

“BEING BY MYSELF AND BELIEVING IN US”  
THE EXPERIENCE OF PREGNANCY AND CHILDBIRTH DURING AN INTIMATE  
PARTNER’S MILITARY DEPLOYMENT

by

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## **ABSTRACT**

For Canadian military families (CMFs), pregnancy and childbirth can occur in tandem with a military deployment. The central issue is that a military deployment of an intimate partner introduces unique stressors that can challenge pregnancy, increasing the risk of prenatal anxiety, preterm delivery, and postpartum depression. The objective of this study is to extend current understanding of how pregnancy and childbirth are experienced during an intimate partner's deployment and how supports and resources shape the experience. This study was conducted in Eastern Canada by interviewing women in CMFs. A descriptive phenomenological approach allowed for stories to be explored and for an over-arching theme, "being by myself and believing in us," to be uncovered. The implications of this study include laying a foundation for future research and refocusing perinatal care to consider how timeliness, togetherness, technology, and support empower women in "believing in us" or remind women of being alone.



## RÉSUMÉ

Pour les familles des militaires (CMFs), la grossesse et l'accouchement peuvent arriver en même temps que l'expérience d'un déploiement militaire. Le souci central est qu'une expérience d'un déploiement d'un partenaire intime présente les facteurs de stress uniques qui peuvent compliquer l'expérience de la grossesse et qui peuvent augmenter le risque de la dépression postpartum et de l'accouchement avant terme. Le but de cette étude est d'étendre les connaissances actuelles de la façon dont les expériences de la grossesse et de l'accouchement sont affectées par le déploiement d'un partenaire intime. Cette étude était menée dans l'Est du Canada. En employant une approche phénoménologique et descriptive, on a découvert l'essence des histoires, « être toute seule et croire en nous. » Les femmes ont simultanément expérimenté « être toute seule, » dans un monde qui ne comprenait pas leur expérience, et « croire en nous, » la possibilité de devenir une famille. Les implications de cette étude comprennent composer les bases pour des recherches futures et guider les améliorations des soins périnataux.

## LIST OF ABBREVIATIONS USED

ANOVA	Analysis of Variance
APNCU	Kotelchuck Index of Prenatal Care Adequacy
ATLAS.ti	Archive for Technology, Lifeworld, and Everyday language
BAM	Becoming A Mother
BBC	Baby Boot Camp
CES-D	Center for Epidemiological Studies - Depression Scale
CAF/CF	Canadian Armed Forces/ Canadian Forces
CINAHL	Cumulative Index to Nursing and Allied Health Literature
CMF	Canadian Military Family
DGMPRA	Director General Military Personnel Research and Analysis
DND/ MDN	Department of National Defence/Ministère de la Défense Nationale
EAMF	Effects of Attachment of Marital Functioning
ECOD	Emotional Cycle of Deployment
EMBASE	Excerpta Medica database
EPDS	Edinburgh Postnatal Depression Scale
FACES	Family Adaptability and Cohesion Evaluation Scales
FRED	Family Readiness through Education on Deployment
HCP	Health-Care Provider
HLTA	Home Leave Travel Assistance
LBW	Low Birth Weight
MAAS	Maternal Antenatal Attachment Scale
MFO	Multinational Force, and Observers
MFRC	Military Family Resource Centre
MFSP	Military Family Service Programs
MOMS	Mentors Offering Maternal Support
MRA	Maternal Role Attainment
NATO	North-Atlantic Treaty Organization
NICU	Neonatal Intensive Care Unit
NCM	Non-Commissioned Member
PDSS	Postpartum Depression Screening Scale

PHBS	Prenatal Health Behaviours Scale
PPSEQ	Postpartum Self-Evaluation Questionnaire
PRQ	Personnel Resource Questionnaire
PSEQ	Prenatal Self-Evaluation Questionnaire
PSP	Personnel Support Programming
PSS	Perceived Stress Scale
NUPDQ	Revised Prenatal Distress Questionnaire
REB	Research Ethics Board
RS	Resilience Scale
SGA	Small for Gestational Age
SL (M)	Special Leave (Mission)
SSRRB	Social Sciences Research Review Board
SSI	Social Support Index
UN	United Nations

## **GLOSSARY**

### **Military Family and the Canadian Armed Forces (CAF)**

Although a single definition for the Canadian Armed Forces (CAF) family has not been established (Daigle, 2013), the global term “military family” describes a family that is connected to a military institution through a loved one’s enrolment in regular or reserve forces. Canadian military families (CMF) include single parent and blended families, in addition to partnered couples, and parents of enlisted members (Daigle, 2013). Among Canadian military families, partnered couples may be heterosexual, same sex, or other, formally recognized as married or cohabiting under common law or in partnerships, with or without children (Daigle, 2013). CMFs include one or more uniformed, commissioned or non-commissioned, members of the CAF in the regular or reserve forces in the Canadian Army, Royal Canadian Navy or Royal Canadian Air Force.

Isovaara, Arman, and Rehnsfeldt (2006) cited that the unique essence of family is identified in what has significance to all its members. For CMFs, the distinctive elements of the military life-style, extended separations, frequent relocations, patriotism, and risk as a central tenet, have significance for all members (Daigle, 2013). In this paper, the terms military family, Canadian military family, and CAF family reflect the family structure described by the military Ombudsman’s report (Daigle, 2013) and the family’s role as described by the Canadian Forces Family Covenant (Military Families Services Programs, 2008a): All members of a Canadian military family serve, but not all wear a uniform; The CAF member is the Canadian military family; And all members of a Canadian military family have a recognized role in the Canadian Armed Forces (MFSP, 2008a).

### **Women in Canadian Military Families**

Women in Canadian military families are individuals who self-identify as women, who are commissioned (officers) or non-commissioned members (NCM) of the CAF or who are partnered with commissioned or non-commissioned members of the CAF.

### **Intimate Partner**

An intimate partner is one, with whom, an individual chooses to procreate or, with whom, to have a sexual or intimate relationship.

## **Maternal-Child Health**

In this study, maternal-child health represents the continuum of perinatal health experienced by women, the continuum of fetal, neonatal, and infant health experienced by children, and the intersection between the two. The term perinatal describes the prenatal period during antepartum, the intra-partum labour and delivery experience, and the six weeks following childbirth, the postpartum.

## **Support Personnel**

Civilian support personnel include civilian health-care providers, counselors, social workers, psychologists, therapists, doulas, health promotions personnel, and community outreach workers in community and clinical settings not employed by the Department of National Defense.

Military support personnel include counselors, social workers, psychologists, Personnel Support Programming (PSP) personnel, Military padres, and Military Family Resource Centre community outreach workers employed in part or in full by the Department of National Defence.

Civilian health-care providers include family physicians, obstetricians, gynecologists, nurses, midwives, psychiatrists, and other self-regulated health professionals with medical, applied medicine, midwifery or nursing education working within their scope of practice in community and clinical settings.

Military health-care providers include physicians, surgeons, nurses, psychiatrists, and other self-regulated health professionals with medical, applied medicine, pharmacy, or nursing education employed in part or in full by the Department of National Defence and working within their scope of practice.

## **Military Family Resource Centre (MFRC)**

The MFRC is a community resource centre that provides not-for-profit informational and professional support, referrals, and programming to all members of CMFs, complementary to and not competing with local civilian support services. MFRCs provide programs and services that help CMFs connect and support each other through the unique demands of the military lifestyle. There are currently 32 MFRCs across Canada. Each MFRC is governed by a volunteer Board of Directors, of which, it is mandated that 51% be non-uniformed members of the CAF community. Each MFRC

creates its own vision, mission, and objectives to reflect the needs of CMFs in its surrounding community. MFRCs receive funding from the Department of National Defence (DND) as well as donations from local partners.

### **Military Deployment, Overseas, Operational tour, and Mission**

For this study, military deployment is defined as an overseas operational mission of 30 days or longer in duration (Lederman & Weis, 2009; Military Families Supports Programs, 2008b) from departure to homecoming, including transit time and time in theatre. Overseas describes foreign or international territories, and areas outside of Canadian territorial waters or airspace. The term operational tour or mission relates to the national or international mandate underlying the significance of the military deployment.

### **Special Leave (Mission) and Home Leave Travel Assistance (HLTA)**

Special Leave (Mission) is granted to members of the CAF deployed on international operations who serve for at least 30 continuous days in an Area of Operations (AOO) (Government of Canada, 2014). Special Leave (Mission, SL(M)) is intended to provide CAF personnel, deployed on North-Atlantic Treaty Organization (NATO), United Nations (UN), Multinational Force, and Observers (MFO) or other international Organizations, with an opportunity to leave the mission area and relieve stress at a non-threatening location, usually back in Canada (Government of Canada, 2014). Home Leave Travel Assistance (HLTA) supports Special Leave and is a benefit offered to CAF personnel deployed or expected to be deployed for “120 consecutive days” (Government of Canada, 2014, Section 21).

### **Emotional Cycle of Deployment (ECOD)**

The emotional cycle of deployment (ECOD) is a conceptual model that describes a trajectory of expected emotional and behavioural responses a family member might experience in relation to a loved one’s prolonged military deployment (Devoe & Ross, 2012; Logan, 1988; MFSP, 2008b). In Canada, the ECOD is referenced and extensively described in the Military Family Handbook that is presented to CAF families prior to deployment (MFSP, 2008b).

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## CHAPTER ONE: INTRODUCTION

Pregnancy and childbirth are life-altering events that mark the beginning of newborn life and the transition to motherhood. For women in military families, pregnancy and childbirth can occur, concurrently, with the experience of an intimate partner's military deployment; a unique circumstance that introduces distinctive stressors (Daigle, 2013; McMillan, 1997; Roberts, 2008; Tarney, Berry-Caban, Berryman, & Whitecar, 2013; Urban, 2013; Williams & Rose, 2007). The experience of an intimate partner's deployment involves a loved one's extended absence, under a national or international mandate, in an operational environment that involves risk to life or limb, without a predictable whereabouts, known return date, or consistently reliable contact information (Daigle, 2013; Haas & Pazdernick, 2007; Roberts, 2008; Urban, 2013). Deep concern regarding the well-being and whereabouts of a loved one, in daily association with patriotic duty, makes the experience of an intimate partner's military deployment unique (Roberts, 2008; Urban, 2013). Distinctive emotional and behavioural responses associated with an intimate partner's deployment are described by the emotional cycle of deployment (Devoe & Ross, 2012; Logan, 1988; MFSP, 2008b). For women in military families, what does it mean to experience a pregnancy while an intimate partner is deployed overseas on an operational tour?

Over a decade and a half ago, McMillan (1997), a Registered Nurse in the province of British Columbia, Canada, wrote on the topic of labour support for women experiencing an intimate partner's military deployment. McMillan described how women in Canadian military families (CMFs) felt pressured to prematurely induce labour, felt abandoned, enraged, despondent, powerless, and confused in their roles. In the current context, have women's experiences changed?

Although no current research on the topic could be found in Canada, studies led by Nurse Midwives, Registered Nurses, and military researchers in the United States have revealed that pregnancy during an intimate partner's military deployment is associated with increased prenatal anxiety (Haas, Pazdernik, & Olsen, 2005; Haas & Pazdernik, 2007; Tarney et al., 2013; Weis & Lederman, 2010), a two and half fold increase in preterm birth (Tarney et al., 2013), increased risk for low birth weight outcomes (Lederman, 2011; Weis & Ryan, 2012), increased risk for depressive symptoms, prenatally and in the postpartum,



(Robrecht, Millegan, Leventis, Crescitelli, & McLay, 2008; Smith, Munroe, Foglia, Nielson, & Deering, 2010; Spooner, Rastle, & Elmore 2012; Tarney et al., 2013), an increased risk for conflict in acceptance of pregnancy (Weis, Lederman, Lilly, & Schaffer, 2008) and in mother-infant attachment (Lederman & Weis, 2009; Schachman, Lee, & Lederman, 2004; Weis & Lederman, 2010). Although women who have experienced pregnancy during deployment are apt to demonstrate confidence and proficiency in the maternal role, their satisfaction, sense of wholeness, well-being, and attachment with their newborns need our careful attention (Lederman & Weis, 2009). Better understanding regarding the meaning of the experience of pregnancy and childbirth during an intimate partner's deployment is needed to promote optimal maternal-child health outcomes for this frequently overlooked military family population (Brooke, 2009; Kennedy et al., 2009; Kennedy et al., 2012; Schachman et al., 2004; Tarney et al., 2013; Weis & Ryan, 2012; William & Rose, 2007).

In this study, I have applied a descriptive phenomenological approach to explore with women their stories of the experience of pregnancy, childbirth, and concurrent partner deployment. It is my aim to authentically represent women's stories in order to extend current understanding of what the experience of pregnancy, childbirth, and deployment is. Additionally, I purpose to increase awareness among healthcare providers, community support personnel, and military leadership of how maternal-child health for CMFs can be optimally supported. Greater awareness and understanding regarding women's experiences, and of how supports and resources shape their experiences, can lead to optimal maternal-child care for Canadian military families and bridge the gap between military and civilian worlds.

### **Background**

The Canadian Government asks a small segment of the population, between 5000 and 8000 operational Canadian Armed Forces (CAF) members in a country of 30 million people, to carry the national mandate for the protection of peace (Roberts, 2008; Tanner et al., 2008). The impact of such a heavy request on such a small segment of the population is hidden in the everyday routines of the military and their families (Daigle, 2013). CMFs, with a member deployed, may experience the realities of having a loved one in a combat zone while their neighbours do not (Daigle, 2013; Roberts, 2008). The cultural dichotomy

of experiencing a family member at “war” in a society that is not is potentially marginalizing and silencing (Davis, Ward, & Storm, 2011). Among women in military families, the distinctive health effects associated with military lifestyle are under-investigated by health care providers (Daigle, 2013; Davis et al., 2011; Tarney et al., 2013). Among women receiving obstetric care at a military connected hospital, 51.4% reported that their health-care providers (HCPs) overlooked their experiences of spousal deployment as a factor affecting maternal-child health (Tarney et al., 2013). Comparatively, Davis et al. (2011) cited that ambivalence and assumptions among civilian support personnel created distance between women in military families who needed help and access to effective support. Compounding the issue, the action research conducted by Davis and colleagues revealed that women in military families, experiencing a partner’s military deployment, silenced themselves. Davis and colleagues noted that women did not discuss their experiences in order to protect others from the negative effects they were experiencing. Amankwaa (2000) warned that women who are socialized to portray strength, pride and the obligation to cope can delay help seeking behaviours.

In Canada, the slogan in every Military Family Resource Centre (MFRC) calls for the family to be “the strength behind the uniform” (Daigle, 2013; MFSP, 2008a). Women in CMFs have historically camouflaged themselves with the attitudes, values, and beliefs that portray strength, pride, and independence (Daigle, 2013; Roberts, 2008; Urban, 2013). For women in CMFs experiencing pregnancy and childbirth during an intimate partner’s deployment, the health effects of unique psychosocial stressors may not be readily identified because of a woman’s desire to portray strength and the likelihood of the HCP to overlook the experience of deployment as it affects maternal-child health (Davis et al., 2011; McMillan, 1997; Tarney et al., 2013; William & Rose, 2007).

Without expanding current awareness and understanding regarding women’s experiences of pregnancy and childbirth during a partner’s military deployment, there is potential that both health-care providers and women in CMFs continue to under-estimate and under-report the effects of an intimate partner’s deployment on maternal-child health and well-being (Schachman et al., 2004; Tarney et al., 2013)

An intimate partner’s deployment during pregnancy and childbirth introduces unique stressors and responsibilities that can challenge a women’s acceptance of pregnancy

and transition to motherhood (Lederman & Weis, 2009). The importance of looking for meaning in the context of the experience of pregnancy and childbirth during deployment is that it can provide valuable insight into what is possible in guiding care that is relevant and acceptable for women in CMFs (Patchell, 2013). Increasing awareness among HCPs and support personnel, in community and clinical settings, regarding the meaning that the experiences of pregnancy and childbirth have for women in CMFs can enhance understanding regarding the relevance of support and resources in promoting optimal maternal-child health outcomes (Davis et al., 2011; Paley, Lester & Mogil, 2013; Tarney et al., 2013).

### **Philosophical Underpinnings**

In 2013, the Canadian military's Ombudsman reported that a shift in philosophy was needed in order to improve the approach and delivery of support to military families in Canada (Daigle). For this shift to occur, Daigle (2013) cited the importance of independent research in promoting concrete, meaningful, and relevant actions that address the issues affecting CMFs. This study was independent. In terms of a philosophical shift, I considered how various philosophical frameworks could provide ways of describing the experience of women in military families. For example, (a) critical social theory describes the dialectic situation in which the military institution dominates the military family, resulting in unbalanced work-home life scenarios (Harrison & Laliberte, 1997; Roberts, 2008); (b) post-structuralism describes a dominant discourse in which everything falls secondary to the mission (Daigle, 2013; Roberts, 2008; Urban, 2013); and (c) feminism describes the military's use of gendered labour (Roberts, 2008) that has resulted in unaccounted losses among women in military families, including unaccounted losses in wages, employment seniority, and pensions related to the assumed responsibilities of women in managing frequent relocations and family transitions (Daigle, 2013; Joseph & Afifi, 2010; Roberts, 2008). Although feminism is a likely framework for this study, feminism's historic roots as an anti-establishment movement makes it potentially alienating to deeply patriotic military families. Feminism purposes not to oppress women, but to create benefit for women, and to acknowledge women's experiences (Gelling, 2013). Yet, for the population of women in CMFs, feminism due to its anti-patriotic associations has the potential to divide and separate women from their military identity. Feminism, associated with opposing military

ideologies, has the potential to be oppressive of women in CMFs who identity themselves as military and belonging to a military family. Ultimately, the meaning of feminism among women in CMFs may be unique from its meaning in civilian academia. To promote benefit for women and to prevent oppression, a phenomenological approach, which explores and respects the human experience, as it reveals itself, provides an alternative and appropriate approach. A phenomenological approach allows taken-for-granted experiences to be accounted for and for significant meanings, including the meaning of care in the context in which it is received, to be understood in new ways. A phenomenological approach to researching the experience of pregnancy and childbirth during a military deployment has the potential to create benefit for women in military families. Phenomenology as a methodology promotes equality and respect for all persons (Colaizzi, 1978), applies a language that is considerate of its readers, explores for meaning, and acknowledges what has been taken-for-granted. In this study, I applied a descriptive phenomenological approach to explore with women the meaning of the experience of pregnancy and childbirth during an intimate partner's deployment and of how supports and resources shaped the experience.

### **A Phenomenological Approach to Understanding the Human Experience**

*What is human experience?* Philosophy informs both this question and its answers. Philosophy is the use of the abstract to capture the elusive. The abstract includes ideas and beliefs (Creswell, 2013) that help one take hold of elusive concepts, including truth, meaning, purpose, and experience. Philosophy rests on four assumptions: ways of knowing, ways of being, ways of valuing, and ways of approaching or, respectively, the epistemological, ontological, axiological, and methodological assumptions (Creswell, 2013). To explore what human experience is, I considered how phenomenology, as a philosophy and a methodology, could provide a framework that relates ways of knowing what the human experience is, ways of valuing the human experience, ways of being, and ways of approaching research involving ways of being. Ultimately, a phenomenological approach provides a framework to explore and understand the meaning that experiences have for people in their world (Leonard, 1992). For nurses, this understanding can refocus care to that which is relevant and meaningful for people who receive their care (Leonard, 1992). The question is not simply what is the experience but what is the meaning of the

experience for “actual” people in the world in which they live?

Phenomenology is attributed to the founding work of Edmond Husserl (1859-1938), and is associated with the writings of Heidegger (1889-1976), Merleau-Ponty (1908-1961), and Gadamer (1900-2002). Colaizzi (1978) and others offered research approaches to phenomenological inquiry. Each author’s work enhances our understanding of phenomenology and the meaning of what the human experience is.

**Husserl.** Edmund Husserl (1859-1938), whose ideas illuminated phenomenological understanding, considered human experience to be a living knowledge. From living knowledge, phenomena could be understood in their essences or origins (Husserl, 1913/1964). Husserl (1913/1964) asserted that this was accomplished through reduction and bracketing. Reduction allowed for the common or universal structures to be identified. Bracketing prevented the intended meaning from becoming altered by the prejudices of cognition (Husserl, 1913/1964). Bracketing and reduction allowed for recognizable or universal elements of the human cognition to emerge (Husserl, 1913/1964). By uncovering what was common, multiple stories could be unified. By uncovering essences, one could transcend knowledge to reach understanding. Husserl’s approach was logical and systematic, reflecting his two passions: mathematics and philosophy. In his work, Husserl (1913/1964) explored the essence of human cognition as it was taken-for-granted and misunderstood. Husserl (1913/1964) described a way of valuing what was common and a way of understanding what was abstract, thus, identifying the phenomenon of the human experience of cognition.

**Heidegger.** Martin Heidegger (1889-1976), a student and friend of Husserl, explored the existential meaning of being in the world, which included: being-with-others, being one-self, being there, care as being, being a whole, potentiality for being, temporality, everydayness, historicity, and within-time-ness (Heidegger, 1927/1962). Heidegger (1956) was influenced by Aristotle’s assertion that understanding ways of being was far superior to exploring ideas of principle and cause. Heidegger (1927/1962) pondered how each of us, as beings, had knowledge of our being-ness, yet could not describe from where it began. Concepts of being-with-child and being as becoming a mother are noticeably absent from his work.

A Heideggerian or interpretive hermeneutic phenomenology relates the reciprocal

relationship between a person and their lived world, where encounters have significance in their interpreted meanings. Heidegger (1956) asserted that the meaning of being is found in the correspondence of beings. A hermeneutic phenomenological approach to studying lived experience involves eliciting that correspondence. The correspondence does not involve researchers removing themselves through bracketing; Rather, the researcher engages in dialogue, being with the participant, entering into the relational space “between” (Carson, 2010). Interpretive phenomenology is an incredibly intimate, reciprocal, and philosophical approach to understanding an individual’s way of being, or *dasein*, in their lived world (Heidegger, 1927/1962). The correspondence, Heidegger (1956) asserted, was necessary in order to understand the significant meaning that experiences have for people in the world in which they live.

**Merleau-Ponty.** Merleau-Ponty (1945/2002) wrote on the concept of the embodied human experience, asserting that the body provides access to the world; when the mind and body are linked, reality is made accessible. Merleau-Ponty (1945/2002) asserted that the reality of human experience is described, not constructed, and described in detail by human perception: sensations, associations, resemblances, memories, and prejudices. Merleau-Ponty (1945/2002) described phenomenology as he perceived it. *The Perception of Phenomenology*, originally written in the 1940s, was a contradiction to the widely held belief that human being was comprised of spirit, soul, and body (Merleau-Ponty, 1945/2002). Merleau-Ponty (1945/2002) posited that humans were one and that the human mind and body were integrated. There was nothing behind it. Phenomenology was referred to by Merleau-Ponty (1945/2002) as the study of essences. Phenomenology literally means the study of the act of perceiving. Perception, or the act of perceiving, allows moments to be captured. But each of these captured moments, put together, do not represent the entire human experience. There is meaning and understanding in the entirety of the experience that is greater than the sum of captured moments. The essence of *what it is* to experience being human must consider the embodied experience of living in this world.

**Gadamer.** Gadamer (1900-2002) considered language to be the universal medium for understanding. Gadamer’s book, *Truth and Method*, originally published in 1960 includes the benefits of conversation, or of correspondence, in conveying meaning. The reciprocity of dialogue among people allows people to reach an agreement regarding their

collective understanding (Gadamer, 1960/2004). In contrast, translated dialogues and written texts are understood through an interpretation with little to no correspondence (Gadamer, 1960/2004). As a partner in the conversation, a text does not get a chance to clarify itself (Gadamer, 1960/2004). Gadamer et al. (1960/2004) cited that texts provide a way for human beings to continue, but they are prone to misinterpretation and inferior to conversations. In today's context, Gadamer's insight can inform our discussions regarding social media.

*One looks for more than understanding on content but on being acceptable to the correspondent; The response time factors into one's perception of the latter. The time lapse between writing a letter and receiving a response is not just an external factor but is a form of communication (Gadamer et al., 2004, p. 362).*

Instant messaging, online status updates, and email offer ways to instantly convey meaning regarding acceptability. The meaning of correspondence, in terms of how it relates to our perceived acceptance, is interesting to consider.

**Colaizzi.** Colaizzi (1978) posited that the purpose of life was to expand and that phenomenological research could expand understanding in ways that were satisfying. As a phenomenological psychologist, Colaizzi (1973) challenged people's assumptions of what psychology was and what phenomenology was. Colaizzi (1973) questioned why psychologists were ignoring philosophical approaches to research. Then he systematically reduced phenomenology into a methodology with four exploratory processes and seven analytic steps. Colaizzi's (1978) described his methods: protocol analysis, imaginative listening, perceptual description, and phenomenological reflection. The protocol analysis, a seven step iterative thematic analysis, is commonly referred to as Colaizzi's method. Colaizzi's (1978) methods align with descriptive phenomenological approaches, while allowing for exploration of context and meaning. Controversially, Colaizzi asserted that his methods were based on Heidegger's (1927/1962) work:

*... the method for objective investigation of human experience cannot be the experimental method. It must be a method which neither denies experience nor denigrates it or transforms it into operationally defined behavior; it must be, in short, a method that remains with human experience as it is experienced, one which tries to sustain contact with experience as it is given. This can be achieved only by*

*the phenomenological (SIC) method of description as it has been articulated by the germinal phenomenologist Martin Heidegger (1962): “to let that which shows itself be seen from itself in the very way in which it shows itself from itself (p. 58).” The remainder of this article will be devoted to developing the meaning of the psychological implementation of this complicated statement (Colaizzi, 1978, p. 53).*

Moreover, Colaizzi posited that bracketing one’s own experiences during research prevented, rather than supported, remaining objective. Instead, Colaizzi offered that researchers should apply phenomenological reflection or journaling throughout the research process--a process similar to bracketing.

In the current context, phenomenological methodologies are largely separated into interpretative or Heideggerian, phenomenological approaches and descriptive phenomenological approaches (Wojnar & Swanson, 2007). An interpretive phenomenological approach explores significant meanings within an individual’s lived experience, acknowledging the reciprocal relationships among the researcher and the participant and the participants and their world. Descriptive phenomenological approaches seek to uncover essential structures that are universal among participants’ stories, verifying the common elements rather than recognizing many interpretations. Colaizzi (1978) applied elements of both, opting to describe phenomenology as a philosophy and a research approach (Dowling, 2007).

In his research, Colaizzi (1973, 1978) explored how people read, memorized, and described texts. In looking for what was common, Colaizzi discovered humans contradicted themselves. An important note given the contractions to phenomenological research that Colaizzi himself introduced. Colaizzi, ultimately, recommended that contradictory data should be embraced by researchers as contradictions simply indicate that human experiences are being researched. Colaizzi’s goal was to promote an ever expanding description to which new understanding and new descriptors can be added.

In embracing human experience and in exploring the “realm of the personal” (p. 69), Colaizzi emphasized maintaining trust and promoting respect. Colaizzi (1978) described how researchers could promote respect for persons by exploring topics significant to the participants and by becoming approachable. Colaizzi proposed that participants should be co-researchers in the conversation and in verifying the results. Colaizzi asserted that the



participant as co-researcher provided a non-threatening approach to exploring stories that had been previously “deliberately unexamined”(1978, p. 69). The great lengths to which Colaizzi explained proximity and partnering with co-researchers indicated the importance that equality and justice had for Colaizzi. Colaizzi purposed to understand what was universal, while allowing the common story to be uncovered in ways that were meaningful for and respectful of the research participants.

In summary, as a philosophy and a methodology, phenomenology provides a framework for exploring and understanding human experience and its meaning. Human experience is living knowledge; it is an interpreted sense of being; it is an embodied perception of reality; it is bigger than the sum of captured moments; it is a contradiction; it is a correspondence among beings; it is explored through proximity with people, observed, described, and related to others through recognizable texts. In relation to women in Canadian military families, a phenomenological approach to inquiry implored me to ask: What is the experience of pregnancy and childbirth during an intimate partner’s military deployment? What meanings, for women, lie within this experience? And how can I respectfully approach this research with women?

### **Positioning of the Researcher**

To explore the meaning that the experience of pregnancy, childbirth, and concurrent partner deployment has for women, I chose to apply Colaizzi’s (1978) methods for descriptive phenomenological inquiry. This approach allows the collective or common experience, and its meaning, to be described in ways that are recognizable for people (Wotjar & Swanson, 2007). I realized that I intuitively looked for “what was common” in how phenomenology was being described by Husserl, Heidegger, Gadamer, and Colaizzi. I chose a descriptive phenomenological approach because I identified that the outcome of a descriptive phenomenological approach, recognizable universal features, best supported the objective of this study: to increase awareness of what the experience is. I also recognized that Colaizzi’s (1978) methods provided a succinct stepwise description of how to respectfully approach research and to understand data. There are several examples of military nurse researchers in the United States who have successfully applied Colaizzi’s methods to researching experience, including: the experience of fatherhood from a combat zone (Schachman, 2010), military sexual trauma (Doherty & Scannell-Desch, 2012), and

widowhood and pregnancy (Doherty & Scannell-Desch, 2008). Additionally, I noted that a descriptive phenomenological approach has been cited as an effective initial step toward understanding and addressing previously un-researched phenomena (Wojnar & Swanson, 2007). Beck's (1992) phenomenological research among women experiencing postpartum depression provided an example of how Colaizzi's methods could illuminate understanding, prompt further research, and lead to the development of a universally accepted assessment tool, the Beck Depression Index. The topic of pregnancy, childbirth, and deployment is an un-researched phenomenon to which a descriptive phenomenological approach can provide insight. Not only is it a reasonable choice for initial exploration, Colaizzi's methods are appropriate. In purposing to create a non-threatening space for women to discuss what was meaningful to them, I appreciated that Colaizzi acknowledged the participants as co-researchers.

The philosophical underpinnings of descriptive phenomenology required me to consider my own experiences. To do this, I considered how phenomenology was described as the study of essences and asked myself what the essence of the experience of pregnancy, childbirth, and deployment was for me, having lived the experience a decade earlier. I found that I described my experience in the opposing words: strength and vulnerability. To illustrate the essence of my experience, I collected a preterm baby sleeper and a .50 caliber bullet casing (See Appendix A). In my journaling, I found myself lamenting that I had put too much emphasis on my partner's experience and too much emphasis on my need for his acceptance of our newborn. I focused on him rather than on the attachment between my baby and me. This discovery compelled me to explore the topic more fully. I expected women's stories to relate strength and vulnerability. However, I also expected that women would provide insight into what supports were effective and what areas of maternal-child health care could be improved.

## CHAPTER TWO: LITERATURE REVIEW

In the previous chapter, I discussed, from a philosophical perspective, how the phenomenon of human experience has been and can be described. In this chapter, I continue to explore the concept of experience by focusing on women's experiences of pregnancy and childbirth from a theoretical perspective (Rubin, 1967; Lederman, 1996; Mercer, 2004; Lederman & Weis, 2009) and women's experiences of deployment within a conceptual model (Logan, 1988; MFSP, 2008). I cite what was known, and what has previously been studied, regarding women's experiences of pregnancy and childbirth during an intimate partner's deployment.

### **Pregnancy, Deployment, and Becoming a Mother**

*What is the experience of pregnancy and childbirth?* The experience of pregnancy has been described as an expectant process in which a woman's "way of being" transitions from identifying as a woman without a child to identifying as a woman with a child to becoming the mother of a child (Lederman, 1996; Lederman & Weis, 2009). Rubin (1975), a perinatal nurse, described pregnancy as a time for learning maternal tasks: protective behaviours, accepting behaviours, a language inclusive of baby, and the readiness to nurture. The experience of pregnancy has been captured in questions: "Who me? Pregnant? Now?" (Gay, Edgil, & Douglas, 1988, p. 365) and described by feelings of shame, excitement, impatience, curiosity, and fear (Gay et al., 1988; Lederman & Weis, 2009; Rubin, 1975). The experience of pregnancy has been related to behaviours of preparing, celebrating, pretending, denying, and health seeking (Gay et al., 1988; Lederman & Weis, 2009; Mercer, 2006) and to somatic descriptions that include: nausea, fatigue, diaphoresis, sleep disturbances, heartburn, weight gain, edema, and changes to skin, hair, nails, and gums (Gay et al., 1988; Lederman & Weis, 2009; Rubin, 1975; Watts, 2008).

The experience of labour and delivery is the celebrated and feared climax of a woman's experience of pregnancy. The experience of labour and delivery challenges one's sense of control, coping, confidence, self-efficacy, and one's perception of self and of others (Sinclair & O'Boyle, 1999). The experience of labour and delivery has been described in contradictions: a marathon and an urgency, eliciting feelings of accomplishment or failure, extreme pain or euphoria, stress or relief, a sense of being exposed or intimate, of trust or fear, of being in control or of losing control, of being an active participant or "a passive

object of care”(Willmuth, 1975, p.39), and of being turned inside out or of becoming complete (Wildner, 2004). A woman’s perceived level of control and choice during labour and delivery greatly influences her experience and her ability to positively recollect the birth (Cook & Loomis, 2012; Willmuth, 1975). For example, a birthing body who feels powerless experiences decreased success in labour and is at increased risk for adverse birth outcomes (Fahy & Parratt, 2004; Lederman, 2011).

### **Becoming A Mother**

Mercer (2006) described the process of Becoming A Mother (BAM) as accepting pregnancy, followed by “increasing attachment, including learning how to care for the infant”(p. 649), and “moving toward a new normal” (p. 649). Mercer suggested: “The process of BAM requires extensive psychological, social, and physical work” (p. 649). The work of becoming a mother is influenced by personal, social, and environmental factors, including the characteristics and personality of the pregnant woman, preparedness for birth, experienced stress, available support, the birth experience, the environment, depression, anxiety, and social support networks (Mercer & Walker, 2006). Maternal identity is achieved, Mercer asserted, when the mother identifies herself in her new role, demonstrating competence and “pleasure in the mother-infant interchange” (p. 650). Becoming a mother is an enduring process in which the relationship between the mother and child evolves over time as the child grows and the relationship develops (Mercer & Walker, 2006).

Rubin (1963/1967/1975) described the process from pregnancy to four months postpartum as Maternal Role Attainment (MRA). Rubin’s (1963) earliest work focused on the relationship between maternal touch and MRA in the postpartum. Rubin suggested that new mothers touch their newborns in predictable ways, progressing from inspection to exploration to responding consistently with caring behaviours. Rubin also listed warning signs that a new mother was experiencing conflict in MRA: muscle tension, wet palms, a preoccupation with minute details in the baby’s appearance, and a lack of progression in maternal touch behaviours. Rubin offered that women must *take in* their experiences of labour and delivery before they can demonstrate *taking hold* of being the mother of a child.

## **Psychosocial Adaptation to Pregnancy**

Lederman (1996) expanded upon Rubin's work. Applying MRA as a theoretical framework, Lederman (1996) extensively described and investigated the process of maternal psychosocial adaptation. Of note, Lederman included both primigravid and multigravid women in her studies, citing their similarities were greater than their differences. Lederman explained that women experiencing a first pregnancy and women experiencing a subsequent pregnancy both related a strong, singular concern for the well-being of their babies, while questioning their ability to manage independently caring for their infants when baby comes home. First time mothers questioned their adaptation to motherhood in relation to having been without a child. Whereas, non-first time mothers questioned their adaptation to motherhood in relation to managing care of their other children. The stress experienced by both groups was similar, although described differently in relation to their changing context.

In 2009, Lederman and Weis published the third edition of *Psychosocial Adaptation to Pregnancy*. The book included findings regarding the developmental challenges faced by primigravid and multigravid women, with special consideration for women in military families experiencing a partner's deployment, and instruments for assessing women's adaptation to pregnancy (Lederman & Weis, 2009). Lederman and Weis investigated how seven dimensions of prenatal adaptation were predictive of fetal health status, postpartum maternal adaptation, and progress during labour. The seven dimensions included: acceptance of pregnancy, identification with the mothering role, preparedness for birth, relationship with a mother figure, relationship with an intimate partner, fear of pain, the loss of control, or helplessness, and ways of coping (Lederman & Weis, 2009). Lederman and Weis (2009) found that women who reported difficulty accepting their pregnancies, difficulty in preparing for birth, or who feared birth, had higher levels of epinephrine and cortisol in early labour and throughout labour. Higher levels of epinephrine, a vasoconstrictor, correlated with abnormal fetal heart rate decelerations, decreased uterine activity, and increased incidence of assisted deliveries ( $p < .001$ ) (Lederman & Weis, 2009). Similarly, higher levels of cortisol correlated with delayed cervical dilation, prolonged labour, and increased incidence of assisted deliveries ( $p < .001$ ) (Lederman & Weis, 2009).

To investigate how the seven dimensions of psychosocial adaptation were predictive of postpartum adaptation, Lederman and Weis (2009) conducted a longitudinal study that followed women (N = 421) for the duration of their pregnancies. Women's scores on the Prenatal Self-Evaluation Questionnaire (PSEQ,  $\alpha = .83$  to  $.94$ ) were compared to scores on the Social Support Index (SSI,  $\alpha = .82$ ) and to scores on the Family Adaptability and Cohesion Evaluation Scales (FACES II version,  $\alpha = .80$ ) (Lederman & Weis). Additionally, 113 women, who were connected to the military and experiencing pregnancy during an intimate partner's deployment, were provided the Postpartum Self-Evaluation Questionnaire (PPSEQ) at six months postpartum. Lederman and Weis sought to link correlations between prenatal personality dimensions and scores for satisfaction with mothering tasks ( $\alpha = .79$ ) and confidence in being a mother ( $\alpha = .73$ ) (Lederman & Weis). In their study, Lederman and Weis defined deployment as temporarily living away from home for a minimum of 30 days in order to support a defined military mission. Lederman and Weis analysed their data using one-way ANOVA and descriptive statistics.

Lederman and Weis (2009) explained that in the first trimester a pregnant woman, experiencing spousal deployment or not, has the task of transitioning from an identity of being a woman without a child to being a woman with a child. During this transition, community support and acceptance from a partner are paramount (Lederman & Weis). In the second trimester, upon feeling fetal movements, a woman begins to recognize the fetus as a distinct being, and she prepares for the mothering role; accordingly, family flexibility becomes fundamental to maternal adaptation, to assuaging the woman's concerns regarding childbirth, and to supporting the woman's belief in her ability to cope (Lederman & Weis). For women experiencing pregnancy during spousal deployment, scores for perceived family adaptability were notably reduced (Lederman & Weis).

Ultimately, a woman who is pregnant transitions from being a woman with child to being the mother of a child (Lederman, 1996). Lederman and Weis (2009) found that prenatal scores for perceived family adaptability correlated strongly with mother-babe attachment and satisfaction in the mothering role, while prenatal community support correlated with confidence in the maternal role and with childcare skills. For women experiencing spousal military deployment in the first trimester of pregnancy, the unusual association of confidence and dissatisfaction in the maternal role and increased conflict in

mother-babe attachment were cited during postpartum adaptation (Lederman & Weis, 2009). The prolonged absence of a partner due to military deployment was associated with dissatisfaction and conflict in mother-infant attachment, but not with the confidence of the new mother in her role (Lederman & Weis, 2009).

### **Emotional Cycle of Deployment**

For women experiencing pregnancy and childbirth during an intimate partner's deployments, the stressors associated with the emotional cycle of deployment may challenge their transition to motherhood. The emotional cycle of deployment (ECOD) describes a trajectory of expected emotional transitions that military families experience in relation to phases of a military deployment (DeVoe & Ross, 2012; MFSP, 2008b). In preparation for deployment, or during the pre-deployment phase, military families experience anticipation and excitement (MFSP, 2008b). As the departure date nears, anticipation transitions to detachment and withdrawal (MFSP, 2008b). Upon departure, families experience a period of emotional disorganization (MSFP, 2008b). For families experiencing repeated deployments, the collusion of exhaustion hinders the ability to recover from emotional disorganization (DeVoe & Ross, 2012; Family Readiness through Education on Deployment, 2013). Sustainment, during the deployment phase, refers to the stabilization achieved by the family. It is associated with an outward portrayal of functional capability. However, recent researchers have indicated that families may be silencing their feelings of being overwhelmed, numb, or exhausted (Davis et al., 2013; Joseph & Afifi, 2010; MFSP, 2008; Roberts, 2008; Urban, 2013). The ECOD describes that homecoming is anticipated through fantasy by family members and is correlated with disruptions to daily routines (MFSP, 2008b; Urban, 2013). Following homecoming, the family transitions quickly to the reunion phase (DeVoe & Ross, 2012), during which roles and routines are re-adjusted and relationships re-negotiated (MFSP, 2008b; Roberts, 2008; Urban, 2013). Elevated stress is the hallmark of reunion (Roberts, 2008). Reintegration and stabilization of the military family, following reunion, may take 6 months to two years post deployment (DeVoe & Ross, 2012; FRED, 2013).

The original ECOD model was introduced in 1988 by Kathleen Logan, a family counselor and naval officer. Logan (1988) illustrated how wives, connected to the United States Navy, were experiencing a loved one's overseas deployment. Logan's (1988) ECOD

model explained how an intimate partner's overseas deployment of three months duration or longer was associated with predictable emotional and behavioural responses that affected feelings of personal rejection and attitudes toward sexual intimacy. Logan (1988) posited that for military support personnel and counselors, a deeper understanding of relational coping and adjustment among military couples could be better supported through promoting an awareness of these expected responses that are neither good nor bad, but *simply exist*. Logan's (1988) ECOD model has been adapted, over the years, to include the responses of other members of the family and to describe behaviours excluding sexual activities. More recently, a modified ECOD was developed to describe the responses among family members who experienced multiple military deployments (FRED, 2013; MFSP, 2008b) and the responses among children in relation to parenting along the cycle of deployment (DeVoe & Ross, 2012). An ECOD model in relation to women's experiences of pregnancy and childbirth during deployment has not been conceptualized.

### **Becoming a Mother during the Emotional Cycle of Deployment**

During military deployment, supporting members cannot predict when their partners will return home; concurrently, they report feeling a lack of control (McMillan, 1997; Roberts, 2008; Urban, 2013; William & Rose, 2007). These stressors and the emotional and behavioural responses related to the emotional cycle of deployment might challenge a woman's psychosocial adaptation during pregnancy (Schachman et al., 2004). Among new mothers in military families, those who experienced their partners' military deployment at any point along their pregnancy had a harder time accepting pregnancy, attaching with their baby, and finding satisfaction in their new role (Lederman & Weis, 2009; Schachman et al., 2004; Weis et al., 2008). However, these outcomes were most pronounced if deployment occurred during the first trimester of pregnancy (Weis, 2008; Weis & Lederman, 2010), when thoughts and feelings about pregnancy, including the responsibilities in becoming a new mother are first conceptualized (Mercer, 2006). In relation to Mercer's (2006) theory, accepting pregnancy means deciding that one is capable, committed, and ready to prepare for the new tiny addition to the family. Preparations involve learning new skills to care for the infant and processing one's expectations for the role transition (Mercer, 2006). Mercer (2006) claimed that maternal identity was achieved when a new mother related pleasure in responding to their infants' cues and competence in her new role. In contrast, Schachman



and colleagues (2004) described maternal maladaptation as: “lack of competence and skill in carrying out mothering behaviours, as well as self reported attitudes and feelings of depression, stress and lack of gratification in the maternal role” (p. 107). Schachman and colleagues cautioned that an intimate partner’s deployment combined with the process of maternal identity formation could increase the risk of maternal maladaptation. Whereas, Lederman and Weis (2009) asserted that women in military families who experienced an intimate partner’s deployment during pregnancy did not lack competence or confidence, rather they struggled to find satisfaction in their new role and expressed conflict in attaching with their newborns. Women were skilled in mothering, but sad. Of note to HCPs, even after the deployed partner returned, the challenges to mothering continued (Lederman & Weis, 2009; Schachman et al., 2004; Weis et al., 2008). With regard to BAM, the effects of the deployment did not end when the partner returned; rather, a new phase, with its associated challenges began in the post deployment phase. In Canada, deployed members often return prior to the birth. The meaning and the impact of reintegration in relation to pregnancy and childbirth have not been studied.

To explore the topic of pregnancy and childbirth during deployment, articles of literature were sought, identified, and organized. To seek and identify pertinent literature, I entered the search terms “pregnancy” and “military deployment” into university library databases, including: CINAHL, EMBASE, MEDLINE PLUS, PsycINFO, SocINDEX, the Canadian Electronic Library, and dissertations and theses. Additionally, the office of the Director General Military Personnel Research and Analysis (DGMPPRA) was contacted by email. Articles of literature, specifically addressing the issues faced by women in military families whose partners were deployed, were selected. The search strategy was continually modified to include and reflect keywords found within the relevant literature: “military family”, “labour”, “childbirth”, “postpartum”, “maternal adaptation” or “overseas”.

In this review, I organized the retrieved literature into women’s experiences of an intimate partner’s deployment; women’s experiences of pregnancy and childbirth during an intimate partner’s deployment as it described in measurements of (a) stress, (b) birth outcomes, (c) depressive symptoms, (d) acceptance of pregnancy, and; (e) in relation to the effectiveness of interventions in supporting women experiencing pregnancy and childbirth during deployment.

## **Women's Experiences of an Intimate Partner's Deployment**

In 2008, Roberts, a social worker, member of the CAF, and a woman connected to the CAF through an intimate partner, independently studied women's lived experiences of spousal deployment. Applying a qualitative approach that was informed by phenomenology, Roberts privately interviewed nine demographically distinct women, ages 37 to 52. The women's stories poignantly revealed how increased stress, responsibilities, adherence to daily ritual, and self-reliance affected their lives and challenged their families' reintegration (Roberts). Roberts described aspects of the women's experiences in themes: employment status, stress at home, stressors related to deployment, situational stress, coping, informal supports, and formal supports. Roberts expanded upon the stressors related to deployment, categorizing pre-deployment as a preparation time, deployment as a time of fluctuating loneliness punctuated by communications, Home Leave Travel Assistance (HLTA) as a contradiction of anticipation, maintaining routines, and relationship detachment, re-deployment as a time of anticipation and apprehension about homecoming, and post-deployment as a period of changing roles, responsibilities, and a loss of independence. Roberts' findings supported the ECOD, while providing additional insight on women's experiences of HLTA (See Glossary). An evaluation of the benefits and limitations of HLTA in relation to the well-being of military families could not be found elsewhere in the literature. Roberts' findings are particularly informative. Of note, the women in Roberts' study all indicated that they purposely avoided other women also experiencing spousal deployment. The women stated that their struggles were sufficiently difficult; they did not want to be tasked with connecting with others also experiencing this hardship (Roberts). Although the women described themselves as strong, they perceived they did not have the strength to support each other (Roberts). These findings challenge the popular objective of military support programming that purposes to connect people so that they can support each other during deployment (MFSP, 2008b). Roberts' findings indicate that connectedness and its role in support should to be reviewed in relation to considering how women experience deployment, with whom women connect, and from whom women receive support. None of the participants in Roberts' study were pregnant during their partners' deployments.

Joseph and Afifi (2010), communications researchers from California, United States, applied the communal coping framework to explore, among women experiencing a

partner's deployment (N = 107), eight dimensions of the experience using eight difference psychometric tools. Joseph and Afifi measured: perceived risk to partner's safety, perceived support from a deployed partner, perceived support from others in the military community, degree of marital disclosure, perceived stressors during deployment, protective buffering, physical and mental health, and marital satisfaction. Protective buffering was described as not disclosing "bad information" during stressful situations (Joseph & Afifi, p. 420). Joseph and Afifi noted a correlation between women's use of protective buffering and negative health symptoms ( $p < .01$ ). Conversely, women who disclosed their stressful experiences with their deployed partners reported higher marital satisfaction ( $p < .001$ ) (Joseph & Afifi). Of note, Joseph and Afifi found no relationship between perceived support from others and disclosure or protective buffering. A woman's decision regarding when and what to communicate with her partner was not correlated with support from others in the military community (Joseph & Afifi). Joseph and Afifi cited that this finding had significance to the military community as it challenged the assumption that women will not "bother" their deployed partners if supports in community were adequate (Joseph & Afifi). Joseph and Afifi recommended that instead of targeting the supporting members' behaviours, empathetic communication techniques should be taught to deploying military members.

In 2013, Urban released a multiphase study describing the Effects of Attachment on Marital Functioning (EAMF). Researchers at Queen's University, Royal Military College of Canada, and the DGMPRA supported the study. Urban focused on the well-being of women whose partners were deployed. The response rate hovered around an abysmal 23% in the first phase (n = 67) (Urban). Phase one, part one of Urban's study involved a cross-sectional survey of women experiencing reintegration following a partner's deployment. Results indicated that 92% were experiencing inter-personal conflict and 26.9% reported feeling overwhelmed (Urban). Phase one, part two also involved a cross-sectional survey. The survey was provided to women separated from their partners due to deployment in the past six months and included women whose partners had not yet returned home. The response rate was 23.3% (n = 87) (Urban). Results indicated that among women, who responded, 37.7% felt "down" and 37.6% felt overwhelmed (Urban). Of the participants from phase one, part two, 70% chose to continue into its second phase of the study (Urban). Phase two, part two involved a longitudinal survey that employed a 14-item Likert style

instrument for measuring well-being (Cronbach's alpha,  $\alpha = .86$ ) (Urban). Women experiencing a partner's deployment were surveyed once a month for four months. Among the women who participated, a significant decrease in feeling supported by others was reported over the four months, while feelings of loneliness or being overwhelmed increased (Urban). The history effect of the repeated measures in this study's design might have influenced the results.

Phase three concluded the study. Of the 87 participants from phase one, part two, 41 continued into phase three of the study (Urban, 2013). Phase three involved a cross sectional survey of women reunited with their partners (Urban, 2013). Notable increases in feeling energized, less lonely, and less overwhelmed were reported (Urban, 2013). Although the response rate throughout this study was poor, the data are consistent with reports of increased stress, responsibilities, feeling overwhelmed, and feeling down during a prolonged separation due to a military deployment (Daigle, 2013; McMillan, 1997; Tarney et al., 2013, Williams & Rose, 2007). Of note, none of the study participants were pregnant.

In 2013, the military's Ombudsman released a report on the well-being of Canadian military families (Daigle). The report was the product of comprehensive investigative approach applied by a team contracted to travel across Canada. The team collected data via interviews and focus groups with military leadership, military support personnel, and military family members (N = 370). In the report, the military's Ombudsman uncovered the growing disparities experienced by military families, particularly by women and children; Reduced access to health care, employment, education, housing, and services were noted (Daigle). Additionally, in contrast to previous claims of strength and independence, the team discovered that women, connected to the military via their partners' enrolment in the CAF, described feeling increasingly "dependent, peripheral, and unfulfilled" (Daigle, p.43). Throughout the report, non-uniformed military family members were described as "non-serving", "non-military", and "civilian" (Daigle). Although the author related the feelings of isolation and exclusion that non-uniformed military family members experienced, the language of the report reinforced the separation between the military family and the military organization. Graciously, Daigle concluded that a philosophical shift was needed. To effect this shift, the military Ombudsman called for more independent research on the issues

affecting military families. Pregnancy and childbirth during deployment are issues that affect military families.

### **Women's Experience of Pregnancy and Childbirth during Deployment**

**Stress, pregnancy, and deployment.** In 2005, Haas, an obstetrician and a Lieutenant Commander, noted that the military lifestyle introduced and exacerbated psychosocial factors that made life stressful. The factors that Haas noted included: geographic separation from extended family, prolonged separation from an intimate partner, increased household responsibilities, fear for a loved one's well-being, feeling overwhelmed, and feeling a lack of control (Daigle, 2013; Haas, Pazdernik, & Olsen, 2005; Haas & Pazdernik, 2007; McMillan, 1997; Roberts, 2008; Urban, 2013; William & Rose, 2007). Haas hypothesized that women whose partners were deployed experienced greater levels of prenatal anxiety and that prenatal anxiety influenced women's eating habits. To investigate the hypotheses, Haas, Pazdernik and Olsen (2005) performed blood pressure screenings and conducted a cross-sectional survey among women (N = 299) visiting a Naval hospital's obstetric clinic. Applying a logistic regression analysis, Haas et al. (2005) found that among women surveyed, partner deployment or active duty status were associated with higher reported anxiety levels during pregnancy. However, Haas and authors (2005) did not find a correlation amongst eating habits, prenatal anxiety, and deployment. In 2007, Haas and Pazdernik repeated the study with an adjusted survey instrument. Haas and Pazdernik (2007) noted that among women receiving obstetric care at the American Navy clinic those who were experiencing an intimate partner's deployment reported feeling uncomfortable when the waiting room television displayed news of military wartime involvement. The authors found that among the pregnant women surveyed (N = 463), having a partner combat deployed ( $p = .004$ ), watching media coverage of the war while a partner was combat deployed ( $p = .01$ ), and having no support person ( $p < 0.001$ ) were associated with higher levels of prenatal anxiety (Haas & Pazdernik, 2007). Additionally, having more than one child at home ( $p = .02$ ) and having active duty status ( $p < .01$ ) were associated with reports of higher anxiety during pregnancy (Haas & Pazdernik, 2007). Haas and Pazdernik (2007) concluded that having a partner combat deployed was associated with higher reported prenatal anxiety. Accordingly, the authors recommended

that the psychosocial stressors associated with a pregnancy during an intimate partner's deployment should be mitigated to prevent adverse birth outcomes.

**Preterm birth, pregnancy, and deployment.** There has been some evidence asserting that psychosocial stress, anxiety, or depression during pregnancy is associated with an elevated risk for preterm birth (Lederman, 2011; Tarney et al., 2013). To explore the correlation amongst birth outcomes, preterm birth, and spousal military deployment, Spieker (2012) conducted a retrospective cohort study at an Army medical center in the United States. Spieker reviewed birth records of all singleton (one infant) deliveries from September 2001 to September 2011 (N = 14,799), citing correlations amongst spousal deployment at time of delivery, spouse's branch of military employment, maternal age, number of children, incidence of preterm birth (less than 37 weeks gestation), small for gestational age (SGA), and low birth weight (LBW) outcomes. Of the birth records, 13.1% (n = 1939) indicated a deployed spouse at the time of delivery (Spieker). Applying a logistic regression, Spieker discovered that the babes of women (n = 197) whose spouses were deployed with branches of the military, other than Army, were at an almost two fold increased risk for LBW (95% CI = 1.18-2.71) outcomes (less than 2500 g) and preterm delivery (95% CI = 1.09 – 2.22). Additionally, having more than two children at home or being over the age of thirty-five increased risk for preterm delivery and LBW outcomes (Spieker). The reported associations amongst birth outcomes and branches of the military are unique to this study. The coincidence between the location of care, at an Army medical centre, and non-correlation among women connected to the Army suggests bias might have occurred either during the study, the medical charting, or during the provision of care. Spieker noted that women had the option to receive care at another facility. This may have skewed the results. It is important to note that Spieker investigated correlations among birth outcomes and spousal deployment at the time of delivery but did not look for correlations among birth outcomes and spousal deployment at any point during pregnancy.

Tarney et al. (2013) reported a correlation between spousal deployment during pregnancy and preterm birth. Once again, at an American military hospital, researchers conducted their study. Tarney et al. recruited women who had received obstetric care in the past 10 years at a military medical facility (response rate: 91.5%). Each participant was given a questionnaire with 15 items; questions included: demographic information, spousal

deployment status, gestational age of the babe at birth, perinatal care experience, perceived stress and anxiety levels during pregnancy, pregnancy outcomes, history of depression, history of surgical procedures, history of alcohol, tobacco or substance use, and history of multiple gestations. Tarney et al. offered that the questions purposed “to identify risk factors for preterm delivery” (Material And Methods, para 1). Participants (N = 346) were grouped for comparison: women who had experienced their first pregnancy during their partners’ military deployment and those who had experienced their first pregnancy with their military partner present. Results were analyzed by chi squared testing and t tests. Tarney et al. found that among women who experienced their first pregnancy during a spouse’s deployment, babies were delivered preterm at a rate (21.4%) two and half times that of babies born to women who experienced their first pregnancy while their military partners were not deployed (8.9%). Additionally, women in the deployed group were more likely to report moderate to severe stress (38.5%) during their pregnancies compared to women in the non-deployed group (20.3%) ( $p = .005$ ) and more likely to report postpartum depression (16.4%) compared to women whose partners were not deployed (9.0%) ( $p = .047$ ) (Tarney et al.).

Of note, Tarney et al. found no statistical difference in reported rates of live births between the deployed (99.2%) and the non-deployed groups (100%); no statistically significant difference in the rates of perinatal loss between the groups, and no statistical difference in rates of post-term births in the deployed (17.1%) and non-deployed (17.9%) groups. Complications of pregnancy, defined by Tarney and authors to include diabetes and preeclampsia also did not occur at a rate significantly higher in the deployed (20.7%) compared to the non-deployed (16%) group ( $p = .301$ ). Although the researchers cited recall bias as a limitation in their study, Tarney et al. concluded that spousal military deployment was a possible risk for depressive symptoms and for preterm delivery; Thus, healthcare providers needed to be aware of the unique social aspects affecting women in military families. Among women whose partners were deployed, 51.4% reported that their “obstetric provider did not address their social situation” (Tarney et al., Discussion, para 3). Over the ten years that women had experienced pregnancies during spousal deployment, the psychosocial aspects associated with their experiences were reportedly addressed less than half the time (Tarney et al.). If health care providers in military healthcare facilities

overlooked the influence of spousal deployment on maternal-child health, how much more so do civilian healthcare providers?

William and Rose (2007) authored a descriptive article for *Zero to Three*, a magazine dedicated to healthy early child development among military families. Although not a peer reviewed article, William and Rose described in rich detail the elements and aspects of the experience of pregnancy and childbirth during military deployment. William and Rose discussed how women, whose partners were deployed, sometimes chose to return to their childhood homes. The authors noted that returning to the “daughter role” affected the woman’s acceptance of pregnancy (William & Rose). William and Rose recommended that in order for optimal maternal-child health care to be provided to women whose partners were deployed, all civilian health care providers needed to increase their awareness regarding the unique challenges faced by this population.

**Depressive symptoms, pregnancy, and deployment.** Robrecht and colleagues (2008) explored correlations between postpartum depressive symptoms and spousal deployment during pregnancy. Robrecht et al. reviewed women’s medical charts (N = 450) at a naval medical centre, comparing Edinburgh Postnatal Depression Scale (EPDS) scores with responses to questions regarding the women’s partners’ deployment status. Results from a linear regression analysis revealed that an intimate partner’s deployment during pregnancy was an “independent predictor of EPDS score ( $p < 0.005$ )” (Robrecht et al., p.860); the authors concluded that spousal deployment was a risk factor for depressive symptoms in the postpartum. Accordingly, Robrecht et al. recommended that increased awareness among HCPs was needed in order to improve support for women experiencing pregnancy and deployment and in order to promote optimal perinatal mental health outcomes.

In 2010, Smith and authors (2010) also explored the relationship between spousal deployment status and EPDS scores among pregnant women. By collecting data from women’s medical charts at an army medical centre (N = 3956), Smith et al. were able to compare women’s EPDS scores from their initial obstetric visit, a visit between 28 and 32 weeks, and a visit at 6 weeks postpartum with a description of their partners’ deployment status: about to deploy, deployed, returned from deployment, or no deployment planned. Results were analyzed by chi squared testing. Smith et al. found EPDS scores were



elevated at 28 to 32 weeks ( $p = .012$ ) and at 6 weeks postpartum ( $p = .006$ ) among women whose partners were deployed compared to EPDS scores among women who reported that no deployment was planned. Of note, the return of a spouse from deployment during a woman's pregnancy increased, rather than decreased, a woman's depression score (Smith et al.). These findings might have reflected the reunion stress that was experienced in the post-deployment phase. Smith et al. concluded that spousal deployment during pregnancy or postpartum was correlated with increased EPDS scores and that women experiencing pregnancy during any part of a partner's deployment might benefit from increased assessment and monitoring for treatment of prenatal and postpartum depression.

In 2012, Spooner and colleagues replicated Smith's et al. (2010) study by conducting a retrospective medical record review at a different location, a Navy and Marine Corps hospital. Chi squared testing revealed that EPDS scores were significantly higher among pregnant women ( $N = 3882$ ) whose partners were deployed ( $p = .04$ ) or whose partners had recently returned from deployment at the initial obstetric visit (Spooner et al.). At six weeks postpartum, EPDS scores were significantly higher among women whose partners were deployed ( $p = .02$ ) or preparing to deploy ( $p = .03$ ) (Spooner et al.). Spooner et al. concluded that a partner's military deployment correlated with increased risk of perinatal depression and recommended supportive interventions, including tailored prenatal programs that could be implemented to improve maternal mental health outcomes.

**Acceptance of pregnancy and deployment.** Weis and Lederman (2010) linked the timing of deployment, its associated risks for depression, and its relative predictability with *Satisfaction with Motherhood and Infant care*, a dimension of maternal identity formation that includes mother-infant attachment. In a longitudinal descriptive study, Weis and Lederman collected EPDS scores, medical histories of depression, and data from questionnaires given to women experiencing a singleton (one infant) pregnancy during spousal deployment ( $N = 113$ ). Women who were enlisted in the American military were included in this study. The questionnaires provided to women by Weis and Lederman included, the PSEQ (Cronbach alpha,  $\alpha = .77$  to  $.93$ ) and the PPSEQ (Cronbach alpha,  $\alpha = .73$  to  $.96$ ). Data collection occurred at four different times: in the first trimester, second trimester, third trimester, and at six months postpartum. Results obtained by linear regression indicated that acceptance of pregnancy ( $p < .05$ ), identifying with the mothering

role ( $p < .001$ ), a women's relationship with her mother ( $p < .001$ ), preparedness for labour ( $p < .01$ ), and her relationship with an intimate partner ( $p < .01$ ) were predictive of *Satisfaction with Motherhood and Infant care* (Weis & Lederman). Additionally, Weis and Lederman found that EPDS scores were inversely correlated with a woman's satisfaction concerning motherhood, attachment with babe, and confidence in providing infant care at 6 months postpartum ( $p < .001$ ). Deployment of one's spouse occurring in the first trimester correlated with depressive symptoms in the antepartum and at six months postpartum (Weis & Lederman). Weis and Lederman reasserted Weis et al.'s findings that first trimester deployment had a "greater significance on acceptance of pregnancy than at any other point in the prenatal period" (Discussion, para 4). However their data indicated that experiencing spousal military deployment at anytime during pregnancy was predictive ( $p < .05$ ) of conflict in mother-infant attachment and decreased satisfaction in the maternal role at six months postpartum (Weis & Lederman).

### **Intervention Studies: Pregnancy, Childbirth, and Deployment**

To explore the effectiveness of supportive interventions among pregnant women in military families, several clinical trials were implemented in the United States. Interventions included prenatal classes being offered (a) on and off military bases (Weis et al., 2008), (b) to the individual or to a group (Kennedy et al., 2012), and (c) with mentored or with standard care (Schachman et al., 2004; Weis & Ryan, 2012).

In 2008, Weis, Lederman, Lilly, and Schaffer conducted a descriptive, longitudinal repeated measures study involving pregnant women ( $N = 503$ ), aged 18 to 35, less than 20 weeks of gestation, primigravid or multigravid, recruited from among four large military treatment facilities and two large medical centers in the United States. Weis and authors explored the correlations between *on base* versus *off base* community support, deployment status of a partner in the first trimester, scores on the Social Support Index (SSI,  $\alpha = .82$ ) and conflict in the Acceptance of Pregnancy (PSEQ,  $\alpha = .88$  to  $.90$ ). Scores were obtained at an initial obstetric appointment then repeated in the 2<sup>nd</sup> trimester, the 3<sup>rd</sup> trimester, and at six months postpartum. By analysis of covariance, the effect of the location of support, on or off base, perceived support (SSI), and spousal deployment in the first trimester were described in relation to women's PSEQ scores. Weis et al. found that a partner's deployment in the first trimester of pregnancy correlated with greater conflict in accepting

pregnancy along each trimester compared to scores among women whose partners were not deployed ( $p < .01$ ;  $p < .01$ ;  $p < .05$ ). Although the pattern of change in accepting pregnancy was comparable with women whose partners were not deployed, the intensity of conflict was higher among women whose partners were deployed (Weis et al.). Weis et al. speculated that the increased responsibilities and stress associated with a partner's military deployment interfered with the process of maternal identity achievement and of accepting pregnancy. "Regardless of the length of deployment, and even after the spouse's return, the wives of deployed service men showed high scores of difficulty with acceptance of pregnancy for their entire pregnancy" (Weis et al., p. 204). In comparing acceptance of pregnancy with perceived community support (SSI), women who perceived that they had no support available to them had greater conflict in accepting their pregnancies along the trimesters ( $p < .001$ ;  $p < .001$ ;  $p < .001$ ) (Weis et al.). Of significance, the authors found that *on base* support in the third trimester for women experiencing pregnancy and deployment correlated with higher scores for acceptance of pregnancy compared to *off base* support ( $p < .05$ ) (Weis et al.). The authors recommended that integrating military and civilian prenatal care, in the third trimester, might provide the informational and emotional support that women experiencing pregnancy and deployment seek (Weis et al.). No other significant differences among groups receiving prenatal education at a location on or off base were noted.

Schachman and colleagues (2004) conducted a randomized controlled trial to assess the effectiveness of the Baby Boot Camp (BBC) program in promoting maternal adaptation among primigravid women, 30 to 36 weeks gestation, whose partners were deployed. Instruments for data collection included Lederman's PSEQ, PPSEQ, the Personal Resources Questionnaire (PRQ) ( $\alpha = .85$ ), and the Resilience Scale (RS) ( $\alpha = .85$ ). Power analysis determined the sample size ( $N = 51$ ) (Schachman et al.). Of note, active duty servicewomen were excluded from the study and no reason was given. Women in both the intervention and control groups met once a week for four weeks. The control group received traditional childbearing education, whereas, the intervention group received childbearing education plus the BBC programming. The BBC classes were tailored to discuss motherhood in the military, available internal and external resources, and what to expect during post-deployment reintegration (Schachman et al.). The intervention group heard from other

women in military families who had experienced pregnancy and childbirth. Schachman et al. defined internal resources as flexibility and self-reliance and external resources as family, other “military wives”, and community supports. Data were collected prior to the classes, at the 4-week completion, and at six weeks postpartum. Independent t tests were used to evaluate differences among outcomes between the intervention and control group. Repeated analyses of variance investigated differences over time. Schachman et al. found that mothers in the intervention group had significantly higher scores for prenatal adaptation ( $p = .034$ ) and perceived social support ( $p = .043$ ) upon completion of the BBC program, and higher scores for postpartum adaptation compared to the control group ( $p = .043$ ) at 6 weeks postpartum. Women in the intervention group scored significantly higher on Lederman’s PPSEQ for satisfaction with labour and delivery ( $p = .000$ ), confidence in motherhood ( $p = .017$ ), satisfaction with motherhood ( $p = .034$ ), and support from family and friends ( $p = .015$ ) (Schachman et al.). Regarding internal resources, statistically significant differences were found between the intervention and the control group but only upon completion of the course and at no other time (Schachman et al.). Schachman et al. found that women’s scores for internal resources increased significantly over time ( $p < .001$ ) regardless of grouping. Similarly, women in the BBC group who had had significantly higher scores, compared to the control group, for awareness of external resources upon course completion, showed no difference compared to the control group by six weeks postpartum (Schachman et al.). Schachman and colleagues concluded that the BBC intervention helped women feel more confident and “better prepared to handle the challenges of labour” (p.113); however, results could have been greater if co-mingling between groups had been better prevented. The authors recommended that concepts in the BBC program should be incorporated into existing prenatal programs for women experiencing pregnancy and childbirth during spousal deployment.

In 2009, Kennedy et al. published qualitative findings regarding women’s experiences of prenatal care at a Navy hospital in the United States. Kennedy et al. had assigned pregnant women ( $N = 234$ ) experiencing spousal deployment into individual or group prenatal care. A phone interview at 3 months postpartum allowed for an evaluation of women’s satisfaction with the prenatal care they had received. The phone interviews were transcribed verbatim and analysed with ATLAS.ti computer software. Themes that emerged

included: “I wasn’t alone”, “I liked it but”, and “they really need to listen” (Kennedy et al., p. 178). The activities during group prenatal care reassured participants that they were not alone, however, some reported feeling rushed and distracted by children also attending the group prenatal sessions (Kennedy et al.). Women receiving group prenatal care reported that they wanted more privacy and more individual time with the instructor (Kennedy et al.). Inclusion of the deployed partner and the need for a satisfactory relationship with the prenatal educator were expressed as paramount to the effectiveness and enjoyment of the prenatal care (Kennedy et al.). Of note, Kennedy et al. stated that “the voices of the active duty women were often the most poignant” (p.181). For enlisted women experiencing pregnancy during their partner’s deployment, exhaustion, discomfort, and perceived impossibility of taking a “day off in the military” were reported (Kennedy et al., p. 181). Kennedy et al. recommended that prenatal care, whether tailored to the individual or to the group, needed to allow the voices of women whose partners were deployed to be heard.

Kennedy et al. (2012) continued to research group versus individual prenatal support among military spouses (N = 322) in a three year randomized controlled trial. Measurements included scores on the Perceived Stress Scale (PSS) ( $\alpha = .84$ ), the Center for Epidemiological Studies-Depression Scale (CES-D), the Revised Prenatal Distress Questionnaire (NUPDQ) ( $\alpha = .81$ ), the Prenatal Health Behaviours Scale (PHBS) ( $\alpha = .70$ ), the Childbirth Self -Efficacy Inventory ( $\alpha = .93$  to  $.86$  for active labour;  $\alpha = .90$  to  $.95$  for second stage labour), the Postpartum Depression Screening Scale (PDSS) ( $\alpha = .80$  to  $.91$ ), the Norbeck Social Support scale ( $\alpha = .89 = .97$ ), and the Patient Participation and Satisfaction Questionnaire ( $\alpha = .83$  to  $.97$ ); In addition to the spectacular number of questionnaires given to the women, women’s and babies’ medical charts were gleaned for information. This information included: maternal weight gain, gestational age at birth, use of analgesia, labour induction, mode of delivery, birth weight, Apgar score, and admission to Neonatal Intensive Care Unit (NICU) (Kennedy et al.). Women were also asked how many days of work they had missed during their pregnancy. Given the wealth of health information, it is surprising that Kennedy et al. focused on the benign topic of women’s attendance at prenatal care sessions. Kennedy et al. found that women receiving group prenatal care attended more prenatal sessions ( $p < .0005$ ). Kennedy et al. related the Kotelchuck Index of Prenatal Care Adequacy (APNCU) to determine that nine sessions

represented the minimal attendance to effect benefits from prenatal sessions. Among women receiving individual prenatal care, 46.7 % attended fewer than nine sessions; whereas, among women receiving group prenatal care, 12.9% attended fewer than nine sessions (Kennedy et al.). The authors concluded that women receiving group prenatal care were nearly six times more likely to receive adequate care compared to women receiving individual prenatal care (Kennedy et al.). Of surprise, Kennedy et al. noted that women receiving group care were also more likely to have epidural analgesia ( $p = .005$ ). Women in groups were described to have discussed the benefits of epidural analgesia and these discussions may have influenced women's pain management choices (Kennedy et al.). Comparing group versus individual prenatal care, no differences in breastfeeding initiation or sustainment were found (Kennedy et al.). Similarly, no differences in reported stress, missed work, or depressive symptoms among intervention and control groups were found (Kennedy et al.). Concerning postpartum depressive symptoms, 15% of the women in the study had a positive screen on the PDSS, while 4.8% tested positively for severe symptoms (Kennedy et al.). Women who had received group prenatal care and who scored positively for postpartum depression were less likely to report feelings of guilt or shame ( $p = .04$ ) compared to the control group (Kennedy et al.). The group sessions had included discussions about postpartum depression. No data on preterm birth, birth weight, or admission to NICU were presented in the publication.

In 2012, Weis and Ryan, both Registered Nurses and Colonels in the American military, published the results of a randomized control trial they had conducted to investigate the effectiveness of mentored prenatal education classes compared to standard prenatal education on prenatal maternal adaption (PSEQ,  $\alpha = .83-.94$ ), maternal-fetal attachment (Maternal Antenatal Attachment Scale, MAAS,  $\alpha = .82$ ), self-esteem (Rosenberg Self-Esteem Scale,  $\alpha = .85$ ), perceived community support (Social Support Index,  $\alpha = .82$ ), and program satisfaction (10 item questionnaire) among women experiencing spousal deployment. Women ( $N = 65$ ), pregnant, at 12 weeks gestation or less, expecting a singleton (one infant) birth, and whose partners were deployed or preparing to deploy at an American Air Force base were included in the study. Following consent, women ( $n = 29$ ) were randomly assigned to one of four intervention groups, each 6 to 9 people in size, or to the control group ( $n = 36$ ) (Weis & Ryan). The intervention groups

received eight prenatal sessions, one and a half hours each, based on the Mentors Offering Maternal Support (MOMS) program. The eight sessions were developed in relation to Weis and Lederman's (2009) seven dimensions of psychosocial adaptation during pregnancy. The sessions included: accepting pregnancy, internalizing motherhood, family relations, military family adjustment, childbirth concerns and labour plans, care of the infant, concerns of the multigravida, and a farewell party during which women were provided with information regarding military benefits and instructed on how to obtain a birth certificate (Weis & Ryan). Results indicated that there were no significant differences between the intervention and control groups on all dependent variables (Weis & Ryan). The authors did discover, however, that among the women in the study, those who frequently spoke with their deployed partners on the phone or by email were more likely to feel good about themselves ( $p < .02$ ) as indicated by scores on the Rosenberg Self-Esteem Inventory and were less likely to experience anxiety in their relationship with their partners ( $p < .04$ ) (Weis & Ryan). Weis and Ryan reported that even bad communication was better than the anxiety of being alone. This finding, though a surprise for Weis and Ryan, affirmed the content of Brooks' (2009) birth story.

Brooks (2009) a doula, wrote an article on the birth experience of an American woman whose partner was deployed. The labour took place in a hotel. The location had been chosen because it was close to a hospital and because it maintained the cellular phone connection between the labouring woman and her deployed partner. The labouring woman was reluctant to give up the connectivity with her partner, and the birth ultimately took place in the hotel. The role of technology, specifically communications technology, in shaping childbirth experiences among women whose intimate partners are deployed has not been researched in Canada or abroad.

A voluntary doula support program was initiated in Esquimalt, British Columbia, Canada, in 1997 to assist women experiencing childbirth during deployment (McMillan, 1997). Today, in Canada, doula support programs for women in CMFs still exist. Some are free while others are offered at a cost. In the past fifteen years, the relevance and meaning of these programs has not been studied. Also, no research data, in Canada, on the efficacy of prenatal support in relation to women's experiences of pregnancy and childbirth during an intimate partner's military deployment could be found. In Canada, perinatal care is provided

by civilian health services. For women in CMFs, there are reports of inconsistent resources being offered and opportunities for social and physical environments to be more supportive (Daigle, 2013; McMillan, 1997; Roberts, 2008; Urban 2013). The relevance and acceptability of support programs and resources for women in military families is at issue (Daigle, 2013; Roberts, 2008).

### **The Experience of Pregnancy and Childbirth during an Intimate Partner's Deployment**

In reviewing the literature, I discovered that research on the topic of pregnancy and childbirth among military families in Canada was lacking. Studies led by Certified Nurse Midwives, Registered Nurses, social workers and military researchers in the United States suggested that we should be more concerned. Pregnancy during deployment was associated with increased prenatal stress (Haas & Pazdernik, 2007; Tarney et al., 2013), impaired acceptance of pregnancy (Weis, Lederman, Lilly & Schaffer, 2008; Weis & Lederman, 2010), increased risk for preterm birth (Tarney et al., 2013), and low birth weight outcomes (Lederman, 2011; Weis & Ryan, 2012). Women who experienced pregnancy during an intimate partner's military deployment were also at increased risk for depressive symptoms (Robrecht et al., 2008; Smith et al., 2010; Spooner et al., 2012), and conflict in mother-infant attachment (Lederman & Weis, 2009; Schachman et al, 2004; Weis & Lederman, 2010).

Positive relationships between pregnant women receiving care and the prenatal instructor, and ongoing communication with the deployed partner were uncovered as significant in improving self-esteem and supporting maternal identity formation among women experiencing pregnancy and childbirth during deployment (Kennedy et al., 2008; Weis & Ryan, 2012). Communication, without protective buffering (Joseph & Afifi, 2010), was also found correlated with improved health among women who were experiencing spousal deployment. The significant meaning that connectivity has for women in CMFs experiencing pregnancy and childbirth during deployment has also not been studied. In Canada, there has been no research on the experience of pregnancy or childbirth during an intimate partner's deployment in the past decade and a half.

Some of the American studies focused on measuring outcomes of the experience of spousal deployment by reviewing women's medical charts. Many of these women would



have received obstetric care from their partners' employer, the American military. They would have received care while their partners were deployed. The impact of this potentially intimidating experience on the women's likelihood to share intimate information was not discussed in any of the studies. None of the studies directly explored the essence of experience or of its meaning. Capturing the women's stories would have provided information on what the experience of pregnancy and childbirth during an intimate partner's deployment was like, what its significance was, and how support could become meaningful in order to promote optimal maternal-child health outcomes. The research that is available indicated that even after a deployed member returned home, the effects of deployment were still experienced (MFRC, 2008; Lederman & Weis, 2009; Smith et al., 2010; Weis & Lederman, 2010). Women's experiences of reintegration, in relation to pregnancy and childbirth during the emotional cycle of deployment, have not been studied but could provide the insight that is needed to refocus care.

### **Research Purpose**

Following a review of the literature, I proposed that an exploration of women's stories that captured the meaning of the experience of pregnancy and childbirth during an intimate partner's deployment would provide the insight needed to guide the understanding of the experience and of how support and resources shape the experience. I proposed to apply Colaizzi's (1978) methods for descriptive phenomenology to explore the essence of the experience. I identified that the purpose of this research study was to (a) create, for each woman, a space for dialogue; (b) extend current understanding, from the perspective of women in CMFs, regarding the meaning of the experience of pregnancy and childbirth during an intimate partner's deployment; (c) ascertain, from the perspective of women in CMFs, how supports and resources shaped their experiences; (d) increase awareness that promotes optimal maternal-child health for CMFs; and (e) lay a foundation for future research.

### **Research Questions**

1. What is the meaning of the experience of pregnancy and childbirth during an intimate partner's military deployment?
2. How do supports and resources shape the experience of pregnancy and childbirth during an intimate partner's military deployment?

### **CHAPTER THREE: APPLYING COLAIZZI'S METHODS**

Colaizzi's (1978) methods provide an approach to exploring human experience as it is described in narrated texts and in rich descriptions. In chapter one, I proposed that Colaizzi's methods would allow me to explore with women the meaning that their experiences have and would allow for rich descriptions to be captured in ways that are meaningful. In this chapter, I discuss the application of Colaizzi's methods. Colaizzi's (1978) methods for phenomenological research were applied by Beck (1992) to explore women's experiences of postpartum depression, by Doherty and Scannell-Desch (2008) to relate women's experiences of widowhood during pregnancy, and by Schachman (2010) to capture the experience of first time fatherhood among deployed American soldiers. I proposed that Colaizzi's methods would allow me to explore with women their experience of pregnancy and childbirth in order to identify unique meanings and a fundamental statement. The captured narrative descriptions and their meaning could then be used to inform the development of future research questions and to promote the enhancement of maternal-child health care for women experiencing pregnancy and childbirth during an intimate partner's deployment.

#### **Procedure**

Prior to commencing this study, approval from my thesis committee, the university's Health Sciences Research Ethics Board, and the Social Sciences Research Review Board (SSRRB) were obtained (See Appendices L, M, N). At the time, all independent research external to the Royal Military College of Canada and involving military, veterans, and families required SSRRB approval at the level of the Canadian Director General Military Personnel Research and Analysis (DGMPPRA). Additionally, to fulfill the requirement of the SSRRB, a Level 1 Government of Canada sponsor was needed. The Chief of Military Personnel helped me to secure the sponsorship of the Surgeon General, Canadian Forces Health Services. At the local level, I presented my study to the Base Commander prior to commencing recruitment.

#### **Recruitment**

Once the required approvals and sponsorships were obtained, I focused on recruiting women in CMFs. Strategic recruitment included advertisements in military newspapers, electronic posts on the military community online bulletin board, and online advertisements,

including: the MFRC enews, and the MFRC Facebook™ page (see Appendix B, C1, C2, D). Additionally, posters and pamphlets were placed in community resource centres known to support CAF families. All advertisements included my email address, the SSRRB number, and the Dalhousie Health Sciences Research Ethics Board approval number.

Women in CMFs, who had experienced pregnancy or childbirth during an intimate partner's military deployment in the past two to five years and who were commissioned, non-commissioned, or partnered with a member enrolled in the CAF were the focus of recruitment. Data saturation was expected to be achieved with a sample of six to ten women meeting the inclusion criteria (Creswell, 2013; Dattilo & Brewer, 2005). Thirteen women responded, four continued with the interviews. Women who had experienced a partner's deployment at any point during their pregnancy or childbirth were considered possible candidates for this study.

### **Criteria for Inclusion**

For this study, I determined that the participant must relate being connected to the military, being commissioned, non-commissioned, partnered with a commissioned or non-commissioned member of the CAF or having been partnered with a commissioned or non-commissioned member of the CAF, and having experienced an intimate partner's deployment during their pregnancy or childbirth at least two years prior and at most five years prior to the interview. The period, two to five years, was chosen in order for adequate time to have passed for the stabilization of the family following deployment (DeVoe & Ross, 2012; MFSP, 2008a). Additionally, participants must have the ability to speak and understand English. The ability to describe one's experience is paramount for descriptive narratives to be collected (Colaizzi, 1978). One language was chosen for this study in order to prevent meaning from being lost in translation (Gadamer, 1960/2004) and to prevent the competition for dominance that is innate within bilingualism (Gadamer, 1960/2004).

### **Exclusion Criteria**

**Adoption and pregnancy loss.** The experiences of adoption during deployment and pregnancy loss during deployment were determined to be beyond the scope of this study. Although the experience of pregnancy loss during an intimate partner's deployment was defined as distinct and separate from the phenomenon being explored in this study, the meaning of exclusion from this study in relation to the impact of loss required

consideration. Accordingly, a repertoire for appropriate empathetic screening was developed. Individuals who responded to this study's recruitment advertisements but who met the exclusion criteria were invited to share what supports they have had since their experience (see Appendix G), and were provided with the contact information for free counselling services through the Military Assistance Programming (see Appendix H). Of note, marital separation was not an exclusion criterion for this study. The re-integration process following deployment challenges the adaptability of the family (Paley et al., 2013); thus, temporary separation was determined to represent a potential family response to post-deployment stress.

### **Sample**

A final sample of four women, aged twenty to thirty years, participated in this study. Participants described heterosexual relationships and being married to their partners during and since their experiences of pregnancy, childbirth, and deployment. All participants had experienced a first pregnancy during the experience of pregnancy, childbirth, and deployment. One participant described discovering her pregnancy after her intimate partner departed on an eight-month deployment. Her partner returned prior to the birth. One participant described that her intimate partner was absent throughout her pregnancy and childbirth due to intermittent courses and deployments. One participant described becoming pregnant during her partner's special mission leave (HLTA) and related experiencing her intimate partner's deployment during the first trimester of her pregnancy. One participant described her intimate partner deploying in the first few weeks of her pregnancy and returning in the third trimester. Participants did not describe their pregnancies as unplanned. All participants had live births and deliveries were spontaneous or assisted. One participant experienced premature rupture of membranes and a preterm delivery. No babies were admitted to Neonatal Intensive Care Units (NICU). Two participants had given birth since the experience. All participants described that their partners deployed during their pregnancies. Three of the four described extended deployments to war torn areas of Asia, the Middle East, and North Africa. Although recruitment occurred in Atlantic Canada, women's stories occurred from coast to coast. Participants in this study related being connected to the military through their partners during their experience of pregnancy, childbirth, and deployment. Participants described their intimate partners as husbands, and

commissioned or non-commissioned members of the regular force: Army, Air Force and Navy. One participant was a military veteran.

### **Interview Process**

Women interested in participating and who contacted me via email were sent an invitation letter (see Appendix E) and Military Assistance Contact Information (see Appendix H). A preliminary telephone interview was arranged for women who chose to participate in the study. Some women preferred an email correspondence. In either case, a preliminary correspondence allowed me to explain the purpose of the study, the rights of the participant, the time commitment, and to identify women meeting the inclusion criteria and not meeting the exclusion criteria for this study (see Appendix F). For women meeting the inclusion criteria and not meeting the exclusion criteria a private interview was scheduled at the School of Nursing or at a location of their choice. For interviews that required travel, I contacted my academic supervisor prior to my departure and upon my return. This process was to promote my safety in relation to home visits. There were no safety issues encountered during this study.

Prior to engaging in discussion with each participant, I explained the purpose of the study and what my two questions were. I disclosed that I had experienced pregnancy and deployment and I cautioned each participant that there was potential for an emotional response during the interview. I promoted the participant's right to stop the interview at any time and I obtained each participant's written consent to participate prior to commencing (see Appendix I).

### **Demographic Information**

Demographic information was collected prior to starting the audio recording. This information included: age, parity, description of relationship with partner (cohabitating, married, common law status); military connectedness (commissioned, non-commissioned or partner sponsored status) and branch of military (Army, Navy, Air Force); years together with intimate partner prior to the experience of pregnancy and deployment; previous experience with deployment; previous experience with pregnancy or childbirth; deployment of an intimate partner since the experience; pregnancy since the experience under study; timing and duration of deployment in relation to the pregnancy or childbirth; a description of delivery (spontaneous, forceps or vacuum assisted, caesarean); gestational age of babe at

birth; history of preterm delivery; admission to NICU; and a description of pregnancy (planned or unplanned) (See Appendix J). The demographic information provided clarity prior to engaging in discussion. It also provided an opportunity for each participant to return their thoughts to their experience. The final question on the demographic information sheet was the place from which each participant was encouraged to start her story.

### **Dialogal Research Questions**

*“The success of these questions, and of all phenomenological research questions, depends on the extent that they tap the subject’s experiences of the phenomenon, as distinct from their theoretical knowledge of it” (Colaizzi, 1978, p. 58).*

I conducted and audio-recorded private interviews with women, following the format of the SSRRB’s sample Moderator’s Guide for individual interviews (see Appendix K) and in accordance with Colaizzi’s (1978) methods. The interviews were a conversation guided by my two research questions. I asked each woman: (a) Please tell me about your experience of pregnancy and childbirth during your intimate partner’s military deployment? And (b) how did the supports and resources you mentioned shape your experience? Applying Colaizzi’s methods, I employed techniques for imaginative listening, perceptual description, and phenomenological reflection. Colaizzi described imaginative listening as the process by which the researcher becomes proximal to the study’s participant in order for dialogue to develop and for the experience to become rekindled (Colaizzi, 1978). Perceptual description, in contrast, includes the observation of non-verbal communication. Phenomenological reflection is the journaling that occurs throughout the research process (Colaizzi, 1978). Applying imaginative listening, in this study, I used prompts: *“What did that mean to you”* and *“would you please clarify?”* Applying perceptual description, I observed and noted non-verbal cues during interviews (Colaizzi, 1978). I added descriptions of the non-verbal communication during each interview to its corresponding transcript. Applying phenomenological reflection, I wrote in my research journal before and after each interview and throughout the study.

Conversations with each participant were 30 to 60 minutes in duration. At the end of each interview, I stopped the audio recorder, thanked the participant, and asked each if she would like to participate in the study’s validation process. The validation process, member checking, was explained to each participant: *“You will be given the grouped preliminary*

*findings that describe what the common experience of pregnancy and childbirth during an intimate partner's deployment is and asked if it is complete?"* All participants indicated that they would like to participate in the member checking process. However, each indicated a preference to be contacted by email. Participants were also asked if they would like to receive a summarized copy of the study and if they would like to receive a thank you note. Immediately following the interview, I wrote field notes and practised reflective journaling.

### **Data Storage**

I transcribed the audio-recorded interviews verbatim and kept all consent forms and contact information separate from the transcripts in a locked two-drawer filing cabinet. I applied an alpha-numeric code to the contact information and to the transcripts to ensure privacy. I also stored my journal and my audio recorder in the locked cabinet. In accordance with university protocols, all data will be stored in this locked filing cabinet at the School of Nursing for a period of seven years following completion of the study.

### **Analysis of Findings and of Emergent Themes**

*"The researcher must go beyond what is given in the original data and at the same time stay with it" (Colaizzi, 1978, p. 59).*

To explore the essence of the experience of pregnancy and childbirth during an intimate partner's military deployment, I applied Colaizzi's (1978) protocol analysis. Protocol analysis is a 7-step process for thoroughly examining written text or texts that have been transcribed verbatim (see Table 1). The essence of the experience is found within the "descriptive responses" (Colaizzi, p. 58) and contextual meanings within the text (Colaizzi).

Table 1

#### *The Steps to Protocol Analysis*

- |  |
|--|
| <ol style="list-style-type: none"><li>1. Reading all the participant's "descriptive responses" in order to acquire a feel for them, and to make sense of them (Colaizzi, p. 59);</li><li>2. Extracting significant statements, eliminating repetitions, and paraphrasing specific descriptions (Colaizzi; Schachman);</li><li>3. Formulating meaning from each significant statement by moving from the spoken word to the hidden contextual meaning among the words (Colaizzi) and repeating steps one through three for each transcript (Schachman);</li></ol> |
|--|

4. Next, formulated meanings can be organized into “clusters of themes” (Colaizzi, p. 59); The clustered themes are compared with each other and with the original transcripts. Anything that is missed, including contradictions among the descriptions should be included (Colaizzi). If the researcher finds that the clustered themes belie the original protocols, the themes should be re-examined or a new analysis conducted. Colaizzi asserted that researchers need to allow the data to speak and to avoid premature conceptualizations that skew the analysis.
5. Next, validated clustered themes are integrated into an “exhaustive description” of the topic (Colaizzi, p. 61);
6. The exhaustive description is then translated into a statement that represents the fundamental structure of the phenomenon (Colaizzi; Schachman);
7. Lastly, the statement is presented to the study participants and any relevant new data must be included in the final research product.

In this study, Colaizzi’s (1978) methods allowed me to explore the rich descriptions of the experience of pregnancy and childbirth during an intimate partner’s deployment and to identify poignant themes. I read and re-read the narratives. I identified significant statements, paraphrased detailed descriptions, and formulated meanings from each (Table 2). I then organized the meanings into themes and organized themes, creating a common story. To ensure the accuracy of this common story in representing the phenomenon being studied, I compared the themes to the original transcripts and was supervised throughout the process. I then looked for an over-arching theme among clustered themes. The clustered themes were summarized into an exhaustive description and synthesized into a fundamental statement. The fundamental statement and direct quotes were presented back to the participants. The member checking process ensured the completeness of the statement in representing the experience of pregnancy and childbirth during an intimate partner’s deployment (Colaizzi) and the fidelity of the findings in representing each woman’s story.



Table 2

*Examples of Formulated Meanings and of Significant Statements*

Examples of Formulated Meanings	Significant Statements or Paraphrased Descriptions
<b>Formulated Meaning: Appreciating Technology</b>	
<p>Communication technology supported women by decreasing the anxiety associated with “not knowing” if their partners were safe and “not knowing” if their partners could be reached.</p>	<p><i>He could send messages to my phone. If he couldn't call me that night he would send me a message saying "I'm okay, you know, don't worry about it. Things are okay."</i></p> <p><i>My husband was able to email frequently. That was sufficient for us. He had access to a computer. It definitely made it easier. I knew I could reach him, like just about anytime. I didn't have a problem reaching him. I think it kept my stress down.</i></p>
<b>Formulated Meaning: Needing to Know Somebody Is There</b>	
<p>Women appreciated knowing somebody would be there if they needed them. Women described needing to know somebody is there; somebody to talk to; somebody who knows.</p>	<p><i>It all just keeps stress down. Knowing that someone is there for you, if you need them.</i></p> <p><i>I needed somebody to be able to talk to. I needed somebody to be able to talk to in order to get things off my chest and stuff.</i></p> <p><i>I don't feel comfortable with everyone at work knowing. I need somebody to know. And I need somebody to be aware that I'm having a really hard time with this.</i></p>
<b>Formulated Meaning: Fear of Preterm Birth</b>	
<p>Women experiencing pregnancy and deployment related the fear of preterm delivery with regards to the fear that their partners would miss the birth.</p>	<p><i>The risk is always there, and you worry about it, that something will go wrong and you will have to give birth early, before they get back.</i></p> <p><i>"I'll be home, I'll be home. I'll do everything to be home." And then he wasn't.</i></p>
<b>Formulated Meaning: Integrated Description of Homecoming and Birth</b>	
<p>The language used in women's descriptions conveyed that the experiences of childbirth and homecoming were integrated. Whether homecoming occurred before or after baby's birth, women described the birth and the homecoming with uncanny similarities.</p>	<p><i>Women described a precipitous labour and a quick homecoming; an urgent delivery and an urgent homecoming; a scheduled birth and a scheduled homecoming; intrapartum exhaustion and feeling exhausted at homecoming; not wanting a crowd at the birth nor at the homecoming; and feeling overwhelmed with emotion at birth and at homecoming. Women's descriptions of homecoming and childbirth included: It happened quickly; I didn't want anyone else there; I was done; pulled out because things were escalating; and I was crying, "I love you".</i></p>

<b>Formulated Meaning: Remembering</b>	
<p>Women described wanting to remember and wanting their child to know about their experience of pregnancy, childbirth, and deployment.</p>	<p><i>It was such a profound event. It sort of defines your pregnancy, you're by yourself and your husband is sort of out and about at war... it just had such meaning in our life. We thought it would be nice for her to grow up and know what was going on at the time.</i></p> <p><i>I don't remember the second day that she was alive—the first and second day that she was alive because of the medication that I was under. They kept the mag-sulfate till the next day. I don't remember any of that ... "I do not want mag-sulfate. I want to remember."</i></p> <p><i>And some lady was so sweet. She said, "can I just take your picture for you?" and I'm like, "yes please." And I look at the picture and, oh my god, I look terrible. I was bawling and he's holding the baby but it was just an emotional moment. It was awesome... to look back. And now, when she gets older, I can show her: Daddy didn't meet you but he DID meet you eventually.</i></p>

### **Scientific Adequacy**

*"Participants were asked to validate the study findings to ensure that the researchers correctly captured the essences of their experiences"* (Dattilo & Brewer, 2005, p. 211).

The trustworthiness of qualitative studies is dependent upon ensuring the credibility, auditability, and transferability of the findings (Brudenell, 1997). The duration of time spent immersed in the data, the member checking process, and the ongoing academic supervision throughout this study added to the credibility of my findings. Auditability was established through an audit trail that included field notes, journaling, and verbatim transcripts of the interviews. Transferability of the study was enhanced by providing a detailed description of the methods and a description of the study sample.

### **Ethical Considerations: Respect for Persons, Concern for Welfare, and Justice**

This study presented minimal risk to its participants. Given the sensitivity of the topic, it was reasonable to assume that an emotional response might be elicited during interviews. In the best interest of the participants, the right to stop the interview was promoted and all participants were offered contact information for Military Assistance

Programs (see Appendix H). To promote equity, participants were offered a summary of the study and its findings and invited to participate in the study's validation process. Autonomy of the participants was promoted through a valid consent process. Privacy was maintained by anonymizing data with an alpha-numeric coding and keeping all data in a locked two drawer filing cabinet.

## CHAPTER FOUR: FINDINGS

The meaning of the experience of pregnancy, childbirth, and concurrent spousal deployment was captured in the essence of “being by myself and believing in us.” The essence was comprised of two intertwined concepts “being by myself” and “believing in us,” which were common to all women’s stories. The integration of these two concepts represented the integrated and opposing meaning of the perinatal-spousal deployment experience. For women in this study, “being by myself” was highlighted by an intimate partner’s absence due to deployment, by others not understanding what it was like, and by feeling different than other pregnant women. Comparatively, “believing in us” meant believing in the possibility of pregnancy, of having a child, and of becoming a new family unit. It encompassed believing in the “baby’s coming” and believing in the safe return of a loved one from deployment. “Being by myself and believing in us” encompassed the meaning of women’s experiences, being on their own with the expectation and unpredictability in becoming “us.” “Us” represented a mother-babe dyad, an intimate couple, and a new family unit. However, “being by myself and believing in us” was more than the sum of these two components. Sub-themes, and their elements, provide further insight. Sub-themes included: Working it out time wise, longing for togetherness, appreciating technology, protecting “us,” knowing somebody is there, and homecoming. In “working it out time wise” women related their experience “being by myself and believing in us” to a timeline. Elements within “working it out time wise” included women’s attentiveness to routines, the timing of events, including HLTA, and the significance of first times. “Longing for togetherness” included the element of sharing the experience. Women described that the first ultrasound and labour and delivery classes were opportunities to support “believing in us” by sharing the experience or a painful reminder of “being by myself.” “Appreciating technology” included considerations for how communication and non-communication technologies shaped women’s experiences. Women in this study shared their appreciation for and application of technology to address “being by myself and believing in us.” Women were grateful for the virtual togetherness that technology offered. Technology provided a way for women to see and hear their absent partners and their unborn children. However, technology could neither replicate human touch nor the physical closeness of “being together.” “Protecting “us”” included the elements of fighting fear and

believing I can. “Knowing somebody is there” described how formal and informal support networks meaningfully addressed “being by myself and believing in us.” Women described “somebody there for me” as someone to whom they could turn, to talk to, to confide in, and count on. “Somebody there” was also someone who supported a woman’s belief in what was possible for her and who advocated for her and her family’s togetherness. Among formal and informal support networks, supportive people included, HCPs, military support personnel, family, friends, and co-workers. Homecoming was the actualization of togetherness and included the elements a moment alone together and remembering “being by myself and believing in us.”

In this chapter, I introduce the over-arching theme, “being by myself and believing in us,” and define “being by myself” and “believing in us.” I then discuss the sub-themes that describe and shape the meaning of women’s experience “being by myself and believing in us:” Working it out time wise, longing for togetherness, appreciating technology, protecting “us”, knowing somebody is there, and homecoming.

### **Being by Myself and Believing in Us**

The meaning of the experience of pregnancy, childbirth, and spousal deployment was found in women’s descriptions of “being by myself and believing in us.” The meaning of the experience was captured in the integration of two essential, yet, somewhat opposing concepts: “Believing in us” and “being by myself.” The perinatal-spousal deployment experience had an integrated and opposing meaning for women in this study. For example, “being by myself” due to the long separation and unique psychosocial stressors associated with an intimate partner’s military deployment both challenged and became intertwined with a woman’s transition from being possibly pregnant to becoming “us.” Although each could stand on its own, the integration of “being by myself and believing in us” captured the meaning of this unique human experience.

“Us,” in this study, represented family relationships including: A relationship between a woman and an intimate partner, a relationship between a woman and her unborn child, and a relationship between an intimate partner and the unborn child. Supports and resources that shaped the women’s experiences addressed “being by myself and believing in us.” The experience was positively shaped by minimizing a woman’s experience of “being by myself” and encouraging the belief in “us”.

Despite “being by myself,” women described the importance of “believing in us.” Focusing on “us” provided comfort and reassurance. Similarly, despite the separation due to the deployment, women focused on that which brought them closer to their intimate partners. Women described an emotional closeness, a spiritual closeness, an intellectual closeness, or a closeness in dialogue: “He is like me;” “We’re both easy going people.” Women who reported that they and their partners were either both military or had similar knowledge, faith, or personalities described how this commonality provided comfort. For one participant, being military, knowing the expectations, and having experienced “being deployed” was credited as providing comfort and a sense of safety.

*I felt safer that he was safe because I had already been through a lot of that training myself... I know the expectation. I know what they expect of him and I know what they're able to tell us, what they're not able to tell us and I know their training. I know what they're capable of. That in itself is comforting.*

Women related that “believing in us” was a journey in which they agreed with the possible and looked to the actual. The journey included transitioning from possibly being pregnant to ultimately having a child and transitioning from believing in a possible new, expanded family unit to having their intimate partners and new babies with them.

In “being by myself,” women discovered their desire for togetherness. Women desired to share their experience with their intimate partners and they struggled to have the intimate partner’s role in the pregnancy acknowledged. The unborn child was understood as a part of a woman and her intimate partner. In the absence of an intimate partner, due to deployment, women described needing to promote a relationship between their intimate partners and their expected babies.

In “being by myself,” women also desired relationships with others that could “normalize” their experience. During their experience, women felt awkward and frustrated, needing to convince others that “I really am pregnant and I really am married.” In this study, the meaning of the statement was *my partner really exists and I am believing in us, believing in his part in this pregnancy, and believing in his return*. In “being by myself and believing in us,” not only did women describe the need to convince others, women described needing to convince themselves that “this really is happening.” Accordingly,

women described needing to be supported in believing in what was possible for them, their babies, and their partners.

“Being by myself” sometimes challenged a woman’s belief in “us.” In “being by myself and believing in us,” women related fears and concerns including: Fear for their well-being, their babies’ well-being, and their partners’ well-being. Women related protecting themselves, their babies, and their intimate partners by “downplaying” or not sharing “bad news,” including minimizing complications during pregnancy and fear for an intimate partner’s safety. However, withholding intimate details of their experience exacerbated feelings of “being by myself.” In contrast, sharing their experiences, via technology or via the timing of appointments, allowed women to focus on “believing in us” and minimized the impact of being or having been apart.

“Being by myself and believing in us” transitioned to “being together” upon homecoming and birth. Not all participants reported that their partners were able to return in time for the birth. However, whether, a partner returned prior to the birth or after, women looked to that moment of finally being “all” together. The transition from “being by myself and believing in us” to being together was along a timeline measured in months deployed and months pregnant. The timeliness of events along this timeline shaped women’s experiences. Women managed their time “being by myself and believing in us” through routine. First times held significance for women in this study. Among the firsts, the first ultrasound was reported as a meaningful opportunity to be supported in “believing in us” or a painful reminder of “being by myself.” Women interacted with technology to mitigate “being by myself” and to support “believing in us.” Technology provided a way of virtually being together and of capturing the experience. Technology, however, did not offer the physical closeness of actually being together. In being with others, women were supported by people within formal and informal networks who addressed “being by myself” through being there and being a safe place to fall, while promoting a woman’s belief in “us” through facilitating shared experiences and empowering a woman’s belief in the possible. When at last togetherness was achieved, at homecoming and birth, women described the importance of privacy and of a moment alone together to establish new family routines and to strengthen their new family unit. Women also described wanting to remember their experiences of pregnancy, childbirth, and deployment.

### **Being by myself.**

“Being by myself and believing in us” was the integration of “being by myself” and “believing in us.” The former, “being by myself,” meant being alone in an unfamiliar and unsupportive world. Women described “being by myself” as being where no one was there, no one was listening, and where no one had their backs. “Being by myself” included descriptions of being physically alone, being with others who did not understand, or being with others but without their intimate partner. The phrase “being by myself” was repeated by all participants in this study. One woman repeated the phrase eleven times during a 60 minute interview.

In “being by myself,” women related feeling awkward, judged, and singled out. For one participant who ventured to a prenatal education session on her own, “being by myself” was felt in the presence of other intimate couples:

*So I went to the very first one by myself. And it was all “somebody brought somebody” ... So, I was so mortified that I was sitting there by myself, at this pregnancy thing.*

Another participant related how questions from HCPs at an emergency department left her feeling awkward because she was on her own and during an obstetric crisis:

*The question kept coming up...Where’s your husband?*

In “being by myself,” women wrestled with feeling “different” yet wanting normalcy. In this study, that which was missing was felt in seeing other happy families together. Women looked to what was occurring amongst other pregnant women and struggled with feeling “(the partner) missed it.” For a participant who experienced childbirth, while her intimate partner was absent, being in a semi-private room with another family was particularly painful:

*I wanted a private room. There were none available. I was very disappointed about that. Obviously, I may have sounded a little selfish, but ... it’s almost like...well, it was being rubbed in my face. Here’s this little family and they’re right there and they’re talking “babe can I get you this? Babe can I get you that?” I was super jealous.*

In considering what was missing, women expressed sadness, a desire for togetherness, and a desire for “normal, healthy” pregnancies and birthing experiences. In



desiring normalcy, challenges during the experience of pregnancy, childbirth, and spousal deployment were downplayed. One participant explained that “being by myself” and being put on bed rest challenged her independence. Yet, she delayed sharing her circumstances and asking for help from others. She explained:

*I don't want to be emotional around people, I want to be strong. I don't want to be THAT person. I've always been independent. Sometimes it was a struggle, when you were pregnant to be that.*

Another participant explained that she was expected to be supportive of others in her family. Thus, she would withhold anything “bad” because:

*I didn't want to burden someone else.*

Women described facing their challenges on their own because: They did not want to bother someone else; they were expected to be supporting of others; they were asked by their partners not to share with others what was going on; and they believed others would not understand. Among women whose partners were deployed in combat zones, all reported that their partners requested of them not to share details of or stressors related to the deployment:

*He would tell me to just be careful who I was telling stuff like that because of what was going on over there.*

Ironically, one participant related that despite her “carefulness,” a local news reporter published in several newspapers detailed articles of her intimate partner’s experience of being deployed in combat. In reconciling that her partner’s deployment and her “being alone” were now public information, she requested copies of the article as a keepsake. The request was denied.

“Being by myself” meant being in a world that did not “get it.” One participant shared that she learned to not talk with her “civilian” friends about her experience because they could not understand.

*It was frustrating. I find a lot of people they don't know the life, or have lived the life, or are in the life, they don't understand.*

Although women hid their challenges, withholding information or not having somebody to talk to left women feeling alone, awkward, and frustrated in a world that did not understand.

### **Believing in us.**

The latter component of “being by myself and believing in us” represented women’s beliefs toward what was possible and of what was to come. Women related “believing in us” as a journey in which they agreed with the possible and looked to the actual. The journey included transitioning from possibly being pregnant to ultimately having a child and transitioning from believing in a possible new family unit to having their intimate partners and new babies with them. For women in this study, a journey of belief began around the time of conception. Upon discovering being pregnant, women related happy disbelief, excitement, nervousness, worry, and shock: “*It’s really happening,*” “*I can’t believe it, of all the times!*” Disbelief and belief met in discovering being with child. Women admitted that they were in happy disbelief regarding being pregnant and that they needed several confirming tests to believe that they were pregnant. Women described administering repeated home pregnancy tests on their own before sharing their discoveries of “being pregnant” with their intimate partners. One woman shared how she administered a fourth home pregnancy test while video conferencing with her deployed intimate partner. She set the timer and waited with her partner for the test results. When the test proved positive again, they celebrated together. Whether it was the positive pregnancy test or the act of sharing the news that made it “real” was unknown.

The meaning of discovering pregnancy was captured in women’s descriptions of disbelief transitioning to belief in the possible: *Being with child is possible for me, now?* For one participant who had been trying to conceive for a year, she discussed how she could not believe that she “got pregnant” right before her partner deployed. She had believed she would have to wait until her partner returned from deployment before they could attempt to conceive again. When asked what the meaning of discovering being pregnant was for her, she related feeling lucky and feeling relieved. The deployment had represented for her an obstacle to believing in the possibility of becoming pregnant. She expressed that she could not believe that of all the times the last possible opportunity before her partner’s deployment was when she would get pregnant.

In “believing in us,” women described believing that a child, who was a part of them, a part of their intimate partner, and a part of all their time together, was within them.

One participant beautifully articulated her understanding of the believed in child as the culmination of the couple's love and time together.

*It's amazing and it's just... it's such a culmination of the time that you spend together as a couple ... it's that culmination of all that time together and creating a new life, that's part of each of you and it's amazing.*

The child, as a possibility, was present in a woman's thoughts, although absent from her arms. Similarly, the intimate partner, while deployed, was very present in a woman's thoughts although absent from being in her arms. Women described believing for the child that would be and believing for the partner who would call or email and who would eventually come home. Although women never saw where their partners were deployed, they believed that their partners were deployed and that they would come home. And although women could not look into their wombs, women, agreed with ultrasound images, believing their children were within them and that they would be born.

In transitioning from discovering being pregnant to accepting their pregnancies, women described sharing a fascination with their growing "bellies." The "belly" was an actualization of the pregnancy. Women shared fundal measurements, images of their "bellies," and recorded their "bellies" moving. Despite this correspondence, women described that their partners were in "shock" upon seeing their pregnant "bellies." Happy disbelief re-emerged in women's descriptions of their partners' reactions to seeing them at homecoming. As one participant described homecoming: "I wanted to be big. I wanted him to notice." For another participant, whose partner returned from deployment at the end of her first trimester, her acceptance of pregnancy and of believing "this is real" was promoted by re-uniting.

The belief that there would be a baby was fulfilled upon childbirth. Being with child reached its wholeness through birth, simultaneously exchanging being full of belief with receiving a child into open arms. Similarly, the expectation of a partner's return was actualized in his return at homecoming, receiving "him" into open arms. The expectation of the possible was actualized in the baby "being there" and in the deployed partner "being there." Women were waiting and believing for the two to come together.

### **Being by Myself and Believing in Us: Working It Out Time Wise**

There was a timeline from “being by myself and believing in us” to being together that was measured by months deployed and months pregnant. Women were very aware of the passage of time and of the timeliness of events in their descriptions of pregnancy, childbirth, and concurrent spousal deployment. Women described the experience of pregnancy and deployment as happening over months and weeks of gestation and months deployed, while labour and delivery were recalled in days, hours, and minutes. Women also gave time a qualitative element: *He got home in time; a different time would have been better; it worked out, time wise.* Timeliness was described in all women’s stories. Women managed their time while “being by myself and believing in us” by creating routines. Women related their time apart from their intimate partners to the timeline of their pregnancies. For example, women described the timing of the deployment in relation to conceiving and women shared whether or not their partners were home in time for the birth. Similarly, women described the timing of HLTA relative to the number of months deployed and months pregnant. Women also described how little things accumulated over time and how meaning was interpreted from “our time together.”

Timeliness, or being attentive to timing, was important to women. In this study, care was understood relative to its timing. Women hoped that their intimate partners would be attentive to their babies’ timing. One participant explained that following reunion with her intimate partner, her partner requested time to re-adjust but she felt that they needed to prepare for the baby’s arrival.

*“Just give me some time to re-integrate.” And I’m thinking ...you don’t have it this time. Like, baby’s coming.*

Women described people who were attentive to timing as caring. For example, the intimate partner who rushed home when contractions started was described as loving. The nurse who took the time during labour to explain what was happening was described as “attentive and sweet.” The obstetrician who realized the significance of a first pregnancy and of the first office visit was described as caring. In contrast, “bad” timing was described as uncaring. For example, one participant described that her doctor withheld care by delaying her baby’s delivery in order to have lunch. Another participant described a

“delivery doctor,” who came late during second stage, as less than caring and unfamiliar with her circumstance.

*I remember the delivery doctor—like the guy that comes in at the last second and catches the baby? ... That was totally awkward and I'll never forget it.*

Women, in this study, described health-care providers who did not consider “is this a good time” or “would a different time be better?” as unsupportive. Attentiveness to timing was also noted in relation to the deployment. Women stated that a wintertime deployment was “more difficult.” One participant noted that winter weather was harder to manage “by myself.”

**Timing of the HLTA.** The timing of events, including special mission leave, in relation to the deployment, was important to women experiencing pregnancy, childbirth, and concurrent spousal deployment. Special mission leave, commonly referred to as HLTA, is granted to deployed members of the Canadian Armed Forces who have spent a significant amount of time away from home (see Glossary). HLTA was described by women as: a chance to see one’s husband, a break from “being by myself,” an opportunity to get pregnant, or a time to prepare and purchase items for the nursery and for baby’s coming. A late deployment HLTA, which was closer to the homecoming date than to the departure date, was described as shaping the experience of pregnancy and deployment in a positive way. Women described that during a late HLTA they could celebrate being done the big part of the deployment and had only a short time remaining until the homecoming. One participant articulated how a late HLTA helped her to reframe her understanding of her partner’s nine month deployment:

*It was easier because him being home was that much closer. Like it was only three months! So we can do that. You have that six months behind you, you’re like, “we can do that.”*

**Routine is key.** To manage time and minimize feelings of “being by myself,” women described the importance of establishing, maintaining, and returning to routine. Having a routine was reported by women in this study to reduce stress and increase predictability. One participant, who had military training, described the importance of routine during her partner’s eight month deployment:

*Day by day, you have the routine. You can depend on it. You get used to it. It's familiar. You know what to expect... When they're deployed, you don't really know what to expect. If you have something familiar, you can expect at home, then it's something you can kind of control outside of the stuff you can't control from the deployment standpoint. So, routines are key.*

Additionally, documenting the pregnancy and reporting to others regularly were described as a way to continue routine. Women related that documenting their pregnancies in a standard or routine way that could be shared “kept everyone in the loop,” prevented disconnect between their partners and their babies, and kept the “mind occupied” during the passage of time. A schedule and routine or regular conversations helped to mitigate the feeling of “being my myself.” One participant mused, that without regular phone calls, she would just have herself.

**Significance of first times.** In “being by myself and believing in us,” women described how the timeliness of events could be poignant. First times were significant. The experience of pregnancy, childbirth, and deployment was marked by firsts: the first hospital visit, the first doctor’s appointment, the first ultrasound, the first time their partners saw their “belly,” and the first time seeing their partners holding baby. Firsts were important in supporting a woman’s thoughts toward her pregnancy and the belief in “us.” In this study, all women were pregnant for the first time and this may have influenced the significance of firsts in the women’s stories. Women desired to share their “firsts” with their intimate partners. One participant, who became pregnant during a late HLTA, explained her appreciation that her partner was home in time for the first doctor’s appointment:

*He came home...It was before I had my doctor's appointment where they tried the Doppler for the first time. He was home in time to come to that appointment with me, which was super-nice. So the first time that we got to hear the heart beat, we heard it together. I'm really happy that he got home in time for that.*

Firsts were remembered. Women related that their mothers were the first people they would turn to for help and women gave detailed descriptions of how their mothers responded. Women also detailed their first hospital visits or doctor’s appointments and, similarly, recalled how they felt about the care provided. Women described that the first visit to the

hospital or to the doctor's office shaped their understanding of their care. First impressions mattered.

Among the firsts, the first ultrasound was a benchmark event for women. All participants in this study shared the meaning of the first ultrasound. The first ultrasound highlighted the meaning of togetherness to women of in realizing the life "as it is" within. When an intimate partner was present, the first ultrasound propelled a woman into believing there actually was a life within her that was a part of her and a part of her partner. But for women experiencing their intimate partners' absence due to deployment, "being by myself" challenged this realization of "believing in us." The timeliness of events, including the first ultrasound, shaped women's experience by supporting her belief in what was possible at a time when she needed it. An untimely event reminded a woman that she was alone.

### **Being by Myself and Believing in Us: Longing for Togetherness**

For women in this study, "being by myself and believing in us" elicited a longing for togetherness. "Being by myself" was to be abolished by togetherness. "Believing in us" was to be actualized by togetherness. Togetherness was understood as being with their intimate partners and their babies and returning to "normal." Women described understanding their pregnancies as togetherness within their bodies; the unborn child was a part of both a woman and her intimate partner. Women longed to bring their intimate partners, who were absent, into the experience, in order for it to be "real" and for it to feel "like a normal pregnancy." Sharing the experience of pregnancy, childbirth, and spousal deployment with their intimate partners, having the intimate partner's role acknowledged, and having private moments as a family following reunion or birth helped relieve "being by myself."

Women longed for their intimate partners to have a relationship with the child growing within them. Longing to bring them together was highlighted in the repeated expressed desire to bring the intimate partner into their experience of pregnancy and childbirth. Women worried that if their partners were distanced from the experience, their deployed partners might become disconnected from the baby. One participant, whose partner was deployed throughout the pregnancy but who returned prior to the birth, articulated this concern:

*Maybe you worry, probably... worry the baby would come and he'd be... like he wouldn't have a relationship, like a bond with the baby.*

It was not just for themselves that women longed for togetherness with their intimate partners but for the sake of their babies. Women shared that both their relationship with their deployed partners and the relationship between their deployed partners and their unborn children were under-acknowledged.

For women in this study, the importance of togetherness was noticed in its absence. The meaning of the intimate partner's role in being physically close and in supporting togetherness became evident in the partner's absence. The absent partner was in a woman's thoughts as related through dialogue and descriptions. The absent intimate partner was very present in thought, although distant from being held. Women desired to give to their partners something physical, to hold on to, of their pregnancy: An ultrasound image, a recording of the fetal heart, a photograph of their "belly." Bringing their partners into the experience was a way in which women were sharing the experience and protecting their partners' "part" in it. In return, a partner's presence and attentiveness to a woman's experience were interpreted as love. As one participant described, her partner's immediate and attentive response "made me feel loved." This love was not just for her but for her unborn child and for the family, the "us," that was being formed.

**Sharing the experience.** Women found meaning in sharing the experience of pregnancy, childbirth and deployment with their intimate partners. Women fought for a shared experience with their partners by trying to modify what could be modified (ultrasound dates, doctor's appointments, prenatal classes, routines at home, and schedules at work) in order to facilitate togetherness. Women shared that they were protecting their husbands, protecting their children, and protecting "that" relationship. Unfortunately, women described feeling "up against walls" with the health-care system when requesting that moments of shared discovery be facilitated. One participant described her struggle with the health-care system in desiring to discover something about the baby with her partner:

*I wanted to know what the sex of the baby was. But I didn't want to know there because I wanted to wait till I was on the computer with him so we could find out together. And she was like, "Are you sure?" You feel like you're up against walls the whole time. Just work with me.*



Women related the utmost importance of sharing their experience, or part of it, with their deployed partners. One participant, who was reunited with her partner between deployment and courses, described the meaning of sharing the experience of the first ultrasound:

*Oh it was amazing! I was saying something about “your Daddy’s saying hi” or something like that and the little hand just went like this (participant gestures a wave). And it was just the cutest little wave in the world. I was so glad that he got to see the first one. And then, when I went to the other ones and they told me I couldn’t turn my camera on to videotape it, I was so relieved that he got to see the very first one.*

Another participant described how the health-care system could improve prenatal care by promoting the sharing of the experience of the first ultrasound with their deployed intimate partners. Having asked for flexibility in scheduling her 18 to 22 week ultrasound appointment during her partner’s HLTA, she met resistance and described her frustration:

*I think that, if there’s a way, that the hospital should have a policy that they should, if they know the situation, they should try and make it their best effort to include the partner whenever they can. It’s the little things. I’m trying to do things with my husband and make him part of this pregnancy. We know when they’re coming home for three weeks. So if we need an ultrasound and we have to push it one week back or one week forward, well, let us do that. So that way they can come with us. It’s great to say, “Here’s a picture of your baby” but... for them to hear the sounds and the kicking. It’s little things, like, where they think that it doesn’t matter, but that could make a big difference.*

All participants in this study offered that hospital administration could be more flexible in their scheduling in order to facilitate the deployed member’s presence. In addition to doctor’s appointments and ultrasounds, the importance of having an intimate partner present was expressed in relation to prenatal education sessions. In particular, women wanted their intimate partners present for the prenatal labour and delivery class. One participant confessed that she booked multiple labour and delivery classes in order to succeed in attending at least one with her intimate partner.

*I actually booked two different labour and delivery classes cause I wasn't sure when he was going to come home. And the planner, or organizer, called me, "do you realize you're booked in for two?" I'm like, "yup. I'm just waiting to hear back from my husband. He's in the military."*

Another participant related that she explained to a prenatal session organizer that she wanted her intimate partner to attend the labour and delivery class. However, the organizer would not provide the flexibility needed to facilitate the intimate partner's attendance. A nutrition class was offered instead. This left the participant feeling that togetherness had been denied.

Women described how exclusion of the deployed partner from the ultrasound experience or from the labour and delivery class denied their partners' role and denied the relationship being formed between the intimate partner and the baby. In this study, women described needing to protect the burgeoning relationship between their partners and their babies who were not yet born. Denying the partner's part in the experience exaggerated his absence and left a woman with feelings "by myself," "stranded," and "up against walls."

### **Being by Myself and Believing in Us: Appreciating Technology**

In this study, women expressed an appreciation for technology. Technology provided a way to bridge the gap between "being by myself and believing in us" and "being together." Technology allowed women to get a "foot-hold" in the actual. Through the use of technology, women experienced a virtual "being together." Technology allowed women to see and hear their absent partners and their hidden children. For example, with each Doppler for fetal heart rate, women could hear their babies' hearts and they were supported in their belief that a child was within them. With each phone call, women were supported in their belief that their partners were there and were "okay." Communication technology provided a way for women to share their experiences. Women described emailing friends and family with news following each doctor's visit. In sharing with others, the possible and expected child was discussed as an actuality. When provided the opportunity to discuss with others how their deployed partner was doing, his expected part in the pregnancy was discussed as an actuality. In this study, communication and non-communication technologies supported women in believing their partners were "okay" and in sharing their experience of pregnancy, childbirth, and deployment. Both communication and non-

communication technology were described as supporting women's desires to share their experiences.

**Non-communication technology.** Among non-communication technologies, home pregnancy tests, Doppler devices, portable ultrasound machines, blood tests, sphygmomanometers (blood pressure devices), computer scanners, vehicles (buses, taxis, airplanes), electricity, plumbing, epidurals, and medication pumps were all described. Cameras, ultrasound images, and video allowed women to capture and share their experiences with their deployed partners, while phone Apps supported women's abilities to monitor and assess contractions during labour. With the use of technology, women reported documenting their progress during pregnancy and labour. One participant, who awoke to contractions, described how an application on her phone helped her to assess the timing of her contractions:

*I had this App on my phone and I was like timing them (contractions) and kind of figuring it out. And they started pretty quickly. It was like four or five minutes, just the first couple, and then they got pretty intense pretty quick.*

Another participant shared how she used her mobile device to capture and share videos of her experience at doctor appointments with her deployed partner.

*Every time I went (doctor's appointment) I would turn the video on for the heartbeat or if the baby would move I'd, like, take a video and send it to him.*

During or after prenatal care visits, routine emails, messenger applications, digital recordings, and image sharing options enabled women to create progress reports. Particular focus was given to measuring and recording the pregnant "belly;" fundal measurements, digital photos, and videos of the "baby bump" were shared. Documenting pregnancy provided a way to frame, share, capture, report, and focus on what was perceived to be the "good news" in a progressing pregnancy. When family and friends responded right away with feedback, appreciation, and appraisal support, women described that this response helped them to feel that they were not alone and that they were relieved of the obligation to keep family informed regarding the pregnancy and deployment.

**Communication technology.** Overwhelmingly, communication technology shaped women's experience of pregnancy, childbirth, and deployment by addressing "being by myself and believing in us." Communication technology closed the distance, supported

togetherness, and was noted by women to decrease anxiety during the experience of pregnancy, childbirth, and deployment. Communication technology addressed women's fears associated with "not knowing" if their partners were safe and "not knowing" if their partners could be reached. One participant explained how her intimate partner would call or text throughout her experience of pregnancy and deployment to assuage her concerns:

*He could send messages to my phone. If he couldn't call me that night he would send me a message saying "I'm okay, you know, don't worry about it. Things are okay."*

Similarly, another participant experiencing pregnancy and deployment related that having an email correspondence with her intimate partner reduced stress:

*My husband was able to email frequently. That was sufficient for us. He had access to a computer. It definitely made it easier. I knew I could reach him, like just about anytime. I didn't have a problem reaching him. I think it kept my stress down.*

Communication technologies facilitated sharing the experience of pregnancy and deployment between a woman and her intimate partner. But it paled in comparison to the physical closeness of celebrating together. One participant, whose partner was deployed during the first few months of her pregnancy, shared her appreciation for modern communication technology, while comparing it with physical closeness:

*Thank you to the wonders of technology!... It made me grateful because, um, you think back to years ago or back—the first and second world war, they did not have, they could not talk to each other. It was hand written letters. And it took forever. So here we are, face to face, in real time waiting to find out if we're pregnant. It would have been more amazing had he been there, to be able to hug him and kiss him... and like share in that physically. But still being able to have the face to face and the whole of a conversation was amazing. Wonderful.*

For another participant whose partner did not make it home for the birth, technology was applied to reduce the fear of preterm birth in relation to a partner not "being there." Although the birth was earlier than expected, technology allowed the partner to be present, "virtually."

*I was sad that he missed all of it and everything but he didn't miss the birth, in a sense, because I had my Bluetooth in my ear... If I closed my eyes, it was like he was there, except I didn't have a hand to pinch.*

Communication technologies provided a method for women to bring their deployed partners into their experience, to eliminate feeling “being by myself,” to promote a sense of “knowing,” and to convey messages that assuaged fears. However, communication technology also added to the struggle between “not wanting everybody to know” and feeling obligated to let others know. The question of “who needed to know what” was a challenge for women experiencing pregnancy, childbirth, and deployment. When news media releases and social media commentaries were published regarding deployments, suddenly everyone knew something. Women described feeling that they needed to provide clarification. Additionally, messages between a woman and her intimate partner were sometimes delayed. Time differences, connectivity, access to telecommunication devices, and unexpected crises influenced when and how messages were communicated. Communication technology was an enabler for togetherness and a stressor in its absence. There was a dependency on technology. One participant, whose partner was deployed in a dangerous area while she was pregnant, shared that had her phone glued to her so that she would not miss a message from him:

*I had that phone glued to me. It was the only way for him to communicate with me.*

The participant also shared that connectivity was not consistent and a late message could induce anxiety regarding his safety:

*I felt stranded. Their Internet would be up and down. So there wasn't a solid line of communication.*

Women reached out to connect with others via communication technology.

Communication supported knowing that their partner was “okay.” Video teleconferencing (Skype™, Facetime™) created a virtual actualization of “being there” and of being supported. The interface provided through technology created opportunities for dialogues that promoted well-being. But as women pointed out in this study, the physical closeness and the meaning of touch were not replicated by this interface. Although women could be with others virtually, women were physically still on their own.

### **Being by Myself and Believing in Us: Protecting “Us”**

In this study, women described that the experience of being pregnant during their intimate partners’ deployments included many stressors and fears. “Believing in us” was something that needed protecting. Women shared their concerns for their babies’ well-

being, their partners' well-being, and their own well-being. Fears included: Fear of pregnancy loss, fear of preterm birth, fear that a partner would not be there for the birth, fear for a deployed partner's safety, fear of missing a message from a deployed intimate partner, fear regarding home security, and fear of a medical crisis. Fear challenged the belief in what was possible and threatened to supplant what was believed in with anxiety. "Believing in us" was challenged by fear.

For all participants, the unpredictability of military life increased the stress already being experienced. The stressors threatened to erode a woman's belief in what was possible in being pregnant and in preparing for childbirth. Sudden changes initiated by DND that increased stress for women included: a change to the deployment, a change to the training or course schedule, a posting message, or a house-hunting trip. Women feared how these changes would affect their health, pregnancies, birth experiences, and the ability of their partners to be home in time. One participant described how the notification of a posting message during her partner's deployment and her pregnancy added to the stress already being experienced:

*And during this, also, we found out we were getting posted... So pregnant, bedrest, and cleaning my house for being posted.*

**Fighting fear.** In this study, women described that fears and concerns could be exacerbated by "not knowing" and "being by myself." The experience of pregnancy, childbirth, and deployment was full of uncertainty and unpredictability. Women described "not knowing," yet choosing to agree with what was believed in. Knowing was described as a certainty, while believing was described as an agreement with the possible. "Being by myself" and believing in what was possible was challenged by bad news. Participants described that news media releases and comments on social media regarding conflict, where loved ones were deployed, were terrifying. Women, whose partners were deployed in combat zones, were echoed in this participant's words:

*It's scary. Wanting to know your husband is safe, don't know where they are, what's going on... it's stressful and add pregnancy.*

Women related not knowing where their partners were, what was going on, when their partners would be back, when they would call again, or if their partners were safe. Yet, women chose to agree with the possibility that their partners were safe, would call, and

would come home. In being pregnant, women did not have the certainty of knowing that their babies were “okay.” Yet, they chose to agree with the possibility that their babies were “okay” and would come. Complications to pregnancy challenged women’s beliefs in becoming “us.” However, women “downplayed” the complications; Women even forgot that they had had complications. Women described how they protected the belief despite complications by minimizing “bad” news. In this study, all women described complications with their pregnancies that required additional hospital visits and fetal assessments. Complications that were described by women in this study included: Congenital and genetic abnormalities, placenta previa, preeclampsia, and obstetric cholestasis. In protecting the belief in “us,” women reported that they “downplayed” or withheld anything “bad.” The downplaying of anything “bad” changed how women communicated with their partners. Women described choosing not to share everything in order to protect their partners, to reduce their partners’ guilt, and to protect “us.” Concerning complications, concerns, and stressors during pregnancy and her partner’s deployment, one participant stated:

*I just didn’t share everything, every detail that was bad. I kept a lot of that sort of thing to myself.*

Similarly, another participant described how she withheld information from her partner in order to protect him from worrying about their baby.

*So, ... it would just be nice if people... we may seem like crazed hormonal pregnant ladies... and I’m sure that does play a factor in it. But we’re crazed, hormonal pregnant ladies that are trying to keep our husbands sane because we’re trying to protect them, too. I didn’t want tell him that I’m over here fighting for (baby) to be with us and that I’m on three pills a day. You know? When he asked how things were going, “Good.” I mean, I told him about the two times I got rushed to emergency—two of the five. You know?... Like, if I didn’t think it was serious enough and I, you know, was going to manage to get away with it without him even knowing about it. I didn’t tell him. I didn’t want him worrying about (baby). There’s nothing he could do. Like... what was he going to do? So, I did my best to try and keep him aware but unaware.*

In addition to protecting a deployed partner from worry, this participant described protecting an intimate partner by preventing his guilt:

*You downplay it so that he doesn't feel guilty. Because you know that he does. And he did. Like if I was really sick, I would downplay it. "Oh, I feel a little off today" instead of "I was stuck on the couch and didn't eat at all today because I was so sick."*

The result of "downplaying bad news" was that it exacerbated feelings of "being by myself." Women were alone with bad news and complications to their pregnancies.

Conversely, women reported that their partners were modifying their messages, minimizing the violence of combat, normalizing the reality of bombings, and downplaying the risks to togetherness. One participant described hearing explosions while on the phone with her partner and how her partner tried to reassure her that it was a daily occurrence:

*When I was on the phone with him... "What's that noise?"*

This participant also described how being protected from the dangers being experienced by her intimate partner, during her pregnancy, had an opposing meaning for her:

*He was really good at protecting me and not letting me know what was going on over there... It felt good to be protected but it felt bad because you knew you were being protected.*

Risks were "downplayed." However, by modifying the message women and their intimate partners were limiting what was possible in bringing their partners into their experience. Instead of the possible being actualized through dialogue, something intimate was missing.

**Believing I can.** In the face of challenges and fears, women related the importance of "believing I can." "Believing I can," during the experience of pregnancy, childbirth, and deployment, meant being ready to face possibility despite challenges. Women described needing to believe that the challenges and opportunities before them could be met. As challenges and opportunities emerged during the experience of pregnancy and deployment, the belief "I can" was imperative. Conversely, women reported that messages of "don'ts", "can'ts," and "shouldn'ts" eroded their self-esteem and increased their frustration. In response to being sent to a nutritionist and being put on bed-rest mid-pregnancy during her intimate partner's deployment, this participant related her frustration:

*So it was just all these like little things adding up... so now you don't know how to feed yourself, you can't get out of bed, you can't go to work, can't walk your dog, ... no, no, you can't go around the block, you can walk up to street to get the mail if you*



*want to, don't vacuum, um... we're not sure if we want you driving your car anymore, but you're okay to live on your own ... There were so many don'ts I felt like a two year old.*

Notably, women described “believing I can” was empowered through support, particularly, through supportive language from HCPs. As challenges and opportunities emerged during the experience of pregnancy and deployment, the doctor’s voice, “you can do it” or “you can’t do that” was described as shaping women’s experiences and her understanding of what was possible. Women reported that their HCPs encouraged them to realize possibilities, in flying to Europe for HTLA “by myself”, and encouraged them to face challenges, in buying a house, selling a house, and having a baby. Ultimately, women needed to believe that they would be able to labour and give birth.

For one participant who experienced premature rupture of membranes, she explained her internal dialogue during labour in realizing that her partner, whom she believed would be home in time for the birth, would not be. She described believing in her ability to give birth on her own:

*“I’ll be home, I’ll be home. I’ll do everything to be home.” And then he wasn’t. I was just like “okay.” But when I got there, when I was in labour and stuff, I just got to the point where ... whatever I haven’t done up till now, if it’s not done, I can’t do it. So it doesn’t matter. He’s not here. So, I’m just going to do it and it’s going to be fine. And it was. It was fine. It was hard but... it was fine. I found it was a lot harder when I went home.*

All women in this study described fears and stressors, specific to pregnancy, childbirth, and military deployment. Fears and stressors challenged a woman’s belief in what was possible. However, the voices surrounding a woman that empowered her belief in what was possible protected her thoughts toward birth.

### **Being by Myself and Believing in Us: Knowing Somebody Is There**

In “being by myself and believing in us,” women described needing to know that somebody was there, somebody with whom they could talk to and share their concerns. All participants described how meaningful support, from a supportive person, decreased their stress, normalized their experience, and reduced feelings of “being by myself.” One participant, who was experiencing complications during her pregnancy and who was also

supporting her intimate partner during his deployment to a combat zone, described that she did not want everybody to know her circumstances, but that she needed somebody to know:

*I need somebody to know. And I need somebody to be aware that I'm having a really hard time with this.*

Supportive people were found among formal and informal support networks. Supportive people helped shape the experience by empowering women to believe in what was possible, by advocating for shared experiences, and by protecting togetherness following reunion. Women, who experienced pregnancy, childbirth, and deployment, described a supportive person as somebody to talk to when they needed to talk, somebody who was there when they were needed, and somebody who was a “safe place to fall” (Table 3). In this study, intimate partners, family members, close friends, military padres, MFRC support personnel, doctors, and labour and delivery nurses were described by women as providing meaningful support during the experience of pregnancy, childbirth, and deployment.

Women described “somebody there” as: somebody who lets me know I’m not by myself; somebody who is there when I need them; somebody to talk to when I need to talk; somebody with whom it’s safe to be upset; somebody who understands, who “knows” and who does not question, judge, or ignore the deployment; somebody who advocates for my partner to be a part of the pregnancy; somebody who advocates for our privacy as a family; somebody who believes I can; and somebody who helps me to see my possibilities (Table 3). “Somebody there for me” was somebody who simultaneously addressed “being by myself” through being there, being a safe place to fall, being understanding, and not asking awkward questions and who promoted “believing in us” through facilitating togetherness, advocating for their and their babies well-being, and empowering women’s beliefs in the possible.

Table 3

*Support Looks Like This*

<p>Somebody who lets me know I'm not by myself; Somebody who is there when I need them; Somebody to talk to when I need to talk; Somebody with whom it's safe to be upset; Somebody who understands, who knows:     Not questioning,     Not judging,     Not ignoring; Somebody who advocates for my partner to be a part of this pregnancy; Somebody who advocates for our privacy; Somebody who believes I can; Somebody who helps me to see my possibilities.</p>
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**Formal support.**

***Health-care providers and practitioners.*** Woman reported feeling “normal” and not alone when health-care providers and practitioners acknowledged their experience of pregnancy and deployment by creating opportunities for women to discuss their partners’ deployment. Similarly, health-care providers and practitioners who facilitated a shared experience, through the sharing of discoveries and of firsts along the pregnancy were described as caring and as normalizing the experience. Facilitating a shared experience meant supporting ways of bringing the deployed partner into the experience of pregnancy and childbirth. This included creating opportunities through dialogue, supporting video conferencing (Skype™, Facetime™), and advocating for flexibility in appointment scheduling. By considering the deployed partner, HCPs acknowledged the partner’s absence and acknowledged the significance of a woman’s desire for togetherness. In this study, obstetricians and labour and delivery nurses were reported to facilitate a shared experience for women and their partners experiencing pregnancy, childbirth, and deployment. Women described how doctors and nurses brought the deployed member into prenatal care by creating a space for dialogue about the deployment, by supporting the use of technology, or by providing something physical for their patients to take home and share with the deployed partner.

One participant described discussing her partner's deployment with her doctor. In response, the doctor offered to use a portable ultrasound to create an image that could be shared with the deployed partner:

*She said I have a portable ultrasound I can use and she printed off a copy for me to take home... So I thought that was really nice. Then I could at least, like, share something that was physical with him. So I got to scan that in and email it to him...I found it really helpful...helpful in making the pregnancy feel a little more normal. Where everyone is like "my spouse is here and we get to share," usually people get to share ultrasounds with their spouse and I did not. I wasn't going to get that chance.*

Women described that office locations and wait list times were barriers to accessing optimal prenatal care during their experiences of pregnancy, childbirth, and deployment. However, women described that "good" care, "somebody there for me," was worth waiting for and worth the inconvenience of accessibility. This participant described her doctor's location as inconvenient, but her doctor's care as meaningful:

*I would drive out there because I really liked her and she would always ask: "How is your husband doing?" She didn't ignore it that he wasn't there and she always asked: "How's your husband doing? How are you doing without him here?"*

Women described how the approach and the questions used by HCPs influenced their interpretations of their care. Questions that implied a woman did not know what was going on in her intimate partner's world were reported by women to increase feelings of anxiety and frustration: "Where's your husband?" "What is he doing there?" "When will he be home?" These questions eroded the belief in "us" and increased feelings of "being by myself." Women described that these questions left them feeling awkward and uncomfortable for being pregnant while their partners were absent. In contrast, questions, which implied that the women knew, or that focused on what the women knew, were described as supportive. Women also described how a language of "you can do it" shaped their understanding as to what was possible during their experience of pregnancy, childbirth, and deployment. Women whose health care providers promoted a language of "you can" related believing in themselves, actualizing opportunities, and overcoming challenges. These women also described a birthing language of "I can."

The deployment was reported as a profound event and an integral part of the pregnancy. Women appreciated when health-care providers and practitioners acknowledged the deployment and its significance. Acknowledging the experience and the meaning it had let women know they were not alone. Conversely, when the deployment was ignored, it exacerbated feelings of “being by myself” and left women frustrated with the health-care system. Women in this study revealed that the civilian health-care in Canada was fraught with misunderstandings regarding military deployment. Women described feeling awkward, questioned, rushed, and judged by doctors and nurses who were unable to understand the full implications of “my partner is military, away, and I am by myself.” Women felt “up against walls” with a health-care system that was unaware of how to respond and how to approach a dialogue with women experiencing pregnancy, childbirth, and military deployment. Women concluded that the health-care system was withholding support. Even military health services were reported as unwilling to provide the most rudimentary care. One participant described how military hospital personnel, despite their understanding of deployment, withheld care, adding to the anxiety of “being by myself:”

*I was having really bad cramping. I told them I was pregnant and they were like “We’re really sorry but we can’t do anything for you unless you’re a member”. Which to me was shocking. Like military community, military wife, pregnant and in pain and not even from this province. No idea where to go. “I can’t help you. I can’t look at you, I can’t do anything” that made me super mad. Because everyone says how military’s like a family... like... the support behind the troops and all this other stuff, but they don’t do a lot for the families. Like what you see advertised and what you think... I don’t feel it’s the same. I feel it’s a show. I was already scared and nobody would help me.*

**Military support personnel.** In this study, women described military support personnel as “being there,” knowing, not judging, and not questioning. Military support personnel included: Front line community outreach workers in MFRCs and military padres. Women described that the support provided by military support personnel reduced their feelings of “being by myself” during the experience of pregnancy, childbirth, and deployment.

Women described the MFRC as facilitating group meetings where information could be shared between families and military leadership and as a place where pregnant women could see that they were not alone in what they were experiencing. One participant, whose partner was deployed for eight months during her pregnancy, described that the support from the MFRC was reassuring:

*You know, the MFRC, if you needed anything they'd be there for you. That gave me peace of mind. There was somewhere I could call no matter what and they would help me. I had no doubt that they would help me with whatever I needed help with, which let me sleep at night.*

However, the MFRC was inaccessible to some due to its location.

*There's... like there's no out reach, I guess, to people that aren't on base... if you're from here you have to go to town ... But it would be nice if they had some sort of little office or something out here.*

In this study, women described how military padres, and priests connected to the military, supported them. One participant described that receiving support during her experience of pregnancy and deployment from a military padre meant not being judged:

*I was lucky because it was a military padre. He was very supportive. I didn't feel like I was being judged.*

She continued to explain that the benefit of spiritual health-care from someone with knowledge of the military meant that she was not asked awkward questions and that she did not feel the uncomfortable-ness of “being by myself:”

*They knew everything. So, it wasn't, uh, they didn't ask questions. They kind of respected the fact that there wasn't everything I wanted to talk about ... So there was never any question about “oh, where is HE?” and “why isn't HE here?” “what's HE doing?” You know?*

### **Informal support.**

***The extended family.*** Women reported that they needed someone to whom they could turn and talk. “Mom” was the first person. Women in this study reported that during their experiences of pregnancy, childbirth, and deployment, they first turned to their mothers. Women’s descriptions of their mothers varied. If this first person, the pregnant woman’s mother, was receptive, a calm and safety was realized. “Mom” was also described

as an advocate, “laying on the horn” to get to the hospital in time. One participant, whose mother was geographically distant, described how a daily correspondence with her mother let her know “somebody was there:”

*Mom was probably there more than anyone. She definitely is the one that cared the most, genuinely... For me, I could be upset with my mother and feel safe being upset with her.*

Similarly, another participant, whose mother was geographically local, described her mother as ready to be there for her.

*My mom was an amazing support throughout. She was just like, “I want to be a part of it; I want to be there for as much as I can be.”*

However, support from a mother was not always realized. One participant described her disappointment in realizing that her mother would not be supportive of her pregnancy during deployment:

*When I told my mother, she wasn't supportive about the fact that he was away and I was pregnant. She thought it was a big mistake. I thought that was going to be my one place I could fall and then, it wasn't there.*

In this study, women described that the relationship with one's mother women could provide a safe place in which to confide and to receive support. However, the lack of a mother's support could also exacerbate feelings of “being by myself.” In seeking someone to turn to, women also reported turning to family members, friends, coworkers, and to personnel in formal support networks. One participant explained how conversations with family members helped her to remain calm during her partner's high-risk deployment:

*I needed somebody to be able to talk to. I needed somebody to be able to talk to in order to get things off my chest and stuff... It kept me from being alone especially for things that he didn't want me to talk about with other people.*

Another participant related how her family supported her through prayers, when she discovered a complication during her pregnancy. This support provided comfort. She described reframing her understanding by moving her focus away from “self” and toward believing in the possible.

*It's reassuring to have that faith in something other than yourself and be able to let go of the things that you really can't control and know that they're going to turn out, the way that they're going to turn out and will be the way that' it's meant to be, regardless.*

**Co-workers and friends.** Women related great appreciation for the support received from people in their everyday world including: their co-workers, friends, and their partners' military friends. Random kindness from people in their communities also held significance. This unexpected support from people in their everyday world let women feel that they were not alone. In contrast, unsupportive work environments were associated with stress leave.

“Somebody there for me” included people within formal and informal support networks, where supportive people were consistently described as being there, understanding, advocating, believing, and supporting the possible (Table 3). Knowing somebody was there reduced women's feelings of “being by myself” and supported “believing in us” by assuaging fears. As articulated by one participant, whose partner was deployed for eight months of her pregnancy, knowing somebody was there helped to keep her stress down:

*It all just keeps stress down. Knowing that someone is there for you, if you need them.*

### **Being by Myself and Believing in Us: Homecoming**

When at last an intimate partner and newborn baby came home, “being by myself and believing in us” was expected to transition to being together. The belief that there would be a baby was fulfilled upon childbirth. Being with child reached its wholeness through birth, simultaneously exchanging being full of belief with receiving a child into open arms. Similarly, the expectation of a partner's return was actualized in the partner's homecoming, receiving the long departed loved one into open arms. The expectation of the possible was actualized in the baby “being there” and in the deployed partner “being there.” Women were waiting and believing for the two to come together. In contrast, women feared that their partners would not be home in time. In this study, one participant described that her intimate partner was not home in time for the birth, while all other participants experienced birth with their intimate partners present.



Whether homecoming occurred before or after baby's birth, women described the birth and the homecoming with uncanny similarities. Women described a precipitous labour and a quick homecoming; an urgent delivery and an urgent homecoming; a scheduled birth and a scheduled homecoming; intra-partum exhaustion and feeling exhausted at homecoming; not wanting a crowd at the birth nor at the homecoming; and feeling overwhelmed with emotion at birth and at homecoming. The language used in women's descriptions conveyed that the experiences of childbirth and homecoming were integrated. Women's descriptions of homecoming and childbirth included: It happened quickly; I didn't want anyone else there; I was done; pulled out because things were escalating; and I was crying, "I love you." The homecoming and birth, which had been believed in, then actualized, were integrated in women's descriptions. The words used by one participant to describe her intimate partner's homecoming could have also been used to describe seeing her first child:

*That moment of seeing him and like just having that first hug and kiss, that's amazing.*

Following the homecoming, some women related that "it was harder" after their intimate partners got back. One participant described preparing for the birth with her intimate partner after he had returned home from a six month deployment:

*He's back in town and he wants to go visit people. He wants to go to the mall. He wants to go do all these things and he's like "okay, let's go" ... even when he got home, he's like "I can't believe how pregnant you are." ... Because they don't realize what's going on... It's like "honey, the baby is coming in a couple weeks."*

The absence of an intimate partner was felt and realized in relation to a woman's changing body. Women described feeling the impact of their partners' absences when reuniting with their partners. In the partner's holding the baby or in the partner's reaching out and touching the "pregnant belly" for the first time, women described feeling excited and happy but also sad and overwhelmed. Although women described feeling excited to see their partners, they reflected that they felt sad that their partner had "missed it all."

**A moment alone together.** For women in this study, "believing in us" had an enduring quality. Women described continuing to "believe in us" and continuing to protect the belief in "us" following the transition to being together. Women, who experienced

pregnancy, childbirth, and deployment, described wanting to be alone with their partners and their new babies. They wanted to have their time together protected. After being separated from her intimate partner for eight months, one participant described that the early family moment together, alone, was important to strengthening the family unit:

*It was just me and my husband. It was important for it to just be me and him. I think even more so because he wasn't around for the pregnancy. I think it was important for me and him to have that. I just didn't want anyone else there. No one. I think it probably strengthened the family. Just with the two of us and the baby. It strengthened, like, just the three of us as a unit—our own unit.*

Another participant, whose partner was absent for most of the pregnancy and for the birth, expressed that protecting the family's privacy was important to make up for losses and to establish new routines:

*I was so disappointed that he wasn't the first one to hold her. So to me, all these people, all of our friends, all of our family got to hold his baby, before he did. So, you're not coming over and taking away his time. He's getting a week to himself. And we're all going to try to get into some sort of routine.*

The experience of pregnancy, childbirth, and deployment also included women's descriptions of seeing their intimate partners' hold their babies. The significance of these descriptions might have been in the longing to see the relationship between the intimate partner and the baby. One participant, whose partner was deployed early in her pregnancy, explained the meaning of seeing her partner interact and hold their baby:

*There's moments seeing him be a father for her and like the way they interact, like I'll watch. There's times it makes me want to tear up. That's like... like your heart is ready to explode out of your chest.*

Women described the meaning of family interaction, which included: *Amazing, what it's all about, and all those fears are lifted.* It was togetherness that fulfilled “being by myself and believing in us” during the experience of pregnancy, childbirth, and concurrent spousal deployment. One participant described that togetherness meant “all those fears,” including fears that were introduced by complications during pregnancy, were lifted:

*We had a follow up, the heart thing had gone. But it's one of those things that it's always there. Like it's in the back of your mind. Having those high tests, that kind of weighs on you... So it's one of those moments when she's in our arms and she's there that that weight is lifted.*

**Remembering.** Beyond “being by myself,” “believing in us” had an enduring quality. In this study, women related that the experience of pregnancy, childbirth, and spousal deployment was profound to the family and that it was important to remember. Women described wanting to remember their experience, wanting their children to know, and wanting to capture that moment together. In wanting to remember, one participant, whose partner had been deployed throughout her pregnancy, described how the experience influenced the name given to their child:

*It was such a profound event. It sort of defines your pregnancy, you're by yourself and your husband is sort of out and about at war... it just had such meaning in our life. We thought it would be nice for her to grow up and know what was going on at the time.*

In wanting to remember, another participant described how a digital image captured the moment of togetherness at a homecoming following the birth:

*And some lady was so sweet. She said, “can I just take your picture for you?” and I'm like, “yes please.” And I look at the picture and, oh my god, I look terrible. I was bawling and he's holding the baby but it was just an emotional moment. It was awesome... to look back. And now, when she gets older, I can show her: Daddy didn't meet you but he DID meet you eventually.*

### **Fundamental Statement**

The meaning of the experience of pregnancy, childbirth, and concurrent spousal deployment was captured in the essence of “being by myself and believing in us.” “Being by myself” was highlighted by an intimate partner’s absence due to deployment, by others not understanding what it was like, and by feeling different than other families. “Believing in us” meant believing in the possibility of pregnancy, of having a child, and of a new, expanded family unit. It also meant believing in a relationship with an intimate partner and in a relationship between the intimate partner and unborn child. In “believing in us,” women related a journey of belief in which they agreed with the possible, including

transitioning from possibly being pregnant to ultimately having a child. “Being by myself” both challenged this transition and became a part of their journey. The integrated and opposing meaning of the experience of pregnancy, childbirth, and deployment is represented in the essence of “being by myself and believing in us.” Sub-themes, and their elements, provide insight. In this study, sub-themes included: Working it out time wise, longing for togetherness, appreciating technology, protecting “us”, knowing somebody is there, and homecoming.

In “working it out time wise” women related the transition from “being by myself and believing in us” to being together, along a timeline measured in months deployed and months pregnant. Women managed their time “being by myself and believing in us” through routine. First times held significance for women. Among the firsts, the first ultrasound was reported as a meaningful opportunity to be supported in “believing in us” or a painful reminder of “being by myself.” Elements within “working it out time wise” included women’s attentiveness to routines, the timing of events, including HLTA, and the significance of first times.

In “longing for togetherness,” women described understanding their pregnancies as togetherness within their bodies. The unborn child was a part of both a woman and her intimate partner. “Longing for togetherness” included the element of sharing the experience. Women described that the first ultrasound and labour and delivery classes were opportunities to support “believing in us” by sharing the experience or a painful reminder of “being by myself.”

“Appreciating technology” included considerations for how communication and non-communication technologies shaped women’s experiences. Women, in this study, interacted with technology to mitigate “being by myself” and to support “believing in us.” Technology provided a way of virtually being together and provided a way to share and capture their experiences. Technology, however, did not offer the physical closeness of actually being together.

“Protecting “us”” included the elements of fighting fear and believing I can. During the experience of pregnancy, childbirth, and spousal deployment, women were challenged by fears, including complications during pregnancy and terrifying news media releases regarding their partners’ deployments. Women protected the belief in “us” by downplaying

“bad” news. However, withholding intimate details left women feeling alone and frustrated. To mitigate the challenges and fears before them, women shared how an internal dialogue of “I can” supported their belief in what was possible.

“Knowing somebody is there” described how people among formal and informal support networks meaningfully addressed “being by myself and believing in us.” Women described turning to the mothers, first, for support. However, support from a mother was not always realized. Women described “somebody there for me” as someone to whom they could turn, to talk to, to confide in, and count on. “Somebody there for me” was also someone who supported a woman’s belief in what was possible for her and who advocated for her and her family’s togetherness.

“Homecoming” captured the actualization of togetherness. “Being by myself and believing in us” transitioned to being together upon homecoming and birth. Whether a partner returned home before or after the birth, women described homecoming and birth with similar words. “Homecoming” included the elements a moment alone together and remembering.

### **Member Checking**

To verify these results, a summary of the findings was returned to all participants. Two participants provided their feedback.

## CHAPTER FIVE: DISCUSSION

*My darling baby, you slept beneath my heart when Canada's mission in Afghanistan began. I remember hearing your father say that he would deploy on Op Apollo Roto 0. I would not see him until the week before your birth. I remember listening to reports of the mission and the fear of the war that would take so many lives. How could the media man be so careless with his words? The day you were born four soldiers were killed, "friendly fire" they told us. They died and you were born. I keep the newspaper from that day, April 18, 2002, with your baby clothes. This year, you are twelve and the twelve year old mission is over. I am glad that it is. It has cost so many, so dearly, and its scars will be felt by those who love.*

The above excerpt is my reflection from March 12, 2014, the day that Canada's mission in Afghanistan officially ended. I, like the women in this study, felt the need to remember my experience of pregnancy and deployment; I am surprised that it took over a decade before I had the opportunity to explore the experience in a way that could effect change. In delving into the hidden meaning of the experience of pregnancy and childbirth during an intimate partner's deployment, I explored with women their stories. I found that within the essence of "being by myself and believing in us" the meaning of the experience of pregnancy, childbirth, and concurrent spousal deployment was captured. In this chapter, I discuss my findings, relating each subtheme to a previous theory or research study to support or refute its merit. I also relate the findings to the over-arching theme of "being by myself and believing in us." In addition to discussing the essence of the experience, I share how supports and resources shaped the experience of pregnancy and childbirth during deployment for women in this study. Then, I explore implications for practice and for research. Ultimately, pregnancy, childbirth, and spousal deployment were integrated into a unique experience with distinct challenges. For those wishing to support women in CMFs, even the simple act of acknowledging the experience can have a profound impact.

### **Being by Myself**

In this study, women were challenged by the awkwardness and loneliness of "being by myself," living each day in a world where others did not understand what the experience of pregnancy during deployment was. The frustration and disappointment of experiencing something that others could not understand was also noted by Doherty and Scannell-Desch

(2008). While researching the lived experience of widowhood during pregnancy, Doherty and Scannell-Desch uncovered the clustered theme: “Not being there: Let down by others” (p. 107). The participants in their study had experienced the death of an intimate partner, during their pregnancies, that was associated with a military deployment or the “September 11, 2001 terrorist attacks” (Doherty & Scannell-Desch, 2008, p. 103). Doherty and Scannell-Desch described widows’ disappointment and frustration in being avoided by friends and family, who did not understand their circumstances, and the outrage of being financially cut off by a dead spouse’s employer. Ultimately, widows created for themselves, and for their babies, new lives, by relying upon themselves (Doherty & Scannell-Desch, 2008). Similarly, women in Roberts’ (2008) study, experiencing an extended separation from an intimate partner due to deployment, described being on their own with the challenges and responsibilities of managing and maintaining their jobs, their houses, their children’s activities, their pets, and the well-being of their families. Women described that they learned to rely upon themselves rather than a disorganized military support system and upon those who did not understand what they were experiencing (Roberts, 2008). I found women described not being understood and being on their own, but they also related how meaningful support was realized in ways that positively shaped their experience of “being by myself and believing in us.” For example, when HCPs acknowledged an intimate partner’s deployment in the context of a woman’s perinatal care, “being by myself” was reduced, “believing in us” was encouraged, and the meaning of the experience was shaped in a positive way.

### **Believing in Us**

Women’s experiences were shaped by supports and resources that encouraged the belief in “us.” “Us” meant a woman and her intimate partner, a woman and her baby, and the new family unit. “Believing in us” represented believing in relationships within a new family unit. “Believing in us” also encompassed believing that a new, expanded family would be realized when a baby was born and when a deployed member returned home. Similar to the model of psychosocial adaptation to pregnancy (Lederman, 1996; Lederman & Weis, 2009), in which a woman’s thoughts toward being with child and becoming the mother of a child are described, women in this study described a transition from disbelief in being pregnant to “believing in us.” Concepts from the model of psychosocial adaption to

pregnancy (Lederman, 1996; Lederman & Weis, 2009), including accepting pregnancy, preparing for birth, relationship with a mother figure, relationship with an intimate partner, fear of pain, and coping skills, were noted among women's narratives in this study. However, women's stories in this study did not capture learning child-care skills, nor the distinct emotional transitions related to the emotional cycle of deployment (ECOD). These findings may reflect the time lapse between being pregnant and being interviewed. Women in this study had experienced their pregnancies and deployments two to five years prior to being interviewed. Each woman was well established in her role as mother. Some participants had also experienced a subsequent pregnancy and birth during this time. The distance, of two to five years, may have prevented the descriptions of maternal role identification and of the ECOD from being well defined. Rather, each woman described what she was believing in for her family during her experience of pregnancy, childbirth, and spousal deployment. The inclusion criterion of two to five years was, perhaps, too restrictive for this study. I turned away eight participants who self-identified as ready to tell their stories. By creating a restriction based on what I considered a "safe" time to tell the story, I did not recognize women as experts in knowing themselves and their readiness to tell their stories. I reported my reflections in this study's journal.

Our understanding of how pregnancy and childbirth are experienced can be informed by considering pregnancy and childbirth as a journey of belief, where expectation and possibility are waiting to become actualized. For example, every time a woman turned on her mobile device to correspond with her deployed partner, she was experiencing an actualization of her partner's expected return. Similarly, hearing a baby's heart rate through a Doppler device allowed women to get a foothold in the actuality of a child living. Baumann and Smith (2012) related the experience of deployment to "unfolding possibilities" (p. 270), citing the French meaning of the word deploy "to unfold" rather than to the English meaning of word "to go the frontline." Prenatal care might be better understood as "unfolding possibilities" (Baumann & Smith, 2012, p. 270), an opportunity to support women in getting a foothold in the actual, to support the belief that there is a child within, and to support the potential for family that exists within that child. Beyond the relationship between a mother and her fetus, women in this study described believing in an expected relationship between their unborn children and their intimate partners. In the



current context of women centred care, the importance to women of the relationship between their intimate partners and their unborn children is over-looked. Understanding this phenomenon might inform how we support women during pregnancy and childbirth. Additionally, a pregnant woman's position along the continuum of "believing in us" should influence our approach to care. Assessing and reflecting upon the woman's journey, from disbelief to having baby here, might allow fears to be acknowledged and possibilities understood in relation to the hope for family. In this study, one participant described difficulty in believing that she was pregnant given the time it took to conceive. After trying for almost a year, she discovered that she was pregnant days after her intimate partner deployed. She described her difficulty in believing that she was actually pregnant, with her partner's child, throughout her experience of pregnancy and deployment. Whether there is a correlation between striving to conceive and a woman's disbelief in the possibility of having a child requires further investigation. It is reasonable that a woman who has had difficulty conceiving might lose hope in the possibility of having a child. Further research could inform health-care providers regarding how the effort to conceive impacts a woman's beliefs toward being pregnant, having a child, and becoming a family. There is some data to suggest that a correlation between maternal depression and having an unplanned pregnancy exists (Yanikkerem, Ay, & Piro, 2013). Yanikkerem, Ay, and Piro found that among pregnant women (N = 550) surveyed in Manisa, Turkey, women who reported unplanned pregnancies (n = 149) had higher scores on the Beck Depression Inventory than women who reported that their pregnancies were planned (p = .000). In considering that stories of unplanned pregnancies are absent from this study, further research is needed to inform our understanding of maternal and perinatal mental health.

In shaping their experiences, women described how bringing their deployed loved one into their prenatal or intrapartum experience had a positive effect in promoting the belief in "us" as a new family unit and reducing feelings of "being by myself." However, sharing their experiences with their deployed partners required timing. In the following sections, I will discuss the subthemes in relation to the over-arching theme, "being by myself and believing in us," and in relation to findings from previous studies.

## **Working It Out Time Wise**

If we consider that being together requires the intersection of timelines, “being by myself” is when timelines are disconnected and “believing in us” is a belief that timelines will intersect again. In this study, attentiveness to a woman’s timeline shaped the acceptability of care. Timeliness of care, perceived or actual, has been a metric to patient satisfaction in hospital and treatment wait times (Kiely, 2014). Timeliness is also a factor influencing health outcomes (Kieley, 2014). Kiely (2014), a nurse practitioner, studied the timeliness of care in a retrospective review of women’s (N = 907) health during treatment for breast cancer. Kiely (2014) asserted that timeliness should be acknowledged by Advance Practice Nurses as a quality indicator and incorporated into practice guidelines. For women experiencing childbirth, timeliness may have an even more important role in patient satisfaction as women relate labour in hours, minutes, and even seconds. In considering the importance of timeliness, control and choice may also have a role. Cook and Loomis (2012) found from their qualitative study that a woman’s perceived level of control and choice during labour influenced her remembrance of birth. Although time is often taken-for-granted, the timeliness of care may have tremendous meaning in relation to a women’s perceived level of choice and control. In this study, the timeliness of an ultrasound in relation to an intimate partner’s ability to attend shaped a woman’s experience of pregnancy and deployment. A first ultrasound that both a woman and her intimate partner could attend supported the belief in “us” and minimized feeling “by myself.” In contrast, a rigid schedule that provided no choice or control, left a woman feeling “up against walls” and frustrated. The meaning of the first ultrasound to supporting a women’s psychosocial adaptation to pregnancy has not been previously studied. Additionally, the meaning of the timing of a labour and delivery prenatal class to supporting a woman’s belief in the possible and supporting her understanding of her intimate partner’s role has not been explored. Fundamentally, nurses and doctors can optimize care for women experiencing pregnancy, childbirth, and deployment by supporting and facilitating women in sharing their pregnancies, their firsts, and their births, with their deployed intimate partners. The single most practical and most meaningful way to do this might be by scheduling an ultrasound that the deployed partner can attend. Military leaders might also consider how the timing of a deployment and of HLTA relates to family satisfaction and to the need for specific

resources. Specifically, a winter deployment was described in this study as more difficult to manage and a late HLTA was described as uplifting. In “working it out time wise,” flexibility in the scheduling and promoting choice and control optimized support for women experiencing pregnancy, childbirth, and an intimate partner’s deployment.

### **Longing for Togetherness**

In this study, the absence of an intimate partner due to deployment allowed for the importance of togetherness to be revealed. The taken-for-granted was suddenly realized in its not being there (Husserl, 1913/1964). For example, togetherness was noticed in its absence and the role of the intimate partner in supporting pregnancy and birth was highlighted by his absence. Women longed for togetherness and desired for their intimate partners’ roles in their pregnancies to be acknowledged. An intimate partner’s role and the importance of an intimate partner being present during pregnancy and labour may not be well understood. During childbirth, the involvement of a woman’s intimate partner varies among cultures in the global community (McConville, 2014). Schachman (2010) suggested that in current North American culture the intimate male partner of a labouring woman is expected to become the labour coach. Similarly, Hodnett’s (1996) seminal research described continuous labour support, which included appraisal support for intimate partners but fell short of conveying the meaning of an intimate partner’s presence at birth. During pregnancy, Lederman and Weis (2009) cited that regardless of age, parity, or ethnicity, a woman’s concern toward “spousal acceptance of the pregnancy”(p. 215) could create conflict during maternal adaptation. They explained that the relationship between a woman and her intimate partner was interlinked with a woman’s perception of family flexibility ( $p < .001$ ) (Lederman & Weis, 2009). A woman, who perceived that her family, specifically her intimate partner, was inflexible, reported conflict in all dimensions of prenatal maternal adaptation (Lederman & Weis, 2009). However, these findings described the relationship between a woman and her intimate partner. The expressed desire for a relationship between the intimate partner and the unborn child, during pregnancy, was not reported. It may have been the absence of an intimate partner that allowed for descriptions of believing in this specific relationship to be uncovered. Comparatively, Doherty and Scannell-Desch (2008) noticed in their phenomenological study that widows mourned for this lost relationship between the intimate partner and child. Similarly, men deployed during their intimate

partner's pregnancies feared dying and not being there to have a relationship with their unborn children (Schachman, 2010).

The concern that women have for relationships between their intimate partners and unborn babies may be overlooked due to a lack of family centred approaches in maternity care. Roudebush, Kaufman, Johnson, Abraham, and Clayton (2006), nurses and policy analysts for the Institute of Family-Centred Care, cautioned that an assumed women centred approach that has ironically omitted the voices of childbearing women has led to misinterpretations of family centred maternity care. Family centered maternity care should include the understanding of intra-family relationships (Roudebush et al., 2006). In listening to the voices of childbearing women, I found that women described protecting their relationships with their intimate partners and promoting the burgeoning relationships between their intimate partners and their unborn babies. An approach to maternity care that does not understand the meaning of family relationships during pregnancy or labour has the potential to quickly become irrelevant or even harmful to childbearing women. The meaning of pregnancy, for childbearing women, in relation to the meaning of the relationship between the intimate partner and the unborn child should be investigated more thoroughly. In this study, women were not looking for acceptance from their partners, but to protect the relationships that bind a family together. Perhaps, the response was defensive? As uncovered in this study, HCPs minimized the importance of the intimate partner's role. Perhaps, women became protective of their family relationships in response to not having their family relationships acknowledged. Perhaps, also, women's descriptions were distinctly heterosexual? Childbearing women in this study described having a part of their intimate partner growing within their bodies. Accordingly, they believed that their partners should be able to attend and be a part of the prenatal care, education, ultrasound, and birth. Their partners were men with whom they wanted to have babies and with whom they wanted to have families. In considering how pregnancy can be experienced as deeply relational in meaning, approaches to care might become more relevant and compassionate. Supporting the "believing in us" must include understanding the relational meaning of pregnancy, beyond the mother-babe dyad but to all intra-family relationships.

Similarly, "being by myself" might be understood in relation to others. In this study, women wrestled with feeling "different" than other pregnant women yet wanting normalcy.

Longing for togetherness, therefore, could be interpreted as longing to be like other pregnant women or longing to belong. Although the relationships described in this study were heterosexual, “feeling different” compared to other families resembled non-biological lesbian descriptions of pregnancy (Wojnar & Katzenmeyer, 2014). Wojnar and Katzenmeyer applied Colaizzi’s (1978) methods to explore the experiences of pregnancy among same sex couples. If both the experience of pregnancy, childbirth, and deployment and the experience of pregnancy among non-biological lesbian mothers have some degree of feeling “not like others,” same sex couples experiencing pregnancy, childbirth, and concurrent spousal deployment might feel the cumulative effect of feeling “not like others” and, therefore, might need extra support facilitating togetherness, reducing “being by myself,” and protecting the family in becoming “us.”

In shaping their experiences, women described how sharing their prenatal and intrapartum experiences with their deployed loved ones had a positive effect in promoting the belief in “us” as a new family unit and reducing feelings of “being by myself.” Of note, all participants in this study were in their early adulthood. Accordingly, the desire for togetherness may have been highlighting the task of intimacy versus isolation, which was challenged by the prolonged separation due to deployment (Erikson, 1950). In safe guarding togetherness, the importance of intimacy was described in women’s stories of wanting a moment alone together following the birth. Women described how the experience was negatively impacted if nurses did not advocate for this intimate moment. In advocating for togetherness, bringing the partner into the experience was more than acknowledging the partner with a “hello” or with feedback. It was bringing the partner into the experience for the woman, acknowledging and supporting the relationships within the new family.

### **Appreciating Technology**

The experience of pregnancy, childbirth, and concurrent spousal deployment was shaped by the use of technology. Technology mitigated women’s feelings of “being by myself” and encouraged the belief in “us” by providing a virtual way of being together. In this study, women applied technology to create a prenatal health information profile and to keep track of contractions during labour. Documenting pregnancy provided a way to frame, share, capture, report, and focus on what was perceived to be the “good news” in a progressing pregnancy. Women in this study described that an immediate online response to

their emails made them feel appreciated and not alone. This finding is interesting because it affirms that both the content of a message and its response time conveyed meaning. As Gadamer (1960/2004) asserted, regarding text and its interpretation, the response time was important. Gadamer (1960/2004) cautioned that context, including time lapses between messages, influenced how we interpret a correspondence of written text. In contrast, during a dialogue, there are more cues and there may be opportunities to clarify meaning in order to enhance understanding (Gadamer, 1960/2004). Written text, however, does not get that chance to clarify itself. In this study, the time lapse in receiving a correspondence by text influenced women's experience and conveyed a message of being heard, being appreciated, and of not being alone. Additionally, women who created a prenatal health information profile reported a sense of autonomy during their pregnancies. Women's descriptions of prenatal health management and documentation resembled the focus of the CenteringPregnancy™ model of care. By promoting autonomy in managing one's pregnancy, the CenteringPregnancy™ model has been found to decrease the risks of maternal depression ( $p = .04$ ) (Kennedy et al., 2011). In recognizing its positive impact, American military tri-services have implemented the CenteringPregnancy™ model of care as part of their reforms to prenatal education and care for military families (Foster, Alviar, Neumeier, & Wootten, 2012). In moving forward, nurses in Canada might consider exploring with women ways in which pregnancy can be documented and shared by providing examples and encouraging options. Nurses should engage in a dialogue with women to let them know how prenatal health profiles have supported women experiencing pregnancy and deployment, while ascertaining who might benefit from this approach.

Technology has the potential to change how health-care is experienced (Patchell, 2014). For example, medical applications for mobile devices help people manage their health (Kuhn et al., 2014). Kuhn and colleagues (2014) reported how a phone application helped people experiencing Post Traumatic Stress Disorder monitor and describe symptoms, while prompting connectedness with health-care providers and supportive family members. In NICUs, preterm babies are shaped by the technology in their surroundings, while their interactions with their parents are influenced by the technology supporting their survival (Altimier & Philips, 2013; Inglis, 2010). For example, the incubator is a formidable barrier to a new mom picking up her baby. Likewise, during

labour, continuous fetal heart surveillance changes the experience of labour, as women are limited in their positioning by the constant presence of a sensitive apparatus on their abdomen and by the belt, which keeps the electronic monitor in place (Snelgrove-Clarke & Scott-Finlay, 2005). In this study, prenatal care and intrapartum care were enriched by the use of communication and non-communication technologies to capture and share the experience of pregnancy, childbirth, and deployment. As one participant stated, “why doesn’t everyone do this?” If necessity is the mother of invention, women experiencing pregnancy, childbirth, and deployment have highlighted how communication technology will re-invent the birth territory. Women experiencing pregnancy, childbirth, and deployment acted in ways that were “ahead of their time” due to the necessity created by their “longing for togetherness.” Women were longing to bring their partners, who were physically far away, close. Although women stated that they would have preferred a hand to pinch, a kiss, a hug, or the physical closeness of celebrating their pregnancy and childbirth experience, they also related how communication technology provided a bridge for the correspondence that was of utmost importance to them. Through the use of communication technology, women transformed their birthing environments and shaped their own birth experiences. “Why doesn’t everyone do this?” Over the next few decades, everyone might. In longing to bring loved ones, who are far, nearer to the experience, childbearing women may transform birthing environments through the use of communication technology. Hospitals should now be considering the logistics and ethics of adding communication technology to the birth territory.

Of note, women in this study shared how technology both helped and hindered their experiences. News releases and social media comments introduced unexpected challenges and women described how they felt the need to clarify misinformation. Similarly, senior military leaders have cited the challenges that communication technologies bring to the control of information (Daigle, 2013; Parsons, 2013). Parsons (2013), an officer in the Canadian military, wrote for the Curtis Papers on how “new media,” including cell phones, were affecting operational missions, the welfare of soldiers, and encounters on the battle field. Despite the problems that communication technologies introduce, the benefits for women experiencing pregnancy and deployment may outweigh the risks. As reported by Weis and Ryan (2012), even bad communication was better than the anxiety of being alone.

Schachman (2010) reported that the benefits of communication technology included the potential to offset fears experienced during deployment and to support parents in embracing their new roles. Similarly, I found that communication technologies provided the vehicle for messages that assuaged women's fears, decreasing their stress during pregnancy and deployment and reducing their feelings of "being by myself." However, communication between a pregnant woman and her deployed partner often involved modifying the message and paled in comparison to actually being together.

### **Protecting "Us"**

In this study, women reported that they and their partners each tried to protect the other by "downplaying" sickness, the risk to baby, the violence of combat, and the risks to togetherness. McConville's (2014) exploration of perinatal stories from women around the world cited the phenomenon of pregnant women protecting themselves and their babies through avoidance behaviours. Women in many cultures described being advised to avoid ugliness, terror, and death during pregnancy in order to protect themselves and ensure their babies' safe deliveries (McConville, 2014). By not speaking about "bad" things, women in this study reasoned that they were protecting their partners and protecting their babies' relationships with their fathers. As one participant explained, *if he feels guilty, he will disconnect and not bond with the baby*. Thus, women described, "downplaying" the severity of illnesses and omitting "bad news" in order to protect future togetherness. Minimizing "bad" news is not a behaviour unique to pregnancy and deployment. Rather, it may represent a behaviour that is common among military couples experiencing deployment. Joseph and Afifi (2010) reported that military couples "buffered" or modified their messages. Although Joseph and Afifi cautioned that "buffering" disconnected intimate partnerships and was associated with measureable negative health effects among women, "buffering" messages was a common behaviour among military couples experiencing deployment. In this study, women were faced with a dilemma of how to maintain intimacy and share the experience of pregnancy and deployment without sharing the aspects that were most intimate and most emotionally prominent to them. Joseph and Afifi recommended that deploying members should receive some training on empathetic communication prior to deploying. I would add that information to military families and to



military support personnel regarding “buffering” or “downplaying” could improve awareness and understanding of this phenomenon and its potential effects.

Consistent with studies discussed previously regarding pregnancy and deployment stress (Haas & Pazdernik, 2007; Tarney et al., 2013), women in this study described prenatal anxiety, complications to their pregnancies, preterm birth, and small for gestational age outcomes. Women neither confirmed nor denied correlations rather they described “what it was like.” Women related their concerns for the well-being of their babies, their deployed members, and themselves. The absence of an intimate partner due to military deployment infused all other concerns. For example, the fear of preterm birth was described, not in relation to the health of an infant, but in relation to the partner not being home in time for the birth. The belief in “us” always included the return of the deployed partner, not just the arrival of the baby. However, “being by myself” women were challenged to protect the belief that their spouses would return safely and that their babies would be born healthy. The meaning of prenatal anxiety was in losing belief in “us” and in exchanging it with fear. Schachman’s (2010) phenomenological study on the experiences of first time fathers deployed to combat also related the element of fighting fear. Men related worry, guilt, and fear in not being there for their pregnant intimate partners and in contemplating “who will be the father” (Schachman, 2010, p. 14) if I die on this deployment? Support which shaped women’s experiences of over-coming fear during pregnancy and deployment included being surrounded by a language of “you can.” Despite the risks to “believing in us” that were introduced by dangerous military deployments and complications during pregnancy, women in this study related the importance of “believing I can” throughout pregnancy and labour. The imperative role of a positive internal dialogue in shaping women’s birth experience was consistent with previous birthing literature (Davis, 2008; Fahy & Parratt, 2004; Lederman, 2011; McConville, 2014; Mercer, 2006). As cited by Davis (2008), “the impact that language may have on the psychological well-being of women” (p. 217) should not be under-estimated. In this study, HCPs, intimate partners, family members, and friends shaped women’s experiences of childbirth and of what was possible by promoting the belief that “I can.”

### **Knowing Somebody Is There**

Support from another was formative. In this study, women described how support from people in their every day lives had an important role in shaping their experience. Support from another had the power to reduce feelings of “being by myself” and to encourage “believing in us.” Although the description of who provided support varied, women’s descriptions of meaningful support were consistent. Women needed to know that somebody was there for them. In this study, women’s descriptions of support (Table 3) resembled Swanson’s (1993) structure of caring, which included: Maintaining the belief, knowing, being with, doing for, and enabling or supporting another through transition. Like the women in Swanson’s study, women in this study related that they needed a safe place to be upset and to make new meanings. However, in contrast to Swanson’s study, women in this study described integrating with their partners and their new babies to emerge as a new family, rather than as recovering after perinatal loss. A safe place was still necessary, not for healing from perinatal loss, but to facilitate togetherness, to have “all those fears lifted,” and to support the family in becoming “us.” Of note, unlike 1993 when Swanson published, modern communication technologies now exist that have created new forums for caring. Accordingly, women in this study related the importance of somebody being there, both virtually and actually, in reducing the feeling of “being by myself.”

Although women described receiving meaningful support from many different people during their experiences of pregnancy, childbirth, and spousal deployment, the relationship between a pregnant woman and her mother was memorable. This finding is consistent with Lederman and Weis’s (2009) model of psychosocial adaptation to pregnancy and Rubin’s (1967) observations regarding maternal role attainment. As cited by Lederman and Weis, there was a measurable correlation between a woman’s relationship with her mother and her ultimate preparedness for labour and birth. I found that women looked to their mothers for support. If a mother’s support was not available, meaningful support was difficult to find throughout the experience of pregnancy, childbirth, and deployment. The lack of support from a mother increased a woman’s feeling of “being by myself.”

The potential for meaningful support during pregnancy, childbirth, and deployment resides within existing family structures. Supportive family members could reduce a

woman's feelings of "being by myself" and encourage believing in what was possible. However, women described that extended family members teetered between being supportive and expecting support from women experiencing pregnancy and deployment. Baumann and Smith (2012) noted this "shifting pattern" of family support, citing that the extended family had the potential to support or hinder an intimate couple's reunion. Disappointment in family members' lack of understanding was also found in the stories of widowhood and pregnancy captured by Doherty and Scannel-Desch (2008). An education campaign on how family members can support intimate partners and their young families experiencing deployment is needed in order to mobilize the potential within the greater family structure and to encourage the actualization of meaningful support existing within families. One participant in this study described how members of her extended family prayed with her during her experience of pregnancy and deployment. Similarly, several participants described the importance of their spirituality and of prayers and faith in shaping their experiences.

Spiritual support encouraged the belief in "us" and moved a woman's thoughts away from "self." Faith and prayers encouraged women to believe that they were not alone and that there was something greater than themselves upon which they could count. Given that women in this study experienced high-risk pregnancies, their attention to spiritual health should not be a surprise. Consistent with Price et al.'s (2007) study that explored spiritual health among women experiencing high-risk pregnancies, the message that "everything will be okay no matter what happens" (p. 67) emerged in conversations with women during this study. This data should remind HCPs and support personnel that they should continue to recognize spirituality as it relates to women's experiences of well-being (Price et al., 2007). In supporting spiritual health, military padres might consider collaborating with nurses to encourage care that acknowledges a woman's spirituality during a high-risk pregnancy. Military padres have an opportunity to continue promoting spiritual health among woman experiencing pregnancy, childbirth, and deployment, by affirming their faith in the ability to conquer challenges and to realize possibilities.

Regarding prenatal education, several participants described prenatal classes as an opportunity to learn something new and to meet other women who were also pregnant. Women specifically expressed wanting to include their deployed partners in the labour and

delivery prenatal education session. However, prenatal course organizers did not always support their requests. Women noted that group prenatal education sessions had the potential to both support the belief in “us” through sharing the experience and to minimize “being by myself” by providing an opportunity to grow a woman’s support network. This finding affirms Kennedy et al’s (2009) qualitative findings regarding group prenatal care for women experiencing pregnancy and spousal deployment. Women in Kennedy et al.’s (2009) study reported that group prenatal care sessions minimized feelings of being alone but could be improved by promoting privacy and providing opportunities to include deployed members.

### **Homecoming**

Bringing baby home and having an intimate partner return from deployment represented the fulfillment of “believing in us” and the completion of “being by myself.” However, at homecoming, whether their babies had been born or were still in utero, women expressed both excitement in seeing their partners and sadness in realizing what had been missed. Baumann and Smith (2012) noted the simultaneous celebration and grief experienced at homecoming. In a case study involving a woman whose partner had been deployed to Iraq for 12 months, Baumann and Smith explored descriptions of homecoming by applying Parse’s (2009) humanbecoming family model. Baumann and Smith described the “joy-sorrow” (p. 268) of homecoming, the importance of protecting time alone, the essence of “unfolding possibilities” (p. 270) for a new way of being a family, and the possibilities of technology. I found similar descriptions of homecoming, of togetherness, of technology, and of seeing possibilities. Baumann and Smith related homecoming to the rebirth of the family. However, the participant in their study had not been pregnant. I discovered that women experiencing homecoming and birth integrated both the homecoming of their loved one and the arrival of their baby into their understanding of “believing in us.” In addition to the findings in Baumann and Smith’s study, I found that women described needing support from their intimate partners, post deployment, in preparing for the birth. Women also described needing intermittent support from their mothers or community nurses following the births of their babies. Women wanted time alone with their babies and their intimate partners, “just the two of us and baby,” and described needing an advocate to protect their privacy. Women also described wanting to

capture those first moments as a family together in order to remember the experience. One participant described naming her child with a name that was symbolic of the deployment. In exploring women's stories from many different cultures, McConville (2014) also cited the importance of family moments alone together to re-establishing family following the birth and the significance of choosing a name for baby that holds meaning.

"Being by myself and believing in us" became the actualization of togetherness at homecoming and birth. During the experience of pregnancy, childbirth, and spousal deployment, women transitioned from "believing in us" to being together as a family. Although this study did not look at the experiences of adoption during spousal deployment, the journey of "believing in us" might be seen in the expecting and waiting for the fulfillment of an adoption and of being together as a family. Of note, all of the participants experienced their partners' military deployments during their first pregnancies. Whether the desire for alone time "just the two of us and baby" includes older siblings is unknown. Further research is needed to consider how to optimally support military families during homecoming, who have older children.

The celebration and grief experienced at homecoming should inform our support of military families. Although homecoming is currently understood and encouraged to be a celebration (MFSP, 2008b), the hidden understanding of homecoming as sorrow should implore nurses to explore with women their individual experiences of homecoming. Women in this study related sadness, feeling overwhelmed, feeling "done," and feeling in their changed bodies what had been missing during their partners' deployments. In reuniting with their intimate partners, women grieved the culminated losses due to the long separation of military deployment. They also noted that their partners expected them to be excited and happy. Understanding homecoming as "joy-sorrow" (Baumann & Smith, 2012, p. 268) should inform military support programming. Currently, feelings of grief and guilt are recognized as responses among those returning from deployment but not mentioned as expected responses among the family at home (MFSP, 2008b). Including grief as an expected emotional response to long separation due to military deployment might better prepare military families for the joy-sorrow of homecoming. Grief does not mean a lack of appreciation or excitement, but simply might represent a response to experiencing an intimate partner's deployment. How fear during deployment is related to the grief

experienced at homecoming is not clear. Of note, at homecoming, participants did not relate the immediate release of the fears experienced during pregnancy and deployment. Rather, “all those fears” were lifted, over time, in seeing their intimate partners holding their babies. Further research involving the experience of homecoming among CMFs is needed.

One of the assumptions of descriptive phenomenology is that *if* what is being studied *is* a phenomenon, it should be significant and reoccurring; therefore, the experience might be found written about in literature because written texts have been the way in which people have captured and shared their human experiences. In considering pregnancy, childbirth, and deployment, Homer’s (trans. 1996) *Odyssey* provides insight. The protagonist, Odysseus, returns after being deployed for twenty years to his wife, Penelope, and to his now adult son. Homer (trans. 1996) draws an illustration of protecting intimacy during reunion: Odysseus secures a private room and the goddess Athena extends time so that the couple can revel in each other’s bodies and listen to each other’s stories. Time, togetherness, protecting “us,” and homecoming were captured in Homer’s (trans. 1996) story, while Athena was supportive in advocating for the couple’s private time. Although people have experienced war, pregnancy, and childbirth for millennia, the paucity of stories in the literature should cause us to ask *why*. Perhaps, it is reflective of the need for writers to illuminate literature by capturing women’s lived experiences.

### **Limitations and Strengths**

Participation in research among Canadian military families is low (Urban, 2013). In this study, four women provided in depth stories, producing a hundred pages of rich narrated text. A sample of four participants falls below the target of six to ten that was proposed. However, the richness of descriptions and the details within examples allowed for profound and hidden meanings within the experiences to be seen. Not in numbers but in understanding the experience this study finds in strength (Carson, 2010). The sample size is reflective of low participation among CMFs, of a restrictive inclusion criterion, and of events during the study. Of note, participation was affected by events occurring in Ottawa and Quebec in the fall of 2014. Participants chose not to be interviewed following the news of CAF members being the targets of terrorism.

Can four in depth stories inform our understanding? Coffman and Ray (2002) developed and published the theory of intentionality based on their grounded theory

research that explored four in depth stories among African American women experiencing high-risk pregnancies. The rich details and the volume of data from a sample of four were sufficient to inform refocusing of the therapeutic role to consider relationship and intentionality. Similarly, Dattilo and Brewer (2005) wrote that for their descriptive phenomenological study it was “reasonable for data saturation to be achieved with a small number of participants sharing their experiences with the phenomenon” (p. 213). Carson (2010) agreed that a small sample could be adequate if the data was significant in conveying meaning. In exploring teaching and learning encounters between nurses and women, Carson (2010) described a sample of five participants whose stories provided rich descriptions of individual meaning. To both increase participation and allow for new meanings to be captured as they arise, future studies that explore women’s experiences should apply fewer exclusion criteria in their methods.

Of note, this study did not capture linguistic, ethnic, cultural, or religious differences among participants. The predominant culture influencing participants was the military culture (English, 2004). This study was limited due its lack of bilingualism. For Francophone women in Canadian military families, the experience of pregnancy and childbirth during deployment was not captured. The potential language barrier that exists and its influence on the experience should be researched in the future.

A surprising strength of this study was that stories from across Canada were collected despite the limitation of geographic location. The transient nature of the military family facilitated recruitment. The benefit was that stories from across Canada were captured by recruiting only within a relatively small geographic area. Additional strengths included the rich descriptions captured in conversations with women, the integrity of focus in addressing the research questions and objectives, and the inter-sectoral collaboration between DND and Nursing. By prompting for meaning, rich descriptions and details were explored with women. By reiterating the objectives of the study on all recruitment material, in every interaction with participants, and throughout the analysis, the focus remained consistent. Inclusion and feedback from the DGMFRA, from the Director of Military Family Services, and from the local base commander promoted knowledge sharing and a commitment to the purpose of the study.

## **Implications for Practice**

The relevance of exploring women's experiences is that it allows for deeper understanding of what the experience is and for care to be refocused in ways that are meaningful to women. Roudebush et al. (2006) warned that without including the understanding of childbearing women, the refocusing of maternity care can become expensive and irrelevant, about "furniture and decor" (p. 203) rather than about "the way in which HCPs communicate and collaborate with women and their families" (p. 203). Mercer (2006) wrote that it was important for nurses to have an interactive dialogue with childbearing women in order to identify and clarify understanding regarding what was being said (p. 650). In this study, women described the importance of an informed approach as shaping their prenatal care experiences. Women wanted timely and appropriate support from people who were compassionate and who facilitated bringing their deployed members into the experience. The easiest way to affect a meaningful change in the experience for women might be to ensure a deployed member's attendance at the first ultrasound. Unfortunately, in this study, there were few civilian HCPs that compassionately approached the topic of military deployment in the context of prenatal care. Inflexibility in scheduling and topic avoidance meant women felt that care was being withheld. Additionally, un-informed approaches to prenatal care made women feel uncomfortable. HCPs that probed into why a husband was not present rather than how a woman was doing with him not being present simply increased a woman's sense of "being by myself."

Deeper understanding regarding the meaning of the experience of pregnancy and childbirth during an intimate partner's deployment could improve HCPs' approaches to communicating about deployment with their patients and could promote collaboration between civilian HCPs and military support personnel. Greater collaboration between military support communities and civilian healthcare communities might improve the relevance and reliability of prenatal support for women in Canadian military families. Mercer (2006) described how the environment of mothering influenced the "process of becoming a mother and an infant's development" (p. 650). The environment included three levels: intimate family and friends, community, and society. Women, in this study, desired an environment of care in which their communities understood the meaning of their experience. One way to facilitate this might include the integration of military and civilian



prenatal support. As recommended by Weis and colleagues (2008), the integration of military and civilian prenatal care might provide the meaningful support that women experiencing pregnancy and deployment seek.

The implications, from this study, for the practice of health-care providers and practitioners and for military support personnel, include: Being attentive to timeliness, advocating for togetherness, facilitating the creative use of technology, supporting the belief in “us,” supporting the belief in the possible, being there, collaborating with military support personnel, and advocating for family privacy. Technology holds the potential to bring the deployed member into the experience and to facilitate the sharing of the experience. By supporting women’s initiatives to use technology, HCPs can minimize the experience of “being by myself” and support the belief in “us.” However, HCPs need to apply technology to care judiciously because the closeness of a physical interaction and of human touch have not been replicated by technology. In looking for how to support a family of “us,” nurses should consider “who” a woman’s “us” is. By engaging in a dialogue that recognizes the many ways in which people are families, nurses can support the belief in “us” while reducing feelings of “being by myself,” different than other families. HCPs might also explore with women where they perceive themselves along the continuum of believing in the possibilities of having a child and of having a partner return from deployment. As noted in this study, women sometimes felt that they needed to convince others, and themselves, that they were actually pregnant and women worried that their babies would be born before their partners came home. Nurses might explore with women, women’s beliefs in possible, their fears and concerns, and their coping. Given that women minimize their fears, nurses might consider inviting women to discuss possible fears in order to minimize “being by myself” and to create a safe space for exploring concerns and fears. In this study, fears associated with pregnancy, childbirth, and deployment included: Fear of pregnancy loss, fear of preterm birth, fear that a partner would not be there for the birth, fear for a deployed partner’s safety, fear of missing a message from a deployed intimate partner, fear regarding home security, and fear of a medical crisis. Of note, obstetricians were credited with supporting a language of “I can.” HCPs could optimize their support and promote a woman’s self-efficacy beliefs by continuing to apply a language of “you can.” Conversely, HCPs might also monitor their patient’s language for signs of

losing belief and the absence of “I can.” In promoting autonomy and self-efficacy, prenatal care providers can encourage women to document their pregnancies and share their progress.

Regarding childbirth, labour and delivery nurses should continue to provide continuous labour support in order to minimize a woman’s experience of “being by myself” during childbirth and deployment. In this study, one participant who experienced premature rupture of membranes and preterm delivery while her partner was deployed, described how “her” labour and delivery nurse was there for her throughout the childbirth. Women in this study remembered and appreciated the attentiveness of “their” labour and delivery nurses. Woman also described appreciating nurses who took the time to explain procedures, who promoted choice during labour, who asked women what they needed, who held women during epidural insertion, who did not rush a woman, who did not yell, who acknowledged a woman’s sense of urgency, who facilitated the creative use of technology during childbirth and spousal deployment to support togetherness, and who let them know that they were not alone. Although technology was described as supportive, women noted that technology paled in comparison to the physical presence of another human being. Some women described how health-care providers made them feel different and awkward for suggesting how technology could be used during childbirth. Labour and delivery nurses can advocate for women by supporting women’s initiatives to use technology and by normalizing creative ways to capture and share childbirth experiences. Additionally, women described the importance of a moment alone together following the birth and of remembering. Labour and delivery nurses can support women who have experienced pregnancy and deployment by advocating for a private moment alone following delivery and by offering to capture the moment in ways that support the families’ use of technology. Importantly, labour and delivery nurses can acknowledge the family’s experience of pregnancy, childbirth, and deployment to promote a sense of being heard and being understood while providing a safe place to emerge as a new, expanded family unit (Swanson, 1993).

In approaching this study, I related my own experience with pregnancy and concurrent spousal deployment. I acknowledged that my focus was entirely on my partner’s relationship with our baby and that I should have been encouraged to focus on attaching with my baby. By exploring the experience of pregnancy, childbirth, and concurrent

spousal deployment, I now recognize that encouraging a woman to focus on her baby and not on the partner's relationship with baby would not be received as caring. Rather, women experiencing pregnancy, childbirth, and deployment are supported when nurses acknowledge and explore, with women, the partner's role in the pregnancy in order to facilitate togetherness.

Regarding one participant's report of on base care being withheld, Canadian Forces Health Services should take note. All people, whether or not they wear a uniform, are worthy of care and Canadian Forces Health Services should promote safe and compassionate care for all populations. As a minimum, Canadian Forces Health Services should call 9-1-1 for any person requiring emergency assistance and, in non-emergency situations, provide bus fare, call a cab, or call a family member. The response "I can't look at you" should be abolished. Further research regarding the attitudes and practices among military health services in Canada to different populations is needed.

Leaders in Canadian Forces Health Services can collaborate with their civilian health-care colleagues in order to bridge the gap and optimize care for women experiencing pregnancy, childbirth, and deployment. Military health services can collaborate with public health, local hospitals, and with MFRCs to provide community and maternal health services; this would look like supporting the development, provision, and promotion of prenatal education, prenatal care, and mother-babe care. Collaboration between the MFRC and military health services could serve the additional purpose of promoting a sense of community, while allowing military Registered Nurses to achieve their full scope of practice. Given the relevancy of group prenatal education sessions to women experiencing pregnancy, childbirth, and concurrent spousal deployment, MFRCs might consider partnering with Registered Nurses, civilian labour and delivery nurses and military nurses, to provide group prenatal education sessions that can facilitate pregnant women in developing their social support networks while providing opportunities to bring deployed members into the experience.

In this study, women who described support from MFRCs described how the support they received shaped their experience in meaningful and positive ways. Of note, I did not ask women to assess military support services rather to describe the supports and resources that were meaningful to them in shaping their experience. Women described how

the support and resources provided by the MFRC helped to normalize their experience of pregnancy and deployment and helped minimize their anxiety in feeling “by myself.” However, the MFRC was also described as inaccessible to some due to its location. By collaborating with community resource centres already serving rural areas, the MFRC might consider creating satellite offices in order to reach more women in Canadian military families and to promote a greater sense of military community. MFRC support personnel might also consider collaborating with nurses to advocate for women experiencing pregnancy, childbirth, and deployment. With their knowledge regarding the issues facing military families, military support personnel can be a strong voice, advocating for a greater awareness among health-care providers of what the experience of pregnancy, childbirth, and deployment is. Military support personnel can join the voices of women by advocating for ultrasound dates to be moved, for prenatal education to be appropriate and timely, and for the creative use of communication technologies. Military support personnel can also help mobilize the support that exists within family structures by providing informational support that promotes support from extended family members. Additionally, Military Family Services (MFS) might consider revising pamphlets that describe homecoming. Revisions should include discussing the potential excitement and sadness of celebration and grief experienced, not only by deployed members, but also by family members at homecoming. Regarding the impact of connectedness, I recommend that military support personnel continue to discuss with senior military leadership the influence of connectivity on the well-being of CMFs. Satellite connectivity is a classified component of military operations, requiring international agreements and government funding. The military Ombudsman’s report omitted the benefits of family connectivity, while stressing the potential risks to mission safety (Daigle, 2013). This focus provides justification for limiting bandwidth for family connectedness. To continue to advocate for tangible and meaningful resources for CMFs, military support personnel should be aware to advocate for connectivity and for a satellite communication system dedicated to family connectedness, separate from operational funding.

### **Research Implications**

In this study, I uncovered that the timing of special leave (HLTA) shaped women’s experiences of pregnancy, childbirth, and deployment. A late HLTA, closer to the

homecoming than to the departure date, was described as hopeful: The big part of the deployment being done and only a small amount remaining. In contrast, a midpoint HLTA was interpreted as “difficult to say, goodbye.” Further research is needed in order to investigate how the timing of HLTA is interpreted, whether this finding is significant, and how the timing of HLTA can benefit families.

Regarding practice development for HCPs, further research regarding a military sensitive approach is needed to optimize maternal-newborn care. A military sensitive approach could be developed that promotes appropriate responses to “my partner is military and away.” HCPs might be encouraged to acknowledge the experience, to explore for meaning, and to discuss who is a woman’s “us.” HCPs might then discuss how to bring the deployed or absent partner into the pregnancy through dialogue, timing, or the use of technology. Additionally, HCPs might look for ways to collaborate with military support personnel to ameliorate approaches to caring for women in CMFs. A military sensitive approach that reflects the essence of “being by myself and believing in us” might also be applied to counselling support. A pilot study, in a prenatal care setting that seeks patient and provider feedback, could evaluate the effectiveness of this approach.

During pregnancy, childbirth, and spousal deployment, women were “believing in us.” This belief included looking forward to the return of a loved one from deployment. Given the impact of war on the psyche, for some families, the person who returns home may not behave as expected. For women whose partners were deployed to war zones, re-adjusting to family life took time. However, “believing in us” had an enduring quality. Women continued to believe in the possibilities of becoming the family for which they had hoped. Further research regarding the reintegration of the family could inform our understanding.

In addition to developing a military sensitive approach to counselling and supporting women experiencing pregnancy, childbirth, and deployment, and in addition to the research recommendations throughout the discussion, future psychometric tool development should be considered. In sharing their stories, women identified stressors and fears during their experience of pregnancy, childbirth, and deployment. Further research into the development, implementation, and evaluation of a psychometric tool for prenatal anxiety

specific to the experience of pregnancy and deployment is needed in order to better assess and understand women's perinatal mental health.

Although this study did not include pregnancy loss during deployment, the responses to this study's recruitment indicated that further research acknowledging pregnancy loss is needed. An interpretive phenomenological inquiry may allow for the significant meaning of pregnancy loss during an intimate partner's deployment to be revealed. If we understand being with child to be agreeing with the possible, pregnancy loss might be better understood by exploring loss as losing a possible-way-of-being. This understanding might reveal how standardized care plans for women experiencing pregnancy loss do not encompass women's ways of being-toward-the-possible. In conducting future phenomenological research, I recommend that restrictive inclusion criteria not be applied. The inclusion criteria that I applied, of two to five years, prevented women who wanted to share their stories from telling their stories when they were ready to tell them.

In response to this study, the understanding gained can refocus our care for women experiencing pregnancy, childbirth, and concurrent spousal deployment and might refocus our care for women experiencing perinatal-family separation that is distinct from military deployment. For example, women experiencing pregnancy and separation from their partners due to employment or for women experiencing separation from their babies' due to NICU admissions, concepts consistent with "being by myself and believing in us" may be discovered. Nurses might consider how timeliness, togetherness, technology, and support can empower women in "believing in us" or be a painful reminder of "being by myself."

### **Conclusion**

In 2013, the military's Ombudsman released his report on the well-being of Canadian Military Families (CMF) and stated that more independent research was needed on the issues affecting CMFs. Among women in CMFs, the distinctive health effects associated with military life-style have been under-investigated by health-care providers. This study explored women's experiences of pregnancy, childbirth, and concurrent spousal deployment in order to increase understanding of the meaning of the experience and of how supports and resources shape the experience. Although this study was limited by geography, the transient nature of CMFs facilitated the collection of stories from across Canada. By asking what is the experience of pregnancy and childbirth during an intimate partner's

military deployment and how do supports and resources shape this experience, an overarching theme emerged. The meaning of the experience was captured in essence: “being by myself and believing in us.” “Believing in us” was both integrated with and challenged by “being by myself.” Sub-themes included: Working in out time wise, longing for togetherness, appreciating technology, protecting “us,” knowing somebody is there, and homecoming. Military support personnel, health-care providers, and health-care practitioners can refocus their care by being attentive to timeliness, advocating for togetherness, facilitating the creative use of technology, supporting the belief in “us,” supporting the belief in the possible, being there, and advocating for family privacy.

Deeper understanding regarding women’s experiences of pregnancy, childbirth, and military deployment and of how supports and resources shape the experience can refocus maternal-newborn care to what is optimal for women in CMFs. Increased awareness of the overlooked aspects of military life, as they pertain to perinatal health, should also encourage bridging the gap between military and civilian worlds. The implications of this study include generating discussion among nurses, midwives, obstetricians, prenatal educators, community outreach personnel, and military leadership regarding the experience of pregnancy and childbirth during an intimate partner’s military deployment. Increased discussion on this topic can support the development of future, meaningful, relevant, and sound quantitative and qualitative research measures.

The development of this study required inter-sectoral and interdepartmental collaboration amongst nursing and the Department of National Defence. This approach might be applied to future research among Canadian military families. By applying a descriptive phenomenological approach, women’s stories were explored by *being with* and by listening. The knowledge gained now implores us to collaborate better and to refocus our care to that which affects optimal maternal-newborn health outcomes.

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**APPENDIX A Artifacts**



## APPENDIX B Recruitment Advertisement Poster

Pregnancy and Childbirth during an Intimate Partner's Military Deployment

La Grossesse et de l'Accouchement au Cours du Cycle Émotionnel du Déploiement

Have you experienced pregnancy or childbirth during your intimate partner's overseas deployment? We are looking for women in Canadian military families to participate in a nursing research study that will involve a private, 60 minute, interview. The objective of this research is to increase awareness and understanding among healthcare providers and military support personnel of what the experience of pregnancy and childbirth during an intimate partner's deployment is for women in Canadian military families.

- Women must be or have been partnered with a commissioned or non-commissioned member of the Canadian Forces, regular or reserve force; (This includes women who themselves are non-commissioned or commissioned members of the Canadian Forces).
- Women must have experienced part of their pregnancy or the birth of their child during their intimate partner's deployment; (Deployment must be longer than 30 days and in an operational environment).
- Reunion following this deployment must have occurred at least 2 years prior and at most 5 years prior to the interview.
- Women must be able to describe their experiences in English.

If you are interested in participating in this study and meet the above criteria, please contact Chris Patchell at [C.Patchell@dal.ca](mailto:C.Patchell@dal.ca). Your participation is confidential.

Dalhousie REB # 2014-3330  
SSRRB # 1371/14F

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**APPENDIX C1 Printed Recruitment Advertisement, Newspaper**

Pregnancy, Childbirth, and an Intimate Partner's Deployment

La Grossesse et l'Accouchement au Cours du Cycle Émotionnel du Déploiement

Have you experienced pregnancy or childbirth during your intimate partner's overseas deployment? We are looking for women in Canadian military families to participate in a nursing research study that will involve a private, 60 minute interview. The objective of this research is to increase awareness and understanding among health care providers and military support personnel of what the experience of pregnancy and childbirth during an intimate partner's deployment is for women in Canadian military families. If you would like to share your story or would like more information please contact Chris Patchell at C.Patchell@dal.ca. Your participation is confidential.

Dalhousie REB # 2014-3330  
SSRRB # 1371/14F

**APPENDIX C2 Electronic Advertisement, MFRC Website, Facebook™ Page**

Pregnancy, Childbirth, and an Intimate Partner's Deployment

La Grossesse et l'Accouchement au Cours du Cycle Émotionnel du Déploiement

Have you experienced pregnancy or childbirth during your intimate partner's overseas deployment? We are looking for women in Canadian military families to participate in a nursing research study that will involve a private, 60 minute interview. The objective of this research is to increase awareness and understanding among health care providers and military support personnel of what the experience of pregnancy and childbirth during an intimate partner's deployment is for women in Canadian military families. If you would like to share your story or would like more information please contact Chris Patchell at C.Patchell@dal.ca. Your participation is confidential.

Dalhousie REB # 2014-3330  
SSRRB # 1371/14F

## APPENDIX D Recruitment Advertisement Pamphlet

Pregnancy and Childbirth  
 during an Intimate Partner's  
 Military Deployment  
 La Grossesse et  
 l'Accouchement au  
 Cours du Cycle Émotionnel  
 du Déploiement



Have you experienced pregnancy or childbirth during your intimate partner's overseas deployment? We are looking for women in Canadian military families to participate in a nursing research study that will involve a private, 60 minute, interview. The objective of this research is to increase awareness and

understanding among healthcare providers and military support personnel of what the experience of pregnancy and childbirth during an intimate partner's deployment is for women in Canadian Military families

- Women must be or have been partnered with a commissioned or non-commissioned member of the Canadian Forces, regular or reserve force; (This includes women who themselves are non-commissioned or commissioned members of the Canadian Forces);
- Women must have experienced part of their pregnancy or the birth of their child during their intimate partner's deployment;

(Deployment must be longer than 30 days and in an operational environment).

- Reunion following this deployment must have occurred at least 2 years prior and at most 5 years prior to the interview.
- Women must be able to describe their experiences in English.

If you are interested in participating in this study and meet the above criteria, please contact Chris Patchell at [C.Patchell@dal.ca](mailto:C.Patchell@dal.ca). Your participation is confidential.

## APPENDIX E Invitation Letter

Dear (insert participant's name),

My name is Chris Patchell and I am conducting research for my Master's Thesis in Nursing. The purpose of this letter is to invite you to participate in my research project: The Experience of Pregnancy and Childbirth during an Intimate Partner's Deployment. The objective of this research is to increase awareness and understanding among healthcare providers and military support personnel of what the experience of pregnancy and childbirth during an intimate partner's deployment is for women in Canadian Military families. This research will be conducted through a private interview at the School of Nursing, Dalhousie University or at a location convenient to you. The interview will consist of open-ended questions: What was your experience? What supports and resources were meaningful to you during your experience? The interview is estimated to take 60 minutes of your time and will be audio recorded.

This research has been approved by the Dalhousie Health Sciences Ethics Review Board # 1371/14F and the Social Science Research Review Board # 2014-3330 in accordance with DAOD 5062-0 and 5062-1.

Childbirth and deployment can be emotionally sensitive topics. Talking about your pregnancy, childbirth, or deployment might make you feel uncomfortable. You do not have to answer any questions that you do not wish to. Contact information for counselling services will be provided to you. Your information will be kept confidential. At no time will any specific comments be attributed to you unless your specific agreement has been obtained beforehand. The information you provide will be summarized in the final report. In addition to submitting my final report to the Dalhousie School of Nursing, I will submit the findings for publication and be sharing these findings with the Voluntary Doula Association, the IWK Health Centre, and the Department of National Defence. You do not have to participate in this research project. If you do choose to participate, you are free to withdraw at any time. Similarly, if you choose not to participate, this information will also be maintained in confidence. I am available to answer any questions you have about the study. You may contact me at [C.Patchell@dal.ca](mailto:C.Patchell@dal.ca) or my faculty advisor, Dr. Erna Snelgrove-Clarke at [Erna.Snelgrove-Clarke@dal.ca](mailto:Erna.Snelgrove-Clarke@dal.ca). If you would like to participate, please respond by email and I will arrange a short telephone interview to confirm your interest and to schedule a private interview.

Sincerely,  
Chris Patchell, BSc, BScN, RN  
Masters of Nursing Student  
Dalhousie School of Nursing

## APPENDIX F Preliminary Screening Questions

*The participant must relate connectedness to the military via commissioned, enlisted or sponsored status, having experienced an intimate partner's deployment during their pregnancy or childbirth, having had a live birth, having been reunited with their partner at least 2 years prior and at most 5 years prior to the interview, and having the ability to speak and understand English.*

Thank you for your interest in this study. The purpose of this study is to listen to women's stories and to increase awareness among healthcare providers, military support personnel, and military leadership of what the experience of pregnancy and childbirth is for women during their partners' overseas deployment. I am a Registered Nurse and a graduate student at Dalhousie University. My interest in this topic is both personal and professional because I experienced a pregnancy during my partner's deployment in 2001. Your participation is completely voluntary. You can opt out of any question, you can ask me any question, and you can stop being a part of this study at any time. I am going to ask you a few questions and then we can arrange to meet for an interview. Would you like me to proceed?

Would you please tell me how you are connected to the military?

Are you commissioned, non-commissioned, or connected to the military through your partner?

Is your partner in the Army, Navy or Air Force? Reserve forces or regular forces?

Would you please describe your relationship with partner: (cohabiting, married, common law status);

When was your experience of pregnancy or childbirth during deployment (year)?  
Where were you at this time?

Had you had previous experiences with deployment: (yes or no);

Had you had previous experiences with pregnancy or pregnancy and childbirth: (yes or no);

Have you had previous experiences with the loss of a pregnancy?

Did you lose your baby during your experience of pregnancy or childbirth during your partner's deployment?

How many years has it been since your experience of pregnancy and deployment?

Has your partner deployed since this experience?

Have you become pregnant since this experience under study?

## **APPENDIX G Women Meeting the Exclusion Criteria**

### **Adoption**

"Thank you for your interest in this study. Although the experience of adoption during deployment introduces important transitions for women and families, the experience of adoption during an intimate partners' deployment is beyond the scope of this study. But I thank you for wanting to share your story."

### **Pregnancy Loss**

"Your experience is significant. How are things with you today?"

"Have you had a chance to speak with someone about your experience? There are counseling services for military families that can offer support. I am going to give you the contact information for military operational trauma and support services. Although I will not be able to interview you for this study, I thank you for wanting to share your story."



**APPENDIX H Military Assistance Programming Contact Information**  
**CANADIAN FORCES MEMBER ASSISTANCE PROGRAM (CFMAP)- 1-800-268-7708**

<http://www.forces.gc.ca/health-sante/ps/map-pam/default-eng.asp>

**CIVILIAN EMPLOYEE ASSISTANCE PROGRAM (EAP) 613- 992-1740**

[http://hr.ottawa-hull.mil.ca/hrciv/dgcesp/ddwb/eap/en/home\\_e.asp](http://hr.ottawa-hull.mil.ca/hrciv/dgcesp/ddwb/eap/en/home_e.asp)

**THE CENTRE FOR CARE AND SUPPORT OF INJURED AND RETIRED SERVICE MEMBERS AND THEIR FAMILIES 1-800-883-6094**

(Mon-Fri 8:00 a.m to 17:00 p.m E.T)

<http://www.cmp-cpm.forces.gc.ca/cen/index-eng.asp>

**DND/CF OMBUDSMAN 1-888-828-3626**

(Mon-Fri 8:30 a.m to 16:30 p.m E.T)

<http://www.ombudsman.forces.gc.ca/>

**CANADIAN FORCES HEALTH INFORMATION LINE 1-877-633-3368**

(Operated on a 24 hour/day, 7 day/week)

<http://www.cmp-cpm.forces.gc.ca/pd/pi-ip/06-04-eng.asp>

**CANADIAN FORCES CHAPLAIN GENERAL 1-866-502-2203**

(Mon-Fri 8:00 a.m to 16:00 p.m E.T)

[http://hr.ottawa-hull.mil.ca/chapgen/engraph/home\\_e.asp](http://hr.ottawa-hull.mil.ca/chapgen/engraph/home_e.asp)

**OPERATIONAL TRAUMA AND STRESS SUPPORT CENTRES**

(Mon-Fri 8:00 a.m to 17:00 p.m E.T)

<http://www.forces.gc.ca/health-sante/ps/mh-sm/otssc-cstso/default-eng.asp>

Atlantic – Halifax 1-902-427-0550ext 5703

This center will provide assistance to serving members of the CF and their families managing stresses that arise from military operations, in particular, UN and NATO deployments abroad.

**CANADIAN/MILITARY FAMILY RESOURCE CENTRES (C/MFRC)**

Military Family Information Line 1-800-866-4546

Military Family Resource Centre- Halifax-24 hour Help line 1-888-753-8827

<http://www.familyforce.ca/splash.aspx>

The Military Family Information Line is a bilingual telephone service for families of Canadian military personnel serving in operations outside Canada. The toll-free, 24-hour service features detailed reports about Canadian Forces missions and operations from around the world and provides the kind of assurance and support family members depend on.

## **APPENDIX I Consent Form**

The Experience of Pregnancy and Deployment during an Intimate Partner's Deployment

Lead Researcher: Chris Patchell, Dalhousie School of Nursing, C.Patchell@dal.ca

Academic Supervisor: Dr. Erna Snelgrove-Clarke, Dalhousie School of Nursing,  
Erna.Snelgrove-Clarke@dal.ca

Thesis Committee: Dr. Erna Snelgrove-Clarke, PhD, RN, Dr. Deborah Tamlyn, PhD, RN,  
Dr. Glenda Carson, PhD, RN

### **Introduction**

We invite you to take part in a research study being conducted by Chris Patchell who is a Masters of Nursing student at the Dalhousie School of Nursing. Taking part in the research is up to you. Even if you do take part, you may leave the study at any time for any reason. The information below tells you what is involved in the research, what you will be asked to do and about any benefit, risk, inconvenience or discomfort that you might experience. Please ask as many questions as you like. If you have any questions later, please contact the lead researcher.

### **Purpose of the Study**

The purpose of this research study is to increase awareness among healthcare providers, community military support personnel, and military leadership of what the experience of pregnancy and childbirth is for women during an intimate partner's military deployment and of how resources and supports shape that experience. The insight that is gained will be applied to recommendations for optimal maternal-child healthcare for Canadian military families in the Maritimes and to recommendations for future research.

### **Ethics Approval**

This research project has been approved by the Dalhousie Health Sciences Research Ethics Board #2014-3330 and the Social Science Research Review Board, in accordance with DAOD 5062-0 and 5062-1. The SSRRB approval # is 1371/14F.

### **Participation**

Your participation is completely voluntary and you have a choice at every stage to end your participation without reprisal or career repercussions to you or your partner. The interview will be 60 minutes long and audio recorded. The researcher will keep your responses confidential and will protect your anonymity in any reports or publications. All participants in this study are women who are connected to the military and who have experienced an intimate partner's deployment (longer than 30 days) during their pregnancies or child-birthing experiences. The experience must have occurred within 2 to 5 years and participants must be able to describe their experiences in English. This study does not include the experience of adoption during deployment or the experience of pregnancy loss

during deployment. It is expected that a total of 6 to 10 women will share their stories. Following this interview, we will be asked if you would like to participate in a member checking process. The process involves a 5 minute phone call. I will read to you a summary of the findings, all participants' contributions, and ask you if I missed anything. Your participation in the member checking process is voluntary, completely your choice.

### **Risks and Benefits**

Due to the nature of the research, your participation in this study will require that you share personal experiences that may cause you some discomfort. Sensitive information, I am going to ask you about, includes: did you experience preterm delivery, do you have a history of preterm deliveries, and was your pregnancy planned? The risks associated with your participation are assessed as minimal risk. You have been provided with a list of contacts for your personal use should you experience some unease during or after the interview. You are not required to respond to any question that you are not comfortable with and, should you choose not to respond, there will be no negative consequences for you.

Some research indicates that talking about personal experiences can benefit well-being and promote a sense of being heard. This study aims to listen to your story and to create a supportive space for you.

### **Privacy and Confidentiality**

This interview requires voice recording. Voice recordings from this interview will be transcribed and will have any identifying information removed. Transcripts will be analyzed for themes to create datasets. All data will be given a code, rather than a name, to maintain confidentiality. Datasets will be stored in a locked cabinet at the Dalhousie School of Nursing for a period of seven years. No information that will directly identify you as a participant will be stored with the dataset.

The information that you provide to us will be kept private. In most cases, only the research team will have access to this information. In some cases, other authorized officials such as the Research Ethics Board, the Social Sciences Research Review Board or the Scholarly Integrity Officer at Dalhousie University may have access as well. Under the Access to Information Act, Canadian citizens are entitled to obtain copies of research reports and research information held in Federal government files. Similarly, under the Privacy Act, Canadian citizens are entitled to copies of all information concerning them that is held in Federal government files. Prior to releasing any requested information, the Directorate of Access to Information and Privacy (DAIP) screens the information to ensure that individual identities are not disclosed. This would be done in partnership with Dalhousie University and in line with all applicable privacy policies.

It is expected that the findings from this study will be shared in presentations and publications, including a thesis presentation at the Dalhousie School of Nursing, and presentations to healthcare providers, nursing students, and military personnel. Only information that has been summarized will be discussed in reports and presentations. We will be very careful to only talk about group results so that no one will be identified. You

will not be identified in any way in our reports. The people who work with your information have an obligation to keep all research information private. All your identifying information will be kept in a separate file, in a secure place. In our written and computerized records no names will be kept with the data. All electronic records will be kept secure in a password-protected, encrypted file on the researcher's personal computer or on a Dalhousie University secure server.

### **Questions/Concerns**

We are happy to talk with you about any questions or concerns you may have about your participation in this research study. Please contact Chris Patchell, [C.Patchell@dal.ca](mailto:C.Patchell@dal.ca) or Erna Snelgrove-Clarke, [Erna.Snelgrove-Clarke@dal.ca](mailto:Erna.Snelgrove-Clarke@dal.ca) with questions, comments, or concerns about the research study. We will also let you know if any new information comes up that could affect your decision to participate.

If you have any ethical concerns about your participation in this research, you may also contact the Director, Research Ethics, Dalhousie University at [ethics@dal.ca](mailto:ethics@dal.ca) or the Social Sciences Research Review Board at [SSRRB-CERSS@forces.gc.ca](mailto:SSRRB-CERSS@forces.gc.ca).

### **Reporting a Crime**

If you report a crime during this interview, it is assumed to be a request for assistance and the researcher will provide that assistance by initiating the reporting to police process.

### **What if You change Your Mind About Participating?**

Participation in this study is completely voluntary. However, if you decide you no longer wish to take *after* you have provided information, we will not be able to remove the information once it has been analyzed.

### **Acceptance**

Your signature on the signature page indicates that you understand the information provided to you about your participation in this research project, and agree to participate. In no way does this waive your legal rights nor release the researcher, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

### **Compensation**

There is no compensation for participating in this study.

Signature Page Researcher's Copy  
The Experience of Pregnancy and Childbirth during an Intimate Partner's Military  
Deployment

Principle Investigator: Christian Patchell, BSc, BScN, RN; Masters of Nursing student  
Dalhousie University, Halifax

**Participant's Acceptance:**

I have read the explanation about this study. I have been given the opportunity to discuss it and my questions have been answered. I agree to take part in this study. I realize that my participation is voluntary and that I am free to leave the study at any time.

I agree that the researcher may audio-record the interview with me: Yes No

**Participant Name**

**Date:**

**Researcher's Name:**

**Date:**

I would like to participate in the member checking process: Yes No

I prefer to be contacted by email, phone, other.

I would like to receive a thank you note: Yes No

I would like to receive a summary of the findings: Yes No

I consent to the researcher quoting my words: Yes No

**Participant Name**

**Date:**

**Researcher's Name:**

**Date:**

Signature Page Participant's Copy  
The Experience of Pregnancy and Childbirth during an Intimate Partner's  
Military Deployment

Principle Investigator: Christian Patchell, BSc, BScN, RN; Masters of Nursing student  
Dalhousie University, Halifax

**Participant's Acceptance:**

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I agree that the researcher may audio-record the interview with me: Yes No

**Participant Name**

**Date:**

**Researcher's Name:**

**Date:**

I would like to participate in the member checking process: Yes No

I prefer to be contacted by email, phone, other.

I would like to receive a thank you note: Yes No

I would like to receive a summary of the findings: Yes No

I consent to the researcher quoting my words: Yes No

**Participant Name**

**Date:**

**Researcher's Name:**

**Date:**

### **APPENDIX J Personal and Demographic Information**

Age: (20s, 30s, 40s)

Description of relationship with partner:

(co-habiting, married, common law status; same sex or heterosexual);

Description of military connectedness:

(commissioned, non-commissioned, or connected to the military through your partner);

Branch of military: Army, Navy, Air Force, other;

Have you had previous experiences with deployment: yes/ no;

    Previous experience being deployed;

    Previously experience with partner being deployed.

Years with intimate partner prior to the experience of pregnancy and deployment:

Years since your experience of pregnancy and deployment:

Description of timing and duration of deployment in relation to the pregnancy or childbirth:

Who was present for the birth?

Was it a multiple birth (twins, triplet, etc)?

Did you deliver vaginally, assisted, or by caesarean section?

Gestational age at birth? (term, preterm, postdates)

Was your baby admitted to the NICU?

Had you had previous experiences with pregnancy or pregnancy and childbirth: (yes or no);

Number pregnancies:

Number of births:

Number of Children:

History of preterm delivery:

Has your partner deployed since the experience of pregnancy and deployment?

Have you become pregnant since the experience of pregnancy and deployment?

In your experience of pregnancy during your partner's deployment, was your pregnancy planned?

## APPENDIX K Moderator's Guide

### MODERATOR'S GUIDE

#### The Experience of Pregnancy and Childbirth during an Intimate Partner's Deployment

Total participant time required: 60 minutes

The purpose of the study is:

(a) to increase awareness among healthcare providers, community military support personnel, and military leadership of what the experience of pregnancy and childbirth is for women during an intimate partner's military deployment and how meaningful resources and supports shape that experience.

(b) the insight that is gained will be applied to recommendations for optimal maternal-child healthcare for Canadian military families in the Maritimes and to recommendations for future research.

#### 1. Introduction & Consent (8 minutes)

- Before the group/interview begins, conduct the informed consent process.
- Welcome participant(s) and introduce myself;  
*Thank you for your interest in this study. The purpose of this study is to listen to women's stories and to increase awareness among healthcare providers, military support personnel, and military leadership of what the experience of pregnancy and childbirth is for women during their partners' overseas deployment. I am a Registered Nurse and a graduate student at Dalhousie University. My interest in this topic is both personal and professional because I experienced a pregnancy during my partner's deployment in 2001. Your participation is completely voluntary. You can opt out of any question, you can ask me any question, and you can stop the interview at any time.*
- Explain the general purpose of the discussion and why/how the participants were chosen;
- Explain the presence and purpose of recording equipment;
- Outline general interview guidelines such as participants can end the session at any time they want or exercise their right to not answer any question(s);
- Address the issue of privacy and confidentiality;
- Inform the participant that information discussed is going to be analyzed as a whole and that participants' names will/will not be used in any analysis of the discussion;
- Provide contact information for free counselling services.

#### 2. Demographic Information (7 minutes)

#### 3. Interview Guidelines & Questions (40 minutes)

*This interview will consist of two primary questions. During the interview I may ask you additional questions to help me to understand more about your answer. You may choose not to answer, that is your right. You are also welcome to ask me any questions about this process.*

*Your answer, the conversation we have, and any information identifying you as a*



*participant in this study will be kept confidential. As discussed, I will be recording our conversation.*

*Do you have any questions for me, before we begin?*

**4. Closing: (5 minutes)**

- thank the participant;
- ask if participant would like to participate in the member checking process, to receive a thank you note, receive a summary of the findings, consent to the researcher using their words (quotes);
- reiterate privacy and confidentiality considerations.

**Please tell me about your experience of pregnancy and childbirth during your intimate partner's military deployment?**

Participants will be encouraged to share their experience. To prompt expansion of the discussion, participants will be encouraged to recall sights, sounds, feelings, things said, seen, and heard.

Clarifying prompts will include: was your partner present or absent at this time? Please tell me more about what that means? Please tell me more about \_\_\_\_\_. Please tell me about what it was like when (ie. your partner came home)?

**You mentioned \_\_\_\_\_ as providing support. Would you tell me more about how this (support, resource, person, service, device) shaped your experience?**

To identifying the meaning of supports and resources, including telecommunications, services, programming, healthcare, and prenatal care, the researcher will prompt expansion of the description of each as it is introduced by the participant. Prompts include: what did this/that mean to you? How was it supportive to you? Is there anything else you would like to share with me about your experience?

## APPENDIX L Dalhousie Health Sciences Research Ethics Board Approval

### REB # 2014-3330 Letter of Approval

Catherine.Connors@dal.ca

Thu 17/07/2014 15:44

Inbox

To: Christian Patchell <C.Patchell@Dal.Ca>;

Cc: Erna Snelgrove-Clarke <Erna.Snelgrove-Clarke@Dal.Ca>; Catherine Connors <Catherine.Connors@Dal.Ca>;



Health Sciences Research Ethics Board  
Letter of Approval

July 17, 2014

Ms Christian Patchell  
Health Professions\Nursing

Dear Christian,

**REB #:** 2014-3330

**Project Title:** The Experience of Pregnancy and Childbirth During an Intimate Partner's Military Deployment

**Effective Date:** July 17, 2014

**Expiry Date:** July 17, 2015

The Health Sciences Research Ethics Board has reviewed your application for research involving humans and found the proposed research to be in accordance with the Tri-Council Policy Statement on *Ethical Conduct for Research Involving Humans*. This approval will be in effect for 12 months as indicated above. This approval is subject to the conditions listed below which constitute your on-going responsibilities with respect to the ethical conduct of this research.

Dr. Brenda Beagan, Chair

Post REB Approval: On-going Responsibilities of Researchers

After receiving ethical approval for the conduct of research involving humans, there are several ongoing responsibilities that researchers must meet to remain in compliance with University and Tri-Council policies.

<https://outlook.office365.com/owa/projection.aspx>

f 3

## APPENDIX M Social Sciences Research Review Board Approval

**From:** <SSRRB-CERSS@forces.gc.ca><SSRRB-CERSS@forces.gc.ca>

**Sent:** 29 August 2014 1:41

**To:** Christian Patchell

**Subject:** RE: SSRRB 1371/14F

Hi Christian,

Thank you for addressing the Board's observations. There are no outstanding/pending SSRRB concerns.

Regards,

**Mehreen Anjum**  
**(613) 992-0244**

## APPENDIX N Post Approval Amendments

Christian Patchell <c.patchell@dal.ca>  
Fw: REB # 2014-3330 Amendment Approval  
15 September, 2014 7:02 PM

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**From:** sharon.gomes@dal.ca <sharon.gomes@dal.ca>  
**Sent:** 15 September 2014 14:18  
**To:** Christian Patchell  
**Cc:** Erna Snelgrove-Clarke; Sharon Gomes  
**Subject:** REB # 2014-3330 Amendment Approval



### Health Sciences Research Ethics Board Amendment Approval

September 15, 2014

Ms Christian Patchell  
Health Professions\Nursing

Dear Christian,

**REB #:** 2014-3330  
**Project Title:** The Experience of Pregnancy and Childbirth During an Intimate Partner's Military Deployment

The Health Sciences Research Ethics Board has reviewed your amendment request dated August 21, 2014 and has approved this amendment request effective today, September 15, 2014.

Sincerely,

Dr. Brenda Beagan, Chair