that serve to provide a framework for the effective group care (Table 1).

Table 1: Essential Elements of Centering Pregnancy

Health assessment occurs within the group space.
Women are involved in self-care activities.
A facilitative leadership style is used.
Each session has an overall plan.
Attention is given to the core content; emphasis may vary.
There is stability of group leadership/
Group conduct honors the contribution of each member.
The group is conducted in a circle.
Group composition is stable, but not rigid.
Group size is optimal to promote the process.
Involvement of family support people is optional.
Opportunity for socialization within the group is provided.
There is ongoing evaluation of outcomes.

Source: Rising et al., 2004

In comparison to individual prenatal care, Centering Pregnancy is structured in a manner whereby 8 – 12 women of similar gestational age meet with a provider approximately 8 – 10 times over the prenatal period for two hours each session (Baldwin, 2006; Massey et al., 2006; Novick et al., 2011). Typically, a physician, nurse or midwife leads the sessions (Bell, 2012). Social workers, nutritionists, physiotherapists, birthing unit nurses and other educators are also welcome to assist (Rising, 1998). Participants of the Centering Pregnancy program are assigned to groups within the first 12 to 16 weeks of pregnancy. Prior to this assignment, the women have individual risk assessments and thorough physical examinations conducted by their healthcare provider (Carlson & Lowe, 2006). Every subsequent group visit begins with a self-assessment where the women take their blood pressure, record their weight, dip their urine and note the results in their charts (Carlson & Lowe, 2006; Robertson, Aycock, & Darnell, 2009). They then meet with the provider individually in the corner of the room to check fundal height and fetal

heart tones (Carlson & Lowe, 2006). During this point in time, women have the opportunity to privately express any concerns they may have (Carlson & Lowe, 2006). The remaining session time is a group engagement and "facilitated discussion" on gestational age-appropriate educational topics outlined in Table 2 (Massey et al., 2006).

Table 2: Centering Pregnancy session topics

	Sessions	Topics
Initial visit	(8 - 12 weeks)	
Group visits	Session 1 (16 weeks)	Introduction to Centering Pregnancy My Prenatal Care – What's Most Important? Personal Goals for a Healthy Pregnancy Nutrition during pregnancy – My Weekly Food Pyramid
	Session 2 (20 weeks)	Common Discomforts Oral Health
	Session 3 (24 weeks)	Relaxation Measures (controlling stress) Thinking about Breastfeeding Family and Parenting Issues
	Session 4 (28 weeks)	Contraceptive Use and the Menstrual Cycle Keeping Myself Safe and Healthy Family and Parenting Issues
	Session 5 (30 weeks)	Self-Inventory: How I Think I'm Doing (update of Session 1)
	Session 6 (32 weeks)	Comfort Measures for Labor Evaluation Sheet I
	Session 7 (34 weeks)	Decisions of Pregnancy Baby care discussion Sibling preparation
	Session 8 (36 weeks)	Personal assessment (feelings about ourselves and our support systems; postpartum period and the need for help and support)
	Session 9 (38 weeks)	Pregnancy Review (update of Session 1) Thinking Ahead (about the birth process and postpartum weeks)
	Session 10 (40 weeks)	Evaluation Sheet II (Emergency Room Survey) My Birth Experience
Postpartum	Postpartum (individual visit)	

Source: Reid, 2007.

Even though a nurse or midwife is normally present to guide the discussion, women are expected to take initiative and build leadership skills by asking questions and sharing their experiences (Baldwin, 2006). Additionally, group care allows participants to establish a relationship with healthcare providers and other women since they spend 20 hours interacting

with one another over the span of seven months. In contrast, women obtaining prenatal care through individual visits only receive a maximum of five hours of support and education from their physician (Massey et al., 2006). Moreover, women receiving individual prenatal care are unlikely to know as many pregnant women who could live the pregnancy experience with them as those who are receiving group care.

The first pilot of this model was implemented in an East Coast hospital clinic. Rising studied 13 "ethnically diverse and primarily Medicaid-eligible prenatal groups" in order to determine women's responses to this innovative model of care (Rising, 1998). The outcomes of interest in this study included pregnancy outcomes, visits to the emergency, evaluation of learning and satisfaction of care. The study consisted of 111 women with an average of 8.75 women per group (Rising, 1998). 96% of the 111 participants indicated that they preferred receiving group prenatal care; while 98% of the sample pointed out that they enjoyed being with other women during their prenatal care (Rising et al., 2004). Since then, numerous studies have been conducted to examine the birth and psychosocial outcomes of group prenatal care (Ickovics et al., 2003; Grady & Bloom, 2004; Baldwin, 2006; Ickovics et al., 2007; Klima, Norr, Vanderheid, & Handler, 2009; Robertson, Aycock, & Darnell, 2009; Jafari, Eftekhar, Fotouhi, Mohammad, & Hantoushzadeh, 2010; Barr, Aslam, & Levin, 2011; Kennedy et al., 2011; Teate, Leap, Rising, & Homer, 2011; Picklesimer, Billings, Hale, Blackhurst, & Covington-Kolb, 2012; Tandon, Colon, Vega, Murphy, & Alonso, 2012; Tandon, Cluxton-Keller, Colon, Vega, & Alonso, 2013; Tanner-Smith, Steinka-Fry, & Lipsey, 2013; Trudnak, Arboleda, Kirby, & Perrin, 2013; Tanner-Smith, Steinka-Fry, & Lipsey, 2014). In addition, a few research studies have qualitatively explored experiences of both women receiving and providers delivering group prenatal care (Kennedy et al., 2009; Baldwin & Phillips, 2011; Novick et al., 2011; Herrman, Rogers, & Ehrenthal, 2012; McNeil et al., 2012; Novick, Sadler, Knafl, Groce, & Kennedy, 2012; McNeil et al., 2013; Novick, Sadler, Knafl, Groce, & Kennedy, 2013; Phillippi & Myers, 2013; Risisky, Asghar, Chafeee, & DeGennaro, 2013; McDonald, Sword, Eryuzlu, & Biringer; 2014). For the purposes of this study, however, only studies exploring women's experiences were examined. Favorable findings have led to the rapid adoption of the Centering Pregnancy model across more than 350 active sites in the United States and Canada (Centering Healthcare Institute, 2014).

2.4 Overview of Included Research Studies Supporting Centering Pregnancy

This review will summarize study findings on the effectiveness of Centering Pregnancy and experiences of women receiving this type of care. The literature used in this review were retrieved using Embase (1996 – present), Ovid Medline (1996 – present) and PsycINFO (2002 – present). The following keywords were used to identify relevant articles: prenatal care, group or groups, group prenatal care, individual or traditional prenatal care, Centering Pregnancy and CenteringPregnancy. Literature included both review and empirical studies. Articles were first screened for relevance by title and abstract before retrieving full-text article. Eligibility criteria for studies to be considered required that the article either examine outcomes and impact of Centering Pregnancy or describe views, perceptions and experiences of women receiving Centering Pregnancy. Of the 812 hits, 41 study articles were pertinent to this literature review. Table 3 presents the characteristics and outcomes of the three randomized control trials. Table 4 presents characteristics of the 12 observational studies and one mixed methods study included in this review. Similarly, Table 5 presents the characteristics and main themes from the eight included qualitative studies. GPNC in the table refers to group prenatal care while IPNC refers to individual prenatal care.

Table 3: Summary of randomized controlled trials (RCTs) examining associations between Centering Pregnancy and birth outcomes (in ascending chronological order)

Author & Publication Year	Title	Study Design	Setting and Participants	Data Collection	Data Analysis and Main Outcomes
Ickovics et al., 2007	Group Prenatal Care and Perinatal Outcomes: A Randomized Controlled Trial	Multisite RCT	Two university-affiliated hospital prenatal clinics Pregnant women aged 14 – 25 years were randomly assigned to either GPNC or IPNC; 80% African Americans Intervention n = 624 Control n = 416	Structured interviews computer-assisted self-interviewing to ensure questionnaires were answered Primary outcomes: preterm birth and low birthweight Pregnancy knowledge evaluated using tool developed by research team; Prenatal distress: Pregnancy Distress Questionnaire; Readiness for labor and delivery and infant care using scales; Satisfaction: Patient Participation and Satisfaction Questionnaire	Intention-to-treat models; General linear model and logistic regression analyses; Cox proportional hazards analyses; Post hoc analysis Women in group care less likely to experience preterm births [OR 00.67, 95% CI 0.44 – 0.99]. Women in GPNC less likely to have suboptimal PNC ($p<0.01$), have significantly better knowledge ($p<0.001$), feel more ready for labor and delivery ($p<0.001$) and have higher satisfaction ($p<0.001$). Breastfeeding initiation was higher in GPNC ($p<0.001$).
Jafari et al., 2010	Comparison of maternal and neonatal outcomes of group versus individual prenatal care: a new experience in Iran.	Cluster RCT	14 urban health centers Intervention n = 320 Control n = 308	Chart reviews; Questionnaires from participants at three points: 34-36 weeks gestation, 24 weeks after delivery and two months postpartum Primary outcomes: low birthweight, preterm birth, fetal demise Secondary outcomes: other maternal and neonatal events including breastfeeding	Intention-to-treat models; generalized estimating equations model No statistically significant differences in preterm births and low birthweight among women in both groups; significant differences in C-section rates between two groups; no statistical significance in breastfeeding initiation rates between groups

Author & Publication Year	Title	Study Design	Setting and Participants	Data Collection	Data Analysis and Main Outcomes
Kennedy et al., 2011	A Randomized Clinical trial of Group Prenatal Care in Two Military Settings	3-year longitudinal RCT	Two military settings from 2005 – 2007 Intervention n = 160 Control n = 162	Chart reviews; Surveys using validated scales including Prenatal Health Behavior Scale, Norbeck Social Support Scale, Pregnancy Distress Questionnaire; Postpartum Depression Screening Scale	Repeated measures analysis, main effects analysis, post-hoc 2x2 interaction contrasts & main effects for models where interactions were significant. Women in group prenatal care are 6x more likely to receive adequate prenatal care and to be more satisfied with their care. No differences were found between the two groups for perceived stress, social support, prenatal or postnatal depression symptoms as well as preterm births and low birthweight

Table 4: Summary of non-randomized studies and a mixed methods study examining associations between Centering Pregnancy and birth outcomes (in ascending chronological order)

Author & Publication Year	Title	Study Design	Setting and Participants	Data Collection	Data Analysis and Main Outcomes
Ickovics et al, 2003	Group Prenatal Care and Preterm Birth Weight: Results from a Matched Cohort Study at Public Clinics	Prospective, matched cohort study	Three public clinics in Atlanta, GA or New Haven, CT Women predominantly black and Hispanic of low socioeconomic status Intervention n = 229 Control n = 229	Primary outcome measures: birthweight and gestational age obtained from chart reviews	McNemar analyses, Mixed-effects models No statistically significant differences in low birthweight and preterm birth rates among two groups.

Author & Publication Year	Title	Study Design	Setting and Participants	Data Collection	Data Analysis and Main Outcomes
Grady & Bloom, 2004	Pregnancy outcomes of adolescents enrolled in a Centering Pregnancy program.	Descriptive, pilot	Teen Pregnancy Center at the Barnes Jewish Hospital (affiliated with Washington University School of Medicine) Intervention n = 124 Control n1 = 144 Control n2 = 233	Information collected on health visit attendance, hospital database and GPNC participant chart reviews.	Chi-square tests Adolescents in GPNC had lower rates of preterm births and low birth weight compared to each comparison group; no significant difference in C-section rates between groups; significant increase in breastfeeding rates between Centering participants and n2.
Baldwin, 2006	Comparison of Selected Outcomes of Centering Pregnancy vs Traditional Prenatal Care	Two-group, pretest/ post-test design	Three different sites in different geographic regions: Northeast, Midwest and South Intervention n = 50 Control n = 48	Four instruments: Rising Pregnancy Review Sheet, Labs & Wurtele's Fetal Health Locus of Control, Prenatal Psychosocial Profile, Participation & Satisfaction tool	Descriptive statistics, Chi-square tests, analysis of variance and covariance Statistically significant differences between groups on post-test in pregnancy knowledge.
Klima et al., 2009	Introduction of Centering Pregnancy in a public health clinic	Focus groups, survey and retrospective chart reviews	Urban public health clinic in the Midwest Intervention n = 61 Control n = 207 Only a subset of the intervention group participated in focus groups. Women receiving IPNC were not recruited for the focus groups. 21 women receiving GPNC and 14 women receiving IPNC completed satisfaction survey	Client satisfaction survey and medical record review of maternal and infant outcomes was completed Qualitative focus groups to evaluate feasibility and acceptability of the program	Independent t-tests and Chi-square analysis Women in group prenatal care had higher satisfaction scores (mean score of 3.9 vs 3.4). No statistically significant difference between CenteringPregnancy and individual care groups in gestational age at birth or birth weight. Content analysis was used to analyze transcripts and notes. Key themes: 1) Enjoyed sharing their experiences 2) Well prepared for labor and birth 3) Enhanced relationships with their providers and other pregnant women

Author & Publication Year	Title	Study Design	Setting and Participants	Data Collection	Data Analysis and Main Outcomes
Robertson et al., 2009	Comparison of centering pregnancy to traditional care in Hispanic mothers	Two-group, non-equivalent pre-post test comparison group design	Hospital based clinic Hispanic women Intervention n = 24 Control n = 25	Breastfeeding, birthweight and gestational age using chart reviews Data collected via questionnaires at the initial visit, 34 – 36 weeks gestation and postpartum. Knowledge and health behaviors: Prenatal/ Postnatal Care Knowledge & Pregnancy Relevant Health Behaviors (PRHB); Self-esteem: Rosenberg Self-Esteem Scale; Depression: Center for Epidemiologic Studies Depression Scale (CES-D)	Descriptive statistics, Chi-square and t-tests, parametric and non-parametric indpt and paired t-tests were conducted Traditional participants had a history of more pregnancies, more living children and higher levels of postpartum self-esteem compared to Centering participants. Knowledge and health behaviors were similar across groups. No differences were found for infant outcomes.
Barr et al., 2011	Evaluation of a group prenatal care-based curriculum in a family medicine residency	Retrospective cohort study	Urban family medicine residency program Intervention n = 195 Control n = 184	Chart extractions from databases Primary outcomes: preterm births, low birthweight and Caesarean section rates	t-tests and Chi-square; logistic regression analysis used when possible. Significant differences in preterm births between two groups. No significant differences in low birthweight and C-section rates.
Teate et al., 2011	Women's experiences of group antenatal care in Australia – Centering Pregnancy Pilot Study	Descriptive study: chart reviews and questionnaires	Two metropolitan hospitals in Sydney, Australia Intervention n = 33; no comparative group	Demographic and clinical outcomes obtained from medical charts. Two self-administered questionnaires about women's experiences with an open-ended section.	Descriptive statistics and content analysis of data from open-ended questions. Women were satisfied and chose this form of care to build friendships and support networks. Attendance rates were high and women appreciated sharing knowledge, ideas and experiences with other women.

Author & Publication Year	Title	Study Design	Setting and Participants	Data Collection	Data Analysis and Main Outcomes
Picklesimer et al., 2012	The effect of Centering Pregnancy group prenatal care on preterm birth in a low-income population	Retrospective cohort study	Health care system in South Carolina serving low-income population Intervention n = 315 Control n = 3,767	Data on health behaviors, sexually transmitted diseases and previous preterm birth history as well as current delivery information	Descriptive statistics, Chi-square and t-tests, multivariable regression Rates of preterm delivery at less than 37 and 32 weeks were lower for group prenatal care. Adjusted odds ratio was 0.53, 95% CI of 0.34 – 0.81, indicating that group prenatal care was protective for preterm delivery.
Tandon et al., 2012	Birth Outcomes Associated with Receipt of Group Prenatal Care Among Low-Income Hispanic Women	Retrospective	Two Florida public health clinics between Jan 2008 – July 2009 Women had to self-identify as Hispanic or Mayan Intervention n = 150 Control n = 66	Data on neonatal birth weight and gestational age obtained thru abstraction of medical records.	t-tests and Chi-square analysis Statistically significant difference in percentage of women giving birth to preterm neonates (5% group vs 13% traditional prenatal care). No statistically significant difference in birth weight.
Tandon et al., 2013	Improved Adequacy of Prenatal Care and Healthcare Utilization Among Low-Income Latinas Receiving Group Prenatal Care	Prospective cohort study	Two Florida, public health clinics Women had to self-identify as Hispanic or Mayan Intervention n = 144 Control n = 70	Data obtained through medical record abstraction and questionnaires. Perceptions of prenatal care: Patient Participation and Satisfaction Questionnaire (PPSQ); receipt of adequate PNC: Adequacy of Prenatal Care Index; compliance with postpartum checkup – question in medical chart	t-tests and Chi-square analysis Statistically significant differences found in satisfaction with prenatal care ($p<0.001$) and higher percentages receiving adequate prenatal care ($p<0.001$). Women receiving GPNC were more likely to have a postpartum checkup within six weeks of delivery ($p = 0.04$).

Author & Publication Year	Title	Study Design	Setting and Participants	Data Collection	Data Analysis and Main Outcomes
Tanner-Smith et al., 2013	Effects of Centering Pregnancy group prenatal care on breastfeeding outcomes	Retrospective chart review used propensity score matching	4 sites in Tennessee (hospital affiliated, community center and rural birthing center) Intervention n = 308 Control n = 486	Breastfeeding outcome data were extracted from the retrospective medical chart reviews	Weighted logistic regression models to examine effects at each site; multilevel mixed-effects logistic regression model used to adjust for propensity scores. Women in GPNC had significantly higher odds of breastfeeding at discharge [OR 2.08, 95% CI 1.32 – 3.26]. No difference in breastfeeding odds at follow-up across four sites.
Trudnak et al., 2013	Outcomes of Latina women in Centering Pregnancy group prenatal care compared with individual prenatal care	Retrospective cohort study	Health department clinic in South Florida between Nov 2006 – Nov 2009; Women had to be Spanish speaking and self-identify as Hispanic. Intervention n = 247 Control n = 240	Review of patient charts. Number of charts pulled from the comparison group was matched to the number of charts pulled from the intervention group.	Logistic regression analysis. Women in GPNC had higher odds of having vaginal birth [OR 2.57, 95% CI 1.23 – 5.36], attending prenatal care visits [OR 11.03; 95% CI 4.53 – 26.83], attending postpartum visits [OR 2.20, 95% CI 1.20 – 4.05], feeding their infants formula only [OR 6.07, 95% CI 2.57 – 14.3]. They also had lower odds of gaining below the recommended amount of gestational weight [0.41, 95% CI 0.22 – 0.78].
Tanner-Smith et al., 2014	The effects of Centering Pregnancy group prenatal care on gestational age, birth weight, and fetal demise.	Retrospective chart review used propensity score matching	Five sites in Tennessee Intervention n = 651 Control n = 5,504	Primary outcome data extracted during medical chart reviews.	Weighted ordinary least squares and weighted logistic regression models. Propensity scores incorporated as weighting function to reduce biases. Women in GPNC had lower odds of very low birth weight [OR = 0.21, 95% CI 0.06 – 0.70], and lower odds of fetal demise [OR = 0.12, 95% CI 0.02 – 0.92]. No differences in preterm birth or low birthweight.

Table 5: Summary of included qualitative studies describing women's views and experiences of Centering Pregnancy (in ascending chronological order)

Author & Publication Year	Title	Study Design Research Objective	Setting and Participants	Data collection	Data analysis	Key Themes
Kennedy et al., 2009	"I Wasn't Alone" – A Study of Group Prenatal Care in the Military	Descriptive study – To compare women's experiences with GPNC to IPNC in two military settings	US Air Force base on the Eastern seaboard and a US Navy Hospital in the Pacific Northwest 234 women completed the interview	Semi-structured qualitative telephone interviews conducted 3 months postpartum	Transcripts analyzed for narrative content using interpretive lens. Thematic analysis was used.	Three broad themes: 1) I wasn't alone – The Experience with Group PNC 2) I liked it but… - Recommendations to Improve Group PNC 3) "They Really Need to Listen" – General Concerns about PNC
Novick et al., 2011	Women's Experiences of Group Prenatal Care	Ethnography – To describe women's experiences of GPNC, describe the activities and interactions of participants in GPNC, explore factors that might influence experiences	African American and Hispanic women receiving GPNC in two urban clinics	45 interviews of 21 women (during pregnancy and postpartum); participant observation of 31/35 total sessions; review of medical record data for 20 women and seven interviews with two group leaders	Hybrid deductive-inductive approach A priori list of codes derived from study's specific aims, relevant literature and interview guide questions. Inductive approach was then used when coding	Six themes: 1) Investing in Care 2) Collaborative Venture 3) A Social Gathering 4) Relationships with Boundaries 5) Learning in the Group 6) Changing Self

Author & Publication Year	Title	Study Design Research Objective	Setting and Participants	Data collection	Data analysis	Key Themes
Herrman et al., 2012	Women's perceptions of centering pregnancy: a focus group study	Focus group study – To determine women's perceptions of group prenatal care	Urban clinic in Delaware 33 women; 23 Black women, seven White women and four Hispanic women	Five focus groups to explore perceptions on strengths / weaknesses of the model and thoughts on potential improvement	Thematic and iterative analysis process	Four substantive themes: 1) It's about respect 2) Knowledge is Power 3) I'm a better mother 4) Supporting each other
McNeil et al., 2012	Getting more than they realized they needed: a qualitative study of women's experience of group prenatal care	Phenomenology – To understand the central meaning of the experience of GPNC for women who participated in Centering Pregnancy	Maternity care clinic in Calgary, Canada 12 women at postpartum and/or group validation between June 2009 – July 2010	Individual interviews	Investigators highlighted and noted in margins statements that had meaning in relation to GPNC and then looked for commonalities + divergences.	Six themes emerged: 1) Getting more in one place at one time 2) Feeling supported 3) learning and gaining meaningful information 4) Not feeling alone in the experience 5) Connecting 6) Actively participating and taking ownership of care
Novick et al., 2012	The Intersection of Everyday Life and Prenatal Care for Women in Two Urban Clinics	Interpretive description – To describe 1) the complex circumstances that generated challenges for women receiving GPNC in two clinics, and 2) the ways in GPNC attenuated difficulties	Two Northeastern urban clinics serving mostly low income African-American or Hispanic women	Individual, semi-structured interviews	Situational analysis to examine situation in women's lives and in clinics surrounding provision and receipt of GPNC	Two main themes: 1) Stressors (problems with transportation and child care, demanding jobs, poverty, homelessness, difficult relationships with partners, limited family support and frustrating healthcare experiences) 2) GPNC strengthened relationships with others through social support. By eliminating wait times, GPNC also offered sanctuary from frustrations with IPNC

Author & Publication Year	Title	Study Design Research Objective	Setting and Participants	Data collection	Data analysis	Key Themes
Phillippi & Myers, 2013	Reasons women in Appalachia decline Centering Pregnancy care	Descriptive study – To explore the reasons Appalachian women decline GPNC	Rural birth center in Southern Appalachia 29 women who declined Centering Pregnancy	Individual, semi-structured interviews	Conventional (inductive) content analysis of manifest content used to analyze interview transcripts	Women preferred one-to-one care, disliked groups and feared bodily or emotional exposure. Some women did not know CenteringPregnancy was an option and they had concerns about partner involvement.
Risisky et al., 2013	Women's Perceptions Using the Centering Pregnancy Model of Group Prenatal Care	Thematic analysis – To gather information from women regarding their experiences with group prenatal care	Hospital-based midwifery practice in South Central Connecticut 10 women and three support people recruited to share feedback	Focus groups were used to gather women's perspectives	Conventional inductive analysis used to analyze transcripts	Three broad themes: 1) Program experience – learning/knowledge gain and shared experiences 2) Midwife relationships 3) Support – Pregnancy/ Labor and Birth/ Post-delivery
McDonald et al., 2014	A qualitative descriptive study of the group prenatal care experience: perceptions of women with low-risk pregnancies and their midwives	Descriptive – To gain a better understanding of women's and care providers' experiences with GPNC in a setting with low obstetrical risk	Midwifery clinic in Ontario, Canada Nine women and five midwives were recruited	Three focus groups – two with women who completed GPNC and one with midwives at clinic	Open coding used to assign conceptual codes to data; Pattern coding captured high-frequency does	Main themes and subthemes: 1) Reasons for participating (connecting and networking; education and preparation; time and efficiency) 2) Benefits (making connections; learning from the group; normalizing the pregnancy experience; improved relationships between women and midwives; feeling prepared for labor and delivery; reduction in workload; shift in social support) 3) Concerns 4) Suggestions for change (content and process; physical environment)

2.5 Birth Outcomes Associated with Centering Pregnancy

Studies reveal that Centering Pregnancy can improve birth outcomes such as preterm births, low birthweight, Caesarean section rates and breastfeeding initiation and duration. A summary of studies that evaluated these outcomes are presented in the following section.

2.5.1 Preterm births and low birthweight

Several studies have examined the prevalence of preterm births and low birthweight infants among women receiving group versus individual prenatal care (Ickovics et al., 2003; Grady & Bloom, 2004; Ickovics et al., 2007; Klima et al., 2009; Robertson et al., 2009; Jafari et al., 2010; Barr et al., 2011; Kennedy et al., 2011; Picklesimer et al., 2012; Tandon et al., 2012; Trudnak et al., 2013; Tanner-Smith et al., 2014). Results from these studies will be grouped and described below according to experimental design. A summary of the results can also be found below in Tables 6 and 7.

Ickovics et al. (2007) conducted a multisite, randomized controlled trial and assigned 1,047 primarily Black women between the ages of 14 – 25 to either standard or group care. Statistical analysis revealed that 9.8% of women receiving group care delivered prematurely as compared with 13.8% receiving individual care (OR 0.67, 95% CI 0.44 - 0.99, p=0.045), indicating that Centering Pregnancy was protective for preterm delivery. This study did not find significant differences in low birthweight rates between the two groups. Jafari et al (2010) describe a cluster randomized control design (n = 628) carried out in Iran whereby 14 urban health centers were randomly assigned to either provide individual or group care. Women receiving group prenatal care had lower rates of preterm births in comparison to those receiving individual prenatal care (6.3% vs 9.7%; OR 0.76, 95% CI 0.46 – 1.41) and were less likely to have infants with low birthweight (6.3% vs 9.1%; OR 0.76 95% CI 0.41 – 1.43). In both situations, however, the differences were not statistically significant (p = 0.19 and p = 0.213 respectively). The final randomized study included in this review was implemented across two US military settings (Kennedy et al., 2011). This study found no differences in preterm births and low birthweight between women receiving group and individual prenatal care.

Similar findings were shown in quasi-experimental designs. A large retrospective cohort analysis (n = 6,155) using propensity score matching indicated that no evidence of differences in the likelihood of preterm birth or low birthweight among women receiving group versus

individual prenatal care (Tanner-Smith et al., 2014). Picklesimer et al (2012) carried out a large retrospective cohort study (n = 4,083) and found that after controlling for maternal race, marital status, tobacco use during pregnancy, early entry into prenatal care and adequacy of prenatal care, a 47% reduction in preterm birth was observed (OR 0.53, 95% CI 0.34 – 0.81). No differences in rates of low birthweight were found between the two groups. Three studies examined the birth outcomes of Hispanic women receiving group and individual prenatal care. Trudnak et al., (2014) used propensity score matching to compare women receiving group and individual prenatal care across five sites. When pooling results across all sites, their study found initial differences in both preterm birth and low birthweight between women receiving group prenatal care versus individual prenatal care. After conducting weighted logistic regression models that controlled for age, race/ethnicity and gravidity at each site and a multilevel logistic regression models to pool results across sites, the results became statistically insignificant for preterm birth (OR 0.83, 95% 0.61 – 1.12) and low birthweight (OR 0.80, 95% CI 0.57 – 1.11). Tandon et al.'s (2012) study found a statistically significant difference in preterm birth rates among women receiving group prenatal care in comparison to those receiving standard care (5% vs 13%, p = 0.04), while one of these studies found no differences in low birthweight or preterm births between the two groups (Robertson et al., 2009). Using data gathered from a pilot intervention at an urban public health clinic in the Midwest (n = 268), Klima et al (2009) found no statistically significant difference in gestational age at birth or birthweight between Centering Pregnancy and individual prenatal care participants. In a poorly designed study, Grady and Bloom (2004) compared data from a Centering Pregnancy pilot intervention (n = 124) with two comparison groups using archived chart data from 1998 (n = 233) and 2001 (n = 144). This study found significant decreases in preterm births and low birthweight between the intervention group and both comparison groups. Finally, one of the earliest prospective cohort studies (n = 558) conducted by Ickovics et al (2003) revealed that birth weight was greater for infants of women in group versus individual prenatal care ($p < .01$). Moreover, while not statistically significant, infants of group participants were less likely to have low birthweight and be born preterm (< 33 weeks) in comparison to women receiving individual care. In sum, the majority of studies indicate that group prenatal care decreases the likelihood of preterm birth with inconsistencies surrounding the impact of group care on low birthweight (Ruiz-Mirazo et al., 2012).

Table 6: Outcomes of studies comparing preterm birth rates between women receiving group versus individual prenatal care

	Preterm birth < 37 weeks		
	Group	Individual	p
Ickovics et al. 2003 (prospective cohort) Group n = 229 / Individual n = 229	9.2%	9.6%	0.83
Grady & Bloom 2004 (comparison group design) Group n = 124 Individual n1 = 144 / Individual n2 = 233	10.5%	N1 = 25.7% N2 = 23.2%	< 0.02[a] < 0.05[a]
Ickovics et al. 2007 (RCT) Group n = 623 / Individual n = 370	9.8%	13.8%	0.045[a]
Klima et al. 2009 (chart reviews) Group n = 61 / Individual n = 207	13.1%	11%	0.667
Robertson et al. 2009 (prospective cohort) Group n = 24 / Individual n = 25	0%	0%	1.00
Jafari et al. 2010 (RCT) Group n = 320 / Individual n = 308	6.3%	9.7%	0.19
Barr et al. 2011 (retrospective cohort) Group n = 195 / Control n = 184	4.2%	8.3%	0.045[a]
Kennedy et al. 2011 (RCT) Group n = 162 / Individual n = 160	7.8%	5.5%	0.46
Picklesimer et al. 2012 (retrospective cohort) Group n = 316 / Individual n = 3767	7.9%	12.7%	0.01[a]
Tandon et al. 2012 (retrospective cohort) Group n = 150 / Individual n = 66	5%	13%	0.04[a]
Trudnak et al. 2013 (retrospective cohort) Group n = 247 / Individual n = 240	8.1%	3.7%	0.035[a]
Tanner-Smith et al. 2014 (retrospective cohort) Group n = 818 / Individual n = 5337	7.4%	13.5%	< 0.001[b]

[a] = statistically significant
[b] = statistically insignificant after controlling for confounding factors

Table 7: Outcomes of studies comparing low birthweight rates between women receiving group versus individual prenatal care

	Low birthweight < 2500 g		
	Group	Individual	p
Ickovics et al. 2003 (prospective cohort) Group n = 229 / Individual n = 229	7.0%	10%	0.38
Grady & Bloom 2004 (comparison group design) Group n = 124 Individual n1 = 144 / Individual n2 = 233	8.87%	N1 = 22.9% N2 = 18.3%	0.002[a] 0.021
Ickovics et al. 2007 (RCT) Group n = 623 / Individual n = 370	11.3%	10.7%	0.9
Jafari et al. 2010 (RCT) Group n = 320 / Individual n = 308	6.3%	9.1%	0.213
Barr et al. 2011 (retrospective cohort) Group n = 195 / Control n = 184	4.8%	8.5%	0.15
Kennedy et al. 2011 (RCT) Group n = 162 / Individual n = 160	4.6%	4.6%	1.00
Picklesimer et al. 2012 (retrospective cohort) Group n = 316 / Individual n = 3767	7.3%	8.4%	0.15
Tandon et al. 2012 (retrospective cohort) Group n = 150 / Individual n = 66	5%	7%	.52
Trudnak et al. 2013 (retrospective cohort) Group n = 247 / Individual n = 240	6.1%	4.7%	0.838
Tanner-Smith et al. 2014 (retrospective cohort) Group n = 818 / Individual n = 5337	6.1%	10.8%	< 0.001[b]

[a] = statistically significant
[b] = statistically insignificant after controlling for confounding factors

2.5.2 Mode of delivery

Six included studies examined the association between model of care and mode of delivery (Grady & Bloom, 2004; Robertson et al., 2009; Jafari et al., 2010; Barr et al., 2011; Kennedy et al., 2011; Trudnak et al., 2013). Table 8 presents a summary of the results found in these studies. Of the two randomized control trials that evaluated this association, a difference between the two groups of women was only observed in Jafari et al.'s study (2010), with 32.8% of women receiving group care giving birth by Caesarean sections versus 40.9% in the control group (p =

0.031). For Kennedy et al.'s (2011) patient population, no significant difference was observed; 31.7% of women receiving care in groups and 29.7% of those receiving care individually had C-sections (p = 0.71). Barr et al,'s (2011) retrospective cohort study revealed that patients cared for by residents using the Centering Pregnancy model had lower rates of C-sections compared to those receiving standard care (17.53% versus 26.92%, p = 0.028). After controlling for confounding factors, this result became statistically insignificant (adjusted OR 0.61, 95% CI 0.37 – 1.01, p = 0.053). A total of 487 medical chart reviews carried out in Trudnak et al.'s study (2013) found that Hispanic women in Centering Pregnancy had higher odds of giving birth vaginally (adjusted OR 2.57, 95% CI 1.23 – 5.36, p = .02). Another smaller study (n = 49) that compared outcomes in Hispanic women prospectively did not find a difference in vaginal delivery rates between those receiving Centering Pregnancy and individual prenatal care (89% and 87%) (Robertson et al., 2009). Finally, Centering Pregnancy did not impact the rate of Cesarean births in the teenage population recruited in Grady & Bloom's (2004) study; C-section deliveries were experienced by 13.7% of the intervention group, 14.6% and 15.9% of the two comparison groups. Based on the studies conducted to date, the evidence for an association between receiving Centering Pregnancy and having vaginal births is weak.

Table 8: Outcomes of studies comparing rates of Caesarean delivery between women receiving group versus individual prenatal care

	Caesarean Delivery		
	Group	Individual	p
Grady & Bloom 2004 (comparison groups) Group n = 124 Individual n1 = 144 / Individual n2 = 233	13.7%	N1 = 14.6% N2 = 15.9%	p = 0.8384 p = 0.5858
Robertson et al. 2009 (prospective cohort) Group n = 24 / Individual n = 25	11%	13%	0.67
Jafari et al. 2010 (RCT) Group n = 320 / Individual n = 308	32.8%	40.9%	0.031[a]
Barr et al. 2011 (retrospective cohort) Group n = 195 / Control n = 184	17.53%	26.92%	0.028[b]
Kennedy et al. 2011 (RCT) Group n = 162 / Individual n = 160	31.7%	29.7%	0.71
Trudnak et al. 2013 (retrospective cohort) Group n = 247 / Individual n = 240	10.1%	17.5%	0.02[a]

[a] = statistically significant; [b] = statistically insignificant after controlling for confounding factors

2.5.3 Breastfeeding

Breastfeeding initiation and duration has also been measured in several studies (Grady & Bloom, 2004; Ickovics et al., 2007; Klima et al., 2009; Robertson et al., 2009; Jafari et al., 2010; Kennedy et al., 2011; Picklesimer et al., 2012; Tanner-Smith et al., 2013; Trudnak et al., 2013). Table 9 presents a summary of these study results. Two of the three included randomized controlled trials showed significantly improved outcomes for breastfeeding initiation/duration (Ickovics et al., 2007; Jafari et al., 2010). Women receiving group prenatal care in the study conducted by Ickovics et al. (2010) initiated breastfeeding more than those receiving individual prenatal care (66.5 versus 54.6; OR 1.73, 95% CI 1.28 – 2.35, p = .001). While there were no significant differences in breastfeeding initiation rates between the two groups described in Jafari et al.'s (2010) study, women receiving group care were breastfeeding more than those receiving individual care at two months postpartum (94.3% versus 86.7%; OR 2.73, 95% CI 1.98 – 4.89, p = 0.001) despite the pressures against breastfeeding in Iranian culture. The last randomized control trial involving a military population (Kennedy et al., 2011), however, indicated that women in both groups initiated breastfeeding at equal rates (94% and 94%, p = 1.00). Within the non-randomized studies, four studies found higher breastfeeding rates among women in group care (Grady & Bloom, 2004; Klima et al., 2009; Picklesimer et al., 2012; Tanner-Smith et al., 2013). Tanner-Smith et al. (2013) compared breastfeeding initiation and duration by using propensity scores to statistically match participants on demographics and medical history across four sites. Using a model that combined results across all sites, her study found that women receiving Centering Pregnancy were over two times more likely to breastfeeding at discharge in comparison to those receiving individual prenatal care (OR 2.08, 95% CI 1.32 – 3.26, p < 0.001). The findings from Trudnak et al. (2013) also revealed a strong association between receiving group prenatal care and breastfeeding (OR 6.07, 95% CI 2.57 – 14.3). Grady & Bloom's (2004) study used two comparison groups to compare effects of group prenatal care using breastfeeding rates from data available for only one of the comparison groups. One study found no differences in breastfeeding (Robertson et al., 2009), while one study surprisingly found an increased likelihood of formula-only feeding among women who were enrolled in the Centering Pregnancy program (Trudnak et al., 2013). Most study findings indicate that being enrolled in Centering Pregnancy increases breastfeeding initiation and duration.

Table 9: Outcomes of studies comparing breastfeeding initiation between women receiving group versus individual prenatal care

	Increased Breastfeeding Initiation		
	Group	Individual	p
Grady & Bloom 2004 (comparison group design) Group n = 124 Individual n1 = 144 / Individual n2 = 233	46%	N1 = data not available N2 = 28%	Group vs n2 < 0.001[a]
Ickovics et al. 2007 (RCT) Group n = 623 / Individual n = 370	66.5%	54.6%	0.001[a]
Klima et al. 2009 (chart reviews) Group n = 61 / Individual n = 207	44.3%	31.2%	0.05
Robertson et al. 2009 (prospective cohort) Group n = 24 / Individual n = 25	66.7%	52%	0.297
Jafari et al. 2010 (RCT) Group n = 320 / Individual n = 308	97.2%	93.8%	0.314
Kennedy et al. 2011 (RCT) Group n = 162 / Individual n = 160	94%	94%	1.00
Picklesimer et al. 2012 (retrospective cohort) Group n = 316 / Individual n = 3767	65%	60%	0.099
Tanner-Smith et al. 2013 (retrospective cohort) Group n = 308 / Individual n = 498	67%	52%	< 0.001[a]
Trudnak et al. 2013 (retrospective cohort) Group n = 247 / Individual n = 240	53.9%	65.4%	0.009[a]

[a] = statistically significant
[b] = statistically insignificant after controlling for confounding factors

2.6 Psychosocial Outcomes Associated with Centering Pregnancy

Pregnancy knowledge and health behaviors, patient engagement, satisfaction of care, social support, self-efficacy and stress have been proposed as important secondary outcomes and mechanisms that affect the experience of group prenatal care and consequently impact birth outcomes (Baldwin, 2006; Kennedy et al., 2009; Ickovics et al., 2011). Many studies have therefore examined satisfaction and knowledge (Grady & Bloom, 2004; Baldwin, 2006; Ickovics

et al., 2007; Klima et al., 2009; Robertson et al., 2009; Kennedy et al., 2011; Teate et al., 2011), while a few have also assessed social support and stress (Baldwin, 2006; Ickovics et al., 2007; Kennedy et al., 2011).

2.6.1 Satisfaction and Knowledge

Satisfaction and pregnancy knowledge were evaluated in numerous studies. Most studies found that women who participated in Centering Pregnancy were more satisfied with their care and felt abler to participate (Ickovics et al., 2007; Klima et al., 2009; Robertson et al., 2009; Kennedy et al., 2011; Teate et al., 2011; Tandon et al., 2013). When comparing satisfaction among women receiving group and individual prenatal care, Tandon et al. (2013) found a statistically significant difference in satisfaction among Hispanic women receiving group and individual prenatal care. Using a prenatal and postpartum questionnaire to evaluate women's experiences and satisfaction of Centering Pregnancy, Teate et al. (2011) describes that women in Australia were particularly satisfied with their care, indicating that this might be an acceptable model of care. Baldwin's (2006) study did not find significant differences between the two groups of women. Despite the fact that Grady & Bloom (2004) did not compare satisfaction of teenagers receiving group with those receiving individual care, they did find that teenagers enrolled in Centering Pregnancy reported high satisfaction. Three studies reported greater pregnancy and prenatal care knowledge (Baldwin, 2006; Ickovics et al., 2007; Klima et al., 2009), while one small study found no significant differences between the prenatal care knowledge of women receiving group and individual prenatal care (Robertson et al., 2009). With regards to satisfaction and knowledge, most studies reveal that women receiving Centering Pregnancy are satisfied with their care and receiving Centering Pregnancy impacts reported pregnancy and prenatal care knowledge.

2.6.2 Social Support and Stress

Findings related to social support and stress were inconsistent across studies. Both randomized control trials that evaluated stress found no differences between women receiving Centering Pregnancy and individual care (Ickovics et al., 2007; Kennedy et al., 2011). Moreover, in the study conducted by Kennedy et al. (2011), no significant differences with respect to social support were found between the two groups. Baldwin et al. (2006) also found no significant difference in regards to social support between groups of women receiving group and individual

care. Thus far, no evidence indicates that Centering Pregnancy has a significant impact on social support or stress.

2.7 Summary of Study Outcomes

Systematic reviews indicate that additional methodologically rigorous studies must be conducted using valid and reliable measurement scales to confirm the above-mentioned benefits of group prenatal care (Sheeder et al., 2012; Lathrop, 2013; Tilden, Hersh, Emeis, Weinstein, & Caughey, 2014). The reviewers suggest that future studies increase sample size (Lathrop, 2013) and use comparison groups to account for any differences in baseline characteristics of participants (Sheeder et al., 2012). This will eliminate the potential for selection bias and ensure that the improved outcomes are attributed to the group prenatal care model (Sheeder et al., 2012). Finally, reported process evaluation can provide reviewers with substantial information needed to compare studies (Tilden et al., 2014).

2.8 Experiences of Women Receiving Centering Pregnancy

The birth and psychosocial outcomes assessed by aforementioned studies are limited in their potential to measure women's expectations and experiences of care. Some of these studies measured women's satisfaction of the care they received, but satisfaction measures are often poorly defined and restricted in their ability to capture the subjective experience of healthcare (Novick, 2009). Realizing this, researchers have conducted qualitative studies to better understand women's experiences of group prenatal care (Kennedy et al., 2009; Novick et al., 2011; Herrman et al., 2012; McNeil et al., 2012; Novick et al., 2012; Phillippi & Myers, 2013; Risisky et al., 2013; McDonald et al., 2014).

Kennedy et al. (2009) completed 234 qualitative interviews with women in two military healthcare settings. Using interpretative narrative and thematic analysis, the researchers found that women enjoyed the group prenatal care experience as it helped them connect with others, learn from other women and realize that the discomforts they were feeling were normal (Kennedy et al., 2009). These women indicated that recommendations such as, increased one-on-one time with the provider and privacy, could be made to improve the program. In comparison to those receiving group care, women receiving individual prenatal care had stronger concerns regarding lack of continuity and choice of provider, limited time overall with the provider, the need for more information, as well as, difficulty obtaining appointments and accessing care

between visits (Kennedy et al., 2009). These findings indicate that women receiving group prenatal care had higher levels of satisfaction and prenatal care knowledge than those receiving individual prenatal care.

Novick et al. (2011) describes a study conducted with 21 low-income participants receiving group prenatal care at two urban clinics in two northeastern states. These women described Centering Pregnancy as an opportunity to invest in their care, socialize with others undergoing similar experiences, form relationships with the group leader and other participants, learn through discussions and become empowered to take ownership of care (Novick et al., 2011). Similar to findings from Kennedy et al.'s study (2009), women wished for more privacy during physical examinations and more personal time with the provider.

Similar findings were identified in a study conducted by Herrman et al. (2012) with 21 low-income women in an urban clinic. These women attributed their positive experience to five facets of the model: the program, the healthcare team, available information, support provided by women and staff and the encouragement to adopt healthy behaviors. Participants suggested improvements to better promote the program by "putting fliers in clinics, schools [and] libraries" (Herrman et al., 2012). They also requested ongoing support after birthing and a scheduled postpartum visit two weeks after delivery rather than six weeks.

McNeil et al. (2012) conducted a phenomenological study with twelve women receiving Centering Pregnancy in Alberta, Canada to better understand the central meaning of the experience of group prenatal care. Their study revealed that women view group prenatal care as an opportunity to spend more time with their provider and ask more questions to gain meaningful information. Women felt supported by the physicians as well as the other participants, which fostered learning and helped normalize the pregnancy experience. Women that did not have friends who were pregnant at the same time realized that connecting with other women was particularly important for them. Finally, women acknowledged that receiving care in groups motivated them to actively participate and take ownership of their care.

Seeing that women from vulnerable populations often face challenges that hinder their access to care, Novick et al. (2012) sought to explore the contextual factors in women's lives that may impact access to group prenatal care. Women were asked to elaborate on the ways in which group prenatal alleviated social stressors. Through interviews with 21 low-income participants,

Novick et al. found that strengthened relationships and social support from women in the groups may reduce the frustration women experience with the healthcare system.

To date, only one study has examined the factors that influence a subset of women in the rural Appalachian area to decline Centering Pregnancy group prenatal care (Phillippi & Myers, 2013). This qualitative, descriptive study revealed that women preferred one-to-one care because they either did not like group settings, had fears of exposure, did not feel a strong reason to change their existing care format or were concerned about their partners' willingness to participate. Some women additionally declined Centering Pregnancy because they were not offered it or faced barriers to participation such as transportation and scheduling (Phillippi & Myers, 2013).

Risisky et al. (2013) made use of thematic analysis to explore the views of participants in group prenatal care and its impact on their pregnancy, birth and postnatal care at a hospital-based midwifery practice in the US. Women recognized that the gaining knowledge and sharing experiences with other women impacted their prenatal experience. The longer appointments allowed women to feel supported by the midwives and more prepared for birth. Support people that attended appointments also helped women both during pregnancy and childbirth. Finally, Centering Pregnancy was perceived to be a model that helped partners prepare for their roles as prospective fathers.

McDonald et al. (2014) describes a qualitative descriptive study carried out with nine women who had completed group prenatal care at a midwifery clinic in Ontario, Canada. Women cited three different reasons for choosing to participate in group prenatal care: connecting and networking, education and preparation, as well as, time and efficiency. Group prenatal care provided women with benefits, such as the opportunity to connect with others and learn in a group, that was not provided by individual prenatal care. Nonetheless, women did express some concerns with group prenatal care and suggested recommendations surrounding content and process, physical environment, presence of partners, increased access to the midwifery team and the participation of a student midwife.

These qualitative studies collectively identify similar psychosocial benefits of receiving care in groups. In most cases, these experiences were not compared to those by women receiving individual prenatal care at the same site. In addition, only two studies explored the factors that lead women to either select or reject group prenatal care (Phillippi & Myers, 2013; McDonald et

al., 2014). In order to better understand the social and cultural factors that influence women to receive group prenatal care, it is essential to further explore women's perspectives, choices and expectations of prenatal care.

2.9 Cultural Perspectives on Maternity Care

2.9.1 Canadian demographics

Significant demographic changes have taken place in Canada over the past 40 years, specifically in regards to population change (Malenfant, Milan, Charron, & Belanger, 2007). For instance, the population in Canadian metropolitan areas has increased by 45% between 1971 and 2001, largely due to immigration (Malenfant et al., 2007). Data from the 2011 National Household Survey (NHS) indicates that 20.6% of Canada's population is foreign-born (Statistics Canada, 2013). Furthermore, the NHS suggests that one out of every five Canadians self-identifies as a visible minority (Statistics Canada, 2013).

2.9.2 Culture's role in shaping perspectives

With such a diverse population of people representing more than 200 ethnic origins (Statistics Canada, 2013), immigrant women receiving maternity care are expected to have diverse views on pregnancy, prenatal care and childbirth (Bodo & Gibson, 1999; White, 2002; Nigenda et al., 2003; Grewal et al., 2008). One study that compared the views of pregnancy and healthcare, experience with healthcare providers and opinions about a new prenatal care program among four different cultures, found that culture influences the preferred number of prenatal visits, the preferred type and amount of information received, the gender and type of provider as well as the use of technology during pregnancy (Nigenda et al., 2003). These kinds of cultural preferences and values are likely to have an influence on patient choice of care between group and individual prenatal care (Purnell, 2013). Further research needs to be carried out to determine if this is, in fact, the case.

2.10 Prenatal care in Canada

Women seeking prenatal care in Canada can access a provider that either follows the biomedical or midwifery model of care. Just like most of North America, the prevailing framework of maternity care services in Canada makes use of the biomedical model of care, which dictates that the doctor is the medical expert that holds the key to knowledge. While this

idea arose at the turn of the century, it continued to manifest itself as changes in prenatal care norms became accepted. Physicians' dominance over maternity care in Canada was further increased after the implementation of the Medical Care Act in 1968, providing all Canadian women with access to maternity care services (Conrad, 1992; Wrede, Benoit & Sandall, 2001). As mentioned previously, the recent reemergence and regulation of midwifery across Canadian provinces gave rise to the midwifery model of care thereby allowing women to play an active role in their healthcare.

Canada is witnessing a growing shortage of maternity care providers that provide intrapartum care, including obstetricians, family physicians, midwives and nurses (SOGC, 2008a). National Physician Database reveals that the percentage of family physicians that provide obstetrical services during childbirth has gradually decreased since 1989 when 31% of family physicians would preside over deliveries (Canadian Institute of Health Information, 2004). While 47% of family physicians still provide prenatal care services, a 2004 survey of 11,041 family physicians found that only 14% provide intrapartum care (National Physician Survey, 2004). These circumstances translate into obstetrician/gynaecologists (OB/GYNs) attending a larger share of deliveries. Findings from a survey conducted by the Society of Obstetricians and Gynaecologists of Canada, however, indicate that obstetricians report heavy caseloads with many working long hours in the office and hospital while additionally being on-call (2008b). This is projected to result in high burnout rates and may lead obstetricians to reduce the provision of intrapartum care (SOGC, 2008b).

2.10.1 Accessing prenatal care in Quebec

In Quebec, the problem of availability of pregnancy care is more acute than in the rest of Canada. In 2006, the Canadian Perinatal Surveillance System of the Public Health Agency of Canada designed the Maternity Experiences Survey (MES) and collected data about prenatal health indicators from recent mothers to better understand pregnancy, labor, birth and postpartum experiences of women (Public Health Agency of Canada, 2006). The survey found that of the 1,256 survey respondents from Quebec, 67.2% sought care from an obstetrician/gynecologist, 28% was followed by a family physician and 2.6% received prenatal care from a midwife. These statistics reveal that even though the province of Quebec has recognized midwifery since 1999, most women in Quebec still opt to either receive care from obstetricians or family doctors. This could be explained by the limited availability of midwives in the province of Quebec. According

to the Canadian Association of Midwives, in 2013, Quebec has 146 midwife members and 26 midwife student members practicing in 11 birthing centers across the province (2015). Seeing that each midwife in Quebec normally follows a maximum of 40 births per year as a primary midwife, a total of approximately 6,000 women can be cared for by midwives in Quebec per year (Canadian Midwifery Regulators Consortium, 2011). Consequently, many birthing centers are at maximum capacity and women who are eager to receive care through midwives are left with no choice but to put their names on a waiting list in the hopes that they will be contacted before the 32nd week of gestation. In the meantime, women seeking alternative, holistic models of care in Quebec must settle to receive care from a family physician or OB/GYN, which results in a lack of choice when choosing a maternity care provider.

According to the 2004 National Physician Survey, only 8% of family physicians attend deliveries and provide intrapartum care. Coupled with the fact that Quebec has the highest proportion of the population without a family physician due to shortages and limited accessibility (Canadian Institute of Health Information, 2009; Canadian Health Services Research Foundation, 2010), many women struggle finding a provider that is willing to follow their pregnancy. To illustrate the poor availability of both family physicians and pregnancy care in Quebec, the university-affiliated community hospital where this study takes place has witnessed several incidents of women presenting in labour to the hospital emergency room having received no prenatal care due to not having a family physician. As a result, the Family Medicine Center (FMC) has an agreement with the local health authority to provide care to pregnant women who do not have family physicians in order to ensure continuity of prenatal care through post-partum care. Consequently, many of the pregnant women cared for by the FMC are new patients. Many are also new immigrants because the hospital serves a multicultural community.

2.11 Implementation of Centering Pregnancy at an academic primary care clinic

In mid-2012, a physician at the FMC of the study hospital raised some staff physician's interest in group prenatal care. The physicians were granted approval and received funds to implement a group prenatal care pilot project. In late-2012, three staff physicians were trained in basic facilitation skills by the Centering Healthcare Institute in Boston, Massachusetts. Before implementing the pilot, the FMC adapted the number of group visits typical of Centering Pregnancy to suit the context. Seeing that the delivery of obstetric care at the FMC is based on shared philosophy of care, two physicians were engaged in each group cohort. This model

ensured that intrapartum continuity of care could be provided to women. The groups were also designed to be facilitated by a nurse.

By March 2013, the FMC began offering group prenatal care to patients. The goal was to provide a new model of prenatal care, occurring in a supportive group environment, which would foster each woman's confidence in her ability to give birth. With rising intervention rates and access to prenatal care becoming increasingly difficult, group prenatal care may provide the population served by the FMC the above benefits while potentially contributing to a cultural change through patient empowerment and teaching. Women choosing group prenatal at the FMC are referred there by various pathways including the birthing center in the area, receptionists at the FMC, the study hospital's website and Alternative Naissance, a non-profit organization offering women information and alternative services related to pregnancy and childbirth.

Six group cohorts were initially offered per year by eight physicians at the FMC. In the past year, three physicians have taken a leave of absence or maternity leave and consequently only five physicians are now available to provide group prenatal care. Since two physicians are needed per cohort, only four group cohorts can now be offered per year. Overall, ten group cohorts have successfully been delivered since the inception of the model.

2.12 Conceptual Model

According to Rising, numerous theoretical perspectives, including feminism, social support and self-efficacy theory, support the group prenatal care model (Rising et al., 2004). A feminist basis for healthcare, developed by Andrist, involves symmetry in the provider-patient relationship, access to information, shared decision-making and social change (Andrist, 1999). These elements are foundational aspects of group prenatal care, as women play an active role in understanding their own health, questioning medical results, participating in discussions and developing skills needed to solve problems (Centering Healthcare Institute, 2008).

Social support theory is founded on the idea of community and the role it plays in fostering a sense of self (Rising et al., 2004). Receiving prenatal care in groups allows women to interact with others, develop relationships that contribute to a feeling of inclusion and ultimately a social support network (Rising et al., 2004; Centering Healthcare Institute, 2008). Studies have found that a lack of social support during pregnancy results in poorer pregnancy and postpartum outcomes (Norbeck & Tilden; 1983; Norbeck & Anderson, 1989; Logsdon, 2000). The dynamics of group prenatal care provide women with an opportunity to create solutions or suggest coping

mechanisms among the group members, thereby fostering social support (Rising et al., 2004; Centering Healthcare Institute, 2008).

Finally, group prenatal care is very much based on self-efficacy theory, which suggests that one's likelihood of engaging in a behavior is dependent on one's confidence in the capacity to perform the behavior consistently well and one's belief that it will achieve the desired outcome (Strecher, DeVillis, Bekker, & Rosenstock, 1986). By providing women with the educational skills needed to assess their weight, test their urine and measure their blood pressure, group prenatal care fosters agency, which empowers women to believe in their own ability to coping a with birth and parenting (Rising et al., 2004).

2.13 Research Questions

The objectives of this study are threefold. First and foremost, it seeks to understand the preconceptions women have of group prenatal care. Secondly, it aims to present the contextual and cultural factors that shape women's choices when choosing between group and individual prenatal care. The study also explores women's expectations and choices of prenatal care. In striving to meet the aims of this study, the following specific research questions were formulated:

1) What are women's general preconceptions of group prenatal care?
2) Why do low-risk pregnant women choose group versus individual prenatal care?
3) How are expectations and choices of prenatal care different between Canadian-born and immigrant women

3. METHODS

This qualitative study is a sub-study of a larger quantitative study seeking to evaluate the psychosocial outcomes associated with the implementation of a group prenatal care pilot project. A qualitative descriptive approach was used to explore low-risk pregnant women's preconceptions of group prenatal care, choices between group and individual prenatal care, and expectations of prenatal care. The following sections will discuss the research design, study setting, sampling strategy, data collection procedures and analysis techniques that have guided this project.

3.1 Research Design

Qualitative inquiry is best suited for research studies that attempt to acquire an in-depth understanding of a phenomena. In other words, the "what" and "how" questions regarding prenatal care expectations and choices can only be addressed by using a qualitative approach (Creswell, 2012). Consistent with this approach, this project in question aims to understand how women describe their preferences and expectations of prenatal care.

This research study followed a *qualitative descriptive* design, as outlined by Sandelowski (2000). Inherent to qualitative design strategies, naturalistic inquiry – which emphasizes that reality can only be understood if studied in its natural context – forms the basis of this study (Sandelowski, 2000). Consistent with this aim, the author remained open to surfacing data by ensuring a lack of "predetermined constraints on findings" (Patton, 2015). Thus, the qualitative descriptive design allowed the researcher to document the real life narrative of pregnant women's views on the subject of prenatal care. Furthermore, seeing that few studies have explored the factors that influence women to choose between group prenatal care versus individual care (Phillippi & Myers, 2013), this qualitative descriptive methodology is the best approach suited for such an in-depth exploration.

One of the tenets of qualitative description involves a focus on rich descriptions of an event or experience, which requires that significant emphasis is placed on the language used by participants to describe facts and realities using everyday terms (Neergard, Oleson, Andersen and Sondergaard, 2009). In this sense, qualitative description ensures that the language used by women to describe their preferences and expectations of prenatal care is maintained (Sullivan-Bolyai, Boya and Harper, 2005).

3.2 Study Setting

The study in question was carried out at a university-affiliated family medicine teaching unit attached to a community hospital. The center has a strong obstetrics program and provides care to low-risk pregnant women that may or may not have a family physician. This university teaching site employs 20 full-time and 40 part-time staff physicians, as well as, 50 family medicine residents. The FMC also employs six full-time nurses.

In comparison to other hospitals and clinics that provide maternity care, this is the only clinic in Montreal that recently offered its patients the option of receiving the Centering Pregnancy group prenatal care model. As mentioned previously, women are informed of this option through various referral pathways.

Given that the clinic is located in a neighborhood considered to be one of the most densely and ethnically populated areas in Montreal, attempts were made to recruit as many immigrant participants as possible (Rouighi, 2010). This was done to ensure a variation of ethnic and cultural perspectives surrounding preferences, expectations and choices surfaced.

3.3 Participants

The target population of this study consisted of low-risk pregnant women seeking prenatal care from staff family physicians at the primary care clinic.

3.3.1 Inclusion and exclusion criteria

Broad inclusion criteria were set to recruit women with diverse views. Women eligible to participate in this study constitute those with low-risk pregnancies receiving either individual or group prenatal care at the Family Medicine Center. Furthermore, to be considered for the study, women had to be above 18 years of age, be able to express themselves in French or English and be in their early stages of singleton pregnancy (set at less than 20 weeks of gestation). Seeing that women tend to have their first prenatal visit at between 8 – 12 weeks of pregnancy, twenty weeks was chosen as the cutoff point because by then a participant would have seen her provider a maximum of three times. This would ensure that women's perceptions and expectations are minimally impacted by their current experience and interactions with their provider. Given that previous exposure and experience to prenatal care may influence participant's views, both primiparous and multiparous women were eligible to participate. Exclusion criteria disqualified women exhibiting chronic illness or diagnosed medical complications, either during current or

past pregnancies since these conditions make women eligible for transfer to the care of an obstetrician. Finally, women who experienced a miscarriage between the time they were informed of the study and the time of successful contact by a research assistant immediately became ineligible to participate.

3.3.2 Sampling

As is commonly the case with other qualitative studies, a purposeful sampling strategy was used for this study. Purposeful sampling, used to deliberately select participants, provides the researcher with "information-rich cases" that one can learn a great deal from about "issues of central importance to the inquiry" (Patton, 2005). Seeing that this study was particularly interested in exploring women's choices of care, participants receiving both individual and group prenatal care were recruited. Furthermore, a special emphasis was placed on recruiting women of immigrant status in order to capture their cultural preferences.

More specifically, a maximum variation sampling strategy was used to capture the "core experiences and central, shared dimensions of a setting" among the sample of diverse women (Patton, 2015). To attain maximum variation sampling and ensure that the heterogeneity of cases is adequately captured (Maxwell, 2009), the author attempted to select women based on three dimensions – age, elapsed time in Canada and educational level. Even though it was relatively simple to recruit a diverse sample based on the first two dimensions, it proved to be much harder to recruit women who had attained educational levels lower than university. In other words, all of the women who agreed to participate in the study were university-educated. The challenges involved in recruiting participants of lower socioeconomic or minority status have been well-documented in the literature (Ejiogu et al., 2011). Bearing this in mind, the author adopted a pragmatic approach of convenience sampling that allowed for the recruitment of women who were willing and available to participate even if they did not range in educational attainment. Notwithstanding that convenience sampling has been criticized due to its low credibility (Patton, 2015), in some cases, it is considered sufficiently appropriate for exploratory or pilot studies (Green & Thorogood, 2009).

3.3.3 Recruitment and enrollment

Research ethics stipulates that an individual provider from the woman's primary care circle briefly inform the woman of the study and obtain her assent to be contacted by the researcher.

Consequently, engaging staff physicians in the recruitment stages of the project was crucial for its success. Thus, along with the help of the nurse and physician leading the group prenatal care project, the author met with her graduate supervisor, physicians, staff and other researchers to discuss strategies and systematize recruitment efforts. Using this information, the recruitment techniques were adopted to meet the clinical processes that suited the physician-patient encounter. Realizing that physicians often did not have time to read a lengthy information sheet, efforts were taken to make the prompts as concise as possible. In addition, a frequently asked questions sheet was included to help physicians answer any questions eligible women had about the study. Two recruitment strategies were developed for each modality of care – individual prenatal care and the CenteringPregnancy program. The participant recruitment process, which took place between December 2014 and April 2015, can be visualized in Figure 1. It is worth noting that since this research is a sub-study of a larger project, some participants were enrolled in both studies.

CenteringPregnancy prenatal care recruitment

As described previously, women choose the model of care that they would like to receive after having spoken with a receptionist or nurse who documents their contact information and choice of prenatal care model. Following their preliminary assessment with the nurse, women choosing to receive group prenatal care were asked if they would be willing to participate in a research study. Those who agreed to receive more information were contacted via phone by the author, who subsequently explained the purpose, procedure, risks and benefits of the study and invited the women to enroll. Of the total number of 12 women who had chosen to receive care in the group, seven agreed to be contacted by the researcher and six consented to participate in the study. The seventh potential participant experienced a miscarriage prior to consenting and she became ineligible to participate in the study. Appointments were set with the women to obtain written informed consent and carry out the interview within one-two weeks after their encounter with the nurse. In other words, most of the women had still not received their care in the group. Due to scheduling constraints, however, the researcher scheduled interviews with two of the six participants after the first group meeting.

Individual prenatal care recruitment

Women receiving individual prenatal care have their appointments scheduled by the receptionists at the clinic. For patients with a family doctor, this is a simple process whereby the

receptionists note the patient's estimated date of confinement (EDC) and set the first prenatal appointment between the 8th and 12th week of gestation. On the other hand, new patients who otherwise do not have a family doctor are provided care in the same timeframe either by resident or staff physicians depending on the patient's preferences for either doctor and the physician's availabilities. In both cases, the scheduled appointment is entered into the appointment program, Medivisit, and a note is included to identify the appointment type – "First Obstetric Appointment" or "New Patient - Obstetrics".

The author accessed the Medivisit system on a weekly basis to screen for new obstetric patients, noting appointment time, name of physician, family medicine chart number and language preference is recorded in a Word document that the researcher can access at a later date. Prompts were placed by Medical Records in patients' charts prior to their appointment time to remind healthcare providers to inform women of their eligibility to join this study. In anticipation of the possibility that women may have questions regarding the project, a frequently asked questions sheet was attached to the prompt. This was expected to facilitate the recruitment process for physicians who may otherwise not have enough time or information to respond to questions regarding the study. Both the prompt and the FAQ document can be found in Appendix 1. Physicians were asked to mark the prompt to indicate the participant's interest to receive more information about the study and leave the form attached on the patient's file for Medical Records. The author collected prompts from Medical Records on a weekly basis and subsequently contacted women interested in being involved in the study.

During the recruitment period, 42 prompts were placed in the files. Of these 42, 16 were marked with either a "Yes, she would like to receive more information…" or "No, she is not interested in participating"; the remaining 26 prompts were left unmarked with neither a yes or no. This could be because physicians 1) did not see the prompt, 2) forgot to mention the study to the patient or 3) the patient did not want to receive more information and the physicians failed to mark that response on the prompt. Of the 16 marked prompts, 12 sheets indicated that the respective pregnant woman agreed to receive more information. The researcher attempted to contact each potential participant via phone a maximum of three times. In some cases, if the woman had a voicemail box, the research investigator left a voicemail informing the woman the purpose of the call. Contact information of the researcher was also relayed in the voicemail in the event that the woman wanted to take the initiative and return the phone call. Successful contact

was made with 10/12 women, of whom two decided to not participate and one was ineligible to take part because she was past the 20th week of gestation. Interviews were scheduled with seven women in total; only six actually kept their appointments.

Participation

Initially, the sample consisted of women who were pregnant for the first time. As the study progressed, however, it became apparent that the inclusion of women who had already had a child would contribute an added dimension that otherwise might not surface and further enrich the data.

Moreover, given that it was more important for the study's aims to enroll immigrant women, mid-way through recruitment, the researcher started deliberately seeking women who had names that appeared to be of immigrant origins, that is non-Anglophone or Francophone last names. In other words, while all eligible women had prompts inserted in their charts, the researcher would try to seize the opportunity to meet potential immigrant women face-to-face either before or after their appointments with the doctor. This was done in order to foster a connection and potentially increase the likelihood of participation by the woman.

Finally, it is important to mention that women receiving group prenatal care were recruited before those receiving individual prenatal care. This occurred because it was critical that interviews be ideally held with women receiving group prenatal care before the first group meeting. Consequently, the researcher placed more efforts on recruiting, enrolling and conducting the interviews with this set of women first.

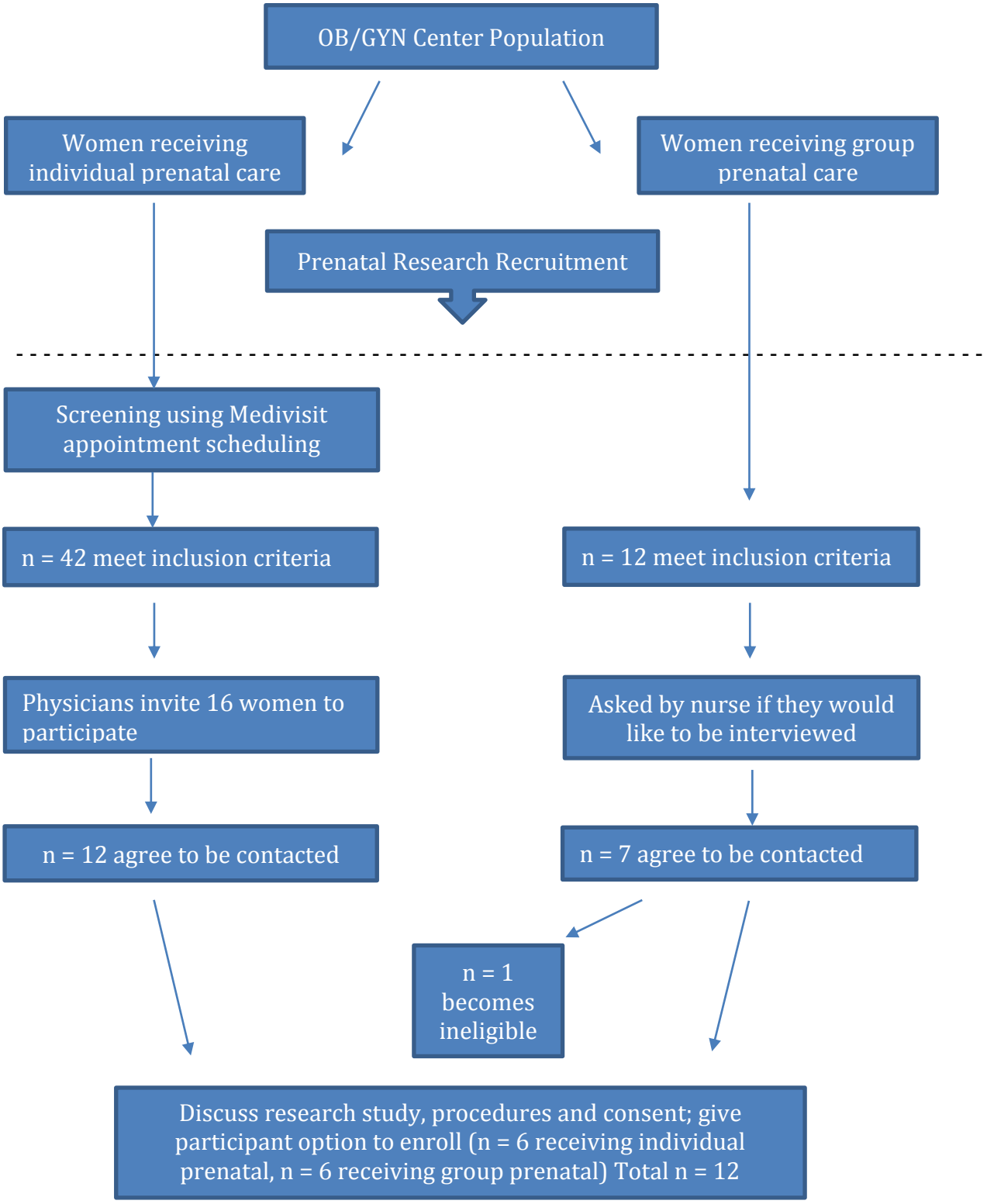

Figure 1: Flowchart illustrating the eligible number of women contacted at each phase of participant recruitment

3.4 Data Collection

3.4.1 Participant interviews

The main source of data for this study was derived from *individual, semi-structured in-depth interviews* with pregnant women. Women who had chosen to receive group prenatal care had their interviews scheduled before the second prenatal appointment, i.e., the first group appointment. This ensured that women's responses to posed interview questions were not influenced by their group experience. To maintain consistency, the author ensured that the interviews for women receiving individual prenatal care were also scheduled after the first prenatal care appointment. Two of the six participants in the set of women receiving individual care, however, were recruited towards the end of their first trimester and had seen their provider more than two times. This is not expected to have changed their perception of group prenatal care since they were receiving individual prenatal care. It might have nonetheless provided them with more scope to comment on their expectations of care.

Participants were given the opportunity to choose the time and place that was most convenient for them to meet. This required the researcher to be flexible and arrange interviews during lunch hours at a location close to the woman's place of employment. Alternatively, some women requested that the interview be held at their apartment. Finally, two of the participants were unable to meet face-to-face. Face-to-face interviews are perceived to be the gold standard of qualitative interviewing (Novick, 2008). In contrast, telephone interviews do not provide the researcher with room to detect visual cues. Some researchers find this loss of contextual and non-verbal data to be problematic as it could result in distortion (Novick, 2008). With this in mind, arrangements were made to conduct the interviews using the video call feature on Skype. In all cases, before the start of the interview, the author explained the study once again, asked the woman if she had questions and finally requested that the participant sign an informed consent form included in Appendix 3.

The open-ended, semi-structured interview was best suited for this study given that it allowed the interviewer to guide the conversation by posing the questions to capture meaning and perspective of prenatal care as defined by the participants (Curry, Nembhard and Bradley, 2009). Simultaneously, semi-structured interviews are adequately open-ended to provide participants the space to discuss information that they feel is important but not necessarily reflected in the interview guide (Seidman, 1998). The interviews ranged in length between 20

and 73 minutes and were carried out in a private place in order to maintain privacy and confidentiality (Green & Thorogood, 2009). Saturation was achieved for the main themes that respond to the research questions this project aims to address. In other words, all women were elicited to speak of their preconceptions of group prenatal care, prenatal care choices and expectations. Due to the open-ended nature of the interviews, some themes emerged from the data, but were not necessarily consistent across interviews. Given that this study is largely exploratory in nature, data collection was terminated before saturation was achieved for these themes (Carey & Asbury, 2012).

3.4.2 Interview guide

Effective qualitative interview guidelines were formulated in joint collaboration with a qualitative expert on the research team to ensure that the questions were relevant and adequately open-ended to invite in-depth responses (Glesne, 1992). Interview questions asked participants to discuss how they accessed the healthcare system for their prenatal care; their choice of care and factors that influenced them to choose this model of care; their expectations of care; their cultural background and the views of pregnancy and prenatal care in their culture; as well as their first impression of the prenatal care they received based on their first appointment.

The initial interview guide developed for this thesis aimed to directly inquire about the factors that influenced women to receive either group or individual prenatal care. Due to issues related to shortages in family physician staff providing group prenatal care, not all women were offered a choice to receive group prenatal care by the receptionists at the FMC. In other words, women who chose to receive group prenatal either found out about it on their own before calling the FMC by reading about the program on the website, through other people that had participated in the program or by coincidentally speaking to the nurse facilitator running the groups. On the other hand, women who were receiving individual prenatal care were often not aware about this option of care. These women – who either had a family physician at the university-affiliated community hospital or were looking for one to follow their pregnancy – scheduled an appointment with the receptionists and were opting to receive individual care by default. Consequently, the interview guide was slightly modified to reflect the fact that women receiving individual prenatal care were not given the choice to participate in group care. In other words, rather than assuming that women were aware of the option to receive group prenatal care, the interviewer inquired to find out if women receiving individual prenatal care knew of this option

and whether they would have hypothetically chosen this model of care if they were given the choice.

3.4.3 Recording data

With the permission of the interviewees, interviews were digitally recorded to allow the researcher to be fully engaged in the interview and pay attention to the participants' non-verbal behavior (Miles & Huberman, 1994). Throughout the data collection process, the researcher kept a reflexive journal to write field notes that described the setting, body language used by the participants as well as the researcher's thoughts, feelings and ideas that can be used to make sense of the data (Green & Thorogood, 2009). Interviews were transcribed verbatim by the author soon after they were completed. This helped identify any questions that needed to be reworded or clarified for ensuing interviews. Moreover, it allowed the researcher to become acquainted with the data (Riessman, 1993). To maintain privacy and confidentiality, the recorded data was securely stored in personal computer files that can only be accessed by the researcher Audio recordings and participants' information will be destroyed upon study completion.

3.5 Data Analysis

Interview transcripts were analyzed using qualitative thematic analysis, which aims to present the key elements of participants' accounts (Green & Thorogood, 2009). A theme is defined as a patterned prevalence in the data that relates to the research question (Braun and Clarke, 2006). According to Braun and Clarke (2006), the six phases of thematic analysis included: a) familiarizing one's self with the data; b) generating initial codes; c) searching for themes; d) reviewing themes; e) defining and naming themes; and f) producing the report. Themes are identified by searching across a data set for convergent and divergent phrases and patterns for further analysis (Braun & Clarke, 2006; Miles & Huberman, 1994). Findings that are grounded in the data were extracted and presented in light of the existing knowledge (Miles & Huberman, 1994). It is important to mention that coding and analysis was done solely by the author. The research team was, however, consulted throughout the process to discuss the coding and themes – both expected and unexpected – that arose from the data.

Transcripts were read multiple times prior to coding to further increase familiarity with and immersion in the data. Rather than adopting a "line-by-line" approach, larger quantities of text were coded. According to Carey and Asbury (2012), this coding approach is considered

appropriate for descriptive studies. Moreover, a hybrid deductive-inductive approach was used to code the generated data according to its meaning and content (Guest, MacQueen and Namey, 2012). This approach involved developing a deductive *a priori* template of codes based on the research questions and conceptual concepts from (1) Andrists' (1997) feminist model of healthcare, (2) social support theory and, (3) Bandura's (1977) self-efficacy theory (Centering Healthcare Institute, 2008; Norbeck and Tilden, 1983; Norbeck and Anderson, 1989; Logsdon, 2000; Strecher, DeVillis, Bekker and Rosenstock, 1986). The coding template was then used to code a few transcripts manually using pen and paper. Notes were inserted in the margins of the transcripts to identify undiscovered patterns or understandings. This inductive approach allowed the researcher to recognize meaningful elements without presupposing what they could be (Patton, 2015). Inductive codes that emerged from the data were subsequently included in the template. Qualitative software program, MAXQDA (Version 11), was then used to help code, manage and analyze the data (Pope, Ziebland and Mays, 2000). A codebook was developed to include a description of all the codes and their relation to one another (Guest et al., 2012). The coded transcripts were then reviewed using the codebook to ensure that the coding was consistent and reliable (Marks & Yardley, 2004). Following coding, the data was subsequently analyzed using a thematic analysis approach outlined by Braun and Clarke (2006).

Thematic analysis was best suited for the purposes of this exploratory study (Braun & Clarke, 2006). While a conceptual model was used in this study, the analysis remained flexible and open to other codes and themes that were not dependent on the conceptual model. Finally, in congruence with the basic or fundamental qualitative descriptive approach, "low-inference" interpretation was used to make sense of the data (Sandelowski, 2000). In other words, the author made choices about what descriptions to include, while maintaining descriptive and interpretive validity, such that most people "observing the same event" or analyzing the "meanings participants attribute to an event" would have the same interpretation (Sandelowski, 2000).

3.6 Rigor of Qualitative Research

3.6.1 Validity of the interview guide

The qualitative interview guide was developed with the assistance of a qualitative researcher. Unlike quantitative research, qualitative data collection and analysis is carried out in

a simultaneous and "iterative" manner (Sandelowski, 2000; Curry et al., 2009). While data collection and analysis was not conducted iteratively, the researcher transcribed preliminary interviews to identify questions and prompts that were unclear and required clarification. This helped ensure that the interview guide was straightforward and comprehensible; it also allowed the author to identify ways to improve interviewing techniques for future interviews.

3.6.2 Credibility

Credibility of research findings is assessed by three basic questions (Miles & Huberman, 1994; Lincoln & Guba, 1985): (a) Do the conclusions make sense? (b) Do the conclusions adequately describe research participants' perspectives? and (c) Do conclusions authentically represent the phenomena under study? Triangulation of data – corroborating the results of the study with other sources of data – was used to enhance credibility of the study (Krefting, 1991). In this case, the alternate sources of data consist of questionnaire results from participants that also enrolled in the main quantitative research study. Questionnaires variables from the larger project that are relevant to this study include prenatal care expectations, attitudes towards pregnancy and childbirth, social support and psychological distress among women receiving both individual and group prenatal care. Data from the reflexive journal was also used (Krefting, 1991).

3.6.3 Transferability

Transferability is comparable to the concept of external validity in quantitative research and it refers to the potential of the study findings to be related and transferred to other contexts (Miles & Huberman, 1994; Lincoln & Guba, 1985). To allow readers to make an informed decision regarding the transferability of the study findings to other settings, thick descriptions of the context, participants' cultural backgrounds, expectations and experiences have been provided.

3.6.4 Dependability

Similar to the concept of reliability in quantitative research, dependability refers to the consistency of results over time and across researchers (Miles & Huberman, 1994; Lincoln & Guba, 1985). In order to ensure dependability has been attained in this study, a dense description of research methods has been provided; supervising researchers thoroughly examined the data

collection and analysis process; and the data was re-coded after developing the codebook. That being said, it is worth noting that there was no second analyst.

3.6.5 Reflexivity

Reflexivity refers to the self-assessment of the researcher's background, perceptions and interests on the qualitative process and results (Krefting, 1991). With a background in sociology, the author has conducted the analysis from a constructionist standpoint that seeks to theorize the sociocultural and structural conditions that shape women's perspectives on the subject of prenatal care (Braun & Clarke, 2006). A reflexive journal was used throughout data collection and analysis in order to highlight biases that arose during the research process. Being aware of these biases allowed the researcher to address them thereby enhancing the credibility of the research study (Krefting, 1991).

3.7 Ethical Considerations

Participation in the research carried very low physical and psychosocial risk, but required a considerable time commitment. Both models of care have been shown to be beneficial in risk reduction, however, no ethical risks were anticipated. Interviews may have triggered anxiety among participants that were uneasy about their pregnancy. Moreover, the researcher initially anticipated that the interview question asking women to reflect on their decision to participate in either individual or group prenatal care may sow doubt in some participants' choice of care. In order to minimize the possibility of this happening, the researcher attempted to keep the interview questions as open ended as possible.

The major ethical concerns involved ensuring confidentiality and reinforcing the voluntary nature of participation during the study period. In order to ensure this was achieved, participants were assured that their information was to be securely stored throughout the study. Transcripts used a pseudonym in order to conceal the identities and ensure that participants would not be identified from any report or presentation related to this study. Furthermore, the researcher's notes of names and matching pseudonyms were kept separate from each other in a secure computer file. This study was approved by the hospital's Research Ethics Committee as can be seen from Appendix 4.

4. RESULTS

This chapter presents the participant characteristics, a description of the process by which women in this study accessed prenatal care at the Family Medicine Center, and the findings from the qualitative analysis. A description of the interview process is included along with demographics of the sample. Contextual information regarding access to care and prenatal care specifically is also presented. The findings are organized and presented according to study objectives. Finally, the themes and subthemes are described in-depth and supported by illustrative quotes from the interviews.

4.1 Analytic Process

Analysis of the data proceeded as per the methods described earlier. All interviews were transcribed verbatim by the author. Since interviews were scheduled over a four-month period, the author did not wait until all the interviews were completed before transcribing them, i.e., the author transcribed most interviews soon after they were concluded. This helped the author improve interviewing techniques and recognize how to frame questions in a way that would not lead participants to answer in a certain manner. It additionally helped the researcher identify if data was being reached. In two cases, when the interview was conducted in a public location, a few words from the recording were unintelligible due to background noise.

It is worth mentioning that the author recruited and conducted interviews with women receiving group prenatal care before those receiving individual care. Coding was initiated after all the interviews with women receiving group prenatal care were completed. The initial codebook was developed by the author with guidance from an experienced qualitative researcher who coded two interviews with the author to explain the process. Nine interviews were coded on paper before using the qualitative software program to store and analyze the data. Questions that the author had regarding the software were addressed by a qualitative project coordinator. After the coding was completed using the software, the author met with the qualitative researcher to verify that the codes and categories were adequately refined.

4.2 Participant Characteristics

A total of 54 women were screened as eligible to participate and had notices placed on their medical charts to prompt physicians to invite them to the study. Of these, 23 women (43%) were told about the study by their healthcare providers and 19 (35%) agreed to be contacted by

the author. Among these 19 women, 12 (63%) agreed to participate in individual interviews. The main reasons cited for declining participation included a lack of time or interest in the study. Interviews were conducted between December and April 2015, and were held in the participants' preferred location. Three interviews were carried out in a meeting room at the Research Center affiliated with the hospital. Three interviews were scheduled in participant's homes; four took place in a coffee shop close to where the participants worked. Finally, due to scheduling constraints, two interviews were conducted over Skype. All consented to participate and agreed to have the interviews audio-recorded. Interviews lasted between 20 and 73 minutes, with the majority lasting approximately 40 minutes.

Table 10 below presents the sociodemographic and health related characteristics of recruited participants. Participants ranged in age between late 20s to late 30s. The majority of women were married and pregnant with their first child. Several women that had other children refused to participate due to childrearing responsibilities and lack of time, although three multiparous women were successfully recruited. Half of the participants were born in Canada; the majority of Canadian-born women (4/6) had resettled in Quebec from other provinces. One woman was born in Europe to Canadian parents and had moved back to Quebec at the age of five. The remaining five women were immigrants from European and Latin American origins. Collectively, these women had resided in Canada just under 10 years. All participants were educated with half the sample consisting of women that had either obtained or were completing graduate degrees. Finally, many of the participants (5/12) described their financial situation to be modestly comfortable, with a few participants having either tight or comfortable situations.

Table 10: Characteristics of the 12 participants who completed the study

Characteristic	Percentage (N)
Sociodemographic variables	
Age group	
26 – 30 years	33% (4)
31 – 35 years	42% (5)
36 – 40 years	25% (3)
Maternal Language	
English	58% (7)
French	8% (1)
Other	33% (4)
Place of Birth	
Quebec	17% (2)
Other Canadian Province	33% (4)
Outside of Canada	50% (6)
Years in Canada (non-Canadian born participants)	
1 – 5 years	17% (2)
6 – 10 years	25% (3)
Marital Status	
Cohabitation	17% (2)
Married	83% (10)
Educational Attainment	
College diploma	8% (1)
Undergraduate degree	42% (5)
Graduate degree	50% (6)
Financial Situation	
Poor or Tight	16.7% (2)
Modestly comfortable	41.7% (5)
Comfortable	16.7% (2)
Missing	25% (3)
Health related variables	
Parity	
Primiparous	75% (9)
Multiparous	25% (3)
Choice of prenatal care	
Group prenatal care	50% (6)
Individual prenatal	50% (6)
Access to a family physician	
Do not have a regular family physician	42% (5)
Family physician outside FMC	33% (4)
Family physician at FMC	25% (3)

4.3 Reasons why women sought care at the FMC

Most women did not primarily seek care at the academic family medicine center in question; however, women were influenced by various factors to ultimately choose the Family Medicine Center for their prenatal care.

4.3.1 Finding out about their options

The majority of women voiced concerns surrounding problems of access to healthcare in Quebec. Some women, particularly immigrant women, were unsure how to navigate the system, find out about their options and receive the appropriate care needed. The difficulty of finding a family physician in Quebec may have exacerbated this problem. Nearly half (5/12) the participants did not have a family doctor. Three participants, who had been followed at the center for a previous pregnancy, had family physicians there. Among these three participants, two only began being followed by a family physician at the FMC because of their pregnancy status at the time. The remaining four participants had family doctors outside the center that did not provide obstetric care. One immigrant woman, who had been in Canada for nine years, described how surprisingly difficult it was for her to find a family doctor:

> *That never occurred to me coming here, you know? Coming from Romania to Canada, I had a family doctor in Romania and there was never an issue of not having a family doctor or being followed by somebody or whatever. And then you get here and suddenly, it's a luxury, you know, almost to have a family doctor. It makes no sense to me.* (G01 – immigrant, primipara)

Another immigrant woman from France indicated that while she was able to obtain a list of providers, accessing a provider that followed patients throughout pregnancy and after postpartum was challenging:

> *I felt like there wasn't much, there wasn't a structure. Like in France, we know what to do you see a gynecologist … Here, we have more* [different options]. *Some gynecologist don't do follow up after birth, some don't want to see you before 12 weeks, and some don't want to see you … It's like whoa I had this whole list and not everybody was accessible.* (G02 – immigrant, primipara)\

Most women used the Internet to search for information regarding their options. Six participants who considered receiving care from a midwife called at least one of the birthing centers available to residents in Montreal before calling the hospital. When notified that the birthing centers were at maximum capacity, women placed their names on a waiting list and sought care elsewhere.

4.3.2 Choosing the Family Medicine Center

There were a number of influences on participants' choice of the Family Medicine Center. Three women were referred there by their family doctors:

> *My family doctor as well suggested* [the study hospital]. *She … recommended highly specifically a couple of the doctors practicing, but she said that it was a great program here and at the Jewish* [Hospital]. *She said it was, like, no matter where you go, you're in good hands.* (G03 – Canadian-born, primipara)

One participant who was seeking a midwife was directed to the FMC and informed about the option to receive group prenatal care at the FMC. Other women searched for a list of obstetricians' names or found out about the option to receive group prenatal care from the university-affiliated community hospital's website. From there, women either called the receptionist to schedule an appointment with a provider or were transferred to the nurse who answered women's inquiries about group care. Of the six women receiving group prenatal care, three were informed of this option by coincidentally calling the nurse's extension:

> *I got a list of, I think it's the same one on the Internet, it's the list of family doctors practicing in obstetrics and I called the main, I guess, the reception line and I left a message and they called back and that went on. And then they called back, and I called back, it was kind of just a little bit of telephone tag for a while, and then someone mentioned to me, I think, and it was finally* [the nurse] *that called me back because I left a long winded message explaining that I was actually looking for a doctor, and then* [the nurse] *called me back and suggested the group prenatal sessions.* (G03 – Canadian-born, primipara)

A few women (3/12) reviewed physician ratings online before calling to ask if it would be possible to book an appointment with that doctor. These women received prenatal care on a one-to-one basis:

> *I also looked at both the doctors to see, on RateMD, I think it is, to see what other people were saying about them.* (I11 – Canadian-born, primipara)

Generally-speaking, most women were largely influenced by recommendations from friends and acquaintances.

> *So I heard from a friend, she gave birth at* [the study hospital]*, and she had a doula with her and she said that she also had been on a waitlist for a midwife and had not gotten one, so she felt like it was a good option.* [The study hospital] *has the, you can dim the lights, there are the baths … the women don't need to be attached to the bed all the time, so it seems like a more alternative approach to labor and so I decided to go for the same model.* (G04 – born abroad to Canadian parents, primipara)

> *I also made an appointment with* [the doctor at the study hospital] *and even though it's a little bit further away, I decided that I would try it because I've heard, I have one friend that delivered* [at the study hospital] *and she had a really good experience, a friend of my friend did not have a very good experience, but she told me that things have changed a little bit and* [the hospital in question] *was known to be very good. So I decided to give it a try, and I first had my appointment with* [the doctor] *and I really liked her. I think she was the reason I decided to, like, stay there, even though it was like a longer commute, because I found she was very professional, she answered all my questions, umm, I felt like really at, at ease with her. She spoke English and that made it easier for me.* (I09 – immigrant, primipara)

In some cases, women based their decision to receive care at the FMC when they find out about the hospital's reputation for maternal and child care from the website:

> *I went online, like I said, it just seemed that* [the study hospital] *had the best reviews, the best feedback, and then just over the course of time, it's been confirmed to me that, like, any woman that I'm close to, that I know in Montreal who has had a baby, they've had it at* [the study hospital] *and have had a great experience. So yeah, I guess both word-of-mouth and the Internet.* (I11 – Canadian-born, primipara)

4.4 Overview of Results

The findings from the interviews are divided into three major *parts* that independently address research questions one, two and three. A qualitative analysis of the transcripts identified nine major themes presented here under the three major headings: three major themes in *Part 1*, four major themes in *Part 2* and two major themes in *Part 3*. A summary of the themes and subthemes are presented in Table 11. The first part reveals women's preconceptions of group prenatal care including their understanding of and familiarity with the model, perceived benefits of receiving care in groups, as well as concerns and fears associated with group prenatal care. The second part reveals the factors that shape women's prenatal care choice between group and individual prenatal care with a focus on women's prenatal care preferences, feelings about pregnancy, past experiences with healthcare providers and their perceived need for social support. Finally, the third part describes differences in expectations and choices of prenatal care among Canadian-born and immigrant women. This section will present women's overall expectations of prenatal care and the differences in cultural approaches to prenatal care as described by all women.

Table 11: List of themes and sub-themes that respond to research questions

PART 1: Preconceptions of group prenatal care
Theme 1A: Understanding of and familiarity of group prenatal care
Theme 1B: Perceived benefits of group prenatal care ▪ *1B-I: A holistic model of care* ▪ *1B-II: Opportunity for women to connect with other women living the same experience* ▪ *1B-III: Forum for men to connect with other men and feel supported as fathers-to-be* ▪ *1B-IV: Access to as much information as possible*
Theme 1C: Concerns and fears associated with a group format of care ▪ *1C-I: A model that offers potentially lower quality of care* ▪ *1C-II: Having enough one-on-one time with the provider to ask private questions* ▪ *1C-III: Time commitment involved with receiving group care* ▪ *IC-IV: A partner that would be unwilling to participate*
PART 2: Factors that influence women to choose group versus individual prenatal care
Theme 2A: Feelings about pregnancy ▪ *2A-I: Anxiety and stress associated with the transition to motherhood* ▪ *2A-II: Fears related to prenatal care and childbirth*
Theme 2B: Prenatal care preferences ▪ *2B-I: Being cared for by either a "medical expert" or a midwife* ▪ *2B-II: Thoughts about delivering in either a hospital or a birthing center* ▪ *2B-III: Having a female provider deliver care*
Theme 2C: Perceived need for and access to social support ▪ *2C-I: Partner involvement in prenatal care* ▪ *2C-II: Receiving support from other women* ▪ *2C-III: Being supported by a healthcare provider*
Theme 2D: Past experiences with healthcare providers
PART 3: Canadian-born & immigrant women's expectations and choices of prenatal care
Theme 3A: Overall expectations of prenatal care ▪ *3A-I: Social support* ▪ *3A-II: Learning from others* ▪ *3A-III: Taking ownership of care* ▪ *3A-IV: Being as informed as possible* ▪ *3A-V: Access to patient-centered care* ▪ *3A-VI: Guaranteeing the health of mother and child*
Theme 3B: Cultural approaches to prenatal care ▪ *3B-I: Choosing between a specialist and a family doctor* ▪ *3B-II: Choosing between a physician and a midwife* ▪ *3B-III: Making the choice between individual versus group prenatal care*

The following sections present a summary of findings and illustrative quotes under each of the major theme headings.

PART I: Preconceptions of group prenatal care

Given that participants' preconceptions of group prenatal care could influence their decisions to either select or refuse this model of care, it was important to understand women's initial perceptions of group prenatal care. All women were asked to reflect on their understanding of group prenatal care. Qualitative analysis of interview transcripts revealed three themes associated with preconceptions of group prenatal care: (A) understanding of and familiarity with group prenatal care; (B) perceived benefits of group prenatal care; and (C) concerns and fears associated with a group format of care.

4.5 Theme 1A: Understanding of and familiarity with group prenatal care

This themes centers around how participants describe their understanding of and familiarity with group prenatal care. Nearly all participants (10/12) indicated that they had never previously heard of group prenatal care. One woman had heard about it during her previous pregnancy from resident physicians who were pilot testing a questionnaire related to the main study. Despite having participated in the pilot study by filling out a questionnaire, this participated admitted:

> *I really don't have a good understanding of what it is, umm, I would, what I gathered from the questionnaire is that you just meet in a group of women and kind of go through the typical meeting or appointment with the women, so… But I'll be honest, I really don't know kind of the long term, how it looks long term as your pregnancy progresses, I'm not sure how that would look...* (I07 – Canadian-born, multipara)

The other woman who was familiar with group prenatal care decided to receive this model of care based on recommendations from two friends who had participated in previous group cohorts:

> *Had it not been for two of my closest friends, I would have had no idea about the groups* [offered at the study hospital] *and the kind of prenatal care that they offer.* (G01 – immigrant, primipara)

Among participants receiving group prenatal care, one participant was referred to the group prenatal care program by a midwife from a birthing center. The remaining participants (4/6) either found out about the model from the study hospital's website or by having contacted by

chance the nurse facilitator running the groups. One participant highlighted that while the website mentions group prenatal care, the description of the program is vague:

> *I don't think I had very much understanding from the website, like, I think it just says you meet with a group of women and there'll be a doctor and nurse there … Now I understand that we go spend time with the doctor in a separate room, but I guess one thing that I was nervous about is that I didn't understand are we going to see a doctor alone or do I have to talk to a doctor in front of people? … I didn't know how long the family doctors would follow us for, and I think I was kind of nervous about was will there be a different doctor there every time and now I see that we'll have those two doctors.* (G05 – Canadian-born, primipara)

Speaking with the nurse in advance of the first visit, in most cases, provided women an opportunity to receive more information and ask clarifying questions.

While most women receiving individual care pointed out that they would like to remain "*open*" to group prenatal care, they admitted that they would be unlikely to choose Centering Pregnancy given their unfamiliarity with the model:

> *It's not a concept that I have ever heard anyone that I've ever known to be pregnant ever talk about. Like none of my family, none of my friends, extended circles, online forums, like when they talk about, you know, oh I'm pregnant, what do I do, no one ever suggests group care. The big decision: obstetrician or midwife, hospital, homebirth, birthing center. It's not, it's never a group care thing. So maybe the knowledge isn't there or it's not as available or widespread…* (I07 – Canadian-born, multipara)

4.6 Theme 1B: Perceived benefits of group prenatal care

When asked about their understanding of group prenatal care, some women elaborated on the perceived benefits of this program. Both women receiving group and individual prenatal care recognized that Centering Pregnancy was different; this approach had features that are not necessarily characteristic of or readily available in individual prenatal care. Group prenatal care was described as a holistic model of care that provides both men and women an opportunity to connect with other men and women living the same experience while also providing an opportunity to be exposed to as much prenatal and baby care information as possible. These subthemes will be described in-depth below.

4.6.1 A holistic model of care

Only women who had chosen to receive group prenatal care commented on their perception of it as an alternative, more holistic approach to care. Two women specifically

indicated that they were attracted to receiving Centering Pregnancy because they valued a holistic approach:

> *It seemed like it was more of a holistic approach, I mean, doctors are all different, but it seemed like if you're just followed by one doctor, you might not get tons of time with them, whereas Anne was saying in this group, really everyone gets a chance to talk about their experience, what they're feeling and it seems like a more supportive environment…* (G04 – born abroad to Canadian parents, primipara)

4.6.2 Opportunity for women to connect with other women living the same experience

The majority of women (9/12) pointed out that group prenatal care is a beneficial way for women to connect with other pregnant women and feel supported during pregnancy:

> *I also think that, again, managing these kinds of issues in a group gives people space to talk, to associate, to make connections and that's really important in this kind of a stage in your life.* (G06 – Canadian-born, primipara)

Many women, particularly those receiving group prenatal care, pointed out that the "*community*" feel of a group is appealing to them and that they find it advantageous to not only share this experience with other women, but also learn from them.

4.6.3 Forum for men to connect with other men and feel supported as fathers-to-be

Group prenatal care was recognized by three women receiving group prenatal care to be a forum that provided men the opportunity to connect with other men that have either transitioned or are transitioning to fatherhood:

> *He doesn't have, like, on his hockey team he has a few guys who are new fathers or becoming fathers, but like, whereas I have all my aunts and a number of friends who are mothers or new mothers to talk to, he doesn't have as many people in his position to talk to, so it's good for him in that way too.* (G05 – Canadian-born, primipara)

In one case, a participant pointed out that even though her husband knows other men who are fathers, he may feel more comfortable admitting his concerns to a group of strangers. Finally, women indicated that men will probably be more likely to play an active role in asking questions specific to the roles of partner and father if there are other men that can relate to the situation.

4.6.4 Access to as much information as possible

Four women, two receiving individual care and two receiving group care, viewed Centering Pregnancy as an opportunity to access as much information as possible from not only the providers but also other men and women attending the sessions:

> *I feel like people in the group might be also in the same boat or might have kids already who might be able to give me, again, more information than just one on one meetings with the doctor. Like they might know stuff that I wouldn't even know to ask … There's more of a community feeling to it in so much as you can discuss things with people who are in the same boat as you, whereas I think normally, it's like if you go to a doctor, it's a lot more unidirectional, it's like asking for information and getting information…*(G03 – Canadian-born, primipara)

One woman receiving individual prenatal care noted that having a 30 minute appointment with her provider meant that she only had time to cover basic information. Group prenatal care for her is attractive in that it provides women with sound and accurate information that might not always be accessible from the Internet:

> *So I like the idea of more access to information and even, yes I'm an independent learner, but it's nice always to be offered information and not to have to go and search for it yourself and also, you know, what they would be giving you is sound information, you know, sometimes when I do read stuff, you have to be like "oh, okay that doesn't, that isn't necessarily a reliable source". But, you know, one would hope and assume, that what was presented in the group was sound and accurate. So that would definitely be nice and save time…* (I08 – Canadian-born, multipara)

4.7 Theme 1C: Concerns and fears associated with a group format of care

When discussing group prenatal care, both women receiving group and individual prenatal care indicated that had some concerns and fears with the Centering Pregnancy model. Women who chose to receive group prenatal care often had these initials concerns addressed by the nurse facilitating the program. Women's main concerns about the program included a fear of possibly receiving lower quality of care; an uncertainty surrounding adequate private time with the physician; time commitment associated with the program; and a partner that would be unwilling to receive care in groups.

4.7.1 A model that offers potentially lower quality of care

Some women (3/12) indicated that group prenatal care could be perceived to be lower quality of care in that it is structured to optimize the doctor's time:

> *At first I thought, hmm, it sounds like I'm going to get less time and less quality and it's like group interviewing when they don't want to spend more time with you, they just want to see who's the best and that's all. This is strange, it looks like we want to optimize the doctor's time, when in fact, no*. (G02 – immigrant, primipara)

> *It seems that when you're having the one-to-one care, it's more you're having a quality service because it's one-to-one care, whereas when it's in a group it's like, doctors do not*

> *have enough time so they're putting you in a group dealing with people when you have specific issues that you have to deal with, with your doctor, but doctors are busy, so they put you in a group to discuss amongst the group.* (I12 – immigrant, multipara)

It is possible that women also perceive this model to be less "*personalized*". When study participants in the individual care group were asked whether they would choose group prenatal care if given the choice, the majority of the women (5/6) indicated that they would still choose what one woman called "*personalized"* care, i.e., individual prenatal care.

4.7.2 Having enough one-on-one time with the provider to ask private questions

Five woman, one receiving group and four receiving individual care, stated that they had some uneasiness about receiving care in groups because of the intimate nature of some examinations and questions:

> *So far with the doctor that I've seen, she has done, you know, the examinations and things that she does are pretty intimate, some of them. So I can't really imagine some of them taking place in a group setting or even the discussions that you have, it's pretty personal. So I don't think I would feel likely interested, you know, likely interested to do that in the group. But I can't really imagine what that would be like so...* (I11 – Canadian-born, primipara)

One participant receiving individual prenatal care expressed her interest to receive group prenatal care but pointed out that before doing so she would need to be assured that group care would allow her some time to consult the doctor privately during appointments:

> *Hypothetically speaking, I would choose the group option, but knowing that I have these private sessions with the doctors, because as much as I believe in building community or having support groups, I also think that it's important that one-to-one contact with the doctor, because there are certain things that I wouldn't feel comfortable speaking or asking or talking in front of a group. I wouldn't feel comfortable. So as long as I know that I have that option for the more one-to-one specific things that you have with the doctor, I would, I would definitely choose that option as an alternative.* (I12 – immigrant, multipara)

4.7.3 Time commitment involved with receiving group care

Five women, one receiving group and four receiving individual care, indicated concern about the feasibility of attending a two-hour appointment as scheduled for group care. One woman, a stay-at-home mom, expressed concern with finding a baby-sitter to take care of her son for more than two hours:

> *Now that I have a child, and I'm at home taking care of him, the practicality of having a two hour appointment, you know, where I need to get babysitting and arrange that*

> *because my husband is usually working, umm, that probably* [lessens my likelihood of choosing it]. (I08 – Canadian-born, multipara)

The remaining four women who were employed, indicated that it might be difficult for them taking the time off work to attend the group sessions. One participant, a teacher, summarizes her concerns with the following quote:

> *I think the timing as well would be an issue. I mean as it is right now, because I'm teaching, often my appointments will be scheduled for 8 AM or 8:30, so I can go, it would be, including wait time, it would be maximum about an hour or an hour and a half and then I can go right back to work. So the two-hour appointment would be kind of not ideal, yeah.* (I11 – Canadian-born, primipara)

4.7.4 A partner that would be unwilling to participate

While partner involvement was not a preference expressed by all women, two women expressed wariness about their partner's willingness to participate in a group model of care. One woman, who was receiving individual prenatal care, highlighted her husband's possible reaction to attending group prenatal care sessions:

> *I know some guys are more, like, outgoing and like, willing to experience that. I know for a fact my husband would find it a little bit more like, "uhhh... I don't know... It's awkward, why would I want to be with other guys who are going to have babies and I don't know them and where are they from and what do we have in common?"* (I09 – immigrant, primipara)

The other woman who had chosen group prenatal care indicated that her husband's willingness to participate surprised her:

> *I thought that he would freak out a lot more at the fact that it's group prenatal care, because he's always very private about things and he doesn't want to talk about things, so I think for him, it might be more uncomfortable but good. I think that in the end he was actually fine with it, he was like that's good and there will be a lot of information, because he definitely wants to be involved in it…* (G04 – Canadian-born, primipara)

PART II: Factors that influence women to choose group versus individual prenatal care

The second part of this chapter describes the findings that emerged from the interviews in regards to women's choices between group and individual prenatal care. All women were asked to explain the factors that influenced them to choose either group or individual prenatal care. Women receiving group prenatal care elaborated on the facets that attracted them to choose this model while women receiving individual prenatal care were asked to explain why they would

either select or refuse to receive group prenatal care if they were hypothetically given the choice. Several subthemes that shaped women's choices of care were identified: (A) feelings about pregnancy; (B) prenatal care preferences; (C) perceived need for and access to social support; and (D) past experiences with healthcare providers.

4.8 Theme 2A: Feelings about pregnancy

With regards to women's feelings about pregnancy, two subthemes were identified: anxiety and stress associated with the transition to motherhood and pregnancy-related fears. Anxiety and stress that accompanied this transition emerged frequently from the interviews. In many cases, these concerns influenced women's help-seeking behavior when seeking prenatal care.

4.8.1 Anxiety and stress associated with the transition to motherhood

While all women discussed a desire to have children, two of the twelve participants had an unplanned pregnancy. Most women looked forward to having a baby and described the transition using words such as "*joyful",* a *"miracle"* and *"exciting"*. Nearly all the women, particularly primiparae, admitted that pregnancy can be "*scary*" and "*overwhelming"*. When probed further, seven women stated that a facet of their anxiety was related to access and coordination of care. Participants acknowledged that in most cases these concerns were partly resolved after meeting a provider that would follow their pregnancy:

> *I feel like, things got more settled, in a way, so I feel like, I feel like I know more the trajectory of where I'm going. I mean, if you think about before this point, I was just kind of like flailing about thinking about, okay, I don't have a doctor, I don't know where this baby is going to be delivered, I don't know anything about prenatal care, whereas now, I feel like it's more established, I feel like okay, there's a doctor, you have all these tests, you've done the preliminary tests already, so if anything is wrong, we'll tell you in a couple of days or week or whatever. As, before it was kind of like, I was more on the dark and now I feel like I have some light.* (G03 – Canadian-born, primipara)

One participant, who had an unplanned pregnancy, discussed other accommodations and changes that needed to be made in her life in order to facilitate the transition:

> *There's a lot happening, there's a lot going on, like juggling a lot of questions, really, really practical questions, just like finances and health care and family and living accommodations. I feel like at this point in my pregnancy we're just, everything is up in the air for like how to organize this, it's like this huge life shift.* (G04 – born abroad to Canadian parents, primipara)

Even though more than half of the participants were employed, few women expressed concerns about career disruptions. Most of the participants were between their late 20s and 30s and expressed feelings that they were at a stage in their life where they were ready for the transition to motherhood. One participant, who typically works over 50 hours a week and describes her career as a "*big part of* [her] *life"*, recognized that having a family will require that she works less but she is content to embark on this new phase of her life:

> *My husband is very supportive of my career and willing to do more at home than like my father or my uncles would have been … I think that everybody feels like they're losing the sort of totally career oriented person that they were, but I think everybody's happy that they're able to start a family.* (G05 – Canadian-born, primipara)

It is worth noting that women receiving group prenatal care discussed anxiety and stress more frequently during the interviews in comparison to women receiving individual prenatal care. Even though his could be cause to believe that women choosing group prenatal care may be more anxious, it could also be explained by the fact that all three multipara participants were receiving individual prenatal care. These women recalled that their anxiety levels were higher during their first pregnancies and possibly did not feel the need to discuss anxiety as much since they were already familiar with the experience and acquainted with the care and childbirth process. Some primiparae women observed this to be the case among their friends and family members that were having a second pregnancy and this happened to ease their anxiety. One participant pointed out that it helped to have a sister-in-law, who was currently pregnant with her second child, address some of her concerns and answer her questions. This same participant noted that women in her social circle who already had a child did not always have the same concerns as primiparae. She indicated, for instance, that while she was concerned about gaining weight, her sister-in-law did not have concerns about body image. Having had a child already, she was aware that her body would "*adjust itself back to its original shape*" (I09 – immigrant, primipara).

4.8.2 Fears related to prenatal care and childbirth

A few women (2/12) expressed concerns about accessing care in the proper timeframe. One participant who was referred to group care by her friends called the hospital for group care as soon as she found out she was pregnant in order to not "*miss* [her] *chance*" (G01 – immigrant, primipara). A few women (3/12) were also concerned about failing to adequately prepare:

> *I think that we live in a very, kind of, bubble wrapped society where it's like, we're always like trying to protect children and protect ourselves and do all these things so that we don't get certain diseases and everything, it's all about prevention, and I think when it comes to pregnancy, there's only so much information out there that the things you need to do or the things that you should do, and it's kind of like, it's overwhelming, I think, to everyone who reads these things because it's like, oh my gosh I didn't do that, or I didn't do that or I didn't start doing that soon enough, or should I have done that? … I think that a lot of people are in the same boat, especially people like first-time moms, where it's kind of just a lot of information about all the terrible things that could go wrong and it's kind of hard to remind yourself that babies are born all the time, and most of the time they're fine. Of course you're going to think, of course, my baby is going to have spina bifida or something because I didn't take my folic acid, because I didn't…* (G03 – Canadian-born, primipara)

Although it was still early in their pregnancy, three women expressed their concerns about managing pain during labor. In addition, the possibility of having an unknown provider present at childbirth troubled most women (7/12). One woman viewed the patient-provider relationship as an opportunity to develop a birth plan that was in line with her values. Being confronted with another physician during labor, who did not necessarily know the patient, her values or her fears, would leave the woman feeling like at a loss of control:

> *At the end, I know that the physician might not be there to deliver the baby. So that's the downside I would say, because yes, technically you're building this relationship with your physician, who you've expressed your fears or not or whatever of what you would ideally like to have this birth to be, and then if you're not lucky enough, I was lucky enough the first time, that on the day I was delivering, my family doctor was there and so she was the one who delivered my son … I don't know if it's a doctor that you've never seen and all of a sudden it's the person who's delivering your baby … would they have been patient enough to understand that fear that it produces to be confronted by the options of being with forceps…* (I12 – immigrant, multipara)

4.9 Theme 2B: Prenatal care preferences

This theme describes the care women would have liked to have irrespective of their current choice. Women seemed to know about many options for the delivery of prenatal care and looked for those options that best matched their preferences. Due to issues related to access, some women were not able to find providers that were in line with their initial preferences. The range of preferences women had for prenatal care included: being cared for by either a physician or midwife; delivering in a hospital or birthing center; and having a female provider deliver care.

4.9.1 Being cared for by either a "medical expert" or a midwife

Many women had preferences that influenced their behavior when seeking a provider. Six participants, for instance, preferred receiving care from a physician specifically because of the value they placed on medical expertise. Three other participants, on the other hand, had a strong desire to be cared for by a midwife. Women acknowledged their preferences were partly shaped by their upbringing and social circles. In other words, women tended to follow the footsteps of their mothers, aunts, sisters, cousins and friends when choosing between a physician or a midwife. One woman described the standard provider of care considered in her family would be the physician. The quote below illustrates her mother's reaction when she considered seeking care from a midwife:

> *Because the way I was raised is sort of, like, if something's wrong, you go to the doctor and you do what the doctor tells you to, so I think that's like, that's sort of like an indirect influence on how I came to be referred to the … doctor… and more directly, like, when I started talking about midwives, my mom is from a really cultural background, and nobody in the family has ever had a midwife and she literally told me not to throw the baby out with the bathwater, at which point I was like, 'Am I the bathwater, who's throwing who out?' So yeah, that's like a pretty, and I feel like that's culturally influenced, that sort of opinion that you can't do this to yourself, have to do sort of mainstream, medical standard of care.* (G05 – Canadian-born, primipara)

Another participant, who displayed strong preferences for a midwife, stated that even though she herself values holistic care, her social circle of friends may influence her liking for this model:

> *Maybe I'm a little bit different, I have three friends who trained to be doulas and two friends who are currently in midwifery school, so I think that that's not run-of-the-mill necessarily for my, like, race/culture category, but it's really been in the last several years something that's in my social life because a lot of friends are interested in it. So it gets talked about a lot…* (G04 – born abroad to Canadian parents, primipara)

Two participants attributed their provider preferences to the value they place on scientific and medical education. One participant, who was completing a doctoral degree in child psychology, remarked that even with her second child, she still prefers to be seen by a doctor as opposed to a midwife:

> *I think they're both valid options. I just like the, being a scientist, I like the science behind it, I like to know as much as I can, medically, about what's going on. And I feel I can get more of that information from an obstetrician.* (I07 – Canadian-born, multipara)

Overall, women were seeking a provider that was competent, caring and willing to spend sufficient time with the patient. Despite the fact that half the sample sought care from a birthing

center, some women (3/6) did not necessarily have a strong preference for a midwife. Rather, they considered that a midwife may potentially be more attentive to their needs than a physician. This was the case for one of the participants who describes what options she considered when seeking care:

> *So I actually called two birthing centers and got my name put on the list there and then I called Anne because I had seen on the website about this group prenatal care and I thought maybe if I could get into there, it seemed like this sort of thing where the doctors might be a bit more dynamic … and maybe, hopefully,* [more] *empathetic, than what I had experienced previously … if one of the birthing centers called me* [back] *now and offered me* [care]*, I would probably turn them down … partially because I really like the group* [format] (G05 – Canadian-born, primipara)

One woman, who was seeking a midwife, stated that the thought of having an OB-GYN follow her pregnancy did not appeal to her because she often had to wait hours before seeing her previous OB-GYN:

> *I've had varied experiences with OB-GYNs, even before I was pregnant, so the thought of having an OB-GYN specifically didn't really appeal to me. I waited like, six hours in the office before, sometimes when I've had an appointment. My, my former OB/GYN delivers all her own patients, so I'd make an appointment and she'd be, like, in the hospital delivering a baby so I'd wait for two hours, and they'd make me sit in the exam room for like an hour and a half with my gown on. It's not really like, I didn't feel super cared for her as a patient before a child, so I didn't think it would be necessarily…* (G06 – Canadian-born, primipara)

4.9.2 Thoughts about delivering in either a hospital or birthing center

Over half the sample wanted to have as natural a childbirth as possible; however, nearly all women (10/12) preferred a hospital delivery over giving birth in a birthing center or at home. Primipara women relied on their friend's and family's experiences to shape preferences around childbirth. One woman who initially was seeking care from a midwife acknowledged that she if she received a call back from the birthing center, she would probably be influenced to turn it down because of her friend's childbirth experience:

> *One of my friends actually gave birth a few, she's a friend of a friend, she gave birth a few weeks ago and she was one of the ones who had a midwife who I talked to who was really happy with her prenatal care, but when she went to the birth house, she actually had a panic attack, and basically decided she wanted to go straight to the hospital and get an epidural right away and so…* ***laughs****... Like I think, she felt, supported before the baby was on the way but maybe then she was less secure and in the nonmedical sort of environment.* (G05 – Canadian-born, primipara)

Overall, women perceived the hospital to be a "*secure*" and "*controlled*" environment. Preferences for a hospital delivery were based on two factors: fear of pain during labor and the possibility of unanticipated birth complications:

> *I want to be where the drugs are and where the doctors are and where, you know, should anything go wrong, because ultimately when you do those other, you know, you have those other options, if anything goes wrong, you have to go to the hospital anyways. So I just want to be there to start, just in case.* (I11 – Canadian-born, primipara)

On the other hand, two women were completely opposed to having a child in the hospital. They would have preferred to have the option if delivering in a birthing center. These women were seeking a "*natural and minimally invasive*" childbirth. One of these women relayed the profound fear she had delivering her first child in a hospital:

> *I ended up giving birth* at [the study hospital] *... which at the end, ended up being much better than what I expected. It wasn't as terrible to be in a hospital setting. I went very, at the very last minute, meaning, when I was really, really ready to give birth, because my concern was that if I would go to the hospital I would be connected to these IV, I wouldn't be able to move, I wouldn't be, like, really free during all the contractions and all that. I was really scared about all the interventions that they could do, that if the baby wasn't coming in a certain time that I would end up with a C-section or with the forceps or something like that. So I was scared of the interventions and for me, birth is something that is much more natural, that ideally could happen in a much more intimate space. But because it wasn't the case, the alternative of the hospital was, to my surprise, a good experience overall.* (I12 – immigrant, multipara)

This same participant viewed pregnancy and childbirth to be a "*natural event*" and was advocating for care that supported this understanding:

> *Birth, being pregnant, having a child … has a lot of potential implications, but overall, it should be seen more of a natural event and supporting that, and allowing women to connect with the powers that we have within and not depend so much on the interventions and making people feel a bit powerless that you're dependent on the system … for pregnancies that are going okay, it's really about that what I look about in a service. That they allow me to see as a woman, that we're able of doing all this amazing work with the support of the people around us, but that they approach it in a more natural way, as you said in a more holistic way. It's not about giving you drugs or this or that, but really believing in the power of your body and nature, being able to bring these babies to the world.* (I12 – immigrant, multipara)

4.9.3 Having a female provider deliver care

When asked about preferences regarding the provider, most women (9/12) did not care whether the provider was male or female. They indicated that a "*competent*" provider that could provide "*good*" care was more important than the provider's cultural background or sex. One

woman stated that for her first pregnancy she was seeking a female provider because she was shy and felt that she may be more at ease talking about certain issues with a female. She indicated that this is probably no longer the case with her second pregnancy. Moreover, women who sought a female provider believed that a female may be better to relate to the experience and consequently be more "empathetic" than a male:

> *I think I do feel more comfortable having a female doctor specially for this area, simply because I feel like it's very, obviously, it's a very maternal thing, but it's also a very woman based thing.* (G03 – Canadian-born, primipara)

One woman also described the experience of having a female provider as empowering, specifically during childbirth:

> *It was a woman family doctor and the nurses … I was surrounded by this energy of women … and my husband … being around women meant a lot for me. And I really like that. I don't know* [if] *the second time around it would be like that…* (I12 – immigrant, multipara)

4.10 Theme 2C: Perceived need for and access to social support

Women's perceived need for and access to social support was often the deciding factor when choosing between group and individual prenatal care. Women sought support from three different sources – their partner, other women (either friends or family), and to a much lesser extent, their healthcare provider.

4.10.1 Partner involvement in prenatal care

When asked about the role of partners in providing support, half the participants (6/12), particularly those who had chosen group prenatal care (4/6), regarded it important for their partners to be involved in their prenatal care. It is unclear whether this is inherently sought support from their partners before starting their care or if this is because the CenteringPregnancy model encourages partners to attend sessions. When probed further about this, one woman stated that individual appointments with a provider may not allow partners to be as involved as they would be in the group format:

> *In the group it's really about families, like everybody who's there; whereas in an appointment, like one-on-one with the doctor, he's sort of a third wheel, like, umm, even when we got our medical, because I had to get my medical records from the previous doctors and the, the second doctor had written, like, 'Patient very emotional comes with husband', as though coming with my husband was something negative. And so, and so in a group context he feels more empowered to talk to people and ask questions, and say,*

> *'Hey this affects me, this affects my wife". Yeah, and being able to do something, like, like umm, find the baby's heartbeat, you know, he's really doing something that makes him feel really involved so yeah.* (G05 – Canadian-born, primipara)

One participant mentioned that involving partners provide couples the space to discuss matters and make decisions together. When talking about partner involvement, one woman indicated that having her partner accompany her to appointments is a means to prepare her husband mentally for parenthood:

> *For me it is important to have him there not only for my support, but for the fact that that's the way he's going to learn and he's going to really realize that he's going to have a baby, because you're having like your tummy growing and you know you're having your baby, but for them it's a very different experience and this is the way they can get involved a little bit more. For him when he heard the heartbeat, he was like, very excited, like "Oh, yes!". So I know for me it's important for him to be there because that way he's more involved, you know?* (I09 – immigrant, primipara)

The four women who did not necessarily feel that partner involvement was important pointed out that it was sufficient enough for partners to attend the "*more important*" appointments, such as the first Doppler listen or ultrasounds.

4.10.2 Receiving support from other women

Women turned to other women they knew who either had a child or were currently pregnant for information and support. A few women (3/6) who had chosen Centering Pregnancy indicated that their social circle of friends and family were either not geographically close or had not experienced the transition to motherhood. These women expressed a heightened need to receive support from other women in the group as depicted in the following quote:

> *I don't have any friends right now, even though I am 35, I I don't have, my sister has kids, I have friends in France, but here I don't have any support system of people who have kids. Most of my friends are either single or childless. And so, I'm looking forward to meeting other women. Maybe they have questions that I'm not thinking of, you know?* (G02 – immigrant, primipara)

Nearly all women receiving individual prenatal care (5/6) indicated that they either had friends, relatives or acquaintances from church that fulfilled the need for support. While some women receiving individual care acknowledged the value of connecting with other women through Centering Pregnancy, one woman pointed out that for someone with an adequate social support circle, it might not be as beneficial:

> *I do understand the advantage of having women who are going through the same thing as you at the same time, being able to, you know, I mean just forums online like BabyCenter is one app or one website where you can be in a group of, you know, women who are due at the same time as you, and so you can ask, like, I'm in week 17 and this is happening. Is that normal, like, are you doing that too? And then you kind of feel supported that way. I can see that as beneficial if someone didn't have that kind, like, I feel like I have a good support system, and if someone didn't have that then going to the group classes and having that support, and having the feedback of, you know, is this normal, I can see how that could be helpful.* (I11 – Canadian-born, primipara)

4.10.3 Being supported by a healthcare provider

Half of the women pointed out that it was important to have a provider who supported the participant throughout pregnancy. For many women, support from a healthcare provider was defined in various terms. Two women were looking for a provider that would answer questions and address concerns without rushing the woman. One participant who had a relatively substandard experience with her previous healthcare providers was seeking empathy from her provider. For three other women, a supportive provider is one that respects a woman's decision regarding care and provides her with the opportunity to participate in the decision-making process. Finally, three participants mentioned that they do not view the healthcare provider as a source of support because they are adequately supported by others. One of these women pointed out that it is difficult to expect support from a provider when she sees her as frequently as every six weeks.

4.11 Theme 2D: Past experiences with healthcare providers

Women's past experiences with healthcare providers sometimes influenced them to choose group versus individual care. A few women (4/12) pointed out that they had poor experiences with the healthcare system in Quebec because of the limited time they would ultimately spend with the doctor. These women indicated that most of the time, their appointments would last a maximum of 10 minutes:

> *When I have seen doctors in the past, I was feel like it's very, not brusque, but it's always kind of really fast. And, again, I sometimes forget to ask questions and I get nervous, stuff like that, so I feel like, for me to have the maximum time with the doctor is important.* (G03 – Canadian-born, primipara)

One multipara woman indicated that since she had already lived through the experience of pregnancy, she would rather have the shorter appointments typical of one-to-one visits:

> *I like the speed of the appointments, I like the flow of them, I like how quickly they go, I like the one on one, like the relationship I feel I've built with my obstetrician … I don't really like the idea of listening to other people -* ***laughs*** *- I just kind of want to go through the process and get it over with and then be on my way. Maybe the first time around might've been a bit different, when I kind of was maybe looking for, you know, other women's experiences a bit more. But this time, not that they're not important, but it's just that I have that experience now so I kind of don't need it from somebody else.* (I07 – Canadian-born, multipara)

Women who had expressed satisfaction with the care they received during their first pregnancy, did not necessarily see the need to seek care from another provider for their second pregnancy. Consequently, when calling the receptionist, they asked to book an appointment with their family doctor directly.

PART III: Canadian-born and immigrant women's expectations and choices of prenatal care

In order to understand the role culture played in shaping women's expectations and choices of prenatal care, all women were asked to reflect on their cultural background and describe how women from their backgrounds would normally access prenatal care. Realizing that individual prenatal care is the standard choice of care in most parts of the world, the author probed participants to understand why group prenatal care would either be accepted or not by someone from within their own culture or community. The last part of this chapter presents two major themes: (A) overall expectations of prenatal care; and (B) cultural approaches to prenatal care.

4.12 Theme 3A: Overall expectations of prenatal care

With regards to what expectations participants have for their prenatal care, several subthemes were identified. Generally speaking, participants want to feel supported by others that are undergoing the same experience. Women see value in learning from others and building a community of support. They view prenatal care as an opportunity for them to take ownership of care, be as informed as possible about the transition and guarantee the health needs of mother and child. Participants desire most, if not all, of the subthemes elaborated upon in the text below.

4.12.1 Social support

Only women choosing to receive group prenatal care had an expectation of receiving social support from both other women, as well as, their provider. These women viewed the group

as an opportunity to connect with other pregnant women and discuss issues specific to pregnancy that friends and family, who are non-pregnant may not want to talk about. Discussions were viewed as an opportunity to normalize the experience for women. One woman welcomed the opportunity to be in a group of "random" people that will generate a diverse range of opinions she may not otherwise get from her close circle of family and friends:

> *I don't know where else you would randomly meet these people, maybe you can find them on a blog or maybe there's something like an online support group that people go and meet, but I personally wouldn't know … sometimes as well it's kind of like you do want to discuss things with your close family and friends but at the same time there are some things that you know how they're going to feel about certain things, you don't want them to judge you on certain things or you know what kind of judgment they're already going to give you, so you're not even going to bother to ask them, so it's good as well to have a more diverse group of people, perhaps, who are going through the same situation and who will maybe look at things differently than you will.* (G03 – Canadian-born, primipara)

Women also discussed how the group provides them with the space to form an established relationship with the "*health team*":

> *I think a lot of it is just the sensation of being supported. I mean the health is important, but also the sort of psychological side, because I don't think it's a good idea to go into labor feeling like you don't have a connection with the health team.* (G05 – Canadian-born, primipara)

Existing support mechanisms were important to both groups. There are differences, however, in who women turn to for social support and whether or not they have expectations for support from the healthcare teams. One woman receiving individual prenatal care, for instance, pointed out that it is difficult for her to expect social support from her physician given how infrequently she sees her:

> *I think at first because we get to see the doctor every six weeks, it's hard to seek, like if you have, if you're not feeling good today, and then you're going to see your doctor six weeks from now, like, I'm already going to, I've already forgotten what I was going to ask her.* (I09 – immigrant, primipara)

All women receiving individual prenatal care stated that they felt adequately supported by friends and family outside the hospital community and did not need an added layer of support:

> *I have, you know, really great friends and I have a good church community so I feel like I'm really supported emotionally and psychologically.* (I11 – Canadian-born, primipara)

4.12.2 Learning from others

Group prenatal care was viewed as a learning forum for most women. Women anticipated acquiring knowledge from other women's past or present experiences:

> *I think there's something to be said about strength and numbers – you know, you learn from other peoples' experiences and you kind of get a sense of what happens to them and how it applies to you and how you can, you know, filter out oh what works for me and what doesn't, but also the kind of things where, I don't know, something would happen or you would get a symptom that would be alarming to you but maybe somebody else has experienced it already so you're aware of it – it's alarming – and that's also some sort of knowledge.* (G01 – immigrant, primipara)

One woman remarked that dynamic settings typical of groups tend to be more conducive to her learning:

> *When I was doing my undergrad, I had a lot of classes that were focused on group discussions and I found it a better way to learn.* (G05 – Canadian-born, primipara)

Women receiving individual prenatal care shared similar views regarding the advantages of learning from others, but these women did not view prenatal care as a setting that had to fulfill this need. Rather, they directly contacted their pregnant friends and family members if they wanted to discuss an issue or learn more about it:

> *What I've done is I've read and I do, I have like the luck that my sister-in-law is pregnant, and then I have some friends that have kids, that have had kids here, and some of my friends in Mexico are also pregnant, so I guess … whenever I have like, something … I'm not very sure about … I'll go ask them. They've been very helpful.* (I09 – immigrant, primipara)

4.12.3 Taking ownership of care

Women viewed prenatal care as an opportunity for them to take ownership of their own healthcare. Women receiving group prenatal care looked forward to being able to take their measurements and find the baby's heartbeat. One woman, referred to group prenatal care by her friends, stated:

> *I do hope that I'll be a little bit more aware of everything that's going on, like in my, in my own body. As my friends were telling me, you know, they're able now to take the heart beat of the baby themselves, to get their own pressure, those kinds of things that, you know, you would count on professionals … to be able to do.* (G01 – immigrant, primipara)

Another woman saw this as a space for her and her partner to ensure their needs were met. She viewed the facilitated discussions as means for her to get her questions answered and prepare herself to the best of her ability for the transition to motherhood.

Women receiving individual prenatal care also expressed an interest in taking ownership of care by engaging in a shared decision-making process with their provider. It is worth noting that women who demonstrated this behavior had given birth before and were referring to their previous deliveries when discussing shared decision-making. One woman, for instance, recounted how she asked her provider to push her induction date by a few days during her first pregnancy. Another woman spoke of her desire for a VBAC despite her doctor's insistence that this may pose some risks:

> *At the moment I'm a bit concerned about the VBAC so this is something more specific due to my condition because my baby is between 16 and 17 months after my C-section and I had a C-section because of the position of my first baby so nothing due to health problems. But because it's not 18 months, it's very hard, it seems that it's very hard to have a VBAC, to try the VBAC and I would like to be considered as a person and not just following just general rules since it's not like nine months after, it's almost 18.* (I10 – immigrant, multipara)

4.12.4 Being as informed as possible

For many women, prenatal care is a favorable period for women to get as informed as possible about pregnancy, childbirth and the transition to parenthood. In particular, most women receiving group prenatal care valued the discussion period, as it meant other participants could ask questions that they might not have considered or thought of. Furthermore, the longer appointments provides women with more time to acquire knowledge and formulate questions:

> *The more the community level than the short visits to the doctor, where yes you can ask three questions but maybe you'll think of five more when you step out… then you've missed your chance and that's it and the next appointment is God knows how long… so I think this idea of a group is very appealing to me. As far as my friends tell me, who have been thru the OB/GYN path, you know, just being followed just by one doctor throughout their pregnancy, every question that they had, the answer was: 'It's normal.' You know… so you don't get a lot from that. Everything that had happened to them like, 'What about this? What about that?' 'It's normal.' So I wanted a little bit more* [than] *that.* (G01 – immigrant, primipara)

Women receiving individual prenatal care indicated that receiving relevant information was important to them too. These women recognized, however, that their appointments were too short to only rely on the doctor as the source of knowledge:

> *I don't think that there's enough time in the one-to-one sessions to really learn what you're going through or learn about things so you have to learn it on your own and maybe come up with your questions and so bring them to the doctor's attention. So yeah,* [I'm hoping to] *get the right information at the right time based on the research I've done and the questions I have.* (I12 – immigrant, primipara)

One woman receiving individual prenatal care pointed out that she and her partner signed up for a weekend intensive birthing class to better prepare for childbirth.

4.12.5 Access to patient-centered care

When contacting the hospital, some women were informed that the doctor following their pregnancy would be willing to take on the entire family. Eager to finally have a primary care physician, a few women had the expectation that receiving prenatal care from a family doctor would provide them with access to patient-centered care for the entire family:

> *I've lived in Quebec for almost nine years and I don't have a family doctor. So that prospect was very, very appealing to me – to be able to finally get a family doctor, especially because I'm pregnant and the baby should be followed. Even if I don't get followed, it wouldn't be necessarily a tragedy but you would want that for your baby.* (G01 – immigrant, primipara)

In general, women simply wanted an empathetic and competent doctor that listened to the patient, respected the patient's needs and was willing to provide the participant with room for shared decision-making:

> *All that I wanted* [was] *a doctor that listened, a doctor that cared, and also that was quite capable, and yet that was still, that was wanting to work with me as a patient, you know?* (G05 – Canadian-born, primipara)

Lastly, women were seeking to build a relationship and maintain continuity of care with their provider. One woman recognized her current pregnancy experience to be significantly better than her previous one when the nurse was on maternity leave for some period of time:

> *Now that I make contact with the nurse as well, she's back, and it's always the same one, because last year it wasn't. So now it's much better, I know who that person is, I can call her and she can answer my questions.* (I10 – immigrant, multipara)

Even though many women (5/12) knew that the provider may not necessarily be present at the time of the delivery, they still anticipated intrapartum continuity of care.

4.12.6 Guaranteeing the health of mother and child

All women indicated that they were expecting routine medical tests and follow-ups that would ensure the health of mother and child. Women emphasized the importance of having a healthy baby and safe, successful delivery:

> *I guess the number one* [expectation] *would be that the baby is healthy. Every time I go to the doctor, I just want to know that everything is okay, you know, the baby's doing what the baby should be doing and that's always my biggest concern.* (I11 – Canadian-born, primipara)

It is interesting to point out that while most women receiving group prenatal care had this expectation, it was not listed as the main priority by all women. Rather, these women were more likely to mention access to information and support as their principal expectations. One woman receiving group care stated that she was certain about receiving the appropriate risk assessment whether she had chosen group or individual prenatal care:

> *I know that the baby will be well taken care of, even in individual care. The screenings will be the same, everything will be the same. It is more about me, maybe some of my, not ambivalence, but some anxiety you can have, like now my life is going to … change and it's more, I don't know, that feeling that yeah you're supported.* (G02 – immigrant, primipara)

4.13 Theme 3B: Cultural approaches to prenatal care

In order to better understand if culture played a role in shaping women's preferences, choices and expectations of care, participants described how women from their cultural backgrounds would normally seek prenatal care. This theme illustrates the cultural norms women considered when choosing maternity care providers and individual versus group prenatal care. Each subtheme will present similarities and differences between Canadian-born and immigrant women.

4.13.1 Choosing between a specialist and a family doctor

Some (3/6) Canadian-born women indicated that women from their backgrounds would normally be followed by a family doctor until a certain point in their pregnancy where a transfer to an obstetrician might be considered. The remaining Canadian-born women indicated that women in their social circles would normally seek care through a specialist, i.e. an obstetrician/gynecologist (OB/GYN). One woman remarked that she was influenced to choose a

family doctor by her sister-in-law, who is an obstetrician herself and chose to be followed by a family doctor for her first pregnancy:

> *I remember even when I was pregnant with* [my first child] *and said to my parents that I was going to have a family doctor, … my dad did say, "Well, you don't have to go to an OB?" So that, that would be the general belief, I guess. But it was actually my sister-in-law, so my husband side of the family, who is an obstetrician herself, who kind of helped me realize that you didn't have to have an OB, because she had a family doctor for her first child. And so it was there that I kind of went that route.* (I08 – Canadian-born, multipara)

All immigrant women pointed out that the specialist would be the standard maternity care provider considered by pregnant women from their backgrounds:

> *Sometimes you do have a family doctor, but I think that's mostly like my parents or my grandparents used to have a family doctor that would see like everything. Right now it's like, hey I'm having trouble with my knee, okay go see that* [orthopedic] *doctor. So when you're pregnant, you go see the OB/GYN, that's what makes sense.* (I09 – immigrant, primipara)

Two of these women indicated, however, that they come from affluent circles that are able to access the private healthcare system, which they described as significantly different from the public system.

4.13.2 Choosing between a physician and a midwife

Only one woman, born abroad to Canadian parents and raised in Canada, drew attention to the fact that women from her social circle would choose a midwife. Two other Canadian-born women expressed an interest in having a midwife, despite the fact that this is not the norm among women from their social circles. A few Canadian-born women (2/6) stated that midwives are rarely even considered in the areas they were raised. Finally, two Canadian-born women indicated a midwife was not a provider they considered being followed by.

All immigrant women highlighted that receiving care from a midwife was an option rarely considered by women from their cultural backgrounds. Two women, from Latin American origins, stated that midwives are attractive only among a specific subset of the population:

> *I think midwives are not very considered. I don't think there are many over there. It's for, like, a specific group of people who have, like, a more natural way of living and health style.* (I09 – immigrant, primipara)

One of these women stated that while midwives may practice in rural areas of her country, receiving care from a midwife is not highly esteemed by the public:

> [Women may see a midwife] *in some rural areas, but that is really seen as you don't have no other option, and it's really, … having a baby with a midwife is seen as, for uneducated people, like, an educated person would go to a hospital … which is a big shame, because they provide such an important service to the communities that are so remote whereas going to a hospital takes forever ... I think they're trying to strengthen the profession of midwives and get them to be trained. But most midwives, I would say, in my limited knowledge, are more, it's like a tradition that gets passed from one generation to the other. They don't necessarily get, like, real training as midwives. They're not associated at all with the health system, at all. So they're not recognized by the health system.* (I12 – immigrant, multipara)

Three of the immigrant women were influenced by their backgrounds to prefer a physician. Two immigrant women indicated that while midwifery is not typically considered among women from their cultural backgrounds, they were "*curious"* and wanted to try this alternative model of care:

> *I would have liked to* [receive care from a midwife], *I think that's a very interesting option that you get here that you don't get back home, for example, in the country where I come from. You don't get that option of licensed midwives being able to assist you in a birth. And that I found amazing. That I have to say it's an amazing opportunity, but it's very limited options for, because I remember I was calling and I was almost ready and they were like yeah, you're on the waiting list number... and I was like okay then, I'm never going to get a call.* (I12 – immigrant, multipara)

4.13.3 Making the choice between individual versus group prenatal care

Nearly all participants, Canadian-born and immigrant women alike, pointed out that group care was not typical in their cultures. Interestingly, a few women – with an educational background in psychology – associated group prenatal care with group therapy for "*substance abuse*" and other "*psychological issues*". When asked about her understanding of group prenatal care, one woman stated:

> *I've never heard of any type of program like this, so, I mean I'm aware from either* [the nurse] *or the website that they do this in British Columbia more often, but that's the first I've ever heard of anything like this. I guess there are support groups for, like, people with cystic fibrosis, but I think those tend to be less medical and more social.* (G05 – Canadian-born, primipara)

One Canadian-born woman indicated that growing up in an individualistic society might prompt women to prefer the individual model of prenatal care:

> *I grew up in Alberta in a suburb. You have your own home and your own yard and your own car and, you know, like I said, it can be a very individualistic society, which I find sad in a lot of ways, because you don't have to share anything; whereas in other cultures you're, like, sharing your roof, you're sharing a table, you're sharing, I don't know, a*

> *yard, you're sharing everything. So probably, yeah I think people here are just more used to having their own way, their own time, their own space.* (I11 – Canadian-born, primipara)

Another Canadian-born woman had a different view on the matter. For her, she argued that it takes "*confidence*" to partake in a group:

> *Partly just being from Canada, I think it's easier to be more confident and step into something like a group, which can be scary. But I think it's easier for someone who's been immersed in the culture for longer* [to] *share experiences or … sign up and say okay, I'll try this thing in a group full of people I don't know. I think that if I was, say, let's say my husband and I had moved to Germany last year, and I had this opportunity then, I would be worried like, 'Is my language good enough? Can I get along with these people?' like, 'How obviously different are we going to be from the group?' Stuff like that would be more of a concern, whereas I've grown up in random classrooms full of lots of random people in Canada, so I kind of know what to expect.* (G05 – Canadian-born, primipara)

In general, women admitted that likelihood for them to choose either group or individual prenatal care is dependent on their understanding and familiarity with the model. One Canadian-born woman stated that because group care was foreign to her, she was unlikely to choose it because as it was, being pregnant was already a new experience that was stressful:

> *The idea of being, I mean I was in a secure, loving, married relationship, but pregnancy, being pregnant, even though, you know, we've said, well maybe it's time to start a family, it was scary and unknown and I fully understood that it was going to be life-changing. And all those things, I guess, just made me want something that I knew, which was the one-on-one doctor-patient relationship. Umm, so I think I might've been hesitant for something unknown. It would have been something unknown on top of pregnancy, and I don't know if I had have wanted to experiment, because it probably would've felt a little bit like experimenting.* (I08 – Canadian-born, multipara)

One immigrant woman stated that she would be unlikely to choose CenteringPregnancy because:

> *I had never heard of group prenatal care before, so what I know from like my friends back in* [my home country]*, like my mother, like everybody, and here also what I've heard,* [individual care] *is the only thing that I know. And also because it's* [offered] *over the phone, I would be like, 'No, what do you mean group? No, individual, thank you'. I think I would like, first thing, individual, yes. They would have to like elaborate a little bit more and try to convince me* [to receive group care]. (I09 – immigrant, primipara)

4.14 Summary of Results

The purpose of this chapter was to provide an overview of the participant demographics and main findings of the study. Nine main themes were identified together with relevant

subthemes. These were subsequently summarized and supported with illustrative quotes from the participant's interviews. Consistent with the aforementioned themes, the main findings of the study reveal that: (1) women may be less disposed to choose a model of care, such as group prenatal care, if they are unfamiliar with it; (2) while women sometimes recognize the benefits of receiving care in group, it is crucial to address concerns with a group format of care, which largely influences women to either select or reject group prenatal care; (3) increased anxiety and stress may influence women's choices of care between group and individual prenatal care; (4) women choosing group prenatal care are particularly attracted to the more holistic nature of the model and they value the increased social support that it provides; (5) all women have an expectation that prenatal care will provide them with adequate medical services that guarantee the health of mother and child, but women seeking group prenatal care tend to expect more from their prenatal care experience, such as learning from others, social support and taking ownership of care; (6) women are influenced to choose the same care options as their friends and family, indicating that cultural perspectives of a group format of care may play a role in immigrant women's choices of care.

5. DISCUSSION

The findings from this exploratory study confirm that group prenatal care is a novel concept for most women, and they anticipate both potential benefits and concerns. Women often acknowledge the potential educational and social benefits associated with receiving care in groups, but in some cases, women's questions, concerns and fears about having enough medical attention for their specific needs may deter them from choosing group prenatal care. Women's likelihood to choose group rather than individual care are additionally influenced by factors such as their anxiety and stress about pregnancy, prenatal care preferences shaped by women's social and cultural backgrounds, the perceived need for social support and women's past experiences with healthcare providers. Finally, women's expectations of prenatal care are not based on cultural factors. Rather, women's expectations of care are largely based on whether or not a woman is receiving group prenatal care and her perception and understanding of it. Nevertheless, for some women in this study, cultural background, experiences and expectations influenced their preferences of care, with a tendency to favor individual prenatal care over a group format of care.

5.1 Preconceptions of Group Prenatal Care

Nearly all women in this study indicated that they were unfamiliar with the group prenatal care model; they had not heard of this approach from women in their social circles or online forums. Women choosing to receive group prenatal care mentioned that speaking to the nurse helped to shed light on the structure and content of the program, which ultimately encouraged them to make the choice to receive this model of care.

Regardless of whether women were receiving group and individual prenatal care, most women recognized the potential benefits associated with receiving care in groups, yet these positive attributes were discussed more frequently by women receiving group versus individual prenatal care. Women viewed group prenatal care to be a holistic model where the quality of the provider-patient relationship could potentially be enhanced through prolonged contact. This preconception of group prenatal is confirmed in numerous studies, which have explored women's experiences of Centering Pregnancy after program completion (Klima et al., 2009; Novick et al., 2011; McNeil et al., 2012; Risisky et al., 2013; McDonald et al., 2014). Women in this study also regarded group prenatal care as a model that allows both women and their

partners to connect with other women and men transitioning to parenthood. The benefits of social support during a stressful period of life is recognized by women in studies where participants describe positively their experience of group prenatal care (Kennedy et al., 2009; Klima et al., 2009; Novick et al., 2011; Teate et al., 2011; Herrman et al., 2012; McNeil et al., 2012; Novick et al., 2012; Risisky et al., 2013; McDonald et al., 2014). The potential to have access to more information is also perceived to be a benefit of group prenatal care. Learning and gaining knowledge through group discussions and by sharing experiences with others is well documented as a rewarding experience for women (Kennedy et al., 2009; Klima et al., 2009; Novick et al., 2011; Herrman et al., 2012; McNeil et al., 2012; Risisky et al., 2013; McDonald et al., 2014).

Even though women in this study recognized the potential benefits of receiving care in groups, many women had concerns about the quality of care, adequate one-to-one time with the provider to ask private questions, time commitment involved in receiving this type of care and the reluctance of some partners to participate in a group format. Concerns with lower quality of care generally revolved around the delivery of healthcare in a group format. This was particularly expressed by immigrant women who initially viewed the model as one that aimed to optimize the physician's time and have women, instead of the doctor, address each other's needs. This impression of group prenatal was not raised in other studies or evaluations of women's experiences with the model. Yet again, few studies have been conducted to understand women's expectations of care and the reasons they reject group prenatal care (Teate et al., 2011; Phillippi & Myers, 2013).

Adequate one-to-one time with the provider and concerns with privacy are repeatedly the main concerns of women highlighted in studies of women's experiences of group prenatal care (Kennedy et al., 2009; Novick et al., 2011; Novick et al., 2012; McDonald et al., 2014). One study found that women rejected group prenatal care based on their discomfort in groups and an uneasiness with exposing any part of their body or discussing private matters in a group (Phillippi & Myers, 2013).

Structural features of group care indicate, such as a two-hour appointment, are problematic for some women who either work or have children with no access to childcare (Novick et al., 2012; Phillippi & Myers, 2013). Finally, the finding that women's reluctance to receive group care due to a partner's unwillingness to participate is in line with a few studies where women

either report factors that make it difficult to receive care (Novick et al., 2012) or factors that led them to refuse receive group care (Phillippi & Myers, 2013).

5.2 Factors that Influence Women to Choose Group versus Individual Prenatal Care

Pregnancy is a significant period in a woman's life characterized by numerous physical, emotional and psychosocial changes. In an Australian qualitative study (Schneider, 2002) conducted with women who were pregnant for the first time, the first trimester of pregnancy was described as 'a world turned upside down'. Many women in this study also described their experience of pregnancy as one that is accompanied by anxiety and stress surrounding accessing prenatal care, childbirth and preparing for the prospective role of mother. Anxiety is partly alleviated when women find a provider to follow their pregnancy. It is unclear whether heightened anxiety makes women more inclined to choose group prenatal care, but in this study women receiving group prenatal care discussed anxiety levels more frequently than those receiving individual prenatal care. Further research is warranted to examine the effect of anxiety on women's choices of group prenatal care.

The approach to choosing prenatal care described by women interviewed for this thesis was, in part, influenced by prenatal care preferences related to the sex of the healthcare provider and place of delivery. In many cases, women are influenced by other women in their social circles when making the choice to receive care from either a physician or a midwife. Half the sample sought care from midwives at some point in their lives even though many of these women did not have a strong preference for a midwife. Ultimately, women wanted an empathetic provider that would spend sufficient time with them and provide holistic care. For some women, midwives were perceived to be possibly more capable than physicians of fulfilling these needs. Despite the fact that half the sample initially sought care from midwives, the majority of women preferred to deliver in a hospital instead of at a birthing center or at home. This is an indicator that a group prenatal care model provided by physicians could sufficiently meet the needs of women seeking holistic care who still prefer to deliver in a "controlled" environment typical of a hospital versus a birthing center.

Social support in this study was often expressed as the deciding factor for women making the choice between group and individual prenatal care. Contrary to women receiving group care, those receiving individual prenatal care indicated that they already feel supported by their social circle of friends and family and consequently, do not consider it critical to share the pregnancy

experience with other women in a group format of care. On the other hand, many women choosing group prenatal care value having a two-hour appointment that allows them to bond with their partners, other pregnant women and the healthcare team. This reason for choosing to participate in group prenatal care is similar to findings from a study conducted by McDonald et al. (2014), which reveals that women desire to connect and network with women.

Finally, women are also influenced to either select or reject group prenatal care based on past experiences with healthcare providers either during a former pregnancy or in general healthcare. A few women in this study, for instance, indicated that many of their appointments with physicians in Quebec were short and rushed, lasting no more than 10 minutes. These women viewed group prenatal care as an alternative model that could result in a better experience because of the longer sessions with healthcare providers. Women who chose group prenatal care in a study conducted in Ontario, Canada also cite longer appointments as a factor that prompted them to choose group prenatal care (McDonald et al., 2014).

Interestingly, women who had a previous child and were satisfied with the care they received during the former pregnancy do not see the value of trying a new model of care. This view is similarly expressed by other multiparous women in a rural area of southern Appalachia who had participated in a research study exploring factors why women refused group prenatal care (Phillippi & Myers, 2013). While women did not specifically attribute this to the importance of continuity of care, it may be indicative that when a trusting relationship is built between a woman and her provider, she is unlikely to want to transfer care.

5.3 Women's Expectations of Prenatal care

Canadian-born and immigrant women in this study did not express differences in terms of expectations of care. This could be attributed to the advancements that have taken place in the field of maternity care worldwide in the past five decades (Chalmers et al., 2001). No studies to date have explored differences in expectations of prenatal care based on cultural factors. Differences in women's expectations of care arise depending on the model of prenatal care women chose to receive and their overall perception of it. In this study, women who chose group prenatal care had an expectation of receiving social support from their prenatal care experience; this expectation did not apply to women receiving individual prenatal care. Similarly, most women who had chosen group prenatal care were attracted to the opportunity to learn from others. These two expectations of care among women receiving group prenatal care is also found

in the only study thus far that has examined women's expectations of group prenatal care (Teate et et., 2011). Women receiving individual prenatal care also recognized the value of learning from others, but they did not expect prenatal care delivery to fulfill this need. For these women, advice and information was sought from friends and family. Dependence on family and friends for support and information has been described as typical behavior of pregnant women (Hayes, Morin, Sylvia, & Bucher; 1997; Worley, Bullock, & Geden, 2004). Both women receiving individual and group prenatal care desired a prenatal care model that allows them to take ownership of their care; yet this expectation was evident only among multiparous women receiving individual prenatal care. Studies indicate that women report greater satisfaction with prenatal care when their views are taken into account and they feel that they can play an active role in decision-making processes of care (Waldenström, Brown, McLachlan, Forster, & Brennecke, 2000; Spurgeon, Hicks, & Barwell, 2001). Women receiving group and individual prenatal care additionally viewed prenatal care as a forum where they can access information relevant to prenatal care, childbirth and infant care. Teate et al. (2011) also describe this expectation of care among women receiving group prenatal care in Australia. Receipt of adequate information is reported to significantly impact women's satisfaction with their experience of prenatal care (Handler, Raube, Kelley, & Giachello, 1996; Hayes et al., 1997; Proctor, 1998; Sword, 2003; Vonderheid, Montgomery, & Norr, 2003; Worley et al., 2004). In addition, both women receiving group and individual prenatal care expected to receive patient-centered care and want intrapartum continuity of care. Women typically desired an empathetic provider that emotionally supports women through their prenatal care and develops a genuine relationship with them (De Koninck, Blais, Joubert, & Gagnon, 2001; Sword, 2003; Worley et al., 2004). Continuity of care is particularly important for pregnant women and studies indicate that its existence is associated with greater satisfaction of care (Handler et al., 1996; Proctor, 1998; Oropesa, Landale, & Kenkre, 2002). Finally, all women in this study expected to receive the proper risk assessment that will ensure the health of mother and child. As mentioned previously, this has historically been the main objective of prenatal care and studies indicate that women consider this to be the main benefit of receiving prenatal care (Handler et al., 1996; Proctor, 1998; Fuller & Gallagher, 1999). Consequently, it is not surprising that all women revealed this as an expectation of care. Nevertheless, it is noteworthy that women receiving individual prenatal regarded this expectation to be their first priority of care, while women

choosing group prenatal care viewed the support and education that group prenatal care could provide them with to be their first priority of care. These findings suggest that women choosing group prenatal care have different prenatal care needs in comparison to those choosing individual prenatal care. Understanding women's needs is particularly useful if care delivery is to be adapted to meet women's expectations and improve the prenatal care experience.

5.4 Cultural Preferences of Prenatal Care

The limited number of immigrant women in this study makes it difficult to interpret the impact of cultural factors on women's choices to receive group versus individual prenatal care. Congruent to other study findings, however, this study demonstrates that provider preferences for maternity care provision and childbirth are driven by cultural factors (Jordan, 1993; Nigenda et al., 2003; Bashour & Abdulsalam, 2005; Hadjigeorgiou, Kouta, Papastavrou, Papadopoulos, & Mårtensson, 2012). Many women in this study indicated that when choosing between an obstetrician/gynecologist, a family physician or a midwife, women tend to choose the option typically chosen by women from their backgrounds. Although currently regulated in most Canadian provinces, most Canadian-born women pointed out that midwifery is not commonly a considered option among women from their social circles. Similarly, all immigrant women drew attention to the fact that midwifery is not an option that is commonly considered among women from their backgrounds. It is important to mention that in some cases women were curious to try a new model of care despite the fact that it was not typically considered by women from their backgrounds. This is also observed among Australian women who indicate that group prenatal care is a 'fun' alternative not normally considered by women in Australia. This suggests that not all women are influenced by cultural factors the same way, further signifying that women's prenatal care needs are diverse. Seeing that women vary in their needs, preferences and expectations of care, providing women with a number of care models and a variety of providers to choose from may optimize women's experiences of prenatal care.

5.2 Study Limitations

The main limitations of this study are related to methodology and the study sample. The initial design of this study aimed to recruit women who were all offered the choice to receive group prenatal care and either selected or refused to receive this model of care. Throughout the year, however, fewer than anticipated group prenatal cohorts were offered due to physician

unavailability for maternity leave or leaves of absence. If a woman called the center during the time a group was being formed, she may have been offered the choice. This was not the case for the women recruited in this study who were already receiving individual prenatal care. Consequently, in order to meet the study objectives, the author proposed to ask women who were receiving individual care about their choice to either receive group or individual prenatal care if they hypothetically had a choice. Even though most women assigned by default to individual care indicated in the interview that they would have refused the choice to receive group prenatal care, this may have not been the case if they had spoken to either a receptionist or the nurse coordinating the group prenatal care program. It is noteworthy to point out that these women did not have the same expectations of care as women choosing group prenatal care. In other words, they did not necessarily view prenatal care as an opportunity to receive social support, learn from others and attain as much prenatal information as possible. Thus, women receiving individual prenatal care who hypothetically rejected the choice to receive group prenatal care during the interview may by nature be different from women who chose group prenatal care.

Secondly, in qualitative studies, sampling should ideally continue until theoretical saturation is reached (Green & Thorogood, 2009). Due to time constraints, in part due to challenges in recruitment and delays in ethics approval for the full study, this standard of sampling was unattainable for all themes and subthemes that emerged in this study. The author nevertheless ensured that saturation was attained for the themes that are pertinent to answering the posed research questions. A final methodological limitation of this study relates to the data collection, coding and analysis being conducted primarily by the author. Even though this has its advantages of allowing the researcher to be immersed and fully acquainted with the data, it results in codes, analyses and descriptions that are influenced by the viewpoints and biases by mainly one person (Sandelowski, 2000). To attenuate the effects of this limitation, the author consulted two experienced qualitative researchers throughout the process of coding and analysis who helped code two interviews with the author and verified that the codes and categories were sufficiently refined.

Finally, the study findings are appropriate and have value as an exploratory study, yet they may not permit generalization to other women and prenatal care settings. In other words, the study findings do not represent the range of views possible for all pregnant women in Canada. It is difficult to know to what extent the views obtained in this study might be similar or different

to a larger or across a range of clinics. Seeing that only five immigrant women were recruited, it was difficult to draw firm conclusions regarding the effect of culture on expectations and choices of prenatal care. Preliminary findings in this study indicate that immigrant women might be interested in trying a new model of care. The inclusion criteria requiring women to speak English or French fluently may have resulted in a selection bias and hindered the author from recruiting women that may have needs not otherwise expressed by the participants in this study. In other words, women who may be very recent immigrants that are not fluent in either language may have different views and experiences that are important to understanding the range of women's expectations. On a similar note, even though the author attempted to obtain variation around educational attainment, half of the women recruited had either attained or were completing a graduate degree. Women indicated that their understanding and appreciation for research prompted them to participate in the research study. It is also possible that this group of women may have been more aware of the prenatal care options available to them than less-educated counterparts. In addition, a higher educational attainment could have influenced participant's preferences and needs fore more holistic care.

5.3 Implications for Practice and Policy

Group prenatal care is a promising model of care that integrates conventional medical care and education to optimize the prenatal care experience for women. Studies indicate that group prenatal care has the potential to improve birth and psychosocial outcomes for women. In addition, this model is an enjoyable experience for many women. Group prenatal care implementation should be expanded to potentially address the current state of access to prenatal care and the increase in preterm birth rates, obstetrical interventions during childbirth and rates of Caesarean deliveries. The findings of this study result in three main recommendations for clinical practice and policy including: (1) increased implementation and strategic efforts to recruit women into group prenatal care by addressing their preconceptions and concerns upfront; (2) incorporating women's expectations of prenatal care into healthcare delivery to ensure that women's experiences are positive; and (3) needs assessments by healthcare providers and managers responsible for implementing this model of care to confirm the acceptability of group prenatal care among their patient population. These three recommendations are elaborated on below.

First, seeing that women are generally influenced by friends and family to choose the same care options, they may be less disposed to choose an unfamiliar care delivery option, such as group prenatal care. Understanding women's preconceptions of group prenatal care will help healthcare providers and staff to prepare information for women about this option and brainstorm approaches to address their concerns with privacy and adequate one-on-one care with providers upfront and ultimately promote group prenatal care. It is particularly critical for healthcare staff to promote group prenatal care as a model that provides women with the conventional prenatal care that they would normally receive along with the the education and support that they would access if they enrolled in a private childbirth education class. In other words, group prenatal care allows women to receive all the care they need from the same provider, which increases continuity of care. Promotion of group prenatal care can be carried out through interactive discussions with women seeking care, written handouts or brochures that can be placed in clinic waiting rooms or reception areas, and photos or videos of sessions that can be included on the website along with descriptions of the program.

Second, understanding women's expectations of prenatal care will allow both healthcare providers and the healthcare system to consider these expectations and improve prenatal care delivery by attempting to meet the needs of women. Clinicians advocating for improved care for women can make use of this baseline understanding of women's expectations and engage policymakers to foster support for woman-centered care and secure financing for initiatives that improve the delivery of maternity care services.

Finally, this study has shed light on the factors that help shape women's decision to either participate in individual or group prenatal care. Since the study is exploratory, it is difficult to determine whether group prenatal care would be acceptable among women from cultural groups different from those involved in this study. Knowing how social and cultural factors influence women's choices of care can help healthcare providers evaluate if their context is best suited for potential implementation of group prenatal care. This study reveals that group prenatal care is appealing to women who are seeking alternative models of holistic care, such as midwifery. Many women both in urban and rural areas of North America who are unable to receive care from midwives due to issues of access may benefit from group prenatal care and find that it meets their prenatal care needs. Even though group prenatal care may not be desired by all women, studies indicate that it is an evidence-based way to deliver prenatal care. Consequently,

clinicians should endeavor to provide a range of care models that meet the diverse needs of women.

5.4 Future Research Directions

Most of the existing research on the subject of group prenatal care has been carried out in US contexts where race is used to identify ethnic backgrounds. Studies that explored perspectives and experiences of women receiving group prenatal care have classified women by race, using labels such as Caucasian, African American/Black and Hispanic. The notions of race and ethnicity do not necessarily overlap when attempting to identify cultural values and preferences. Moreover, race is a more useful concept when attempting to identify genetic and geographical predispositions to disease (Senior & Bhopal, 1994). Ethnicity, on the other hand, identifies people based on shared social background, cultural values, language or religious tradition (Senior & Bhopal, 1994). Studies examining the association between health and cultural background reveal that culture plays a role in the type of care patients choose to receive; this is not necessarily the case for race (Purnell, 2013). It is essential to identify and consider participant's cultural backgrounds in order to better explore the acceptability of different approaches, such as group prenatal care among the diverse populations typical of the North American metropolitan settings.

As mentioned previously, only one study was retrieved that explored the personal and cultural factors that influenced a subset of women in the US to participate in group prenatal care (Phillippi & Myers, 2013). While one other study by McDonald et al. (2014) described the reasons women cited for choosing group prenatal care, it did not include consideration of the perspectives of women who rejected this model. One study conducted in Australia by Teate et al. (2011) examined women's expectations of care at the first group meeting. Comparisons of expectations of care among women receiving individual or group prenatal care in the same setting have yet to be explored. One recent immigrant involved in this study who was receiving individual prenatal care indicated that she might have been more inclined to choose group prenatal care if the group consisted of women from her background whom she would be able to better connect with. Future research could explore the extent to which women are more or less likely to choose group prenatal care if they perceive the group to be a forum where they can connect with women who share the same language and cultural values. Such research would be particularly useful to identify the factors that affect the implementation and sustainability of this

model in some clinical settings. In addition, it is worth exploring if group prenatal care is more attractive to women with higher anxiety levels in order to potentially promote this model among women with greater psychosocial needs.

Thus, in order to improve prenatal care delivery, a better understanding of the expectations of pregnant women regarding the quality and content of care would be helpful. Furthermore, with the increasing attention to provide culturally-competent care to meet the needs of diverse communities, it is important to confirm the extent by which expectations of prenatal care are shaped by cultural factors. More research is needed to help identify the preconceptions, choices and expectations of care that Canadian-born and immigrant women have when choosing between group and individual care.

Finally, research to investigate the exact mechanisms and processes by which group prenatal care contributes to women's experiences and outcomes, positively or negatively, would be an important contribution. To date, social support and enhanced provider-patient relationships have been proposed as the underlying factors for the improved outcomes (Risisky et al., 2013). No studies, however, have evaluated whether this is in fact the case. In addition, no studies have explored the experiences of partners engaging in group prenatal care and the role that they play in enhancing women's satisfaction of care and overall experience.

6.0 CONCLUSION

Group prenatal care is a comprehensiveness model of care that can fulfill many prenatal care needs and expectations that women have. It not only provides women with the adequate risk assessment and serial surveillance needed to guarantee a healthy pregnancy, but it does so while combining education and support thereby ensuring the delivery of an integrated care experience. Many studies point to the positive outcomes and experience associated with group prenatal care. Additionally, women in this study express a considerable demand for holistic care. Due to limited access, the option of receiving care from midwives is not readily available to all women. Physicians that are trained to facilitate and deliver group prenatal care can fulfill this need for women. Study findings from this thesis indicate that the added benefit of social support in group care may be particularly advantageous for women who are isolated or are in need of enhanced social support that they may not be adequately receiving from family and friends. Last but not least, this study indicates that some immigrant women may be interested in receiving group prenatal care despite the fact that this is not typical in their culture. Further research is warranted to explore differences between Canadian-born and immigrant women's choices between group and individual prenatal care. Based on this information, efforts should be taken to expand the implementation and evaluation of group prenatal care across clinical settings in Canada. Health promotion of group prenatal care and adequate information regarding the content and care process of the model should be relayed to women in order for group prenatal care to be effectively considered.

REFERENCES

Al-Gailani, S. (2013). Pregnancy, Pathology and Public Morals: Making Antenatal Care in Edinburgh Around 1900. In J. Greenlees & L. Bryder (Eds.), *Western Maternity and Medicine, 1880 – 1990* (pp. 31 – 46). London: Pickering & Chatto.

Alexander, G. R., Kotelchuck, M. (2001). Assessing the role and effectiveness of prenatal care: history, challenges and directions for future research. *Public Health Rep, 116(*4): 306 – 316.

American College of Obstetricians and Gynecologists. (2012). *Guidelines for perinatal care.* 7th Ed. Washington (DC): American College of Obstetricians & Gynecologists.

Andrist L. (1997). A feminist model for women's health care. *Nurs Inquiry, 4*: 268-74.

Baillargeon, D. (2009). *Babies for the Nation: The Medicalization of Motherhood in Quebec, 1910 – 1970.* Waterloo, ON: Wilfrid Laurier University Press.

Baldwin, K. A. (2006). Comparison of Selected Outcomes of CenteringPregnancy Versus Traditional Prenatal Care. *J Midwifery Womens Health, 51(*4): 266 - 272.

Baldwin, K., Phillips, G. (2011). Voices Along the Journey: Midwives' Perceptions of Implementing the CenteringPregnancy Model of Prenatal Care. *J Perinatal Educ, 20(*4), 210 – 217.

Ballantyne, J. W. (1901). 'A Plea for a Pro-Maternity Hospital' *British Medical Journal* 6 April, pp. 813-4.

Ballantyne, J. W. (1902). *Manual of Ante-Natal Pathology and Hygiene: The Foetus*. Edinburgh: William Green and Sons.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, *84*(2), 191.

Bashour, H., Abdulsalam, A. (2005). Syrian Women's Preferences for Birth Attendant and Birth Place. *Birth, 32(*1), 20 – 26.

Barr, W. B., Aslam, S., Levin, M. (2011). Evaluation of a group prenatal care-based curriculum in a family medicine residency. *Fam Med*, *43*: 712 – 717.

Bell, K. (2012). Centering Pregnancy: Changing the System, Empowering Women and Strengthening Families. *International Journal of Childbirth Education*, *27(*1): 70 – 76.

Bodo, K., Gibson, N. (1999). Childbirth customs in Vietnamese traditions. *Canadian Fam Physician, 45*: 690-97.

Braun, V., Clarke, B. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*:77-101.

Bryder, L. (2013). 'What Women Want': Childbirth Services and Women's Activism in New Zealand, 1900 – 1960. In J. Greenlees & L. Bryder (Eds.), *Western Maternity and Medicine, 1880 – 1990* (pp. 31 – 46). London: Pickering & Chatto.

Canadian Association of Midwives. (2015). 'Midwifery in Canada' – Quebec. Retrieved online from http://www.canadianmidwives.org/province/Quebec.html?prov=6

Canadian Health Services Research Foundation. (2010). *Quality of Healthcare in Canada: A Chartbook*. S. Leatherman & K Sutherland (Eds.) Ottawa: Canadian Health Services Research Foundation.

Canadian Institute of Health Information. (2004). Giving Birth in Canada: Providers of Maternity and Infant Care. Retrieved August 14, 2015 from https://secure.cihi.ca/free_products/GBC2004_report_ENG.pdf

Canadian Institute of Health Information. (2009). *Experiences with Primary Health Care in Canada – Analysis in Brief*. Retrieved August 14, 2015 from https://secure.cihi.ca/free_products/cse_phc_aib_en.pdf .

Canadian Midwifery Regulators Consortium. (2011). 'Working Conditions'. Retrieved online from http://cmrc-ccosf.ca/node/60#_Quebec

Carey, M. A., Asbury, J.-E. (2012). *Focus group research.* Walnut Creek, CA: Left Coast

Carlson, N. S., Lowe, N. K. (2006). CenteringPregnancy: a new approach in prenatal care. *MCN Am J Matern Child Nurs. 31(*4): 218-23.

Carolan, M., Cassar, L. (2010). Antenatal care perceptions of pregnant African women attending maternity services in Melbourne, Australia. *Midwifery*, *26*: 189-201.

Centering Healthcare Institute. (2008). Facilitator's Guide to the Mom's Notebook. Washington, DC: Centering Healthcare Institute.

Centering Healthcare Institute. (2014). *Locate Centering Sites*. Retrieved from https://centeringhealthcare.secure.force.com/WebPortal/LocateCenteringSitePage

Chalmers, B., Mangiaterra, V., Porter, R. (2001). WHO Principles of Perinatal Care: The Essential Antenatal, Perinatal, and Postpartum Care Course. *BIRTH, 28(*3), 202 – 207.

Conrad, P. (1992). Medicalization and social control. *Annual Review of Sociology*, 18: 209 – 232.

Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: SAGE Publications.

Curry, L. A., Nembhard, I. M., Bradley, E. H. (2009). Qualitative and mixed methods provide unique contributions to outcomes research. *Circulation*, *119*: 1442 – 1452.

De Koninck, M., Blais, R., Joubert, P., Gagnon, C. (2001). L'équipe d'évaluation des projets-pilotes sage-femmes. Comparing women's assessment of midwifery and medical care in Québec, Canada. *Journal of Midwifery & Women's Health*, *46,* 60 – 67.

Earner-Byrne, L. (2013). 'Twixt God and Geography: The Development of Maternity Services in Twentieth-Century Ireland. In J. Greenlees & L. Bryder (Eds.), *Western Maternity and Medicine, 1880 – 1990* (pp. 31 – 46). London: Pickering & Chatto.

Ejiogu, N., Norbeck, J. H., Mason, M. A., Cromwell, B. C., Zonderman, A. B., Evans, M. K. (2011). Recruitment and Retention Strategies for Minority or Poor Clinical Research Participants: Lessons from the Healthy Aging in Neighborhoods of Diversity Across the Life Span Study. *Gerontologist*, *55(*Suppl 1*)*: S33 – S45.

Fuller, C. A., Gallagher, R. (1999). Perceived benefits and barriers of prenatal care in low income women. *J Am Acad Nurse Pract, 11*, 527 – 532.

Glesne, C., Peshkin, A. (1992). *Becoming Qualitative Researchers: An Introduction.* White Plains, NY: Longman.

Grady, M. A., Bloom, K. C. (2004). Pregnancy Outcomes of Adolescents Enrolled in a CenteringPregnancy Program. *Journal of Midwifery & Women's Health*, *49(*5), 412 – 420.

Green, J., Thorogood, N. (2009). *Qualitative Methods for Health Research.* 2nd ed. Los Angeles: SAGE Publications.

Gregory, K. D., Davidson, E. M. (1999). Prenatal Care: Who Needs it and Why?. *Clinical Obstetrics & Gynecology, 42(*4), 725 – 736.

Grewal, S. K., Bhagat, R., Balneaves, L. G. (2008). Perinatal Beliefs and Practices of Immigrant Punjabi Women Living in Canada. *JOGNN*, *37*: 290-300.

Hadjigeorgiou, E., Kouta, C., Papastavrou, E., Papadopoulous, I., Mårtensson, L. B. (2012). Women's perceptions of their right to choose the place of childbirth: an integrative review. *Midwifery, 28(*3), 380 – 390.

Handler, A., Raube, K., Kelley, M. A., Giachello, A. (1996). Women's satisfaction with prenatal care settings: A focus group study. *Birth, 23*, 31 – 37.

Handley-Derry, F. (2013). Repeat Elective Caeserean: decision-making for women with a previous caesarean section. McGill Library Collections [Internet]. Retrieved from

http://digitool.library.mcgill.ca/R/-?func=dbin-jump-full&current_base=GEN01&object_id=119507.

Hayes, E. R. Morin, K. H., Sylvia, B., Bucher, L. (1997). Prenatal acre and birthweight: A pilot study of mothers' perceptions of accessibility, availability, and satisfaction with prenatal care services. *J Perinatal Education, 6*, 39 – 47.

Health Canada. (2000). *Family-Centered Maternity and Newborn Care: National Guidelines*. Ottawa: Minister of Public Works and Government Services.

Health Experiences Research Group. (July 2013). *Researcher's Handbook Healthtalkonline & Youthhealthtalk Modules, version 30.* Oxford, UK; Department of Primary Health Care, University of Oxford.

Henley-Einion, A. The medicalization of childbirth. In C. Squire (Ed.), *The Social Context of Birth* (pp. 85-99). 2nd ed. New York: Radcliffe Publishing.

Herrman, J. W., Rogers, S., Ehrenthal, D. B. (2012). Women's Perceptions of CenteringPregnancy: A Focus Group Study. *The American Journal of Maternal/Child Nursing*, *37(*1), 19 – 26.

Higginbottom, G., Hadziabdic, E., Yohani, S., Paton, P. (2014). Immigrant women's experience of maternity services in Canada: A meta-ethnography. *Midwifery*, *30(*5), 544-559.

Ickovics, J. R., Kershaw, T. S., Westdahl, C., Rising, S. S., Klima, C., Reynolds, H., & Magriples, U. (2003). Group prenatal care and preterm birth weight: Results from a matched cohort study at public clinics. *Obstetrics and Gynecology, 102*(5), 1051-1057.

Ickovics, J. R., Kershaw, T. S., Westdahl, C., Magriples, U., Massey, Z., Reynolds, H., & Rising, S. S. (2007). Group prenatal care and perinatal outcomes: A randomized controlled trial. *Obstetrics and Gynecology, 110*(2 I), 330-339.

Ickovics, J., Reed, E., Magriples, U., Westdahl, C. Rising, S. & Kershaw, T. (2011). Effects of group prenatal care on psychosocial risk in pregnancy: Results from a randomized controlled trial. *Psychology and Health, 26(*2), 235 – 250.

Jafari, F., Eftekhar, H., Fotouhi, A., Mohammad, K., & Hantoushzadeh, S. (2010). Comparison of Maternal and Neonatal Outcomes of Group Versus Individual Prenatal Care: A New Experience in Iran. *Health Care for Women International, 31*(7), 571-584.

Jordan, B. (1993). *Birth in Four Cultures: A Crosscultural Investigation of Childbirth in Yucatan, Holland, Sweden, and the United States.* 4th Ed. Long Grove, IL: Waveland Press.

Kennedy, H. P., Farrell, T., Paden, R., Hill, S., Jolivet, R., Willetts, J., Rising, S. S. (2009). "I Wasn't Alone" – A Study of Group Prenatal Care in the Military. *Journal of Midwifery & Women's Health, 54(*3), 176 – 183.

Kennedy, H. P., Farrell, T., Paden, R., Hill, S., Jolivet, R. R., Cooper, B. A., & Rising, S. S. (2011). A randomized clinical trial of group prenatal care in two military settings. *Military medicine, 176*(10), 1169-1177.

Klima, C., Norr, K., Vonderheid, S., & Handler, A. (2009). Introduction of CenteringPregnancy in a Public Health Clinic. *Journal of Midwifery and Women's Health, 54*(1), 27-34.

King, C. R. (1990). The woman's experience of childbirth on the Western frontier. *Journal of the West*, 29: 76 – 84.

Kotch, J. B. (2005). *Maternal and Child Health: Programs, Problems and Policy in Public Health*. Sudbury, MA: Jones and Bartlett Publishers.

Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *American journal of occupational therapy*, *45*(3), 214-222.

Lathrop, B. (2013). A systematic review comparing group prenatal care to traditional prenatal care. *Nursing for women's health, 17(*2): 118-30.

Lincoln, Y. S., Guba, E.G. (1985). *Naturalistic Inquiry.* Beverly Hills, CA: Sage Publications.

Logsdon, M. (2000). Helping hands. Exploring the cultural implications of social support during pregnancy. AWONN Lifelines, *4*: 29-32.

Malenfant, E. C., Milan, A., Charron, M., & Belanger, A. (2007). Demographic Changes in Canada from 1971 to 2001 Across an Urban-to-Rural Gradient. *Demographic Documents.* Ottawa: Statistics Canada.

Marks, D. F., Yardley, L. (2004). *Research Methods for Clinical Health Psychology*. Thousand Oaks, CA: Sage Publications.

Massey, Z., Rising, S. S., Ickovics, J. (2006). CenteringPregnancy group prenatal care: Promoting relationship-centered care. *Journal of obstetric, gynecologic, and neonatal nursing*, *35(*2): 286-94.

Maxwell, J. A. (2009). "Designing a Qualitative Study" in Bickman LE, Rog DJ, editors. *The SAGE Handbook of Applied Social Research Methods.* 2nd ed. Los Angeles: SAGE Publications. 214 – 253.

McDonald, S. D., Sword, W., Eryuzlu, L. E., Biringer, A. B. (2014). A qualitative descriptive study of the group prenatal care experience: perceptions of women with low-risk pregnancies and their midwives. *BMC Pregnancy and Childbirth*, *14*:334.

McNeil, D. A., Vekved, M., Dolan, S. M., Siever, J., Horn, S., & Tough, S. C. (2012). Getting more than they realized they needed: a qualitative study of women's experience of group

prenatal care. *BMC Pregnancy and Childbirth, 12*: 17.

McNeil, D. A., Vekved, M., Dolan, S. M., Siever, J., Horn, S., & Tough, S. C. (2013). A qualitative study of the experience of CenteringPregnancy group prenatal care for physicians. *BMC Pregnancy and Childbirth, 13 Suppl* 1:S6.

Miles, M. B., Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. 2nd ed. Thousand Oaks, CA: Sage Publications.

Mitchinson, W. (2002). *Giving Birth in Canada, 1900 – 1950.* Toronto: University of Toronto Press.

National Physician Survey. College of Family Physicians of Canada, Canadian Medical Association, Royal College of Physicians and Surgeons of Canada (2004). National and Provincial Data: Family Physician Participation in Maternity and Newborn Care. Retrieved August 14, 2015 from http://nationalphysiciansurvey.ca/wp-content/uploads/2013/07/2004-ByProvinceFP-Q9.pdf

Nuttall, A. (2013). Taking 'Advantage of the Facilities and Comforts … Offered': Women's Choice of Hospital Delivery in Interwar Edinburgh. In J. Greenlees & L. Bryder (Eds.), *Western Maternity and Medicine, 1880 – 1990* (pp. 31 – 46). London: Pickering & Chatto.

Neergaard, M. A., Olesen, F., Andersen, R. S., Sondergaard, J. (2009). Qualitative description – the poor cousin of health research? *BMC Medical Res Methodology*, *9(*52).

Nigenda, G., Langer, A., Kuchaisit, C., Romero, M., Rojas, G., Al-Osimy, M., et al. (2003). Womens' opinions on antenatal care in developing countries: results of a study in Cuba, Thailand, Saudi Arabia and Argentina. *BMC Public Health*, *3*:17.

Norbeck, J., Tilden, V. (1983). Life stress, social support and emotional disequilibrium in complications of pregnancy: A prospective multi-variate study. *J Health Soc Behav, 24*: 30-46.

Norbeck, J., Anderson, N. (1989). Psychosocial predictors of pregnancy outcomes in low-income black, Hispanic and white women. *Nurs Res, 38*: 204-9.

Novick, G. (2008). Is There a Bias Against Telephone Interviewing in Qualitative Research? *Research in Nursing and Health*, *31*(4): 391 – 398.

Novick, G. (2009). Women's Experience of Prenatal Care: An Integrative Review. *Journal of Midwifery & Women's Health*, *54(*3): 226 – 237.

Novick, G., Sadler, L. S., Kennedy, H. P., Cohen, S. S., Groce, N. E., Knafl, K. A. (2011). Women's Experiences of Group Prenatal Care. *Qual Health Res*, *21(*1): 97 - 116.

Novick, G., Sadler, L. S., Knafl, K. A., Groce, N. E., Kennedy, H. P. (2012). The Intersection of Everyday Life and Group Prenatal Care for Women in Two Urban Clinics. *J Health Care Poor Underserved, 23(*2), 589 – 603.

Novick, G., Sadler, L. S., Knafl, K. A., Groce, N. E., Kennedy, H. P. (2013). In a Hard Spot: Providing Group Prenatal Care in Two Urban Clinics. *Midwifery, 29(*6), 690 – 97.

Oakley, A. (1980). *Women Confined: Towards a sociology of childbirth*. Oxford: Martin Robertson.

Oakley, A. (1984). *The Captured Womb: A history of the medical care of pregnant women*. Oxford: Blackwell.

Oropesa, R. S., Landale, N. S., Kenkre, T. S. (2002). Structure, process, and satisfaction with obstetricians: An analysis of mainland Puerto Ricans. *Med Care Res Rev, 59*, 412 – 439.

Page, L. (1993). Redefining the midwife's role: changes needed in practice. *British Journal of Midwifery, 1*, 21 – 24.

Patton, M. Q. (2005). "Qualitative Research" in Everitt BS, Howell DC, editors. *Encyclopedia of Statistics in Behavioral Science.* New Jersey: John Wiley & Sons. 1633 – 1636.

Patton, M. Q. (2014). *Qualitative Research and Evaluation Methods.* 4th ed. Thousand Oaks, CA: SAGE Publications.

Phillippi, J. C., Myers, C. R. (2013). Reasons Women in Appalachia Decline CenteringPregnancy Care. *Journal of Midwifery & Women's Health, 58(*5), 516 – 522.

Picklesimer, A. H., Billings, D., Hale, N., Blackhurst, D., & Covington-Kolb, S. (2012). The effect of CenteringPregnancy group prenatal care on preterm birth in a low-income population. *American Journal of Obstetrics and Gynecology, 206*(5), 411 – 417.

Pope, C., Ziebland, S., Mays, N. (2000). Analysing qualitative data. *BMJ: British Medical Journal*, *320*(7227), 114–116.

Proctor, S. (1998). What determines quality in maternity care? Comparing the perceptions of childbearing women and midwives. *Birth, 25*, 85 – 93.

Public Health Agency of Canada. (2008). *Canadian Perinatal Health Report*. Ottawa, ON: Public Health Agency of Canada

Public Health Agency of Canada. (2009). *What Mothers Say: The Canadian Maternity Experiences Survey*. Ottawa, ON: Public Health Agency of Canada.

Public Health Agency of Canada. (2013). *Perinatal Health Indicators for Canada 2013: a Report of the Canadian Perinatal Surveillance System*. Ottawa, ON: Public Health Agency of Canada.

Purnell, L. D. (2013). Transcultural Health Care: A Culturally Competent Approach. 4th ed. Philidelphia: F. A. Davis Company.

Reid, J. (2007). Centering Pregnancy®: A Model for Group Prenatal Care. *Nursing for Women's Health, 11(*4): 382 – 388.

Riessman, C. K. (1993). Narrative Analysis. *Qualitative Research Methods Series*. No 30. Newbury Park, CA: Sage Publications.

Rising, S. S., Lindell, S. (1982). The childbearing childrearing center: a nursing model. *Nurs Clin North Am, 17*: 11 – 21.

Rising, S. S. (1998). Centering Pregnancy – An Interdisciplinary Model of Empowerment. *Journal of Nurse-Midwifery*, *43*(1): 46 – 54.

Rising, S. S., Kennedy, H. P. & Klima, C. S. (2004). Redesigning Prenatal Care Through CenteringPregnancy. *Journal of Midwifery & Women's Health*, *49*(5): 398 – 404.

Risisky, D., Asghar, S. M., Chafee, M., DeGennaro, N. (2013). Women's Perceptions Using the CenteringPregnancy Model of Group Prenatal Care. *Journal of Perinatal Education, 22(*3), 136 – 144.

Robertson, B., Aycock, D. M., Darnell, L. A. (2009). Comparison of Centering Pregnancy to Traditional Care in Hispanic Mothers. *Maternity & Child Health Journal, 13(*3): 407-14.

Romalis, S. (1981). *Childbirth: Alternatives to Medical Control.* Austin: University of Texas Press.

Rothman, B. K. (1982). *In Labor: Women and Power in the Birthplace*. New York: W. W. Norton.

Rouighi, H. (2010). *Portrait de l'immigration à Côte-des-Neiges* [Internet]. Retrieved online Dec 2013 from http://www.conseilcdn.qc.ca/wordpress/wp-content/uploads/2013/05/PortraitimmigrationCDN.pdf

Ruiz-Mirazo, E., Lopez-Yarto, M., & McDonald, S. D. (2012). Group Prenatal Care Versus Individual Prenatal Care: A Systematic Review and Meta-Analyses. *J Obstet Gynaecol Can*, *34(*3): 223 – 229.

Sandelowski, M. (2000). Whatever happened to qualitative description? *Res Nurs Health*, *23(*4): 334 – 340.

Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences.* New York: Teachers College Press.

Senior, P. A., Bhopal, R. (1994). Ethnicity as a variable in epidemiological research. *BMJ*, *309*: 327 – 330.

Shroff, F. E. (1997). The New Midwifery: Reflections on Renaissance and Regulation. Toronto: Women's Press.

Sheeder J., Yorga K. W., & Kabir-Greher, K. (2012). A review of prenatal group care literature: the need for a structured theoretical framework and systematic evaluation. *Matern Child Health J, 16(*1): 177-187.

Small, R., Rice, P. L., Yelland, J., & Lumley, J. (1999) Mothers in a New Country: The Role of Culture and Communication in Vietnamese, Turkish and Filipino Women's Experiences of Giving Birth in Australia. *Women & Health*, *28*(3), 77-101.

Society of Obstetricians and Gynaecologists of Canada (SOGC). (1998). *Healthy Beginnings: Guidelines for Care During Pregnancy and Childbirth.* Ottawa: SOGC.

Society of Obstetricians and Gynaecologists of Canada (SOGC). (2008a). *A National Birthing Initiative for Canada*. Retrieved August 14, 2015 from http://sogc.org/wp-content/uploads/2012/09/BirthingStrategyVersioncJan2008.pdf

Society of Obstetricians and Gynaecologists of Canada (SOGC). (2008b). *Health Human Resources Project on Intrapartum Emergency Obstetrical Care*. Retrieved August 14, 2015 from http://sogc.org/wp-content/uploads/2012/09/hhr-survey-report_e.pdf.

Spurgeon, P., Hicks, C., Barwell, F. (2001). Antenatal, delivery and postnatal comparisons of maternal satisfaction with two pilot Changing Childbirth schemes compared with a traditional model of care. *Midwifery, 17*. 123 – 132.

Statistics Canada. (2013). Immigration and Ethnocultural Diversity in Canada. *National Household Survey 2011.* Ottawa: Statistics Canada.

Strecher, V. J., DeVillis, B. M., Bekker, M. H., & Rosenstock, I. M. (1986). The Role of Self-Efficacy in Achieving Health Behavior Change. *Health Educ Behav, 13(*1): 73-92.

Strong-Boag, V., McPherson, K. (1986). The confinement of women: childbirth and hospitalization in Vancouver, 1919 – 1939. *BC Studies*, 69/70: 142-174.

Sullivan-Bolyai, S., Bova, C., Harper, D. (2005). Developing and refining interventions in persons with health disparities: the use of qualitative description. *Nurs Outlook, 53*: 127 – 133.

Sword, W. (2003). Prenatal care use among women of low income: A matter of "taking care of self". *Qual Health Res, 13*, 319 – 332.

Tandon, S. D., Colon, L., Vega, P., Murphy, J., & Alonso, A. (2012). Birth Outcomes Associated with Receipt of Group Prenatal Care Among Low-Income Hispanic Women. *Journal of Midwifery & Women's Health, 57(*5): 476 – 481.

Tandon, S. D., Cluxton-Keller, F., Colon, L., Vega, P., Alonso, A. (2013). Improved Adequacy of Prenatal Care and Healthcare Utilization Among Low-Income Latinas Receiving Group Prenatal Care. *Journal of Women's Health, 22(12*), 1056 – 1061.

Tanner-Smith, E. E., Steinka-Fry, K. T., & Lipsey, M. W. (2013). Effects of CenteringPregnancy group prenatal care on breastfeeding outcomes. *Journal of Midwifery & Women's Health, 58(*4): 389 – 395.

Tanner-Smith, E. E., Steinka-Fry, K. T., & Lipsey, M. W. (2014). The effects of CenteringPregnancy group prenatal care on gestational age, birth weight, and fetal demise. *Maternal and Child Health Journal, 18*(4), 801-809.

Teate, A., Leap, N., Rising, S. S., & Homer, C. S. (2011). Women's experiences of group antenatal care in Australia—the CenteringPregnancy Pilot Study.*Midwifery*, *27*(2): 138-145.

Tilden, E. L., Hersh, S. R., Emeis, C. L., Weinstein, S. R., & Caughey, A. B. (2014). Group Prenatal Care: Review of Outcomes and Recommendations for Model Implementation. *Obstetrical & Gynecological Survey*, *69(*1): 46 – 55.

Thielen K. (2012). Exploring the group prenatal care model: a critical review of the literature. *Journal of Perinatal Education*, *21(*4), 209-18.

Thompson, E., Walsh, L. V., Merkatz, I. R. (1990). The history of prenatal care: Cultural, social and medical contexts. In I. R. Merkatz & J. E. Thompson (Eds.), *New perspectives on prenatal care* (pp. 9-30). New York: Elsevier Science.

Vonderheid, S. C., Montgomery, K. S., Norr, K. F. (2003). Ethnicity and prenatal health promotion content. *West J Nurs Res*, *25*, 388 – 404.

Waldenström, U., Brown, S., McLachlan, H., Forster, D., & Brennecke, S. (2000) Does team midwife care increase satisfaction with antenatl, intrapartum, and postpartum care? A randomized controlled trial. *Birth*, *27*, 156 – 167.

Walker, D. S., Visger, J. M., Rossie, D. (2009). Contemporary Childbirth Education Models. *Journal of Midwifery and Women's Health, 54(*6): 469 – 476.

White, P. M. (2002). Crossing the River: Khmer Women's Perceptions of Pregnancy and Postpartum. *Journal of Midwifery and Women's Health*, *47(*4): 239-246.

World Health Organization. (2002). *Essential Antenatal, Perinatal and Postpartum Care*: *Training modules*. Copenhagen: WHO Regional Office for Europe.

Worley, B. L., Bullock, L. F., Geden, E. (2004). The incubator model: Is it effective prenatal care? *Clin Excell Nurse Pract*, *8*, 29 – 34.

Wrede, S., Benoit, C., Sandall, J. (2001). The State and Birth/The State of Birth: Maternal health policy in three countries. In R. Devries, C. Benoit, E. van Teijlingen, S. Wrede (Eds.). *Birth By Design: Pregnancy, Maternity Care and Midwifery in North America and Europe.* London: Routledge. (pp. 28 – 50).

LIST OF APPENDICES

APPENDIX 1: RECRUITMENT PROMPTS PLACED ON PATIENT MEDICAL CHARTS

PLEASE KEEP ON TOP OF PATIENT FILE – DO NOT FILE

PRENATAL CARE STUDY

PARTICIPANTS NEEDED

We are seeking pregnant women (<18 weeks) to participate in a research study about their experience of prenatal care.

Please mark your patient's choice to be contacted and *keep this sheet in patient file*.

☐ **Yes, she would like to receive more information and agrees to be contacted by a research assistant.**

- *PLEASE GIVE PATIENT ATTACHED ENVELOPE*

☐ **No, she is not interested in participating.**

Participant's contact information:

Name: _____

Telephone number: _____

Email: _____

Best time to be contacted: _____

Co-PIs: Maxine Dumas Pilon, MD; Anne Mirca Dupiton, BScN
Senior co-investigator: Jeannie Haggerty, PhD
Research coordinator: Noura Redding, MSc (c)

NOTE: Participants may or not be contacted depending on study's needs. Upon contact, patient will be able to accept/reject further participation.

PRENATAL CARE STUDY

1) **Purpose of the study?**
   To better understand the experience and knowledge of women who receive prenatal care at St. Mary's Hospital.

2) **Benefits of participating?**
   Responses will help us improve prenatal care for pregnant women at St. Mary's Hospital.

3) **What is required from participants?**
   Participants can choose to either do an individual interview OR answer three questionnaires during the pregnancy period.
   - Questionnaire 1 – during the first trimester
   - Questionnaire 2 – during the third trimester
   - Questionnaire 3 – at postpartum visit

4) **How much time will it take?**
   15- 30 minutes to complete either the interview or questionnaire.

5) **Where can you complete it?**
   Study can be completed at hospital or home and participants will receive a pre-paid, pre-addressed envelope to send questionnaires back.

6) **Will this affect the healthcare you receive?**
   No, your decision will not change the healthcare you normally receive. Participation in this study is voluntary. You may withdraw or refuse to participate at any time.

7) **Who will see your information?**
   Your answers are kept confidential or "private" and only the study team will see the answers.

NOTE: Participants may or not be contacted depending on the study's needs. Upon contact, patient will be able to accept or reject further participation.

Contact Information

If you have any questions or concerns about this study, please contact the research coordinator, *Noura Redding*:
Work: (514) 345-3111 ext. 5590 | **Cellphone:** (514) 258-5222 | **Email:** nour.redding@mail.mcgill.ca

APPENDIX 2: INTERVIEW GUIDE

Expectations, preferences and reflection of prenatal care choices

Annotated interview guide for qualitative researcher – with prompts (*in italics*). Prepared as per guidance for effective qualitative interviews from Researcher's Handbook Healthtalkonline & Youthtalkonline (version 30), University of Oxford* and Glesne (1992).

1. **Introduction and explanation of study**
   Thank you very much for agreeing to take part in this interview. I work at the St. Mary's Research Centre, for the Group Prenatal Care Research Project; we are exploring the choices women make when choosing between two models of prenatal care. With the stories and experiences we collect during this project, we will better understand the reasons women prefer one model to the other. We will also get an idea whether culture plays a role in shaping women's expectations and choices.

   For this project we will be interviewing around 15 women who are receiving prenatal care at St. Mary's Hospital. The interviews will be transcribed and analysed. Nobody will be able to identify you or your information from any report or presentation related to this study. Study findings will be published in scientific papers for healthcare providers that are considering implementing this model of care.

2. **PIS / Consent form – explain and request signature**
   Ask permission to record the interview

3. **Set up recording equipment**
   TURN ON POWER OF RECORDER

4. **PAUSE TAPE (red button)**

   I would like to ask you to start by telling your story right from when you started to think about prenatal care up until now. I'm interested to hear about expectations you have, choices you made, interactions with healthcare professionals and reflections on prenatal care overall. Then, I'll ask you a few more questions and if you get stuck, I can help with some specific questions. We can stop at any point if you want and please feel free to tell me if you do not wish to answer a specific question.

5. **HIT RECORD BUTTON start interview**

6. **Thanks again xx, so let's start with the story of your pregnancy.**

Accessing the health care system/receiving prenatal care

- How did you end up receiving prenatal care at St. Mary's Hospital Center? *(Family doctor referral, advice from friend, cold call, previous health experience at the hospital)*
- When did you make the decision to seek prenatal care?

Choice of care

- When you called the hospital to book an appointment, what did the receptionist tell you about the choices of prenatal care you could receive at the hospital?
- Were there certain factors that made this model attractive to you?

*Health Experiences Research Group. (July 2013). Researcher's Handbook Healthtalkonline & Youthhealthtalk Modules, version 30. Oxford, UK; Department of Primary Health Care, University of Oxford.
*Glesne C, Peshkin A. Becoming Qualitative Researchers: An Introduction. White Plains, NY: Longman. 1992.

- Did anyone help you decide what model of care to choose? For instance, your partner, family, friends?
- What is your understanding of group prenatal care?
- Have you ever experienced group care before? Is this typical in your culture? Why or why not?
- For women receiving individual care: hypothetically speaking, if you were given the choice to receive group or individual care, what would you choose?

Expectations

- Do you have specific goals or objectives for prenatal care? What are you hoping to get out of it? What are your expectations? *(Support, knowledge, assessment of maternal and infant health)*

Culture

- Where were you born? What do you consider your mother tongue to be?
    - **If not born in Canada,** how long have you been living in Canada?
- Do you currently have any children? If so, how old are they and where were they born?
- Can you describe how women from your cultural background go about accessing the healthcare system? Are their families normally involved in the process?
- How do women from your cultural background usually receive prenatal care? *(Midwife, family physician, nurse, in groups, individually?)*
- What words come to mind when you think about what pregnancy means to you?
- Would the same words come to mind for other women from your culture?
- Do you think your cultural background influences what preferences you have when choosing a healthcare provider or type of care? *(Same culture, same sex)*
- Do you think your cultural background influenced your choice between individual and group prenatal care?

First appointment

- Can you describe how your first prenatal care appointment went? (*How, when, feelings, what was it like, alone or with someone)*
- Do you think your first appointment changed how you feel about your pregnancy? *(Made you more calm, anxious, reassured or about the same?)*
- Did you feel that you got what you needed? What else would be/have been helpful? (*Information or system gaps, access to information and support)*

Last topics

- Are there any other issues I've not covered which you feel you'd like to add?
- Can I just ask you why you decided to take part in this research? Was there a particular reason you said yes?

7. What happens next?

I'll send the audiotape off for transcription.

8. Fill in the respondent detail sheet

2 *Health Experiences Research Group. (July 2013). Researcher's Handbook Healthtalkonline & Youthhealthtalk Modules, version 30. Oxford, UK; Department of Primary Health Care, University of Oxford.
*Glesne C, Peshkin A. Becoming Qualitative Researchers: An Introduction. White Plains, NY: Longman. 1992.

APPENDIX 3: CONSENT FORM

Centre Hospitalier de St. Mary

St. Mary's Hospital Center
Pavillion Hayes/Hayes Pavilion, Bureau/Suite 4710
3830, avenue Lacombe, Montreal (Quebec) H3T 1M5

Understanding Women's Preferences, Choices and Experience of Group versus Individual Prenatal Care

Principal Investigator: *Dr. Jeannie Haggerty, McGill University*
MSc student: *Ms. Noura Redding, McGill University*
Funded by: *St. Mary's Hospital Center Annual CARE Competition*

You are being invited to participate in this research study. The objective of the study is to better understand women's preferences to choose either group or individual prenatal care. We are interested in understanding your choice and experience of care. This document is to give you information about our research project and invite you to be a part of it.

Purpose of research
We are doing research to better understand women's preferences, choices and experience of prenatal care at St. Mary's Hospital Center. Prenatal care refers to a plan of care that addresses medical, psychosocial and educational needs of pregnant women and their families. There are two types of prenatal care offered to women at the St. Mary's Family Medicine Center. Individual prenatal care involves one-on-one visits with a healthcare professional that last 15 – 20 minutes. Group prenatal care, on the other hand, consists of two-hour medical visits with a group of 8 – 10 pregnant women. The research team would like to know why some women choose to receive group prenatal care instead of individual prenatal care. We are curious to see if culture influences women's expectations and choice of prenatal care. Finally, we want to know how women reflect on their choice and experience of prenatal care. This research will be done over a period of one year.

Participants and procedure
We have selected all the family doctors that provide prenatal care at St. Mary's Hospital. The doctor you are seeing has accepted to take part in our study. We are asking her patients to take part too. To be a part of this study you would need to participate in an interview that will take place before the 18th week of pregnancy. During this interview, we will ask you questions on the type of prenatal care you chose to receive. The interview should last a maximum of *one hour*. *Interviews may be audio recorded with your permission.*

Voluntary Participation
Your participation in this study is entirely voluntary and you may withdraw or refuse to participate at any time. You may also refuse to answer any questions during the study or ask to stop at any time. Whatever you decide, it will not change the healthcare you normally receive.

Confidentiality
Your answers are kept confidential or private and only the study team will see the answers. It is possible that the Research Ethics Committee will have access to the documents for quality assurance purposes. Each participant will be given another name on documents to hide the participant's identity. The master list of names will be kept in a locked file cabinet. All electronic information will be stored on a password-protected computer at the hospital. Documents will be kept for five years and then destroyed to maintain confidentiality. The St. Mary's special confidential paper recycling process will be used. In the case that you decide to no longer participate in the study, printed data will be destroyed via St. Mary's special confidential paper recycling process. Electronic data files will also be deleted.

Benefits
We cannot promise that taking part in this study will bring you any personal advantage, but we hope that the results of the study will help us understand if group prenatal care is attractive to a specific set of women. By understanding women's expectations and experience, we can better promote and improve group prenatal care.

Risks & Inconveniences
There are no known risks to participating in this study. However, the time spent participating in the study may be inconvenient. If you decide to participate in the research study, a copy of this consent form will be given to you.

Contact Information
If you have any questions or concerns about this study, please call and talk to one of the following people:

Principal Investigator:
- *Jeannie Haggerty, PhD* – (514) 345-3111 ext. 6334

SMHC Site Investigators:
- *Maxine Dumas-Pilon, MD* – (514) 345-3111 ext. 5773
- *Anne-Mirca Dupiton, BScN* – (514) 345-3111 ext. 2658

Research Coordinator
- *Noura Redding, MSc student* - (514) 345-3111 ext. 5590

By signing below, you are agreeing to participate in this research study. Make sure that any questions have been answered to your satisfaction, and that you have a thorough understanding of the study.

If you want to talk to someone not connected with the study about your rights as a study participant, or if you have any complaints about the research, you can call the St. Mary's Ombudsperson at (514) 345-3511 ext. 3301.

Certificate of Consent

I hereby give my consent to participate voluntarily in the study titled: "Understanding Women's Preferences, Choices and Experience of Group versus Individual Prenatal Care." ***In doing so I give the Principal Investigator access to my interview records.***

Print Participant's Name	Participant's Signature	Date
Print Interviewer's Name	Interviewer's Signature	Date