THE UNIVERSITY OF CALGARY

# Women's Psychosocial Journey of Infertility: Evolution or Resolution?

by

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE

DEGREE OF MASTERS OF SCIENCE

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

CALGARY, ALBERTA

JUNE, 1995

THE UNIVERSITY OF CALGARY

FACULTY OF GRADUATE STUDIES

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## ABSTRACT

The purpose of this study was to characterize the psychological experience of women who discover that they are infertile and negotiate their way through the treatment process to an endpoint or resolution. The broad research question: "What has the experience of infertility been like for you?", facilitated the development of a theory which represented participants' cognitive, social, and emotional responses to infertility as well as their coping strategies. Grounded theory, a qualitative research method, was employed for theory development. Five participants who had experienced infertility and had not yet achieved a live-birth pregnancy, took part in unstructured interviews.

Evolution was identified as the primary process generated from the data. The infertility journey represented a series of adaptations to changing information women encountered as they proceeded through various treatments and reproductive experiences. These adaptations were accompanied by emotional responses and self directed coping strategies.

The theory is comprised of seven primary stages that represent expectations around mothering and the adaptation that occurs in response to changing information about one's fertility status. Psychological processes affiliated with each stage are identified. An overview of implications for counsellors working in the area of new reproductive technologies is included.

## ACKNOWLEDGEMENTS

This thesis is dedicated to Geraldine, Amanda, Jane, Maryanne, Janet, and all women who will at some point in their lives, negotiate the journey of infertility.

I would like to express my appreciation to my supervisor and mentor, Dr. Sharon Robertson who supported and guided me through this research process. I am grateful to Dr. K. Cairns and Dr. M. Valentich for participating as members of my thesis committee, and encouraging me to continue on with my research efforts.

Without the love and support of my husband, Dr. Tony Pattinson, I would not have been able to dedicate the energy and time to complete my M.Sc. or finish this thesis work. It is his passion and dedication to women's reproductive health that inspires me to continue my research and counselling efforts in the specialty of infertility.

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# CHAPTER ONE

## INFERTILITY DEFINED

### Introduction

Parenthood is a normal and socially desired aspect of adult life (Kikendall, 1994). Although family patterns are changing, most heterosexual couples have at least one child, and for most of those couples, planning when, rather than how to conceive is the norm (Cook, 1987).

The medical system considers couples to be infertile when they have been unable to achieve pregnancy after a year of regular sexual relations, or have been unable to carry pregnancy to live birth (Menning, 1980). It is estimated that 8 to 15% of couples experience difficulties with infertility (Baird, 1993). While about half of these couples can be treated successfully, the infertility experience is known to place a significant emotional burden on the couple, especially the woman.

While most fertility research focuses on the physiological parameters, the experience of reproductive failure impacts the individual's physical, psychological, and social experience, requiring the redefinition of personal identities and goals (McDaniel, 1992). Reproductive failure often creates cognitive dissonance by interfering with a primary life goal, creates overwhelming stress, and tests the coping mechanisms and resources of the couple (Forrest, 1992). However, no published research has explored how individuals respond to or cope with their reproductive failures from the time of diagnosis to the eventual abandonment of invasive efforts to conceive. Such information would be of great practical use to counsellors in the area in order to normalize the experience and guide clients through this tortuous journey.

Despite the fact that women are known to be much more distressed and threatened by infertility, there are few gender specific studies in the area. While social attitudes are more tolerant of female career development and child-free lifestyles, most of Western society views the conception, bearing, and raising of children as the primary role of a married woman (Afek, 1990). Failure to achieve this life goal leaves women at particular risk for significant distress, feelings of failure, and loss of control (McEwan, 1987).

Traditionally, society and medicine have supported the idea that women were responsible for childbearing and by default, also for infertility. Until recently, infertility and miscarriage were often attributed to a woman's emotional disturbance or stress. Historically, women were encouraged by their physicians to "relax", or relieve themselves of the stress of working outside the home. There was no evidence to support this, and little attention was paid to male or female physiological factors that might have been responsible for the reproductive failure (Kikendall, 1994).

With the explosion of infertility investigations and treatments in the 1980's, the focus shifted away from the woman's distress, to the discovery and bypass of physical impediments to reproduction. A massive research effort addressed the physiologic aspects of fertility and several scientific journals emerged to accommodate findings.

The first effort to identify and support the psychological experience of infertile couples occurred in the early 1970's, when Barbara Eck Menning established a support group to assist couples in working through their common ordeal (Brown, 1994). She suggested that the experience of reproductive failure was not unlike the experience of dying and adopted the Kubler-Ross (1969) model to sensitize health care providers and

patients to the normality of grief associated with the loss of fertility. At the time that Menning suggested the griefwork model, infertility was a crisis of fairly short duration with few viable options other than adoption or a short course of medication to stimulate a woman's ovaries. Although available in some centres, in vitro fertilization was highly experimental, expensive, and rarely successful. Psychological resolution was seen to be desirable and achievable. Indeed, the American national support group for this population is named "Resolve".

However, with the introduction of new and more complex reproductive technologies, conception has the potential of becoming a life-long pursuit, as the medical endpoint effectively ceases to exist. Counsellors and health care professionals working with infertile clients require a model specific to this population, keeping in mind the new medical options they face. Decision making and closure around treatment issues are important so that individuals experiencing infertility do not spend their entire lives trying to create another life.

## Statement of the Problem

Despite the physiological focus of infertility research and treatment, psychologists are gradually becoming more involved in the study of reproductive failure. While the Menning (1980) griefwork model continues to be most frequently cited, transitional (Koropatnick, 1993; Matthews, 1986), biopsychosocial (Cook, 1987), gender specific (Abbey, 1991), and cognitive (Litt, 1992; Mendola, 1990; Stanton, 1991) studies of the infertility experience are becoming more prominent in the research literature. While each approach addresses a specific portion of the overall infertility experience, most do not confront the overall experience.

It is also possible that infertility may be created by a complex mind-body-social interaction that is not yet understood. While most psychological research now suggests that infertility causes stress rather than the reverse hypothesis (Mendola, 1990), there is some recent evidence to suggest that lack of social support and psychosocial distress may also contribute to functional abnormalities of the hypothalamic-pituitary-ovarian axis, resulting in reduced fertility (Barneu, 1991; Wasser, 1993). In response to these findings, some clinicians are once again examining the effect of a woman's psychological state on her ability to conceive (Curole, 1990). If this is the case, there has never been a better time for a long-term comprehensive psychological model describing women's experience and interaction with the diagnostic and treatment processes for infertility.

## Specific Aims

The aim of this study is to develop a new theoretical model that identifies and describes the gender specific psychological experience of women pursuing medical intervention for long term infertility. Information related to the context and mediation of women's experience of infertility is explored by asking the open question: "What has the experience of infertility been like for you?". It is the hope that this model will be able to illuminate the longitudinal psychosocial processes involved in the adjustment to infertility and non-biological parenthood.

Women have been chosen for this study because of evidence that they show higher distress and experience the crisis of infertility differently from their partners (Wright, 1991). They are also most often targeted for medical treatment, regardless of the identified etiology (Newton, 1993). On a practical level, women may also be

more accessible for research because of their frequent involvement in medical treatments and support group activities.

The aim of the proposed research is to provide a model that will illuminate the psychological process of women experiencing long term infertility and treatment. Individual aspects of the emotional journey of infertility have been described by researchers and counsellors and these hypotheses may be supported by the participants in the present study. However, a pattern defining the duration, sequence, triggering, and mediation of the psychological experience over time has yet to be described and this may ultimately assist in the identification of beneficial counselling strategies and future research directions.

# CHAPTER TWO

# LITERATURE REVIEW

## Introduction

The research question "What has the experience of infertility been like for you?", necessitates a qualitative research method in order to support the depth and richness of data that an answer to such a question offers. As the goal of this study is to develop a theory of a process over time, grounded theory methodology has been chosen to guide this research.

The pattern of the literature review reflects the pursuit of discovery inherent in the philosophy of this method (Glaser, Strauss, 1967). While studies aimed at verification initiate the literature review to design the research, examine previous methods and results, and reduce concepts into variables to be tested, grounded theory methodology promotes scepticism when assessing the validity and reliability of current literature. This is especially important in the early phases of research so as not to bias the researcher into accepting and searching for previously reported concepts (Chenitz, 1986).

Literature reviews are performed at three phases of the research process: before the collection of data, during analysis of the data, and following data analysis. The initial literature review qualifies the proposed research by identifying the scope, range, intent, and type of research available in the area, and by establishing its purpose, background, and significance (Chenitz, 1986). The direction of early data collection may be influenced and supported by what is suggested by current literature, but over reliance on previous work may entangle the researcher in verification rather

than discovery of emerging patterns (May, 1986).

The second review allows a comparison between the data available in the literature and the concepts emerging from the research process. Previously published work may enrich and verify emerging concepts, and inspire new directions for inquiry and discovery. A final review at the end of the study allows for the new theory to be placed within the context of other research (Chenitz, 1986).

Therefore, the following literature review is provided for the purpose of informing the reader of the researcher's theoretical sensitivity to the biopsychosocial issues of infertility at the point of initiating the research. A discussion of the predominant (Menning, 1980) theory of infertility griefwork, an overview of reproductive technologies, feminist concerns with infertility and treatment issues, and theories of transition in adult development are presented.

## Griefwork

The most commonly cited description of the emotional experience of infertility relates to the concept of grieving the loss of fertility. Barbara Eck Menning (1980), pioneer of the psychological literature related to infertility, describes the experience and outlines a syndrome of feelings that people work through when confronted with a barrier to biological parenthood. This process is named "griefwork" and is viewed by many counsellors working in the field as essential to their client's healthy functioning and outcome related to the experience of infertility.

Menning (1980) asserts that failure to grieve over infertility is the most common problem that counsellors will encounter when working with this population. She describes the process of grieving infertility as running the predictable course of shock

and surprise, denial, anger, isolation, guilt, depression, and resolution and sees the counsellor's role as a facilitator of the grieving process.

While the griefwork model is commonly used by counsellors in the clinical setting, no qualitative study with women experiencing infertility has been conducted to confirm that they progress through clearly defined stages in a prescribed order with resolution being ultimately achieved. Individual variability within this model is not recognized and factors that influence the intensity of emotional reaction to infertility have not been investigated (Stanton, 1991).

Menning's stage model of grieving is generalized from the Kubler-Ross (1969) model which describes the process of grieving within the context of the death and dying experience. In his work with HIV infected clients, Schwartberg (1992) notes that grieving stage model theories do not accommodate individual differences in duration, intensity, and symptomatology of grief, nor do they fit with the experience of multiple and overlapping losses.

Women who experience infertility also endure many repeat and overlapping losses. For example, the onset of menstruation each month represents a loss of effort, expectation, opportunity, and hope. Losses in adulthood that have clinical importance in the development of depression include: loss of relationship, health, status, self-esteem, self-confidence, security, hope of fulfilling an important fantasy, or something/someone of great symbolic value (Mahlstedt, 1985). Mahlstedt also goes on to suggest that while any of these singular losses may precipitate a depressive episode, the experience of infertility involves them all.

Losses associated with infertility are often "invisible" to the couple's support

system and society in general. There is no ceremony associated with such losses and support is frequently non-existent (Mahlstedt, 1985). Being a childless couple is not overwhelmingly accepted in present social environments and remaining childless because of infertility implies that a woman has not pursued enough of or the right type of treatment. Couples may not even admit their situation to potential sources of support for fear of being the object of pity or scorn (Afek, 1990).

Long term treatment for infertility may extend the grieving process into a chronic state. In examining perceptions of parenting after infertility, Hammer Burns (1990) notes patterns of long-term bereavement related to the loss of familial/relationship connections during the infertility experience. She reports that chronic grief inhibits the growth of close personal ties and precipitates prolonged pathology including depression, psychosis, exaggerated anger, and denial.

There are few indicators in the grieving literature that guide the individual from the emotional experience of grief to psychological closure of their infertility experience. This creates ambivalence for counsellors and their clients who are trying to negotiate this journey. While coping strategies such as improving marital communication and self nurturance are suggested (Mahlstedt, 1985), the path to ultimate resolution remains indistinct.

## The Impact of New Reproductive Technologies

Reproductive technology has developed significantly since Menning first introduced her model of grieving. Where resolution of infertility was seen as essential so that a couple could make the transition to considering options of adoption or childlessness, science and medicine now provide a considerable array of technological

interventions to bypass the failed reproductive system. Just as a couple reaches the end of the list of possible treatments, embryo donation, donor gametes, surrogacy, embryo cloning, and micromanipulation open the door to new and almost limitless possibilities for further intervention.

Technologies such as in vitro fertilization and gamete donation also provide opportunities to create pregnancy without sexual intercourse with one's partner, or without a genetic link to one's offspring. This results in ambiguity concerning family ties and biological attachment of each parent to the potential child (Hammer-Burns, 1987). However, as new medical options develop, they are pursued by individuals experiencing infertility, at often considerable financial expense and over extended periods of time.

At a joint meeting of the American and Canadian Fertility Societies (Sauer, 1993), it was announced by an infertility specialist that his centre would accept women up to the age of sixty-two years for donor egg treatment. Where women once had the certainty of menopause to enforce closure and resolution of their infertility experience, science has reset the biological clock.

While infertility might have represented a singular loss prior to the introduction of new reproductive technologies, it is feasible that a couple may experience multiple biological losses over the course of treatment: the loss of embryos following an unsuccessful in vitro fertilization cycle, the loss of a potential pregnancy following drug therapy, the death of frozen embryos in an unsuccessful laboratory thaw. These 'losses' may occur more than once during each menstrual cycle intensifying the possibility that a new crisis will occur long before the previous one has been resolved.

Infertile couples are often juggling the emotional demands of preparing for a new cycle of treatment, trying to maintain optimism for the future, and grieving their previous loss.

Potential psychological losses add to the impact of the crisis and may include: loss of control, esteem, privacy, worthiness, self, relationships, emotional support, and the frequently cited "death of a dream" (Afek, 1990). This emotional and physical component of infertility is often described by patients as the "roller-coaster ride".

Individuals live their lives in menstrual cycles, hoping with each ovulation and grieving every twenty-eight days with the onset of menstruation. The essence of time becomes a focus for women, especially as they approach menopause and time "runs out" on the opportunity to conceive. The observation of other people's babies growing into children and becoming adolescents leaves the infertile person feeling left behind and stuck in their development (Raphael-Leff, 1992). Because infertility creates feelings of ambiguity and being out of control, some individuals may try to gain control through obsessive behaviours such as bulimia or alcoholism. Sexual acting out behaviours are more common among the infertile and are most often an attempt to recapture the sense of enjoying sex for its own sake rather than for procreative purposes (Hammer Burns, 1987).

Prolonged treatment of infertility in itself seems to be causing new syndromes of psychological disturbance in its consumers including chronic anxiety, lowered self esteem, hypochondria, derealization, depersonalization, paranoia, psychosomatic reactions, and defensive manoeuvres such as denial, phobia, obsessive compulsive disorders, rumination, magical thinking, sexual problems, and marital distress (Berg, 1990; Raphael-Leff, 1992).

Perhaps the perception of infertility has evolved from accepting that being infertile eliminates the chance of biological parenthood, to the implication that "infertility" now requires medical intervention to achieve biological parenthood. The need to "resolve" childlessness can be procrastinated until the last treatment modality has been exhausted, yet science reassures us that potential intervention is becoming limitless. It is feasible that an infertile woman could spend the better part of her life attempting to conceive. Psychological resolution of childlessness may now be more critical, yet ironically less attainable than ever before.

## Feminism and the New Reproductive Technologies

Writings about infertility and surrogacy date back to biblical times. The Old Testament tells of Sarah's inability to conceive and the "surrogacy" arrangement made between Abraham and Sarah's handmaid. A woman's purpose was intimately linked with her ability to produce a child for her man. A woman's fertility was equal to her worth in the same way that the land was valuable only if it produced crops (Afek, 1990).

Most of mainstream Western society continues to view the bearing and raising of children as the primary role of married women (Afek, 1990). However, Bunkle (1988) asserts that childbearing is the reason women have been exploited and marginalized in every culture. Bunkle highlights the divisions in feminist philosophies by explaining that some view reproductive technologies as an opportunity for women to control their lives and reproductive decisions, while others claim that the medical (male) drive to control reproduction medicalizes and further oppresses women in the childbearing process.

The primary issue of concern for feminists revolves around perceived

imbalances in control and power over a woman's bodily functions and opportunities for informed choices. Historically, women's encounters with the medical profession have been fraught with sexism, paternalism, and capitalism. Monique Begin (1989), former Minister of National Health and Welfare, claims that medicine is practiced within an extremely authoritarian, hierarchical, impersonal, and distant organization with a vertical power structure: the doctor at the top, the nurse as the obedient assistant in the middle, and the patient as a passive powerless creature at the bottom. To surrender control of reproductive functions to a profession of this reputation leaves women in a very vulnerable position physically and emotionally.

Stanworth (1987) views the scientific breakthroughs of reproductive technologies as directly responsible for the deconstruction of motherhood. Through the manipulation of eggs and embryos scientists will determine the sort of children who are born. Medicine begins to control motherhood itself through the removal of eggs from some women for donation to others. Motherhood as a unified biological process has been effectively deconstructed: in place of mother, there are ovarian mothers who supply eggs, uterine mothers who give birth to children, and social mothers who raise the children. Through the eventual development of artificial wombs, the potential arises to make biological motherhood redundant.

Surrogacy has recently become a contentious feminist issue. Much of the justification for feminist concerns has been surrogacy's new link with IVF, and the possibilities that assisted reproduction presents. Donor gametes combined with surrogacy now blur the lines of responsibility and parental rights.

Pre-conception (surrogacy) contracts are now a reality in Canada. A 1988 study

by the Law Reform Commission found more than 100 such contracts in Canada, but estimated that the actual total was much higher because of the existence of informal arrangements among friends or relatives. The technique of total surrogacy (a pregnancy that is genetically unrelated to the gestational carrier) has raised a question unprecedented in human history: Who is a mother? (Hopkins, 1990).

In her feminist analysis, Zipper (1987) asserts that the surrogate mother is a victim of commercialization and exploitation. Surrogacy and IVF creates business opportunities from childbearing and dehumanizes a process that has historically been respected and associated with intimacy. As total surrogacy becomes a more acceptable option for infertile couples, feminists are concerned that it will be the poor women that become a class of "breeders" to provide service for those who are unable or unwilling to bear children.

Ambivalence in feminist groups arises when considering the freedom that donor sperm services allow women who do not have, or do not desire a male partner. However, gamete donation programs are provided primarily by medical centres that have the capacity for screening donors for sexually transmitted diseases and genetic disorders. The Royal Commission on New Reproductive Technologies addressed this issue in recommending that the medicalization of this process be reassessed. At present, physicians maintain control over the whole process including the selection and matching of donors and recipients. Participants have no right of access to records if they are kept and the entire process is kept secret. Within this medical model, an infertile woman has no control, and a fertile woman becomes a patient (Achilles, 1992).

Research and experimentation in the area of reproductive health has also been

a concern of women's groups. History lessons involving diethylstilbestrol (DES), thalidomide, and radiation justify concerns and suspicions about the safety of technologies and chemical agents used in assisted reproduction. Recent studies suggest that fertility drugs may increase the risk of ovarian cancer, although the research in this area is not conclusive (Whittemore, 1992).

In a brief to the Royal Commission on New Reproductive Technologies, the Canadian Nurses Association (1990) recommended that all new reproductive technologies and associated therapeutic agents be thoroughly investigated before they are approved and made available beyond the research setting. Feminist writers take this a step further and recommend that new ways of intervening in reproduction be evaluated in terms of their usefulness and motives. Bunkel (1988) worries that scientific experimentation is often motivated by competition rather than for the good of womankind.

Not all research is motivated by power or financial gain, but rather is prompted by women who believe that motherhood is an important component of their lives. The intensity of this quest for pregnancy and motherhood, and the pressure that it creates motivates many practitioners to seek new and better ways to meet patients' needs (Pattinson, 1993). However, Rose (1987) takes issue with the longings of those who are infertile to have children. She asserts that societal and male pressure to fulfil the mothering role is at the core of women's pursuits.

The legitimacy of a woman's wishes to have a child are also evaluated in society according to her marital status. Single women are not supposed to have children. Married women who explicitly state that they have no wish to reproduce are condemned

for not being real women. Women who want children but have problems getting pregnant are judged to be too fanatical (Zipper, 1987). It's a no win situation.

When can a woman decide that she has had enough treatment, enough ultrasounds, medications, temperature charts? Is she able to ignore the newest baby-making technology on the horizon? How does that fit with a woman's image of her purpose in life? What happens to the esteem of those women who become failures of reproductive technology? Feminists raise valid concerns that new choices are quickly aligning with an old obligation (Beck-Gernsheim, 1989).

The motto of the Sheba Hospital IVF clinic in Israel combines promise and threat: "You're not a failure until you stop trying" (Beck-Gernsheim, 1989). The motives of such a philosophy require careful scrutiny when considering the implication that the acceptance of biological childlessness and the decision to discontinue reproductive intervention creates a new failure for the infertile woman.

## The Transition to Non-Biological Parenthood

Transitional models of coping with unanticipated life events demonstrate how individuals move from being enveloped and defined by the transition to eventually integrating the transition into their lives (Fassinger, 1992). The Schlossberg (1989) adaptation model identifies variables that impact the ease with which individuals integrate transitions into their lives. These variables are classified into three distinct groups: transition characteristics such as timing, source, and duration; individual characteristics such as ego strength and coping; and environmental characteristics such as support systems and options.

Matthews (1986) provides a theoretical framework for understanding the

developmental reconstruction and transformation made by involuntarily childless couples who are unable to make their anticipated transition to parenthood. The reconstruction of reality and identity takes place for the married couple when they are unable to accomplish the role of procreation. This relationship between identity transformation and role expectations includes both the comparison with others as either alike or different from oneself followed by the identification with those regarded as similar to oneself.

This adaptation process is gradual for most infertile couples and Matthews (1986) asserts that the long treatment process allows the time for readjustment of identifications. It is also maintained that the medical professionals involved in the treatment of infertility serve as agents responsible for informing the couple as to their transitional stage and their likely destination. Medical personnel also provide an outlet for frustration and control as infertile clients can blame the fertility investigations or physicians for their failure to conceive.

Koropatnick (1993) borrowed Schlossberg's (1989) theory, and Matthews' (1986) framework, to study the degree to which infertile individuals display symptoms of distress, and whether differences in the occurrence and severity of these symptoms can be predicted by characteristics specific to the transition and/or to the individual. The results of her study suggests that the passage of time and the perceived end to the pursuit of biological parenthood influences the individual's adaptation to the infertility transition. Individuals who perceived their infertility as final reported fewer interpersonal distress symptoms and appeared to adapt more successfully.

Individual characteristics that facilitated adjustment to non-biological parenthood

were reported as high self-esteem, internal locus of control, higher socioeconomic status, and maturity (Koropatnick, 1993). Low self esteem and poorly defined self-image correlated with psychological distress for infertile individuals. Individuals who define themselves negatively may be unable to identify and mobilize their strengths and resources in the face of infertility. The impact of environmental characteristics related to support systems was not identified.

While most literature dealing with the social and psychological dimensions of infertility is impressionistic (Matthews, 1986), transitional models of development may provide a framework for investigation of the infertility experience. Koropatnick (1993) begins this process in her identification of individual and transition characteristics by using the Revised Symptom Checklist (SCL-90-R). However, a qualitative approach to examining the transitional process over time may expand on this perspective and identify additional characteristics of transition and coping specific to the infertile population. As the quest for motherhood is supported within the present social context, the impact of environmental factors also requires further elucidation.

## Summary

The most frequently cited description of the emotional experience of infertility is that of grieving. The "griefwork" model (Menning, 1980) suggests that individuals progress through stages of shock, surprise, denial, anger, isolation, guilt, depression and resolution when confronted with infertility. While grieving is generally recognized by counsellors as a component of the infertility experience, reproductive technologies have advanced, providing long term options for intervention as well as multiple and repeat exposures to failure and disappointment. How individuals cope with repeated

losses and the chronicity of their reproductive failure has not been examined extensively. Our knowledge of the psychological experience and counselling strategies specific to infertility have not kept up with the technological advances.

Feminist writers raise concerns about the exploitation of women within the medical system when they undergo treatment for infertility. Women, socialized and biologically equipped to seek motherhood, find themselves in a vulnerable position when trusting medical personnel to take control of their reproductive health and provide them with information to make informed choices. Stanworth (1987) also suggests that the technologies have "deconstructed" motherhood blurring the lines of parental connections, rights and responsibilities.

Matthews (1986) suggests that the transition to non-biological parenthood may represent a reconstruction of reality and identity through social comparison with others. This process is gradual, long term, and accompanies the often extensive physical assessment and treatment. Koropatnick (1993) adds that the passage of time and an perceived endpoint to the pursuit of biological parenthood influences adaptation to infertility. High self-esteem, internal locus of control, higher socioeconomic status and maturity is reported to facilitate adjustment to reproductive failure.

While various segments of the emotional and cognitive aspects of infertility have been studied and discussed, there is not yet a comprehensive theory available in the literature that describes women's psychological experience with, and response to infertility over years of treatment and reproductive failure. It is the "passage of time" or the journey from grief to resolution that this research will examine so that women and their health care providers may come to understand how time heals.

# CHAPTER THREE

# THE METHOD OF INQUIRY

## Introduction to Grounded Theory

The purpose of this chapter is to provide an introduction to grounded theory, a rationale for its use in this study, a description of the methodology and the application of grounded theory in this research.

Grounded theory is a systematic research method employed to collect and analyze qualitative data for the purpose of developing a theory that explains a social or psychological phenomena (Chenitz & Swanson, 1986). The function of grounded theory is to illuminate the lived experience of the participants. This descriptive method encourages the development of a broad theoretical foundation of a phenomena especially in research areas that have not been thoroughly studied and it is often considered the precursor for further investigation.

According to Glaser and Strauss (1967), grounded theory utilizes an intricate problem solving process which involves the analysis and organization of data into a structure that illuminates the situation under study.

The intention of this approach is to develop hypotheses about relationships between reported concepts through constant comparison of the data and literature. Description is used to illustrate or provide support to concepts. Data analysis evolves over time, moving through phases and optimally resulting in "grounded theory" (Corbin, 1986).

## Rationale for Using Grounded Theory

A grounded theory methodology has been chosen to study women's experiences

of infertility for three reasons.

Firstly, the value orientations of this author include constructivism: that is, understanding experiences from the participant's point of view. The current prescribed norms for grieving infertility (Menning, 1980) are generalized from a mixed gender population that is experiencing grief related to death and dying. "Fitting" the experience of infertile women into a stage theory developed for another population does not give voice to their specific realities and viewpoints. Grounded theory stresses that the meaning of experiences must be understood from the participant's perspective (Chenitz & Swanson, 1986).

Secondly, the belief in the importance of adding women's voice and experiences to literature largely dominated by the medical model, guides this researcher to a qualitative method of theory development. The intent is to maintain the authenticity of their subjective experience, while providing clinicians with theoretical information about the process. Belenky (1986) noted that the traditional ways that we have developed theory have neglected women's voice. As women's identities are often invested in successful childbearing and parenting, recognition of their experiences with reproductive failure seems most appropriate.

Finally, when the specific area of study has not been widely researched, grounded theory provides an appropriate methodological choice (Chenitz & Swanson, 1986). Research examining the broad and long-term psychological processes of women experiencing infertility is limited. Therefore, grounded theory offers an appropriate route for this exploration.

## Grounded Theory Methodology

Grounded theory methodology which employs a process of constant comparison, utilizes a specific approach to sampling, data analysis, and theoretical sensitivity.

### Theoretical Sampling

Theoretical sampling is a strategy of moving from one participant to the next while developing categories and building theory (Corbin, 1986). Sampling decisions are not determined prior to the research process but rather are guided by the emergence of grounded theory (Glaser & Strauss, 1967). Theoretical sampling requires the researcher to simultaneously collect, code, and analyze the data. During the collection of data, the researcher is encouraged to remain unbiased and open to emerging information, putting aside any preconceived concepts. Analysis of the data begins at the onset of collection by comparing similarities and differences between incidents and categories in the findings. The researcher develops hypothetical connections in the data and then substantiates these by reviewing the data, field notes, and literature or by consulting with the participants. The emerging hypotheses guide further sampling directions (Chenitz & Swanson, 1986).

### Data Organization and Analysis

Glaser (1978) stresses the importance of memo keeping during interviews in order to highlight commonalities, emerging core themes and areas that require further examination.

Once data have been obtained, they are broken down and coded into categories. Glaser and Strauss (1967) distinguish between two types of coding that must take place simultaneously: (a) substantive coding which resembles the words of

the participants and (b) theoretical coding which hypothesizes how substantive codes are related to each other.

Substantive codes are compared and clustered into core categories that represent common themes that are central or relate to many other categories, and hold explanatory power (Corbin, 1986). These first core categories provide the theoretical foundation and direction for further data collection.

Glaser and Strauss (1967) developed questions for the researcher to ask herself in order to clarify the linkage between categories: Is the category a condition of some other category? Is it a course, a context or a contingency? Does it bear on another category? Does this category compare with other categories? Is the category a strategy? Under what conditions is the category maximized or minimized?

The researcher continues to sort categories on the basis of commonality, connection, and concepts. Patterns eventually emerge from this sorting process which provide the theory outline. When no further categories emerge from the data and the same patterns are seen repeatedly with little variation, saturation of the categories is determined (Corbin, 1986).

## The Research Interview

Unstructured interviews are most commonly used and are considered to be the foundations of grounded theory (Swanson, 1986). Therefore, an unstructured interview was adopted as the fundamental research tool for this study in order to access a broad perspective of the infertility experience. Imposing structure on the interview might have introduced bias into the process and limited access to the wisdom and voice of the participants.

The purpose of the interview was to obtain as much detail about the psychological evolution through the infertility experience from the participant's own frame of reference. The philosophy of this approach relates to the belief that the perspectives of others are meaningful, knowable, and capable of being made explicit (Barlow, 1993).

In order to encourage comfort with disclosure of sensitive reproductive health experience, an environment of equality, respect, and empathy was promoted and provided to the best of the researcher's ability. This included careful listening, non-judgemental acceptance of any information provided, and self disclosure on occasion.

## Theoretical Sensitivity

Theoretical sensitivity to the research issues implies that the researcher is able to assign insight, meaning, understanding, and significance to the data. The acquisition of theoretical sensitivity may be promoted by having prior professional experience with the phenomenon under study. Sensitivity to the phenomenon may also be enhanced by personal experience in the research area and must be monitored so as to avoid super-imposing personal biases onto emerging concepts and theory (Strauss & Corbin, 1990).

Prior to fieldwork, the researcher had become more familiar with the psychological experience of infertility by examining, questioning and pondering available literature. The resulting impressions and familiarity serve to sensitize the researcher to the process (Davis, 1986). Theoretical sensitivity applied to the data analysis promotes new ideas and insights (Strauss & Corbin, 1990).

## Grounded Theory Method Applied

The purpose of this study was to pursue an understanding of the psychological journey of women who had endured long term infertility and medical intervention. Women who had experienced a minimum of two years of infertility and unsuccessful medical intervention were recruited for participation. The research explored the emotional and cognitive processes of participants as they became involved in the pursuit of conception.

### Sampling

Recruitment of participants was assisted by the distribution of a written request for volunteers (see Appendix 1) to counsellors involved with the Infertility Support Group in Calgary. Three women were recruited by the counsellors and two women volunteered to participate after hearing about the study through word of mouth. All participants articulated a willingness to participate in this research project for altruistic reasons.

Ten interactive interviews were completed with five participants whose experience with infertility ranged from three to eight years. (See Table 1) All participants were married and were involved in infertility treatment with the Regional Fertility Program in Calgary.

All five women had experienced at least two years of infertility and unsuccessful intervention. None of the participants had experienced a full term pregnancy culminating in a live-birth. Women at various stages of treatment and psychological experience were sought out in order to establish a model that would demonstrate the infertility experience over time and exposure to treatment failure. Early stages of the

study were guided by open sampling choices which gradually became more specific as theory emerged. All participants were initially asked the open question: "What has the experience of infertility been like for you?"

With each interview, the conceptual framework was challenged and revised as sampling became increasingly theoretical. For example, participants one and three had commented that they had experienced very little crisis in their lives until their infertility experience which distressed them immensely. However, I noted that participant two had experienced reproductive health difficulties since adolescence and had adapted to this illness prior to realizing that she was infertile. Although distressed, she utilized more coping strategies including assertion, and felt more in control of her situation.

Table 1: Participant Demographics

| Participant | Diagnosis | Duration | Occupation | Age |
|---|---|---|---|---|
| 1 | unexplained | 3 yrs | bank teller | 31 |
| 2 | endometriosis | 5.5 yrs | homemaker | 34 |
| 3 | unexplained | 4.5 yrs | real estate agent | 28 |
| 4 | luteinized unruptured follicle syndrome | 8 yrs | counsellor | 41 |
| 5 | unexplained | 5 yrs | teacher | 45 |

At that point, I questioned whether previous crisis and adaptation influenced the ability to cope with infertility. Therefore, I sought out women who were older and more likely to have experienced more difficulties in their lives. Participant number four had previously experienced a severe cardiac illness that she was not expected to survive. Participant number five had experienced a full term stillbirth and the death of her first

husband in a motor vehicle accident.

Subject number is dependent on saturation of categories in the grounded theory model. Five participants were required for saturation of most concepts that emerged from the data.

## Data Transcription

The audiotaped interviews were transcribed by the researcher using WordPerfect 5.1. Copies of the transcripts and data analysis were stored in the following way:

1. One copy on the hard drive of my home office.
2. One copy stored on a micro floppy disk at my home office.
3. Two printed copies stored in my home office filing cabinet.
4. Original audiotapes were stored in my home office filing cabinet.

## The Interview Process

The following section describes the pre-interview, first and second interview contacts that were made with the women who agreed to participate in this study.

### Pre-Interview Contact

Participants called the researcher or were contacted by telephone and were provided with information about the purpose and outline of the study as described in appendix 1 and 2. If verbal agreement for participation in the study was obtained, an interview was arranged at a time and place that was mutually convenient for the participant and the researcher. Participants were informed that the first interview might take between one and two hours, and depending on the need for further clarification, a second interview may be required. Each participant was informed that she would

have the opportunity to review her transcripts in order to clarify or delete any statements that she made. In preparation for the interview she was asked to consider the following question: "What has the experience of infertility been like for you?"

## The First Interview

All interviews averaged 1.5 hours and were conducted in the home of the participants, at their request. On the occasion of the first interview, the researcher began with a brief self-introduction and thanked the participant for her agreement to take part in the study. A written description of the study (see Appendix 2) was provided and the woman was given the opportunity to ask any questions about the research or the researcher. The participant was then given the opportunity to read the consent, and ask any additional questions prior to signing the consent. Each woman was provided with a copy of her consent.

The subject was then asked to choose a pseudonym for confidentiality purposes, to indicate her present age, occupation and marital status, and to identify the duration and type of infertility treatment she had experienced.

The interviewer then presented the question: "What has the experience of infertility been like for you?" Further questions were framed in order to examine the psychological process from the time of realization of infertility, to the present day experience, while respecting the directions and concerns of the participant.

The interviews were tape recorded with each participant's consent, and the researcher took notes highlighting observations during the interview.

## The Second Interview

Before the second interview took place, a transcript of the first interview was

delivered to the subject for her review. At the time of the second interview the subject had the opportunity to correct errors and misinterpretations in the coded transcript. The researcher presented and explained the emerging model and asked the participant for feedback and personal insights. The second interview was more structured and narrow in focus (Swanson, 1986) to deal with apparent gaps in the information. The researcher made notes to record necessary corrections for the transcripts, categories, and theory.

## Compliance with Ethical Standards

In accordance with ethical standards, the following measures were taken to ensure that participants were able to provide informed consent to participate in the research, that their confidentiality would be protected, and that they were aware of the risks and benefits of participating.

### Consent

The purpose of the study and the nature of the participant's involvement (see appendix 2) was explained prior to the signing of consent. Participants were also informed of their right to withdraw from the research at any time. Subjects were aware that the research interview involved risks and benefits and were encouraged to terminate the interview if they became overly distressed.

Tape recording of the sessions was done only with the participant's consent. Note taking was performed in full view of the participant and was shared when requested.

### Confidentiality

Confidentiality was maintained by assigning a pseudonym chosen by each

participant at the time of the initial interview. No videotaping was done and all tape recordings were transcribed by the researcher. Identifying information obtained from interviews was not to be shared with the participants physicians, spouses, or health care providers. The researcher maintained one list of pseudonyms cross-referenced with subject names in a computer file on the hard drive of her office computer. No identifiable record will be used for teaching, publication, or any other scientific purpose. All tapes were to be destroyed when the research was completed.

Risks and Benefits

Subjects were informed prior to the interview that discussing their personal experiences might put them at risk for emotional upset and distress. Participants were reassured that if they became very distressed during the interview, they would be withdrawn from the study and the researcher would arrange for access to the psychological services at the Regional Fertility Program for assistance and support. None of the participants' required this intervention. However, one woman stated that she sought counselling after reading her transcripts as she was faced with her emotional desperation and pain.

Participants were informed that a potential benefit of participating might include the development of new insights or perspectives related to their difficulties and whatever value they might experience from catharsis. Each participant ultimately stated that the research process had provided her with some insight into her own feelings and experience, especially when she was able to read her own words in the transcripts.

## Data Analysis

The following section describes how the process of separating the data into substantive codes, common themes and categories facilitated the development of the grounded theory.

### Development of Categories

Once the transcripts were completed, data were separated out into substantive codes that resembled the words or ideas of the participant. This was accomplished by analyzing and interpreting each statement made by the participant (see appendix 5).

Substantive codes were compared and clustered into core categories that represented common or connected themes. Incidents were constantly compared for similarities and differences and the researcher continually questioned and pondered the data. For example, some women used assertive strategies in coping with their infertility experience, while others did not. The two women who viewed themselves as compliant and non-assertive displayed difficulties such as bulimia and chronic anger, while the other participants demonstrated less emotional distress when discussing their reproductive failure. The researcher then began to question how non-assertive behaviour influenced the woman's distress throughout her experience. As the substantive codes accumulated, theoretical codes were then developed to represent how the substantive codes related to each other. Linking of the categories was assisted by the collection of memos throughout the research process. Memos were entered into the computer after the interviews and when insights developed. As interviewing progressed, memos were integrated into the theory formation which in turn assisted in directing further data collection.

Patterns eventually emerged from this sorting process providing a theory outline. The coding and subsequent theory was checked against the data repeatedly by the researcher. When no further categories emerged from the data and the same patterns were seen repeatedly with little variation, saturation of the categories was determined (Corbin, 1986). An initial draft of the model was then submitted to the research supervisor for feedback. In addition, the two counsellors at the Regional Fertility Program and the study participants were consulted about the process and soundness of the emerging theory.

## Theoretical Sensitivity and Major Preconceptions

The grounded theory approach utilizes preconceptions derived from available literature and research to gain access to the experiential world of the subject. These preconceptions or "sensitizing concepts" are used to develop theoretical sensitivity to a social process or experience without being used as rigid research orientations. Over time, preconceptions are abandoned or confirmed depending on research findings (Glaser & Strauss, 1967).

The following represent predetermined ideas as derived from available literature related to the infertility experience, and the researcher's personal and professional background.

### Preconceptions

1. Women experience emotional distress and grief in response to their inability to complete the social prescription of biological motherhood. This distress is often described as a "roller-coaster ride" because of emotional highs and lows.

2. The experience of infertility results in a predictable course of shock and surprise,

denial, anger, isolation, guilt, depression and resolution; a similar process was originally reported in individuals dealing with death and dying.

3. Social support during the infertility crisis is often limited because: being a childless couple is not socially supported regardless of the etiology; infertile individuals may not feel comfortable discussing their difficulty with others thereby limiting sources of support; the "losses" associated with infertility remain invisible to society in general.

4. The continuous development of new reproductive technologies may potentially expose couples to multiple losses and delay emotional resolution of their situation.

## Personal Preconceptions

My personal preconceptions result from the experience of being a consumer of infertility treatment and technologies as well as my professional background as a counsellor specializing in infertility and genetics. My interest in this subject area was triggered by personal and professional observation that the end point of infertility treatment continues to be pushed back and options for bigger and better ways of producing perfect babies are a growing industry.

Some of the guilt and anxiety I experienced during my treatment was related to my failure to "resolve" to an end point of treatment rather than a failure to conceive. The ambiguity of being "diagnosed" with unexplained infertility left me wondering if I might become pregnant one day after I had put my desire for motherhood behind me. There seemed to be no definite endpoint that I could look forward to.

This ambiguity is supported in Leiblum's (1987) report that among women who claim to have resolved their infertility, 93% indicate a willingness to participate in new treatment options that develop in the future. The psychological impact of this

technological boom on the consumer and her "resolution" requires further consideration.

Although I understand that my experience may result in heightened sensitivity to the phenomenon being studied, it is hoped that my philosophies will not intrude on the stories of the participants. My professional familiarity with reproductive health counselling may serve as an advantage in perceiving participants treatment experiences.

## Issues of Rigor

In quantitative research, reliability and validity are established through the use of certain procedures for data collection and analysis and are important in the evaluation of research findings (Chenitz & Swanson, 1986). However, Chenitz (1986) stresses that as validity relates to a person's constructions of what has occurred, there are no fixed truths.

### Data Evidence and Credibility

Qualitative researchers address issues of validity by evaluating the evidence and credibility of research. Glaser and Strauss (1967) assert that the element of constant comparison in grounded theory methodology encourages comprehensive and integrated theory development. In addition, analysis of data by specific coding procedures demonstrates how theory is linked to the data, increasing its credibility.

The theory must also to relevant to the social or practice world and to persons in that world (Glaser & Strauss, 1967). The use of varied literature and participant sources to inform the theory development also increases its credibility and usefulness. Returning to the participants and other sources for feedback regarding the theory

evolution and its applicability to their personal experience increases its relevance. All of the above mentioned strategies were employed in this research.

## Accuracy and Replicability

Rather than determining the accuracy of repeated measurement as stressed in quantitative research, Chenitz and Swanson (1986) suggest that reliability of a grounded theory be assessed by questioning: "If I apply this theory to a similar situation will it work, that is, allow me to interpret, understand, and predict phenomena?" (p. 13)

As categories were developed and theory evolved, the researcher took this information into the counselling setting in her work with women experiencing infertility. Feedback indicated that the new theory provided these clients with an accurate overview of what they had experienced, insight into their present state, and a suggestion of what they may or may not experience in the future.

## Summary

Grounded theory was the methodology chosen to guide the formation of a theory that would represent women's voice in their psychological experience of infertility. The specific approaches to sampling, data analysis and theoretical sensitivity employed by this method were outlined. An unstructured interview was adopted as the fundamental research tool for this study.

Following recruitment of the participants, a pre-interview contact and research interviews were completed as per the ethical standards outlined. Transcripts from the interviews were analyzed into codes and categories. Major preconceptions and issues of rigor were considered in the research process as theory emerged.

# CHAPTER FOUR

# WOMEN'S PSYCHOLOGICAL JOURNEY OF INFERTILITY

## The Grounded Theory

The purpose of this chapter is to describe the grounded theory that has evolved as a result of this research project. A diagram of the model (See Figure 1) is provided followed by a detailed description of the core categories and how they relate to the theory development (See Table 2).

The accounts of the participants are powerful and profound and demonstrate their experience more intensely than any description the researcher can generate. Therefore, as much as possible, the words of the women who participated are provided in order to respect their contributions to the research and to lend support to the grounded theory.

This theory represents the cognitive and emotional experiences and responses of women, beginning with their decisions to become mothers. The pattern of response and coping that emerged in this theory is summarized as follows.

Participants revealed that as the "expectation of motherhood" collided with increasing evidence of infertility, cognitive dissonance and a highly emotional response resulted. Women quickly begin searching for ways to reduce the dissonance and this led them into reproductive technologies. Treatment was seen as "movement", an escape from the stasis and lack of control they had experienced. Gradually, women developed problem and emotion focused strategies, including a unique utilization of hopefulness and hopelessness to deal with the stress of infertility and treatment. As evidence of reproductive failure mounted, participants described a shift in their

philosophies and self schemata that accommodated the realism of their situation and ultimately decreased their emotional pain.

While this theory is organized into stages, the experience of the participants often extended into more than one stage concurrently. As infertility represents multiple losses and adjustments, women would "loop back" through the stages, especially the emotional response to cognitive dissonance, as new information arose in the treatment process. A pivotal point in the journey appeared to be the development of personal boundaries and assertive strategies. While most participants initially felt that they would sacrifice as much of themselves as necessary to achieve a pregnancy, they tended to evolve towards self care strategies after exposure to treatment pain and emotional suffering. The intensity of the emotional pain gradually diminished as the participants developed strategies to control their experiences and protect themselves.

All participants denied the concept of resolution. However, most described an evolutionary process that involved incorporating childlessness into their life plan by changing expectations for themselves and setting new goals for their lives. This was a process that required much effort, personal growth and development of coping strategies. This was especially true for two participants who admitted to never encountering a serious crisis prior to their discovery of infertility. Encountering reproductive failure shook the foundations of their belief systems and hopes for the future.

Another participant had experienced the death of her first spouse and more recently a stillbirth, but seemed to have well defined boundaries and coping strategies in place prior to undertaking treatment for infertility. While not minimizing the pain of

her experience, the researcher noted that she demonstrated a "serenity" in dealing with the crisis of infertility that provided valuable insight into the importance of an assertive stance in this threatening situation. Encountering participants at different stages of the process produced a longitudinal view of the infertility journey and the factors influencing its navigation. The following pages will elucidate the details of this experience as conveyed by the participants.

## Identifying Self as Mother

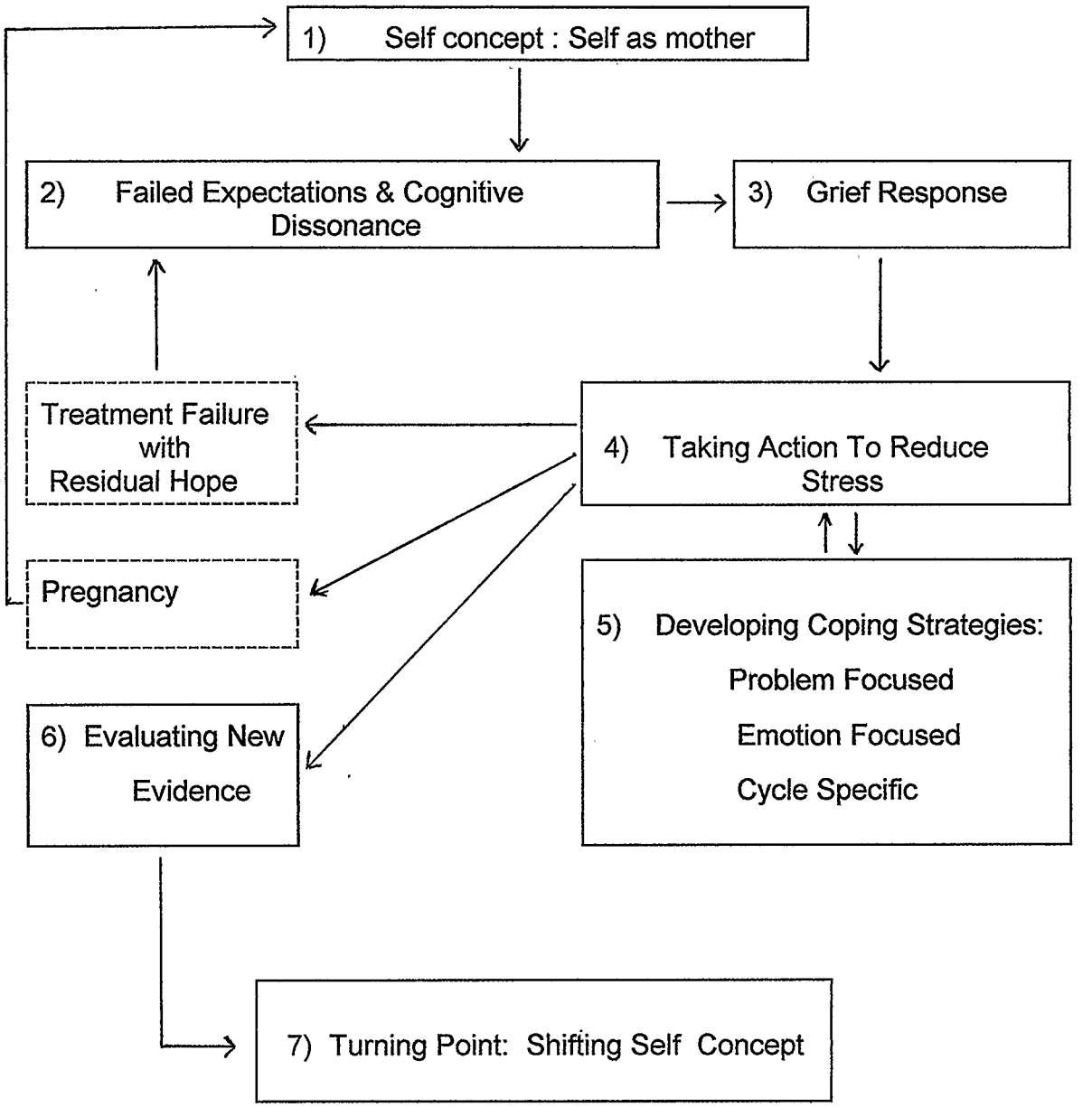
The first stage in the "psychological journey of infertility" was establishing the intention to mother. Three components of this decision involved establishing motherhood as a desirable goal, seeking motherhood as a preferred career, and viewing motherhood as the ideal state for themselves. As women were interviewed several years after they had first established the intention to mother, their retrospection must be examined within the context of these goals being thwarted by reproductive failure.

### Motherhood as Goal and Expectation

> One of my life's ambitions has always been to be a mother. There are three things I wanted to have done before I died, and that was one of them.

All participants in this study identified mothering as a part of their self definition and ambition. Decisions to pursue pregnancy arose from expectations that all participants discussed with their spouses premaritally or early in their marriages. All participants denied any spousal pressure to produce offspring and asserted that they were making personal decisions to mother based on their perception that parenting would enhance their lives.

Figure 1: Model of Adaptation to Infertility



## Table 2: Description of the Model: Adaptation to Infertility

1. IDENTIFYING SELF AS MOTHER

    Motherhood as Goal and Expectation
    Motherhood as Preferred Career
    Idealization of Motherhood

2. FAILED EXPECTATIONS: EXPERIENCING COGNITIVE DISSONANCE

    The Reproductive Experience and Cognitive Dissonance:
        Expectation of Fertility to Confirmation of Infertility
        Reproductive Autonomy vs. Assisted Conception
        Procreation vs Recreation
        Effort Does Not Equal Reward

    The Psychosocial Experience and Cognitive Dissonance::
        Failed Role Expectations
        Social Non-Support for Infertility Grief
        Social Comparison with Peer Group
        Exclusion from Membership

3. GRIEF RESPONSE TO COGNITIVE DISSONANCE

    Loss of Self Esteem: Depression, Guilt and Self Blame
    Loss of Control: Powerlessness and Anger
    Loss of Purpose: Stasis/ Holding Pattern
    Loss of Connection: Silence, Embarassment and Isolation

4. TAKING ACTION TO REDUCE DISSONANCE: GETTING CONTROL

    Acceptance of Tentative Infertility
    Narrowing of Focus
    Search for Meaning/Diagnosis
    Waiting as Stasis vs Treatment as Movement

5. DEVELOPING COPING STRATEGIES

    Problem Focused Strategies:
        Taking Control/Responsibility
        Negotiation/Evaluation of Treatment
        Asserting Personal Choices
        Searching for Distractions

Table 2: Description of the Model: Adaptation to Infertility (con't)

Emotion Focused Strategies:
- Seeking Communication/Support from Spouse
- Buffering from Primary Mothering Figure
- Search for Nurturing and Support
- Emotional Preparation for Treatment

Cycle Specific Strategies: The Cycle of Hope:
- Pre-ovulation Hopefulness
- Immediate Post Ovulatory - Hope Peaks
- Pre-Menstrual Intentional Surrender of Hope
- Failure and Resignation OR Effort Rewarded: Pregnancy
- Rebounding/Resurfacing of Hope

OR

6. EVALUATING NEW EVIDENCE

- Repeated Treatment Failure and Loss of Hope
- Setting/Facing the Treatment Endpoint
- Weighing of Personal Sacrifice
- Considering Alternatives to Treatment

7. TURNING POINT: SHIFTING SELF CONCEPT

- Shift in Philosophies and Schemas
- Focus on Self Care
- Reintegration with Social Group
- De-idealization of Motherhood/Pregnancy
- Hope/Confidence for Self in Future
- Positive Meaning Signification of Infertility
- Recognizing the Uncontrollable Nature of Infertility
- Stronger Marital Intimacy
- Return to Normal Physical/Emotional Activity

In support of Surrey's (1991) assertion that a girl's mothering relationship with her mother forms her basic primary self definition, most participants expressed that their own mothering had been very nurturing and positive, and that they desired to establish the same connections with their own children. Emotional connection and nurturing of children was viewed as a natural progression within their relationships and life cycle, and a way to fulfil their dreams and desires. One participant who viewed her mother as less emotionally involved with the family, credited her father's parenting as her major influence:

> I think my father had quite an influence on me as to whether I wanted children or not because he was a very happy parent and he did such wonderful things with us when we were kids, that I wanted to pass that on to another generation of kids.

She described her father as carrying out more of the traditional female role, while her mother modelled autonomy, intolerance of sexism and a strong preoccupation with her career.

One participant had her goal of motherhood cruelly interrupted:

> We were planning a family you know and that was in the works and I had every expectation that that would occur...and then when I was 27 my husband was killed.

After living and enjoying the single life for several years, she remarried and now pursues her dream of pregnancy almost two decades later.

## Motherhood as Preferred Career

Childbearing has traditionally been seen as a natural and expected function of women. However, career choices available to modern women have provided a satisfying alternative to motherhood for some, or a chance to combine motherhood with

career for others (Stewart, 1989). However, for the woman experiencing infertility, career represents a lesser alternative rather than a deliberate choice over childbearing. One participant described alternatives to mothering as "winning the bronze medal in the Olympics when you were hoping for the gold".

Participants expressed the desire for the opportunity to be active and connected as mothers in the community, and keep up with the development of their peers. Motherhood represented a "lifestyle" that was not available to a woman who is focused solely on career:

> I would like to get pregnant and not work anymore. I am looking for a change in my lifestyle. That's a very big part of it. I want to be at home. I want to be a bigger part of the community.

Motherhood as a career encompassed many opportunities to connect with other adults and children, to nurture, to teach and to share experiences. The mother-child relationship was not confined to the nuclear unit but extended the woman out into the community.

> On all sorts of levels it makes you more acceptable to some people...I think in terms of the commonality of human experience, more people are mothers and fathers than aren't so I think, certainly it's a ticket to a certain level of understanding or commonality that isn't available to you if you're not a parent.

While the woman of the nineties is encouraged to pursue career opportunities, education, and autonomy, these participants asserted their needs to find empowerment through mothering and connection. Surrey (1991) contends that empowerment occurs within the context of a growth-promoting, life-enhancing, interactive process. Participants saw mothering as the opportunity to create and sustain new and deep affinities. Infertility interrupted that opportunity and choice leaving the woman in a state

of disconnection:

> I'm feeling on the outside. That and jealous. You know all my friends are going to moms and tots groups and saying "oh, but you have this career". I don't want a career. I just want to be a mom.

Idealization of Motherhood

The experience of infertility promotes glamorization and idealization of pregnancy and mothering as well as a willingness to accept any risk to conceive (Stewart, 1989). Three of the five participants viewed motherhood as the ideal situation, necessary for complete fulfilment and happiness. One participant stressed: "I wouldn't have been completely happy (without a baby)...it would have been something missing there always for me...." For some women, childbearing represented the opportunity to create the ideal family unit. This same participant reported such positive childhood experiences that reproducing a similar environment with her husband took on paramount importance:

> I was lucky enough to grow up in a family that was probably the closest I've ever seen to an ideal. I mean you're not in everybody's homes, but the homes that I have been in, my family was the closest I think to an ideal family.

Within the context of the infertility experience, women also expressed a willingness to endure incredible emotional and physical suffering if it would assist in the pursuit of their goal of pregnancy. One participant reflected back on her eagerness for self sacrifice in an attempt to bargain for conception:

> I honestly thought in the beginning, whatever it takes to get pregnant, I'll do it. I read about women on Pergonal, Clomid and they talked about the side effects and I think to myself, listen honey, if it's going to get you pregnant, just take it.

Parenting and pregnancy were equated with happiness, enjoyment, enrichment and fulfilment. Coworkers or friends who did not appear to share the same enthusiasm or appreciation for parenting and pregnancy were the target of anger and resentment by participants:

> I'm often times angry at women that have children and work full time. That really makes me mad. I don't understand why they're not taking advantage of the situation.

The reproductive issue that created the greatest and most consistent resentment among participants was that of abortion. As the achievement of pregnancy consistently evaded them, participants who observed others choosing abortion were greatly saddened, angered, and bewildered by such a choice.

As parenting became too grandiose a goal to strive for, pregnancy replaced it as the ideal state:

> I fantasize a lot about pregnancy, birth. I phone all my friends and let them know that I'm pregnant. And I like the look of myself pregnant...it's very pleasing to me. But by the time I have the baby, the fantasy is over.

Another participant yearned for "even a maybe" in the results of her pregnancy tests so that she could experience the sensation, however short, of being pregnant.

## Summary

Participants in this study asserted their desire to mother and felt that they had arrived at this decision without external pressure. Most of the women saw motherhood as a preferred career, and some expected that motherhood would create an ideal situation for themselves.

Over time, as women experienced failure in their attempts to achieve motherhood, they were faced with the possibility of infertility. Participants who

expected to "build their life around a baby" were beginning to encounter evidence that their expectations might only be met with intense effort.

## Failed Expectations: Experiencing Cognitive Dissonance

The second component of the grounded theory model begins with a transition from the participant viewing her ideal self as a potential mother to confronting her real self as infertile. Tension and cognitive dissonance was created when the women attempted to hold two conflicting ideas simultaneously: the desire for motherhood and the reality of infertility. Bitonti (1993) notes that cognitive dissonance, especially that which is relative to the concepts most central to one's ideal self, creates difficulties with self esteem. While participants admitted to decreased self esteem, they also reported grief related to the loss of their ideal self, and several emotional and behavioral responses to their feelings of loss of control.

There are several sources of dissonance in the infertility experience, especially as the infertile woman compares her situation with that of others in her social environment. Further distress is created by the realization that for them, conception is not likely to result from an act of intimacy. The following is a categorization and discussion of the sources of the participant's failed expectations.

### The Reproductive Experience and Cognitive Dissonance

As women gradually began to comprehend that sexual intercourse was not resulting in pregnancy despite their best efforts, and that lovemaking was becoming a task, coordinated and directed by the medical system, they experienced cognitive dissonance specific to expectations they had assumed around fertility and conception.

Expectation of Fertility to Confirmation of Infertility

Most of the participants in this study assumed their own fertility and conception was a matter of when rather than how. Participants waited at least a year before seeking infertility assessment and treatment. Conceptional failure was often attributed to bad timing, stress, or late maternal age. One participant, who had experienced endometriosis since her adolescence, had always suspected that conception might take a little longer than the norm.

The first year of the participant's journey represented the transition from expecting pregnancy to occur to wondering why "nothing's happening":

> The first year we were a little surprised that we weren't conceiving, but we weren't. We weren't too nervous about it. We have friends who were conceiving very quickly and that was making it a bit difficult but we weren't really worried.

While there is much discussion in health care settings about the prevention of sexually transmitted diseases that cause pelvic inflammation and subsequent tubal infertility, none of the participants in this study had tubal disease. Logic dictates that healthy behaviour produces a well functioning body, and women who pride themselves on taking care of their bodies find the diagnosis of infertility incompatible with their image of robust health (Mahlstedt, 1985). This was confirmed by the participants of this study who asserted that their health habits had been optimal, therefore fertility was expected:

> I wasn't expecting to be infertile. I always had a period every month. I have never used IUD's, or had an abortion. I just expected that when it was my turn, I would become pregnant.

Unlike medical diagnosis such as cancer or diabetes, the diagnosis of infertility

is often not conclusive. Women reported that their concerns about infertility and their active hoping for conception gradually increased as the months of reproductive effort passed. One participant explained the insidious onset of her experience with infertility:

> Initially I assumed that I would get pregnant...it seemed like it was logical that it should be a reality. And so there wasn't a lot of needing to hope, it was just there. And slowly over time...the evidence accumulates and therefore there's not much else except that hope that exists so it has to be strong, because there isn't the other evidence there.

By the time they saw a reproductive endocrinologist, women were aware that they were experiencing infertility and their anxiety levels were rising. There was a sense of loss of control over what was normally assumed to be a highly controllable event (Gervaize, 1993). Their questions for the specialist revolved around the reasons for their failed expectations, and how conception could be achieved. The months that followed often required intense effort, vigilance to the cause, and expenditure of emotional and financial resources.

Reproductive Autonomy vs. Assisted Conception

> People would say, oh you can just try again like you can just hop into bed and have a good time, but little do they know it's not that easy.

Common expectations regarding childbearing revolve around contraception and choice. For most, unprotected intercourse carries with it a significant chance that pregnancy will occur. For the majority of the adult population, reproductive choice connotes the ability to prevent or plan the appropriate time for conception. The birth control pill especially, has allowed women control over their reproductive functions. As a benefit of this, sexual intercourse now carries less risk of unwanted conception and more focus on pleasure.

While planned conception is normally associated with an act of intimacy between partners, seeking out medical assistance for the diagnosis and treatment of infertility involves inviting in a stranger to orchestrate or facilitate the event. Some participants found the transition from intimacy to medicalization particularly difficult:

> I took the day off work to go to the appointment because it's a pretty emotional point. I don't mind sitting in the waiting room like other people seem to mind. I'm just nervous about sitting in front of the doctor and trying to discuss this - it's so important to me and it's twenty minutes of his day.

The expectation of reproductive control is diminished by new evidence that planning and facilitating conception is now under the control of an "expert". When reproductive control is delegated to a third person, women experience feelings of incompetence, powerlessness, and dehumanization (Becker, 1991). The only control a woman may sense at this point is whether to seek medical consultation, and from whom.

One participant explained how she waited months because she chose to consult with a female gynecologist in order to avoid the embarrassment of being examined by a male doctor. However, she asserted that her experience with the female physician during a diagnostic test of her fallopian tubes left her traumatized and anovulatory:

> Not only did she embarrass me, she left me on the table unclothed and went out of the room and there was a doctor passing by and there was a window there. And I was like open to the public to see what the doctor had done...she was very rough with her procedure and after that was the first time that I stopped ovulating.

Shortly after this encounter, the participant developed bulimia and obsessive compulsive tendencies related to feelings of being out of control. She also expressed distress related to her feelings of shock and anger at being treated in this manner,

especially by another woman. Subsequently, this participant "took control" by requesting a referral to a male reproductive endocrinologist.

Procreation vs Recreation

While the sexual experience is normally associated with pleasure, most descriptive accounts of the infertility experience support the view that reproductive failure negatively impacts sexual functioning (Gervaize, 1993). This notion is supported in this research. Most of the participants described a loss of sexual intimacy in their relationships as sexual intercourse became a means to an end, rather than a mutually pleasurable experience:

> We don't have sex for fun really anymore. We do, but not very often. So we still have a lot of intimacy and usually our intimacy does not involve sex. It just stopped. Sex is a job. Sex has got a total purpose here.

The one participant who reported a different experience, explained that once she knew that spontaneous conception was unlikely, reproduction was separated from the sexual experience and intimacy during intercourse was maintained. The separation of procreation from recreation appears to be influenced by the etiology of infertility. Tubal occlusion or azoospermia are concrete diagnoses that preclude the possibility that conception will occur during sexual intercourse. Sherry Franz (1993), spokesperson for the Infertility Awareness Association of Canada (IAAC), supports this concept in a personal anecdote of her infertility experience related to her partner's sterility:

> When we discovered we could never create a baby together, we embarked on a reluctant journey from "integrated sexuality" to a sexuality sharply divided in form and function. For us now, infertility testing and treatment are attempts at procreation, and sex is an expression of intimacy and affection. There is very little overlap between the two.

While intimacy might be preserved with the separation of "form and function",

most participants in this study were initially provided with the diagnosis of unexplained infertility, and therefore understood that an opportunity still existed for spontaneous conception. Therefore, sex often became procreative and purposeful, undermining its recreative aspects:

> There was that sort of hope, lack of hope going through you even during sexual intercourse, because I think, I kind of wished that it would produce a baby or result in a baby and I felt very upset if it didn't.

Sexual intercourse was planned, timed, and paced to maximize perceived chances of conception. Temperature charts were kept, and intercourse was scheduled or avoided accordingly. While timed sex was occasionally prescribed, women would frequently decide on various approaches quite independent of medical advice or spousal support:

> The first year for him, he thought...let's keep trying, it's not such a big deal. Except when we started getting into the timed sex...I don't think he liked that as much. There was one month where I tried the theory of everyday. So it's been all over the place.

As intimacy declines and the stress of infertility and treatment escalates, couples are challenged to maintain their relationships and learn new ways of coping with crisis.

Effort Does Not Equal Reward

In Western society, many are taught as youngsters that if they work hard to achieve a goal, they can expect some degree of success. While the concept of work and conception are unseemly counterparts for the fertile, this incongruity becomes a part of the infertile woman's reality. Attempts to achieve a pregnancy become associated with "trying", planning, monitoring, self-sacrifice, and praying. This much effort into any other venture might reasonably lead to reward. However, the

uncontrollable nature of fertility, and the ambiguity of unexplained infertility foils logical expectation.

> I've considered myself pretty tough through it all. I've had to work hard for a lot of things but it's always worked out. It's not happening though. I've worked really hard, but I've had no success. Totally different from the things that you work for in life.

Women struggle with each menstrual cycle to maximize their chances for pregnancy. Effort often translates into hours of time spent away from other commitments for medical purposes, and personal suffering related to anxiety, and invasive diagnostic tests. These efforts are accepted and anticipated as part of the work required to achieve a goal. The feeling that they were doing everything possible was of great importance to the participants: I've never had surgery before. That took a lot for me. I was scared. I had never been put under before. So in my terms I was doing as much as I could do. I was giving it my all and I think that was why it was taking out of the other areas in my life and the bulimia because I felt like I was doing everything I could.

However when the onset of menses signals another month of unrewarded effort, there is no feedback to inform the woman why conception evaded her once again. She is not able to adjust her strategies to alter the outcome because of the uncontrollable nature of conception:

> I think you can always learn from what you might think were your mistakes. The problem with infertility is that you don't necessarily know whether or not you've made a mistake, or whether its just chance, or if its not meant to be or an act of God or whatever...

Naturally, the investment of time and energy into an ambition with such unpredictable yields causes a great deal of distress and frustration. Infertility defies logical expectations and challenges the woman's assumptions about what she can and cannot take for granted in life.

## The Psychosocial Experience and Cognitive Dissonance

Reproductive failure impacted women's social expectations for themselves in the role of mother. As they compared themselves with their fertile peers and siblings, they experienced a sense of exclusion from their communities and friendships. Further dissonance was created when women received little or no support for their grief from others in their social mileu.

### Failed Role Expectations

The socialization of women is intimately connected with her nurturing role as wife and mother. Childbearing is viewed as the responsibility of women, and this is promoted by the modelling and teaching within our families and society. Even the nursery rhymes of our childhood promote the expectation that girls will become mothers: "First comes love, then comes marriage, and then comes Mary with a baby carriage..." One participant reiterated these expectations:

> That's just what women do. They get married, and they have children. And they raise their children. That's what my Mom did, very well actually.

When infertility interferes with the goal that women have learned to expect their entire lives, guilt and grief ensues and they may begin to question their value within their marriages:

> I think I felt as a wife, that I let my husband down even though it's totally illogical...I did feel it...I felt that I was cutting him off his reach of children even if it was unintentional but I wasn't able to have children it seems and normally the way to have a child is to get a wife or woman...I went through times thinking that he should get another wife. And I even verbalized that to him a couple of times when I was particularly mournful and slightly crazy...

Feelings of role failure were also influenced by expectations and pressures

within the extended family:

> We're the first of the children on both sides to get married. So everybody's waiting for a grandchild, and there are no grandchildren.

Three participants expressed trepidation about discussing infertility with their mothers especially related to concerns that their mothers would not cope well or respond sensitively. While one participant ultimately did confide in her mother and found her to be supportive, two others eventually severed their maternal relationships temporarily to relieve some of pressures they felt their mothers were exerting. The severance of close relationships with family and friends is also reported by Mahlstedt (1985), who attributes these separations to the insensitivity of others which leaves the infertile person feeling unaccepted, misunderstood, and unloved.

Social Non-Support for Infertility Grief

While Western society promotes family ties and the creation of children within marriage, infertile women find that this standard does not apply to them. Women who choose childlessness are criticized for being selfish or maladjusted, while infertile women are pitied and ignored (Stewart, 1989). The way to determine if a woman is childless by choice or nature is to question them. Participants found that others in their environment were curious about their childless state and would often probe for more information. This was often a painful experience for the women regardless of the questioner's intent:

> I think in most cases the response I get from people is not cruel but it comes across as cruel. I've heard things like: Oh jeeze, what's wrong with you? How come you can't get pregnant? And to me those are average questions and that's a knife right in the heart. I take it personally.

As infertility treatments are regarded as personal health choices, many of these therapies have been deinsured by provincial health plans while other related personal health choices such as pregnancy, childbirth, and abortion continue to receive social and medical support. The impression that infertility is "self-induced" abounds in society and sadly, is promoted by some health practitioners. This may be related to the association of some tubal infertility with pelvic inflammatory disease and sexual promiscuity. While this etiology is not uncommon, neither is endometriosis, immunological disease, ovarian dysfunction, azoospermia, sperm antibodies, or more recently discovered, genetic causes of failed implantation.

Regardless of the cause of infertility, women often feel they are being blamed for their situation. One participant made her voice heard at a public meeting with the Royal Commission on New Reproductive Technologies:

> To the best of my knowledge, I haven't done anything to cause my infertility...so I resented being blamed for that and being told that I must somehow be responsible, therefore they couldn't fund me. I wasn't asking them to stop abortions or not to fund other programs. I just wanted equality and even if infertility is self inflicted, I still don't think it should be any different than any other medical or psychological condition. I think that it should be supported the same way.

Participants reported that they encountered much ignorance about infertility, including the suggestion from others that their failure to conceive was related to anxiety or psychological problems. One participant explained how her previously infertile sister was very supportive of her during the diagnostic phase of her treatment...until a cause of infertility could not be determined:

> She was supportive until I had all my testing done. I have "unexplained infertility" so they don't know what's wrong with us. When I told her I was undiagnosed, she told me she believed it was a psychological problem....I

> find that a very painful thing to believe. I'm having a lot of pain and I need some support and I don't want to be belittled like that.

The participant who noted that she stopped ovulating at the time she felt victimized by an insensitive physician, asserted that the mind and body were interconnected in her experience of infertility. However, her psychological distress occurred after her failure to conceive, an effect and exacerbation rather than the root cause of her difficulties:

> There's so many people that say oh just take your mind off of it. So there's a lot of people I can't talk to about it because they just don't understand. I think there ARE mental things that affect infertility and maybe it's affected me now, but I don't believe that's what started it. Like give me some credit guys, I'm not a nut case.

The height of social insensitivity was encountered when men, "secure" in their reproductive abilities would offer a solution to the infertile couple. This participant took the opportunity during the interview to give them a little advice:

> To all men out there: stop offering your services. They'll joke: "we did it first shot you know, I'll help you out". There's something about that that just turned a little knife in my back. Like not only are you saying that you can have children but you're pushing it in our face that you did it the first time.

While much of the infertility literature implies that isolation from social support is counterproductive, the experience of these participants calls into question the value of support they are offered. It would appear that isolation is initially an appropriate and healthy strategy for self-protection at a very vulnerable time in the infertility experience.

Social Comparison with Peer Group

Fertility is the norm. When a woman is assigned the label of infertile, she is stigmatized or identified as different from others. A stigma connotes a discrediting

blemish that is outside a socially defined norm (Becker, 1991). When women in this study found that they were unable to conceive, they began to compare their reproductive situations with their friends and family members:

> Most people just seem to have children. It's like you get out of high school, you go to university, you graduate, you work, you get married, you have children, you buy a cottage, whatever...

While conception and childbearing was seen to be effortless and natural for their peers, their conceptional efforts were intense, purposeful, and anything but spontaneous. Participants observed that reproduction was taken for granted and sometimes children were unappreciated. This was very distressing for women who were unable to achieve what others easily secured:

> And you see other people around you that seem to have no problems with it and I think its the hardest thing especially when they throw away their children. That used to kill me.

Observing others celebrating parenthood was equally difficult and participants expressed feelings of shame, jealousy, sadness and the feeling that life is not fair. Women measured themselves against the norms that they observed in their environments, and sensed that they held less value in comparison to the fertile woman:

> I maybe was ashamed of it in a way...maybe it had something to do with my womanhood...like everybody else was having children. They make such a big thing out of it...they praise it and they celebrate it.

Mahlstedt (1985) asserts that society reinforces behaviour related to procreation and infertile couples are constantly reminded of their loss of status in the eyes of others. Social comparison is reciprocal - the social environment measures a woman's accomplishments by questioning "How many children do you have?" while the infertile woman compares her childless state to the activities of mothering that surround her.

Observing friends producing and enjoying children produced intense feelings of loss, and most participants reported an avoidance of children and infants for a period of time. Only one participant, a teacher, consistently maintained a professional and personal relationship with children, despite her discomfort:

> We've had friends for a number of years and they started having one kid, two kids, three kids and...I'm happy for them, they've got great kids, they're wonderful, I really enjoy having them around but it has made it harder.

Exclusion from Membership

The status of mother comes attached with instant membership and connection with the larger social system. Some women associated motherhood with a "lifestyle change" or an opportunity to meet other families through community activities. The knowledge and shared experience of motherhood was seen to represent a strong bond between women, that participants felt left out of and ultimately isolated themselves from:

> I was feeling alone, very ostracized. You know they weren't trying to but how do you join in with something you don't understand. And I think that there was a point when I actually kind of turned off kids. I didn't want to baby sit. I didn't want to see them...I don't think I liked myself so much back then.

Timing was an important factor in joining "the club". Participants reported feeling developmentally behind their friends with children, and saw time slipping away as children around them grew up:

> It's an exclusive club. It's something that I'd like to be a part of. And you know, even now I'm getting too old to be a part of it...a lot of my friends have their kids already.

Feeling "out of sync" with their friend's development was something participants

reported regardless of their age. It was the youngest of the participants who identified herself as being "too old" to participate as she observed her friends and their children graduate from moms and tots groups. However, a forty-five year old participant also felt left out of "the club" despite the probability that most of her cohorts had completed their childbearing:

> I'm not saying I'm ashamed or embarrassed but out of sync. Marching to a different tune. Almost an outcast.

Motherhood is a life-long membership which influences the direction and experiences of women's lives. While the woman in her twenties may feel excluded from the experience of being involved with infants and toddlers, post-menopausal women who have suffered infertility will miss the opportunity to grandparent. Banishment from motherhood influences a woman's experiences throughout her lifetime.

## Summary

Participants began to experience cognitive dissonance when conflict arose between expectations for their lives and the reality of their situation. As successful and autonomous procreation evaded them, and as they perceived disparity from the social norm, women experienced a profound sense of loss. The psychological responses to the grief that ensued are outlined in the following section.

## Grief Response to Cognitive Dissonance

The response of the participants to facing the possibility that their goals and expectations were not compatible with the reality of their situation, was an intense sense of loss. Emotional and behavioral responses to the loss of self esteem, control,

connection, and purpose were intense, overlapping, repetitive, and persisted until the woman was able to restructure her perception of the ideal self.

The emotional responses to infertility mentioned most frequently in the literature are grief and depression, anger, guilt, shock or denial, and anxiety. Cognitive responses reported include ruminations and obsessive thought, inability to concentrate, confusion and disorganization (Dunkel-Schetter, 1991). While participants reported all of these responses, most also reported feelings of immobilization or stasis, and powerlessness.

Loss of Self Esteem: Depression, Guilt and Self Blame

All participants reported grief or depression related to the enormous pain of their experience and loss of self esteem. "Depression" in this context included sorrow, disappointment related to conceptional failure, crying, decreased enjoyment of life, and fatigue:

> I've never had pain like this. I've had some problems with my family or whatever, but not on this scope, not like this. This is the biggest. Some days...I look back and I think how did I honestly get through that day?

Women also began blaming themselves for their reproductive failure, especially related to their feelings of failing significant others:

> We're an undiagnosed couple but I still take the greater part of the blame even though it may not have anything to do with me. I have thought, how on earth can I do this to this beautiful man? And it just seems really unfair that this should have to happen to him.

One woman expressed guilt and self-blame for "fooling around" with nature and felt that her reproductive failure might be God punishing her. Another participant who became pregnant through IVF and delivered a stillbirth, felt responsible because she

had set up the expectation that a baby would arrive and when the baby died due to a cord accident, "the natural thing is to lash out at the cause of it, which was me".

Loss of Control: Powerlessness and Anger

All participants expressed anger, powerlessness, depression or anxiety related to the loss of control they felt, and the major impact that this had on their assumptions:

> I just can't predict anything. I just feel really out of control, that something is going to happen to me again on a different scale in ten years. Perhaps I will be faced with diabetes, or I'll be faced with something else. It seems like life is so out of control. And I've never felt that way before.

Women who had "unexplained infertility" expressed the most distress related to the ambiguity of their situation:

> We were undiagnosed. That was the hardest thing. Actually that has been the worst part of my whole fertility process. I wish they'd fake it and tell you something. Being undiagnosed is the worst. It's too open. You still think you can get pregnant.

> I tend to be somebody who once I've made up my mind to go in a certain direction, it's very difficult for me to give it up. So I think it would have been easier if there would have been a definite explanation that I could understand...If you don't have an explanation, there's always that thread of hope because there's no proof that it can't happen.

> If I would have had something diagnosed, I could at least come to peace, get a peace of mind, a sense of calm. But I have no idea. Every month, I have no idea. I feel like in the infertile population, sort of the worst off because I don't even know why I'm there. I don't have a physical way of putting my problem in place.

While some research has suggested that infertile individuals see control as being external to themselves (Platt, 1973), the reality of infertility includes the wisdom that we as mere humans, regardless of our expertise or access to technology, cannot force conception. We can assist it, encourage it, pray for it. However the physiological outcome is beyond our control.

Women who saw themselves as non-assertive, expressed the most distress related to their lack of control of their fertility. One woman explained that she had always been a nice person and felt intense dislike for herself when she became angry. This participant reported the greatest degree of depression related to her experience.

Eating disorders are often associated with loss of control, poor self esteem, and loss of connection with others (Orback, 1982; Surrey, 1991). The one participant who developed bulimia during her infertility investigations revealed her past non-assertive strategies:

> I am actually considered a nice easy-going kind of person. I don't push and there have been some problems there I guess....I didn't take any control, but you know, when I go to the doctor, I give them the control. So it's like, help me. But this has been a totally different kind of experience for me and I'm realizing looking back that you have to take control of your infertility. But its really hard to think that way.

While most participants were ultimately able to identify aspects of the infertility process that they could regulate, loss of control was identified as the trigger for the strongest emotional and behavioral responses:

> I have no control. I do have a measure of control over my day to day life but I don't have control over the situation. It's the shits...it's made me feel everything: angry, mad, I'm depressed, I'm everything.

Loss of Purpose: Stasis/Holding Pattern

Most of the women in this study described feelings of stasis or immobilization, when they were unsure of the direction their lives should take. They related sensations of "being stuck in a stage of life"m feeling unable to "move on with decisions" or find motivation to explore new possibilities. One woman described longing for the enrich-ment of motherhood and the stasis that she felt as her goal continued to evade her:

> I'm stuck in the same place. My life cycle is stuck. I'm not moving into emotional enrichment. I think that would come with being a parent. I'm not getting there.

As they awaited motherhood, two participants stayed in jobs they were unhappy with, one quit her job to ease her stress levels, and another pursued education as a back-up in case motherhood did not become a reality. Raphael-Leff (1992) supports these findings in her assertion that disillusionment related to failed expectations results in a generalized sense of being impotent and non-productive which may affect work and social accomplishments.

Participants spent a lot of their time waiting at this stage. They waited for the missed period each month, waited for medical appointments, or waited for a diagnosis that would explain their dilemma:

> I started to act a lot differently. I put off a career move. I did that because I was sort of expecting that I would get pregnant in the next month or two and I didn't want to start a new job. I felt like I was short changing myself...here I am waiting and waiting and it just seemed like I was becoming unhappy. Maybe I should have been focusing on some other part of my life rather than just having a baby.

Raphael-Leff (1992) describes this stage as "living in limbo" as the woman focuses on what might be, rather than living in the present reality of her situation. As time marches on, the static infertile woman observes other people's babies growing into children. Her biological clock ticks towards menopause with each menstrual cycle of waiting. As others move on with their lives, the infertile woman is left behind, "yearning for genetic immortality", and immobilized in her developmental process.

### Loss of Connection: Silence, Embarrassment, and Isolation

Most descriptive literature regarding the emotional experience of infertility reports

difficulties in social interactions within the social network (Dunkel-Schetter, 1991). Participants in this study related many hurtful and insensitive incidents where they were probed, criticized, or embarrassed regarding their childless state by individuals in their social milieu. This also discouraged them from initiating discussions about personal or childbearing issues with new people they met:

> I was embarrassed and I was afraid. I just thought maybe they would look at me and like...what's wrong with you, why can't you have children? Mostly afraid of their response.

Women communicated that they gradually distanced themselves from people who did not demonstrate the capacity to empathize with their grief. They avoided social situations where family celebrations were the focus, because they felt out of place and were unsure of their ability to hide their sadness. Some participants avoided friends because they felt that supporters would ultimately become bored with their woes and abandon them. This "buffering" from others included family members, close friends, and coworkers:

> I feel very unbalanced and in many cases I feel socially out of place. I think that I experience a lot of emotional pain and I'm not living the same as everybody else that's living normally. I'm on a different scale. I don't fit in.

One woman continued with her social relationships but identified herself as someone who always had strong boundaries around what she expected and gave in relationships. She did not interpret her friend's questions as malicious, but did carefully choose who she would and would not confide in. For example, this participant decided not to confide information about her experience with infertility to the couple's parents because she suspected strong religious beliefs would preclude their capacity for

understanding her choices. However, she found the lack of connection and support difficult:

> I think a lot of the uneasiness through the process has been brought on by ourselves. Number one is the secrecy that we have decided on and that's probably the most difficult position for us.

Most of the participants were able to maintain a strong relationship with their spouses despite the fact that some of them related that their spouses were less devastated by their infertility and less involved in the medical intervention. The women who initially utilized non-assertive strategies projected more blame at their husbands and confided in them less. Ultimately however, most participants felt that their relationships were strengthened as spouses leaned on each other for support more during their isolation from others.

### Summary

Grief response occurred in response to cognitive dissonance and losses involving self esteem, control, purpose, and connection. Descriptions of the participant's experience resembles what is reported in the descriptive literature as the emotional experience of infertility or "griefwork" (Menning, 1980). As the experience of loss continued through the duration of the participant's unsuccessful efforts to conceive, grief response represented a repetitive phenomena.

## Taking Action to Reduce Dissonance: Getting Control

Once the participants in this study perceived that infertility was a reality but conception remained a possibility, they assumed control and responsibility of their situation. The women, rather than their husbands, took the lead in initiating medical treatment and finding an answer to their difficulties. Abbey (1991) also found that

infertile wives took more responsibility for their infertility and perceived themselves as having more control over the solution than did their infertile husbands. For the participants, this pursuit of control was represented by a narrowing of their focus to concentrate on producing a pregnancy, searching for meaning and diagnosis, and the consideration of invasive technology. Treatment was seen as movement that would optimally lead them back to their ideal self as mother.

### Acceptance of Tentative Infertility

Women began to perceive that they would not conceive without medical intervention. Infertility and childlessness were separated so that the woman could accept her reproductive failure without surrendering to the reality of childlessness. Matthews (1986) notes that infertile individuals are faced with the dilemma of not knowing whether they can rightfully mourn for what they cannot have, or hope for what they might still obtain. The ambiguity of the situation is created by the conflicting evidence: They have not yet conceived, but they are not sure that conception is impossible.

Participants began to consider invasive treatment and technology to assist them in achieving conception, regardless of the financial, physical and emotional costs. They were confident that technology will provide the solution:

> So I'm going to exhaust fertility treatments, so once the artificial insemination episodes are done, then I will move on into in vitro and do that for several cycles...but it's certain, we will be parents one day.

The one participant who attributed the chronic nature of her infertility to her negative interface with the medical community, was unable to accept that she was permanently infertile:

> They make me infertile....Deep down inside I know I'm normal. I know that I can have a normal cycle if things could just get back to some kind of normalcy. I don't know what its going to take, but I know one day, I'll have a normal cycle. I really believe that.

However, this participant pursued very invasive technology in an attempt to get control of the situation, feeling that she could not wait until her body healed itself.

Narrowing of Focus

Participants reported becoming "consumed" by their infertility as their focus and efforts intensified. Conceiving became their primary and solitary goal; infertility became the enemy:

> This is the biggest problem. This is procreation. It doesn't get any bigger as far as I'm concerned.

Women began close monitoring of their monthly menstrual cycles, becoming hyper-vigilant to signs of ovulation or pregnancy. They evaluated their health habits and attempted to modify their lifestyles to optimize their chances for conception:

> I began taking yoga because I had heard that it had meditative qualities and I do it almost every day. And I'm eating a lot less meat, because I'm thinking about my diet. I used baking soda douches, I used vinegar douches...I thought my mucus was too acidic or not acidic enough...I suffer. I don't take peptobismol, I don't take tylenol, I don't drink alcohol, not even a glass, because I think perhaps I'm susceptible that way and that's keeping me from being pregnant. You don't know...so I'm very careful.

During this time frame, participants would report that they felt obsessed; that their entire life was focused on procreation. This was particularly true for the participants who idealized pregnancy and childbirth. This concept is reinforced by Matthews (1986) who asserts that the individuals who will experience the most threat to their identity will be the ones whose commitment to parenthood is the greatest. The

idea of living their lives without children was incomprehensible and too frightening to consider as an option:

> I used to take my temperature sometimes three times a day. I would get almost psychotic about it...I was so scared to see the temperature drop, right before your period starts.

The threat of childlessness left the participants who were exclusively invested in childbearing vulnerable to obsessive and depressive difficulties as they tackled the challenge of conquering infertility.

## Search for Meaning/Diagnosis

Adaptation to change is a constructive process, involving seeking and processing information on which coping actions might be based (Deutsch, 1988). Attributing a cause to the crisis is associated with a sense of interpretive control, contributing to adaptation (Mendola, 1990). Women in this study actively sought meaning and information related to the etiology of their infertility. They generally reported being much more active than their spouses in researching and finding resources. Most went to the library to seek out reading material related to infertility:

> I was quite an informed person. I took every book out that I could take out in the library. I spoke to everybody, I mean, I was aware of what was going on.

As much of the information that they obtained from their physicians was highly technical and complicated, researching promoted comprehension of medical information and the chance for the woman to identify the source of her reproductive difficulties. She developed an expertise about infertility that diminished the power differential between her and her physicians, making her the expert about her own body:

> So every cycle my thoughts are running through my head, you know they never test for cervical mucus, and perhaps my tubes are clear but they're not friendly to sperm. It just goes on and on and I really have no idea so I spend a lot of time thinking about what could be.

Seeking meaning and information served to empower the women in their health care relationships, and allowed them a sense of control over their situation. Berg (1991) has suggested an alternative interpretation; that greater information seeking is correlated with greater emotional strain in women suggesting that more highly distressed women are drawn to information seeking, or the seeking in itself produces the strain. The participants in this study seemed to arrive at a saturation point in their information seeking, where new information was no longer helpful and would sometimes produce anxiety.

Waiting as Stasis vs Treatment as Movement

Once women had done their research and established a satisfactory relationship with a specialist, they embarked on treatment as a way to move out of stasis and "do something" active to move from their ambivalent state. Becker (1991) suggests that the onset of treatment is perceived as definitive action, allowing for renewed hope, even if the odds are not high:

> There was something I could do about it: IVF. I've always been the kind of person who believes that the Lord helps those who help themselves. I'll try everything I can do and then I can't do anymore.

For most women, treatment represented getting control of infertility, being active in the fight, and demonstrating to self and others that they were doing everything in their power to achieve motherhood:

> I was walking around with an intravenous in my arm. This is blatant fertility treatment. So I felt like I was saying to the world see...I'm doing

> something. It was a constant reminder to me and it was making me feel really good and it was a real big control factor I guess.

It was essential to the participants that they ultimately felt that they had done their best, especially if pregnancy and childbirth were never achieved. For most, IVF represented the ultimate in treatment, the limits to which they would push reproduction. Embarking on this treatment option seemed to be a requirement for accepting their situation, re-conceptualizing their goals and moving on with their lives:

> I just felt like I had to try IVF...that was the one step and if that didn't work then I'd feel like I could move on...like that was the last. That was it. It was something that I had to do for myself.

Another participant decided to pursue IVF as "final proof" that she was unable to conceive. This participant had never been able to determine the etiology of her infertility and therefore carried the "unexplained infertility" label. Evidence was required that conception was not possible in order to eliminate the ambiguity of her situation:

> We decided that definitely we would go as far as one IVF treatment and we'd try that and *when it didn't work*, then we'd go on. It is because at the point when we started IVF we had pretty well come to the conclusion that this was only to prove that it couldn't work.

This participant did not acquire the proof she sought as IVF assisted her in producing a pregnancy even though she sadly lost her baby to stillbirth. Treatment produced different evidence than she was prepared for, and today she debates whether further IVF is able to provide her with the proof she needs to put closure on her infertility experience.

## Summary

Getting control of the infertility process involved the acceptance that conception was unlikely to occur without intervention, the concentration of focus to optimize

chances of conception, a search for the underlying reasons for infertility, and movement into the realm of assisted conception. This was a time of intense effort and departure from stasis for the participants. Cycles of treatment often resulted in conceptional or reproductive failure creating the repetition of cognitive dissonance and grief response for the participants. As women regained hope and recovered from their loss, they would re-enter the treatment realm. Multiple failures ultimately resulted in loss of hope, skepticm regarding the possibility of treatment success, and re-evaluation of the evidence of permanent infertility. The occurence of pregnancy lead the women back to their original self identification as mother. The repetition of this cycle most often represented years of unrewarded effort and suffering.

## Developing Coping Strategies

Coping strategies are the cognitive and behavioral attempts utilized by individuals to mediate stress. Lazarus and Folkman (1984) distinguish between problem focused strategies which are employed to confront and seek solutions to the situation, and emotion focused strategies, which are used to limit emotional distress. It is suggested that problem-focused strategies are adaptive in controllable events, while emotion focused strategies are most successful for coping with uncontrollable events. However, infertility encompasses many controllable and uncontrollable factors. For example, the individual cannot control the conceptional outcome of IVF. However, she can control when and if she decides to proceed with IVF, which doctor will facilitate her treatment, and whom she will seek out for support during her journey.

In this study, women developed problem and emotion based strategies to assist them in coping with controllable and uncontrollable elements of their treatment

experience. Problem focused strategies involved developing assertion, learning to negotiate with physicians and developing strategies to prepare themselves for treatment as well as treatment failure. Emotion focused strategies involved the identification of and reliance on supporters to sustain them through grief and distress. Women utilized intentional hopefulness and hopelessness to cope specifically with the highs and lows of the menstrual cycle as they attempted conception and then awaited the outcome.

## Problem Focused Strategies

As women developed assertive strategies to take control of and negotiate their medical treatment, they were better able to cope with the stresses of assisted reproduction. As they gained confidence, women also began voicing personal choices, setting personal boundaries and planning alternate activities to distract them from the disappointment of conceptional failure.

### Taking Control/Responsibility

Developing assertive strategies to assist women in coping with infertility and its treatment was a pivotal point, especially for the participants who were less self-assured and more compliant in the health care setting. While most participants started this process believing that they would sacrifice as much of themselves as required to produce a pregnancy, they began to re-evaluate their happiness and to take responsibility for other aspects of their life and health:

> That's when I was starting to realize I wasn't happy. Every part of my life was probably suffering at that point. I believe there's a balance between work, spiritual, exercising, and probably all of them were out of balance. This is when I started to take control....and right away I felt that a door had been opened...all of a sudden the scales were just moving...

Women who had been in stasis related to important life decisions, began to make movement and set boundaries. One woman who was afraid to make a career move because she felt guilty for the potential maternity leave that she might request, began to put her own needs before that of her employer's:

> I think that when I get pregnant this month, I'll just have to tell my boss I'm pregnant. Life goes on. Tough luck, he'll have to find somebody else. I was really nervous about making comments like that to somebody and now, I don't care what they think, this is my life.

While women continued to have the emotional lability associated with fertility drugs and cyclical disappointments, they made choices about their emotional health and moved from constant grief into action to deal with their stress:

> I can either choose to rise above this and move on or I can stay here and wallow in my self pity. And I chose to rise above it and I really have risen above it.

A participant who initially did "pretty much what the doctor said to do" had some advice for women involved in treatment for infertility:

> It's very important to take control of yourself, especially when seeking treatment. So don't go to the clinic and see the doctor and schedule appointments and let him take care of you because that's not the point. The doctor doesn't take care of you, you take care of you. You are ultimately responsible for your own health.

Negotiation/Evaluation of Treatment

Becker (1991) noted that as women take responsibility for their infertility treatment they demonstrate to themselves that they still have control over their lives. Making treatment decisions enables them to move on with their lives. Becker stresses that being a "good patient" means being passive, not questioning authority, and following orders. Therefore, this transition to taking charge of one's medical care

requires either flexibility within the health care setting so that the client is not labelled "difficult", or enough confidence on the part of the participant to disregard the labels assigned to her by threatened health care providers.

Most participants in this study encountered little resistance to their resumption of responsibility, but this flexibility or acceptance of client's rights may be specific to the philosophy of the one fertility program that they all attended. They felt comfortable refusing treatments and asking questions:

> He wanted us to either go on a pump or a needle in myself every two hours and he thought I should put a needle in myself. I'm like, no thanks, there's no way I could do that. No way.

The participant who had well developed boundaries prior to her introduction to infertility treatment was confident in her ability and rights to make decisions about any intervention that she undertook:

> If I had any questions - I could get an answer. If I had any concerns I felt at any point I could have said no... I never felt any pressure. I was in the drivers seat, not in that I knew how to follow this process but that I had control over what was happening to me and I could have stopped or gone in another direction at any point.

Becker (1991) reports that clients of reproductive technology undergo a learning process, in which they become increasingly aware of how their physicians think and behave. Once they become aware of their physician's clinical competence and observe their practice, they become better equipped to negotiate their care. Some participants would write to their doctors or fax questions in advance of appointments so that their physician would be prepared to answer their questions. One woman who understood that her visits with the doctor were short, and that her dilemma with infertility impacted her physician much less than it did her, prepared herself for medical appointments so

as to maximize their benefit:

> I have a special little book that I keep and I've got questions in there that I want to say. I don't want to make a mistake. I would hate to look back and have something missed by me or the doctor...I want to be taken very seriously. This is consuming me and it's consuming my husband...and I want the doctor to know this. I'm here and this is really important to me.

Asserting Personal Choices

Participants in the study who felt pressured and probed to meet social demands to mother, began to develop boundaries around what they would accept from others, and assertive language to deal directly with inappropriate advice or probing. Rather than avoiding social interactions, they controlled them by developing appropriate and self-protective responses that limited further probing. The issue of personal choice became important; whatever action they decided upon had to be something they felt comfortable with and took responsibility for:

> Everybody is telling me a story that as soon as we adopt, we will be pregnant. The way that I'm dealing with that is I'm saying: If that happens it's wonderful...that's not why we're adopting. This is a choice we have made because we cannot have children.

Social prescriptions for behaviour became less of an influence while women explored new ways of living outside of the traditional expectations of marriage. This required work within the relationship as marital expectations shifted:

> We're both non-conformists but what has happened in life has not followed the straight and narrow and a white house with a picket fence. I think it concerns him more that he feels he should be the bread winner...it took some talking on our part to see that...no we don't have to play that game. Whatever is working for us works for us.

This developing confidence in their abilities to make their own decisions especially related to parenting choices, provided participants with the courage to begin

the re-integration process into society, equipped with a new voice.

Searching for Distractions

Some participants began to recognize that the less active they were, the more vulnerable they were to emotional distress. They began to seek satisfaction in other activities, developed new interests and prepared themselves for conceptional failure by planning and timing pleasurable endeavours for their cycle end:

> Some months are better than others. This past month, I purposely booked a trip to Vancouver to help through that period, and that was really helpful. If I have something to look forward to, that helps.

Three participants changed their career situations, and one pursued further education to develop herself further in her chosen profession. One participant remained in the teaching profession where she encountered the opportunity to nurture children. Four of the five participants acquired cats or dogs to care for. Anton (1992) refers to this behaviour as "redirection of mothering energy". She also states that women have been traditionally so focused on nurturing others within relationship, that few women have tapped their true intellectual, physical or creative potential.

Breaking the old mold was a frightening prospect. However participants chose to develop new potentials in themselves as a distraction from the emotional devastation of infertility and to prepare themselves for the prospect of childlessness. Finding interest in other activities ultimately provided a holiday from infertility:

> If you're busy at work or around people laughing, you know I had a lot of fun at work...I didn't have a lot of time to think about it. I felt I had no choice but to make the best of it, what can you do, you can't sit at home and cry every day...feel sorry for yourself.

## Emotion Focused Strategies

The development of emotional focused strategies represented women's preparation for conceptional efforts by reaching out for support from those people that she assessed would be a source of nurturance. This strategy also included severing ties with individuals who were more likely to be an additional source of stress rather than support.

### Seeking Communication/Support from Spouse

While most participants felt that their husbands were less invested in their pursuit of parenthood, and less affected by infertility treatment, women began seeking their husbands out to communicate their need for emotional support. Previously, women had been willing to take responsibility for the infertility diagnosis regardless of the etiology because, as one participant noted, "I think that I can handle it better than he can".

The tendency for women to accept responsibility for reproductive difficulties within a marriage is supported in the literature. Perceptions of personal responsibility for some aspect of infertility may be required in order to feel in control of its solution (Abbey, 1991).

Husbands generally performed the role of the "sturdy oak", provided reassuring noises and remained optimistic about the chances for conception. However, there came a point when the participants required more from the relationship, and had developed the confidence to ask for it:

> I said to my husband you know, we're beginning a brand new cycle, I need some support here. I need you to ask me how I'm doing and I need you involved. I have to remind him. He's not always reading my cues

about needing support.

Most participants were happy with the willingness of their spouses to support them emotionally and to help them in their decisions regarding treatment. Some were surprised by the generous support they received when they asked for it. Women also appreciated their husbands' messages of grief and evidence of emotional vulnerability at times of loss and sadness, as confirmation that they were not negotiating this journey alone.

Buffering from Primary Mothering Figure

While severing emotional ties with significant others might be labelled avoidance, the two participants of this study who severed their maternal ties did so in an effort to conserve their emotional resources and establish boundaries in relationships with their mothers that were interfering with their coping and happiness. One participant stated:

> One thing I did was sever my relationship with my mother and it was hard and it still bothers me. But it was something I had to do because she's a very negative person who always puts me down and I thought, I need to feel like the best I can again for peace of mind. So maybe it gave me self-confidence in that I'm finally doing something that I want to do for myself...it's time to move on.

A second participant recognized her mother's insecurity in her responses to her daughter's reproductive failure:

> My mom has not dealt with my infertility. And you know, probably that's been one of the biggest problems that I have found. She wasn't happy being a mother because she was very quick to want to be a friend, bypass the mothering...so my Mom's just a little bit insecure.

Both participants regarded their mothers as very invested in the maternal role, but unhappy with the reality of mothering. Their daughter's experience with infertility frightened or angered them, causing tension in the relationship and additional stress

for the participant.

A third participant avoided telling her mother about her reproductive failure to protect her mother from worry and pain. However, this participant was close to her mother and finally reached out for nurturance and support:

> I thought she (mother) would be hurt and worried. I didn't want to worry her, that was the biggest thing. I finally told her and she was very supportive and she said that she felt very sorry for me and she knew that I'd been depressed and now she knew why. She told me that she would pray for me.

Hammer-Burns (1987) suggests that potential grandparents become frustrated in their transition to the developmental task of being mentors when their children are infertile. Parents of infertile persons may feel responsible or wonder if they caused the infertility defect in their children. The future grandchild also represents an opportunity for the grandparent to nurture without the responsibility of parenthood...an opportunity lost and grieved when their children are infertile.

Search for Nurturing and Support

As women developed confidence and voice, they reached out to others to share their experience and seek emotional support. Sources of support included the infertility support group, church leaders, counsellors, other infertile women and men, physicians, psychiatrists, friends, and coworkers.

Early sources of support and validation were discovered in the infertility clinic waiting room. Finding commonality of experience normalized the journey these women travelled, and provided evidence that others were surviving the same hardships:

> The strength of the conversation in the waiting room was to find out what someone else was going through and realize that you weren't totally alone. I think that was the hardest thing: feeling that you were alone and

nobody else had been through it...

A participant who had severed her maternal ties found the courage to confide in and ventilate with a friend. This friend provided her with the opportunity to share her anxieties and receive nurturing in return:

> There was one girl I did tell because I had to tell someone..I thought I'd go nuts because my husband doesn't talk about things as openly. So I told this one girlfriend of mind, that it was IVF and all that I had to go through and she still phones me everyday, just to see how I'm doing. So I didn't need my mother. She kind of replaced that main support.

Connecting with others who chose not to have children provided refuge for one woman who was eager to examine the positive implications of child free living:

> We have another friend who is not interested in kids at all, has no place for them at all and I must admit, sometimes I deliberately seek her out...That's the aspect of her that I'm really quite conscious of finding refuge in.

Eventually participants found new sources of spiritual, emotional, and physical nurturance when they needed to escape the frustrations of their situation for a time. As women became more confident in identifying individuals in their social milieu who would be supportive and sensitive, they began the reintegration back into society and family activities which started a healing process for them.

Emotional Preparation for Treatment

Before participants entered the treatment cycle they frequently sought emotional balance and peace so as to optimize their chance of success. While some researchers term this "magical thinking", there is increasing evidence that stress does impact fertility and treatment success. The reassurance that their health was in balance allowed them to feel that they were giving it their best chance. "Having no regrets" was a mental

strategy that Blenner (1992) noted. Women wanted the satisfaction of knowing that they had done everything possible to get pregnant, even if they were ultimately unable to have a child.

One of the participants cancelled her embryo transfer because she was emotionally upset over the death of a friend. Another woman resigned from her position as an accountant in order to decrease her stress levels:

> I wasn't working - I quit. I quit to fix up the house because I felt that I just couldn't handle stress very well. I did everything for peace of mind. If I did what I felt I had to do, then if it didn't work out I'd feel like it really wasn't meant to be.

Women also prepared themselves for treatment failure having learned that conception was evasive and reproductive failure was the most likely outcome of treatment. However, once involved in the cycle of treatment, it was easy to forget about the slender chance of success and allow optimism to carry one away. One participant tried to ease her disappointment by writing notes as a reminder of the likelihood of failure:

> There was always disappointment no matter how much I prepared myself. There was, and I even got to the point of writing down so that I would know, that I had thought of this and prepared myself, and yet there was still that feeling of disappointment of sort of oh shucks, it's not fair.

For another, potential failure was reframed as an opportunity for moving on, evidence that she had done her best, and the ordeal had come to an end:

> I have to think ahead of what I can do...there's always something positive that's going to come out of it and one thing I know is that the feeling again of being able to move on...I mean what a feeling.

### Cycle Specific Strategies : The Cycle of Hope

Infertility treatment produces a challenge for even the healthiest of individuals

to contend with. By the time women reached the point of considering in vitro fertilization or other invasive therapies, they had endured many months of failed conceptional efforts, surgeries, medications with aversive side effects, and multiple disappointments.

All participants had developed a sophisticated strategy for surviving the treatment cycle while protecting themselves emotionally. I have termed this the cycle of hope, as women utilized intentional hopefulness to allow them the courage to initiate invasive treatment, and the surrender of hope to soften the blow of disappointment. This emotional cycle has also been referred to in the literature as a type of cyclical mood disorder experienced by infertile women. However, the "depressive" phase of the disorder evades the standard criteria for a major depressive disorder because the duration of the symptoms is less than two weeks (Downey, 1989).

One woman tried to explain her utilization of hope:

> Well I'm hopeful and not hopeful at the same time. I always held back a certain amount but you try to put your best into it too so there's hope and lack of hope at the same time, which sounds contradictory.

Pre-Ovulation Hopefulness

As participants began the process that led them to invasive treatment, they felt like they were doing something positive about their situation. They stressed the importance of positive thinking to assist them in initiating the treatment cycle, otherwise as one participant questioned: "Why would I put myself through this?". This hopefulness occurred despite the physician-given odds of treatment success, which Blenner (1992) also noted in her population of clients embarking on treatment. Litt (1992) noted that optimism serves as a buffer against emotional distress during IVF

treatment, and it does not increase the risk of emotional distress when expectations are challenged by failure. In this study, optimism and hope provided the fuel necessary to initiate and maintain movement through hormone mood swings and daily injections. When participants were asked about their typical feelings in the pre-ovulatory period, the following responses arose:

> I was pretty confident then, I started to feel better and better as time went on because again, I was doing something. There was something I could do, there was a glimmer of hope.
>
> I think I'm going to get pregnant. I'm actually very confident. Depends on when you ask me in my cycle though doesn't it?

Immediate Post Ovulatory - Hope Peaks

Once confirmation of ovulation and in the case of IVF, fertilization was assured, women's hope peaked. This period of high optimism was associated with the third week of the menstrual cycle. One participant felt that "It's worked for sure" following the ovum retrieval in her IVF cycle. Positive visualization and optimism was the only power a woman had to influence nature at this stage:

> Who knows the power of the mind. The power if I'm thinking positively or negatively, maybe a little glimmer of hope can't hurt.

For one participant, ovulation propelled her into mental action, to assist implantation:

> And so once I've been inseminated..emotionally I'm very disturbed...nervous...hopeful, very hopeful...and I can't concentrate. And so the next couple days I spend a lot of energy when I'm meditating in visualizing a pregnancy. I'm visualizing conception.

Some women reported less receptivity to negative information regarding their low chance of success during their hopeful stage. Remaining hopeful required intense

concentration, commitment to the cause, and the filtering out of any pessimistic information.

Pre-menstrual Intentional Surrender of Hope

With the arrival of the final week of the menstrual cycle, women remembered their past disappointments and intentionally surrendered their hopefulness to cushion the blow of potential failure. This was accomplished with realistic self talk based on previous repeated evidence of failure:

> I'm hopeful but then I tell myself perhaps I shouldn't be this hopeful because when you're this hopeful you're going to get really disappointed.

Another participant felt that surrendering her optimism would allow her to survive emotionally and to protect her functioning in other aspects of her life:

> I would consciously make myself, because I found that I was afraid that if I didn't prepare myself, the letdown would be so big, I wouldn't be able to handle it. And so I wanted to prepare myself so I wouldn't absolutely fall apart...and not be able to function or whatever.

The development of hopelessness is interpreted in the literature as a declining state of mental health across the course of a failed IVF attempt (Hynes, 1992). However, these participants described a process that places hopelessness in a unique and normalizing context.

Failure and Resignation

Even with preparation for conceptional failure, women experienced intense sadness when it became a reality. They described a week or two of depression and crying, returning to the grief response:

> It's the worst time of all. It's like going from grey to black. It's almost a physical thing. It's terrible.

One participant had agreed to a continuous intravenous infusion of hormones for her most recent treatment cycle, and was confident that this heroic effort would produce a pregnancy. She was devastated as her intense effort went unrewarded:

> For a week I really didn't do much of anything but stay in the house and cry. I cried a lot, and I remember feeling really helpless like I didn't know if I was going to come through it. And that's pretty scary. It was really the first time I felt so helpless in my grief.

Three participants achieved pregnancy as a result of IVF but subsequently experienced pregnancy loss. This seemed to intensify their grieving, as they allowed themselves celebration and hope for a time, only to be disheartened once again:

> After I found out I was pregnant, they (ultrasound) just wanted to see how many...and the sacs were empty. I cried, I just sobbed. I was laying on the table there and I'm sure everybody heard me in the waiting room. That was painful... my soul had just been ripped apart.

Rebounding/Resurfacing of Hope

Over time and repeated failures, women gradually lost hope in the ability of technology to assist them with conception. One participant considered each failure of technology a "point of confirmation" which added to the evidence that conception would evade her. Another found that her hope for pregnancy gradually faded:

> I think that hope gradually dies over a number of years. Cycle after cycle after cycle and you don't conceive - every cycle a little bit more of the hope dies.

When the women still had the resources to invoke faith in their ability to conceive, grief and sorrow at the time of menstruation gradually gave way to renewed hope as planning began for the next treatment cycle.

Hope was bolstered for one participant who achieved a pregnancy, but had remaining embryos in cryopreservation. Knowing that she could not consider

destruction of the embryos after all of her intense effort, and their stamina in surviving such a rigorous process, she reflected on how she could not resist getting back on the "roller coaster":

> How dare we say one thing if we have one normal baby. That's it, what else could we ask for? But then there's these embryos. There's only four but still...The roller coaster continues.

Logic and emotion ran at cross-purposes as hope for a subsequent treatment cycle arose. While her emotions prepared her to try again, this participant's cognitive processes questioned her desire for another IVF cycle:

> Not only physically but emotionally...why put yourself through this? Why not handle this another way? I guess that basically comes down to hope and optimism or some inner belief that its going to work.

Participants reached a crossroads at this point in their journey. They re-evaluated whether to rebound back into another treatment cycle while examining the evidence of failure from previous attempts. As evidence of failure mounted, hope declined, compelling women to re-evaluate their situations and goals. Where treatment once represented movement, repeat treatment and failure epitomised travelling in a loop with no destination in sight.

## Summary

As women took action to reduce dissonance and reclaim their self concept as mother, they made decisions to pursue invasive technology to assist conceptional efforts. They began to concentrate intently on their goal, evaluate and negotiate treatments, educate themselves, and bolster themselves physically and emotionally to maintain health during taxing treatments. Participants developed a number of problem and emotion focused strategies which they utilized depending on their needs at various

times. Women revealed strategies including intentional hopefulness and hopelessness to ease their passage through rigorous interventions. As time passed and treatment persistently failed, women gathered evidence which led them to their next "point of confirmation".

## Evaluating New Evidence

As each reproductive failure mounted, hope for biological motherhood decreased. Women reported fatigue from their journey, and decreased motivation to continue the battle. There was now proof available to indicate that conception was unlikely. They had shown themselves and others that they had tried their best. Evidence of repeat treatment failure, loss of hope, strenuous personal sacrifice, an end to treatment options, and evidence of alternative options encouraged women to look past the point of intervention and into a future of alternatives.

### Repeated Treatment Failure and Loss of Hope

Participants began to feel the strain of repeated treatment failure and began to suspect that their efforts in this journey were not to be rewarded. They were not able to rebound to a feeling of hope for their next treatment cycle:

> I wasn't very hopeful about going through the next transfer...going through even more scared than the first time. Like not hopeful this time. The second time, I was very quiet and it was nothing like the first time at all.

Most women expressed concerns regarding the impact of repeated failures on their emotional, physical, and marital health. Ironically, one participant felt that as treatment progressed she became less emotionally fit to parent:

> As the waiting goes on and you become an angrier, more resentful less nurturing person, like you're so tied up with your own anger and

> resentment that you can't pass on the nice things to a someone else in the way you might have been able to, then the ability to be a good parent decreases.

Another woman noted that the failures were jeopardizing the gains she had made to conquer bulimia:

> All my pregnancy tests always came out negative and this one there was a very faint blue line...and I thought there might be a chance and then my other test came back negative. That old familiar feeling was coming back and it's quite hopeless...I started wanting to be bulimic again. I went out of production for about a week.

Women began to contemplate how much of themselves they were willing to sacrifice. Their original commitment to "doing anything" to achieve biological motherhood was challenged by evidence that "anything" might not result in childbearing, and continued efforts would tax emotional and physical resources to the breaking point:

> As you go along, the boundaries change. At first, there's no boundaries, you think whatever it takes, I'll do it. That's just talk, you don't know what you're saying until you're in the thick of it...

However, one woman viewed her repeated failures, loss of hope and the journey of emotional pain as a prerequisite to her acceptance of non-biological parenthood:

> A part of what you might have to go through...all this pain before you finally get it, like no, you're not meant to have children. And you know, and maybe that's what it takes, you have to crawl and go through all this...

## Setting/Facing the Treatment Endpoint

The end of women's experience with reproductive technologies was signalled by their willingness to set limits on further treatment and a diminishing faith in technology's capabilities. When women found themselves undergoing treatment

despite a loss of hope in the technology accompanied by evidence that conception was unlikely, they decided on an endpoint.

Emotional and cognitive conviction that technology could no longer benefit them appeared to be a requirement for the abandonment of heroic efforts. A participant who had decided that her treatment had reached its logical endpoint, and emotionally she no longer felt the need to continue, was induced to reconsider her treatment endpoint when evidence indicated that she could get pregnant with IVF. With the stillbirth of her infant, she now seeks more proof to reach closure:

> I think at that point we had drawn that line, and we'd go one more (IVF) as proof and I would have been fine...I think I could have accepted it and we would have gone along and continued. I don't know what would have happened, but life would have been very smooth.

As mentioned previously, women entered treatment to take action against their infertility and to prove that they were giving childbearing its best chance. For most of the participants, IVF represented that best chance, their most intense efforts, and personal suffering. They could not be criticized for shirking their responsibilities, or choosing a "selfish" child-free existence. Conception was beyond their control:

> Even if this pregnancy doesn't work out, I'll try whatever remaining embryos, if it doesn't work, I'll just go: it really wasn't meant to be. There's absolutely not one more thing I can do, and I'm not going to worry about it anymore. Really, because there has to be a point...

### Weighing of Personal Sacrifice

As women surveyed the costs of their treatment years, they noted many losses and negative changes that impacted their happiness and ability to formulate other goals for themselves. As medical intervention required so much concentration, time, and persistence, many other areas of their health and well-being had deteriorated from non-

attention and chronic strain:

> It had affected my body badly and I felt that my relationship with my husband was under a lot of strain, my relationship with a lot of friends was under a lot of strain because of this so called obsession...

What concerned women the most was their loss of connection with other significant people in their lives. This was especially true for women who initially had difficulty setting boundaries and asserting themselves. Infertility had infiltrated every part of their lives, monopolizing their time and risking their connections with others:

> I've lost happiness, I've lost two years of productive life, I've been very unproductive because I'm waiting. I've lost a close relationship with my sister. I've certainly lost a lot of...connection.

Women began attending to current relationships with friends and family as the connection with a potential baby faded. They also began to resume pleasurable activities that they formerly felt would jeopardize their chances of conception. The cessation of treatment was an opportunity for this participant to resume physical activities that previously had provided her with a source of pleasure and accomplishment:

> I put on an awful lot of weight which negatively impacted a lot of things I did as a person who wasn't a parent. We had a very active life and I cut out some of those things. So if we weren't going to have children, I thought that stopping treatment was a good thing because I could resume a lot of other things that I did.

Cost-benefit analysis of unsuccessful treatment and decreasing resources, translated to many years of effort without compensation. As they evaluated the sacrifices made, women accumulated the evidence they required to move in a direction of self-care.

## Considering Alternatives to Treatment

Four of the five participants actively pursued or considered adoption. This contemplation of the options generally began as evidence of treatment failure mounted. However, one participant viewed the adoption option as her first choice. Treatment preceded adoption because of the long waiting lists for a healthy baby:

> I always wanted to adopt. I had four adoptive cousins and one of my dreams when I was quite young was that I'd adopt 12 kids of all different nationalities and races and have a mini United Nations.

The consideration of adoption exemplified the return to a focus on parenting rather than pregnancy. The opportunity to nurture a child and progress in its development was seen as preferable to the pursuit of biological parenthood:

> I think we need to adopt a baby. I think that we need to just get on with our lives and we really want to adopt but we really need to get on with parenting. It was a lesser but now it's not. It's just a different way but we feel they are all God's children and they're all loaned to us anyway.

Shifting expectations related to how their families would be created was a gradual process for most participants. It involved much discussion with spouses, investigation of options for adoptive parenting, and consideration of child-free living. Hammer Burns (1987) supports this finding and comments that adoptive parenting requires an examination of motivations for parenting to determine if it is desired for the social parenting experience, or for immortality through the survival of one's genes. Most women in this study came to the former conclusion. Only one woman voiced child-free living as the desirable alternative to biological parenting and found herself looking forward to the opportunities that childlessness offered. Ironically, she became pregnant and awaited delivery of her baby as this thesis was being written.

## Summary

Participants experienced a point of re-evaluation of their situation following evidence of repeat treatment failure and loss of hope in treatment success. Time and energy were being wasted in treatment and women felt the need to make decisions that would assist them in moving on with their lives. The emotional and physical costs of repeated conception failures were accumulating, and women were losing their connections with others. Alternatives were considered, with most couples considering adoption and one woman exploring a child-free couple-focused lifestyle.

## Turning Point: Shifting Self Concept

The issue of resolution was a point of contention for the participants of this study. Resolution implied that the conflict was over and a final endpoint had been attained. Some participants felt that having a child in their arms would be their ultimate resolution, if there existed such a possibility after everything they had endured.

Movement towards acceptance of non-biological parenthood appeared to be a very gradual process of re-evaluation and adaptation. Menning's (1980) assertion that resolution required that feelings be recognized, worked through, and overcome overlooks the active cognitive restructuring that is required within the infertility treatment process as new information arises. This may be related to continuing advances in reproductive technology that now make it difficult for infertile individuals to reach the point at which they feeling they have done everything (Berg, 1991).

As women in this study recognized that they were unlikely to achieve their goal of biological motherhood, they reconceptualized themselves. The identification of the new self was consistent with the reality of self, so that cognitive dissonance and

resulting distress were reduced or eliminated. Women incorporated their experience with infertility into the core of their being. One participant explained:

> I honestly think there's a turning point. I think I'm getting to it. There's a point when you're along the path and you have a choice of whether you want to continue with the way you've handled things and the grieving or you stop and you go, okay this is the situation. I accept the situation the way it is, I'm going to make you a part of my life and I'm going to move on. It's not going to go away, it's going to be a part of me that makes me unique. And I think that's what I'm coming to. And that's okay, you know. It's not a negative. It's just part of who I am and I wouldn't be the person I am if I hadn't gone through that....

The "turning point" for participants involved the adoption of new philosophies and schemas, development of an attitude of self care, reintegration into society, de-idealization of motherhood or pregnancy, renewed hope for the future, surrendering responsibility for infertility, strengthening of their marriage, positive meaning attribution of the infertility experience, and an eventual resumption of normal activity.

### Shift in Philosophies and Schemas

While resolution is associated with peace and acceptance of one's situation, women in this study described a shift in their world view that encompassed scepticism and a loss of faith in their assumptions about the fairness and predictability of life. As they had learned that they could not take fertility and expectations about mothering for granted, their disillusionment was incorporated into their schemas:

> I will never be the same as I was before. I was a lot more optimistic and a lot less sad. I'd never really faced a crisis of any kind. I was kind of naive...unaffected by life's difficulties. I don't think you can be prepared for something like this. I've been scarred and I'll always be as if I had.

They re-evaluated their situations and reformulated a healthy and supportive situation for themselves...

> I look at life...my priorities are so different. I've re-evaluated everything...friendships and work, family, where we were living.

and began to count their blessings:

> My life has been very blessed. I've not had anything wrong with my life. We've always been called the perfect couple and we've done well in our life.

Women placed their dilemma with infertility in perspective, and occasionally, downward comparison provided comfort:

> There are families living on the street right now and life isn't so bad. You've got a beautiful home, you've got a nice husband, you've got some nice friends. I'm telling myself, perhaps God is a lot busier doing other things...a lot of people have bigger problems than you.

While participants recognized a change in satisfaction with their lives, they reiterated that the emotional pain and trauma of their failed expectations remained with them. Decisions to move on were based on practicality, fatigue, loss of hope, and a need to feel that they were moving productively through their lives. One participant described the behavioral changes she made, while her emotional acceptance lagged behind:

> For me I think it has to be points of confirmation...like the IVF is one point of confirmation. There has to be a time where you kind of think logically and put things together and say this is now the direction I want to go. I don't know if there's any resolution that you come to. You change the direction of your life and your decisions. I don't think its a turning point in your emotions and feelings. I think that continues on...the action changes.

### Focus on Self Care

> A child is a very important thing but I have to think about myself too. And I don't think that's being selfish. I have to do my very best for myself. I do.

Most participants recognized that self care and assertion were essential to their

well-being. The catalyst for the transition from "baby first" to "me first" was the recognition that without self-care, the woman would be unprepared to nurture a child or any other person. Women also adopted self care attitudes with exposure to physical and mental pain during the treatment process. While unlimited self-sacrifice was the idealized expectation for themselves, self nurturing became a necessity for survival:

> I feel that it is very important to me, that if I don't look after my body, and not only my body but my way of thinking, if I don't manage that I have nothing to work from. So that's something that I very carefully guard is what things will happen to me.

Women's early learning teaches them to be nice, sweet, and agreeable and therefore assertion and setting boundaries are difficult and foreign tasks to learn. By relying on self-affirmation to reflect the belief in self, women reclaim their power (Anton, 1992). Women in this study, pushed the boundaries of femininity to assert their own needs for nurturance. They developed new roles and expectations for themselves, which focused less on others, and more on self:

> I didn't used to be an assertive person...I used to try to please everybody else. Now I realize that I can do that but I have to take care of myself....I will do anything to take care of myself. That will be most important.

Anton (1992) encourages infertile women to embrace the quest for feminine wholeness as they journey towards an endpoint of treatment. "Wholeness" encompasses learning about and valuing the self, accessing untapped strength and wisdom, and creating a full whole life, without children.

### Reintegration With Social Group

As women's affiliation with and nurturing of others helps them to define themselves and deal with the everyday challenges of life, participants in the study found

that they could not isolate themselves from their social environment indefinitely. Some women gradually formed new relationships that were more genuine or committed than they had previously experienced. Most found their way back to old friends and initiated interaction with infants and children once again:

> In the last year I've just decided I can't shut myself off from everyone and I'd better move on. So I've been going over if someone has a baby and giving them a gift, which has been hard for me because they always hand you the baby, but that really hasn't been all that bad.

Friends provided infusions of encouragement and support for the women to move on with their lives. Involvement in family activities was once again enjoyable, and promoted healing within a circle of support and care:

> I had a friend that reached out to me, the same friend who's been pregnant and we're godparents, so she's been great. She reached out to me and that started a healing process for me...it was bringing me back and it was also right around then I quit my job that I didn't like...

Social judgement became less of an issue, as women developed skills to manage inappropriate probing and selected friends who demonstrated sensitivity to the issue of infertility.

<u>De-idealization of Motherhood/Pregnancy</u>

As motherhood as the ideal no longer fit with the reality of the self, women adapted new attitudes about the value of motherhood. One participant identified difficulties in her mother's experience with the traditional role and the contradiction inherent in the philosophy that motherhood represented happiness and fulfillment for women:

> My mother and that generation - that's all they did. That made them a woman, it's like they had children and that was the focus of their life. My mother couldn't handle it when we left - her whole life was so focused on

> us. For some women even now that's fine, but you still have to have your sense of self and she lost that I thought.

The bliss of motherhood was perceived as a misrepresentation promoted by society. A participant commented that her friends idealized parenthood and encouraged her quest for treatment until she became pregnant. Shortly after announcing her pregnancy, she was distressed to find her cohorts professing how disruptive parenthood was to their lives. She provided the following advice:

> People don't talk about it enough...about really what are the hardships of being a parent...to infertile people. I think infertile people really have...not a fantasy but its just not a realistic picture because you become so obsessed with all the involvement in infertilty.

The participant who viewed child-free living as a positive alternative to biological parenthood professed that resolution of her infertility was now society's problem. She could accept her situation and find new potential for herself:

> There's more to life than having kids. You could look at it as a way of taking an opportunity and running with it. It's not the end of the world - it's what *other people* perceive it is. That really makes me mad because I have come to terms with if things don't work out, I can move on and I'll be ok.

The participant who travelled the infertility journey well equipped with coping strategies and a strong sense of self, separated motherhood as a goal from her sense of self:

> No motherhood is not necessary for happiness or fulfillment, to be a complete woman, to be a real woman. I don't have any images like that at all. For me, its something I want but..oh heavens there's a lot of opportunity in life without that one tiny little label.

As women gradually identified new strengths and challenges, they also developed the philosophy and confidence that they could be of value to society, outside

of the mothering role:

> I think that I have something to give to the world and being a mother isn't the only thing. I think it's one of our functions, it's nice if it's there...

Hope/Confidence for Self in Future

Self confidence in their abilties to cope developed as participants recognized the rigor of the journey they had travelled and their persistence through it. They had survived a phenomenon that threatened the core of their being and they found themselves fit at the journey's end. This assurance in their ability to contend with whatever life handed them, prepared them to face their future with poise.

> It's changed my view of the world. And I think to a certain extent it's because of the whole fertility process of having worked through something and now knowing that I can do that.

> In a way it really destroys your self concept because you haven't got to where you want to go and yet in another sense, it allows you to set out a process and follow it and then know that you can.

Redirection of mothering energy was approached with the goal of anticipating and enjoying alternatives to mothering, rather than as a strategy to distract from the pain of reproductive failure:

> I made a list...like the crafts I want to try, the places we want to travel, so many different things, courses I want to take, books I want to read...so really honestly, if things didn't work out I thought, it's not like that was it.

Where all hope had previously been invested in the desire for conception, women began to reinvest positive energy into themselves and their newly recognized potentials.

Positive Meaning Signification of Infertility

Most choices and experiences that individuals encounter in their lives include

positive and negative aspects. Initially it was very difficult for the participants to recognize the positive value of childlessness. However, the restructuring of self expectation to adapt to the reality of their situation, necessitated the identification and maximization of the advantages of childlessness:

> There are times when we sort of sleep in on a Saturday and say it's a good thing we don't have to get up. I sort of kick the nieces and nephews out the door and say well its their parent's problem now.

One participant recognized the power she held over her perceptions of experience and opted to view the pain of infertility as an opportunity for growth:

> I guess through the pain sometimes you can grow. You get knowledge through the pain, you get learning through it. It doesn't have to be a bad experience. We only make it painful because that's the way we choose to perceive it I guess. Having a baby isn't everything in the world.

Another recognized that the infertility experience had inspired her to develop a greater degree of empathy for others:

> I've gained a lot of compassion for people who are having fertility problems and I think I'm just generally less prejudiced. Maybe I've developed a better understanding...maybe more insight.

It is one of life's ironies that infertility prepares one to be a perceptive and empathic parent; a compassionate person with well defined boundaries and coping abilities, and strengths to endure incredible pain.

### Recognizing the Uncontrollable Nature of Infertility

Women reported that after repeated treatment failure occurred, they began to surrender control of responsibility for infertility, understanding that they had very little influence over whether or not conception would occur:

> You realize pretty soon after you start treatment for infertility that you don't have a lot of control over it...you realize that you're at the mercy of

> a lot of uncontrollable factors, some of them man-made, some of them out there somewhere, like God given or fate controlled.

Atwood (1992) regards this externalization of the problem as helpful in assisting the infertile individual to separate herself from her infertility. Once the infertile woman becomes a woman with infertility, the all encompassing way of regarding her circumstances is compartmentalized, allowing the opportunity for her to feel some control over other aspects of her life.

Because physicians in our society are promoted as infallible healers, women enter into treatment trusting that their physician will provide a positive outcome. However, the uncontrollable nature of infertility thwarts the efforts of even the most brilliant scientist or physician. Over time, participants came to the realization that their doctors could facilitate the treatment process and optimize their chances, but beyond that, were just as powerless as their client's in the influence of nature:

> The doctor is only human, they cannot make you pregnant. They are not a life deciding force. They are there to help you along the way but I think I had put too much stock in thinking they were miracle workers.

## Stronger Marital Intimacy

The experience of infertility proved to women that their marriages could face crisis and survive:

> We feel stronger, we feel there could be worse things. This is one obstacle and hey we're making it, we're getting through this, it's all right...yeah we don't need to have kids. We love each other and it's not the end all and be all.

Women and their partners developed new communication patterns to support each other during stressful times:

> If nothing else I'm glad we've gone through infertility because of how it's strengthened our marriage. We always had a strong marriage and man are we ever stronger now. We've had to talk so much...the communications have to open. If they don't open I think that you can lose your marriage.

Participants also experienced relief in knowing that the failure to produce offspring did not endanger their spousal connections. Marriages that were nurturing and not tied to socially prescribed roles allowed the women to see themselves as something other than mother. The woman who experienced the stillbirth of her full term infant, was convinced that the stress of the loss would shatter her marriage. Although she admitted that this tragedy strained them, to her surprise, it also strengthened their bond, "like a muscle: if you use it a lot, then it becomes stronger".

Return to Normal Physical/Emotional Activity

The resumption of a normal activity level was characteristic of the turning point stage. Participants experienced renewed zest for life within the context of stronger relationships, greater marital intimacy, acceptance of themselves, and new coping strategies that they could generalize to other aspects of their life. They made choices to shed their grieving affect, to move on to more productive living, knowing that the pain of their experience would always be a part of them:

> I think that it's important to carry on a normal life. And I don't want to be miserable and unhappy and angry with the world. That's not the way I want to be...

Menning (1980) defines this as resolution: a return to normal activities with the expectation that emotional pain will resurface during vulnerable times when infertile individuals encounter celebrations of childbearing. However, life is lived with more hope and purpose and as the days pass, the pain of the journey loses its edge.

## Summary

As women develop a new self-schema that is more fitting with the reality of their situation, they reach what they describe as a turning point. Care and attention shifts from conceptional efforts to self care and connection within intimate and social relationships. Women described a loss of naivety related to assumptions and expectations about life. They expressed more confidence in their abilities to find a place of value in society, despite their childlessness. Motherhood as the ideal was challenged, and positive aspects of infertility were explored. Control over infertility was ultimately surrendered, and a return to normal activity was pursued.

In conclusion, participants did not experience the proposed theoretetical concepts in a linear fashion. Cognitive dissonance, grieving, taking control of treatment, developing new coping strategies, and re-evaluation of the evidence frequently overlapped and were experienced repeatedly. As women became more invested in their new self-concept, lost hope in treatment, and evaluated that intervention was futile, the balance tipped away from cognitive dissonance and grief. Continued medical treatment was procrastinated or declined. Alternatives were researched and energies were invested elsewhere.

However, none of the participants would admit to abandoning the possibility of medical intervention in the future. However, participants who were heavily invested in "turning point" concepts, demonstrated a reluctance to expose themselves to potential grief again, and a satisfaction with their lives at present.

# CHAPTER FIVE

# INTEGRATION OF THEORY AND RESEARCH

## Introduction

The purpose of this chapter is to integrate the theoretical findings from this study with the existing research in the area. Each major category from the theory will be discussed and evaluated within the framework of available published evidence and support for the findings. Study limitations and implications for further research will be reviewed. Finally, a discussion of counseling implications including strategies suggested by study participants will be included.

## Defining Self as Mother

The findings from this study indicate that women defined themselves as future mothers and for all, biological motherhood was a goal. For some, motherhood represented a preferred career or an ideal situation for themselves. Becoming mothers was seen as an opportunity for growth and connection, an expectation for themselves, and an improvement in lifestyle that included integration into the community.

Surrey's (1991) feminist writings offer evidence that women's desires for motherhood find their origins in their early development of capacity for connection, empathy, interaction, and mutual empowerment. The initial development of self occurs within the context of the mother-daughter relationship, and mothering is associated with deepening self-awareness within the experience of mutual empathy with the developing child. This process begins the learning and practice of mothering and nurturing within a relationship. Participants in this study reflected their desire for affiliation with a child and the community. Most had experienced positive parenting and nurturing role models

as children, and saw mothering as a vital part of the self.

Participants in this study believed in their right to mother and that parenting would enhance their opportunities, growth, and development. Daniluk (1988) notes that the goal of pregnancy and childbearing is inherited. Society has reinforced the importance of parenting over the centuries with the implication that reproduction is a basic human right and parenthood a necessary developmental event.

Robinson (1989) agrees that motherhood is assumed to be an essential step in the development of a woman's identity. She states that a woman's desire to bear children is related to cultural expectation and opportunities, while her biology increases her readiness to nurture an infant.

Afek (1990) notes that compulsary motherhood is promoted as a limiting experience for women. She claims that the women's movement has concentrated only on women breaking out of stereotyped female roles while ignoring those women who wish to become mothers. The wish for a biological child is seen as narcissistic or influenced by social pressure and oppression.

Some women from this study expressed indignation at the suggestion that their decision to parent may be related to social or spousal pressure. Most women viewed their decisions to parent as personal and thoughtful, and denied pressure from any source to mother. In their marriage, they were more invested and interested in childbearing than their spouses were, and felt that they were more distressed about infertility than their husbands.

Studies of gender differences related to parental goals indicate that women feel it is much more important to produce a biological child, than do their male partners.

Women are more likely to endorse parenthood for affiliative reasons; to care for and nurture a child. Outside employment is often viewed as a rival obligation to mothering responsibilities (Berg, 1991).

This was supported by the women in this study who felt that their husbands were supportive of them, but less invested in the idea of childbearing. Most of the participants felt that motherhood was preferable to a career, and one participant left the workforce as her employment increased her stress levels and possibly complicated her attempts to conceive.

While women have recently been given new options to control when and if they have children, participants in this study made the choice to mother and assumed that they held control of this decision at this stage. Available research contends that there are valid sociological, biological, and psychological motivations for mothering. However the impetus identified most frequently in this study, was the desire for connection and nurturing.

## Failed Expectations: Cognitive Dissonance

As the realization of infertility gradually emerged for participants in this study, they began to experience a conflict between their ideal self as biological mother and the reality of infertility. This cognitive dissonance represented a threat to their goals and self concept and triggered a grief response which will be described in the next section.

Kathleen Kikendall (1994) places the failed expectations of infertility within the self-discrepancy model. She affirms that if a woman has a strong desire for a child, the reality of infertility produces conflict, discrepancy and emotional problems. Failure to meet the social expectation of motherhood, adherence to socially prescribed roles, loss

of the internalized sense of mothering identity, and failure to accommodate the desires of the spouse for children produces crisis and emotional distress.

Participants from this study confirmed conflict and discrepancy related to failed role expectations, social non-support for their grief, feelings of stigma in comparison with their peers, and exclusion from membership in the mothering experience. Abbey (1991) confirms that childlessness disqualifies infertile women from membership in the experience of parenting, and ultimately from many potential social connections and relationships.

Women in this study had expected to take part in the maternal role, to create families as part of their normal life transitions, to be a part of the larger mothering culture, and to be supported in grief, as society supports others who experience loss. However, as they began to experience loss related to their ideal self and esteem, they also experienced isolation from their social circle creating a psychological and social destruction of connection.

In a phenomenological study, Bitonti (1992) also found that the self-esteem of women involved the subjective assessment of congruence between one's ideal self-schema and the perception of self in the moment. Consistency between the ideal self and real self maintained self-esteem. Bitonti confirms that the role of connec-tion or affiliation is central to women's experience of self esteem, especially during transitional events. She concluded that loss of self-esteem creates depression and stress.

The consideration of medical intervention to assist conception also challenged normal expectations. Reproductive autonomy was lost, sexual intercourse focused on procreation, and conception became an unrewarded effort. Women consulted

physicians who advised and instructed them on the best ways to conceive.

Sandelowski (1990) reported similar phenomena in her grounded theory research of conception. "Forcing conception" was associated with the loss of romantic lovemaking as infertile couples labored to make conception occur. Intercourse became a job, or a means to an end. Lives were structured around the menstrual cycle and the normal path to conception was replaced by a series of "painful hurdles" to be overcome. The labour to conceive created alienation between husbands and wives, as strangers were introduced into the conceptional process.

In summary, existing theory supports the findings in this section of the research study. Discrepancy between the reality of infertility and the ideal reproductive and social self generated distress. For the participants in this study, cognitive dissonance was created throughout their journey as new information arose. As a result, they experienced repeating cycles of grief that gradually decreased in intensity.

## Grief Response to Cognitive Dissonance

Descriptive studies provide abundant information about the emotional responses to the loss and dissonance of infertility. Recurrent themes include grief and depression, anger, guilt, shock or denial and anxiety. Menning (1980) and Mahlstedt (1985) report that depression and grief are the most common responses they encounter in individuals after a diagnosis of infertility. Cook (1987) asserts that anger and guilt are also a part of the response pattern.

Except for shock and denial, emotional responses of women in this study were consistent with previous research. Denial, shock or surprise is usually described early in the infertility experience (Dunkel-Schetter, 1991). Although some participants in this

study reported shock at the way in which they were treated by the medical system or within their social mileu, they reported that the realization of infertility was an insideous process, accompanied by cycle after cycle of failure. The assumption of shock and denial may be generalized from the grieving literature (Kubler-Ross,1969) which describes the individual's reaction to experiencing a sudden diagnosis of a lethal illness. It is likely that shock may be experienced in women who suffer sudden loss of their fertility; for example, in emergency surgery requiring the removal of reproductive organs.

The feelings of loss of control reported by women in this study are reflected in the descriptive literature. Dunkel-Schetter and Lobel (1991) suggest that there are two aspects of loss of control in the infertility experience that are important to consider. One is the loss of control over daily activities, bodily functions, and emotions, and the second revolves around ambiguity about the future, especially related to planning strategies and goals. Mahstedt (1985) suggests that infertile individuals suffer loss of control over their moods and emotions, their sexual relationship and their privacy.

Loss of social connections and feelings of exclusion as reported by study participants are also supported in the literature. In descriptive writings, Cook (1987) and Mahlstedt (1985) report that infertile individuals experience difficulties in social interactions and relationships. Some women feel unaccepted or scorned by family and friends and therefore withdraw from relationships (Dunkel-Schetter & Lobel, 1991).

Descriptive reports generally focus on the emotional effects of infertility rather than changes in identity and esteem or social effects. Dunkel-Schetter and Lobel (1991) suggest that this is because emotional distress attracts more attention in the

clinical setting.

Empirical research does not clearly indicate specific reactions to infertility or that adverse effects are common. McEwan (1987) did report abnormally high levels of depression in a study of Calgary infertility patients. However, these findings have not been replicated. Judith Daniluk (1988) reported infertility had a greater impact on women than men, and that distress was highest early in the infertility assessment process. Her findings are supported in this research.

The emphasis on identifying psychiatric morbidity in this population, with instruments like the Minnesota Multiphasic Personality Inventory may be misplaced. While psychological strain reactions occur within the context of the infertility experience, significant psychopathology is not usually present (Berg, 1990).

The time of access to infertile individuals in the clinical setting might also explain some of the lack of quantitative evidence. Individuals who decide on reproductive technologies may not see the clinic psychologist until invasive treatment is planned or initiated. As demonstrated in this theory, the "taking action" phase is characterized by assertiveness, coping, and hopefulness rather than psychological distress. Short term distress and hopelessness typically occur when a woman realizes conceptional failure at the cycle end; two weeks after she was last seen by the clinic doctor or counsellor.

### Taking Action to Reduce Dissonance: Getting Control

As women evaluated the nature of the challenge they were presented with, they began to mobilize themselves in order to find a solution to their dilemma. Their "taking control" strategies involved tentative acceptance of their situation, narrowing of focus to concentrate on solutions, a search for meaning or diagnosis, and approaching

treatment as a means of ending the immobilization of grieving.

There is a debate in the literature as to the usefulness of strategies that involve asserting control within the infertility experience. In 1973, Platt, Ficher, and Silver administered an Internal-External Locus of Control Scale to fertile and infertile couples. Infertile couples scored more externally as compared to their fertile cohorts. Infertile couples reported feeling helpless regarding an aspect of their lives they expected to be able to control, and in 1974, there were few solutions that medical science could offer them. Viewing the biology of infertility as something outside of their power to control was and remains a reality. However, the development of reproductive technologies offers an element of control, with a catch.

Mendola (1990) found that taking personal control of infertility through long term medical intervention was costly for individuals in that it created more disruption and distress. He asserts that infertility is not a medical illness and measures of control cannot prevent its' chronic impact. Infertility remains unpredictable and uncontrollable even with medical intervention.

Participants in this study who experienced the most distress around loss of control issues were those women diagnosed with unexplained infertility. This diagnosis implies that there is no known explanation for their difficulty and that capacity for normal conception remains a possibility. Koropatnick (1993) found that individuals who perceived their infertility to be permanent, rather than ambiguous, experienced less distress. This is consistent with Schlossberg's work which asserts that transitions of an uncertain duration create more distress than transitions of a known duration. Koropatnick added that individuals who exhibited emotional calm in coping with their

infertility were more confident in their abilities to effect change, demonstrated an internal locus of control, and possessed secure self images and esteem.

Participants in this study accepted that while infertility was a reality for them, biological parenthood might be possible within the realm of reproductive technologies. Assertion of control was directed at finding meaning in their experience, improving their health habits, and making personal decisions to pursue assisted conception. Stanton (1991) confirms that the primary vehicle for controlling the outcome of infertility is the active pursuit of and participation in medical intervention. In her study, women who perceived less control over the outcome of infertility treatment, were more threatened and distressed.

In summary, while the role of nature in infertility allows humans little control over conception, a sense of control and responsibility around some aspects of the infertility process is healthy. Ambiguity related to the etiology of reproductive failure may predispose a woman to increased feelings of powerlessness. Repeated treatments resulting in failure, and long term exposure to medical technology may increase distress and decrease an individual's capacity to cope.

## Developing Coping Strategies

In this study, women identified three methods of coping with infertility and treatment. Problem focused strategies accompanied the development of assertiveness, emotion focused strategies centred on social support, and cycle specific strategies utilized intentional hopefulness and hopelessness.

Studies on successful coping with infertility are scarce. Most often, studies that examine adjustment to crisis, focus on distress and therefore very little is known about

effective coping with infertility (Stanton, 1991). However, Stanton suggests that seeking social support, active problem solving, and positive reappraisal are related to women's well-being. Therefore, more active strategies for women engender successful coping, while avoidance contributes to distress.

In a study of gender differences in response to infertility, Abbey (1991) reported that women engaged in more problem solving and escape coping than did their husbands. She suggested that adaptation to chronic long-term stressors may require active coping strategies combined with periods of escape during which psychological resources can be replenished. Taking personal responsibility for the infertility process was seen as important to establishing a sense of control.

Problem focused strategies developed by the participants centred on taking control within the health care relationship. Becker's (1991) research confirms that this strategy is developed because the health care system creates a world of power for the physician. Infertile clients balance the power differential by taking the lead in accepting responsibility for initiating medical treatment, perceiving medical intervention as positive action while sharing responsibility for conception with the doctor, and finally taking full responsibility for decisions related to their medical treatment. Taking responsibility and control provided women and men with the feeling that they were moving towards a resolution of their dilemma.

For the participants in the current study, emotion focused strategies involved the identification of nurturing and support. In light of suggestions that psychosocial stress may contribute to infertility and that social support may buffer the impact of stressors on the body (Wasser, 1993), ensuring that strong supportive connections are not only

accessible, but also pursued is a prudent strategy.

In this study, participants developed coping methods that utilized hope and loss of hope as a means of modifying their emotional responses and optimizing their chances of conception in the treatment cycle. There is suggestion in the descriptive literature that this phenomenon may represent the emotional roller coaster, the time of hope and despair that infertile individual's refer to (Mahlstedt, 1985).

Hynes' (1992) research suggests that women develop depression and decreased self-confidence across the course of a failed IVF cycle and Berg (1991) asserts that repeated treatment failure results in loss of hope. Downey (1989) refers to changing emotional affect during the menstrual cycle as a mood disorder which evades classical diagnosis because of the short duration of depressive states. These findings lend some support to the idea that women lose hope as they approach the end of their cycle. However, there is no other research evidence that this writer could identify to suggest that it is an intentional effort to cope and buffer disappointment. As hope rebounded, participants from this study engaged in another cycle of treatment. However, repeated treatment failure created loss of hope and increased the liklihood that they would move into the re-evaluation phase. Hopelessness has traditionally been regarded as part of infertility griefwork and depression (Menning, 1980) and it is possible that hope and hopelessness have been overlooked as coping mechanisms because of these previous assumptions.

In summary, there is some research support to suggest that problem and emotion focused strategies are helpful in modifying controllable and uncontrollable aspects of infertility. The development of assertion in negotiating within the health care

mileu appears to be helpful in re-establishing a sense of control. Social support and connection is vital to the emotional and physical health of women. Utilization of hope and hopelessness provides researchers with a new interpretation of changing moods and affect within the context of infertility and the menstrual cycle.

## Evaluating New Evidence

Repeated treatment failure and loss of hope signalled a departure from the taking action---failed expectations---cognitive dissonance---grief response loop. Women began setting an endpoint to intervention related to mounting evidence that treatment was not destined to facilitate their goal of motherhood. They reported fatigue and a feeling that they had sacrificed as much of themselves as they could tolerate. Alternatives including adoptive mothering and child free living were considered.

Koropatnick (1993) reported similar findings: that the passage of time and the failure of the treatment process influenced an individuals adaptation to the infertility transition. The incorporation of this reality into their self schema signalled successful adaptation. Setting treatment endpoints regardless of available reproductive intervention began the process of coming to terms with childlessness and emotional healing. Transition to non-biological parenthood depends on successful shifting of self concept and identification of strengths and resources.

Mednick (1991) suggests that initially, the option of adopting children is ignored as infertile individuals get caught up in the pursuit of biological parenthood. However, once individuals accept that biological parenthood is unlikely, they develop receptivity to alternative ways of forming their families or the consideration of childfree living.

Berg (1991) asserts concerns that continuing advances of reproductive

technologies create difficulty in reaching a treatment endpoint. Leiblum (1987) found a higher percentage of women reported successful resolution of their infertility crisis when they limited IVF to one attempt. Infertile individuals are left with a struggle in evaluating whether the evidence is sufficient to warrant discontinuation of therapy and the surrender of their dream.

The evaluation of new evidence begins the deconstruction of the infertility crisis, and the evolution of a new self schema. Years of conceptional failure and intense effort provides evidence that the goal of motherhood is not likely to be reached, and that infertility is a permanent situation. In order to stop the pain, the woman is forced to reconstruct her ideal self so that it is compatible with her reality.

## Turning Point: Shifting Self Schema

As women invested in developing new self-schemas and expectations for themselves, they began to develop a focus on self care, connection in relationships, hope in their abilities to survive and thrive, recognition that childlessness is likely, and that they could not assert control over conception. As the participant became more invested in a new self-ideal, she became less distressed and also experienced less committment to medical intervention for infertility. A return to normal activity and for most, increased marital intimacy resulted. All women denied that this was resolution because of the finality of the term. Infertility had been incorporated into their new self-concept, and while it was accepted, it also impacted the formation of the new self. There are many descriptive accounts that confirm the phenomena of shifting self concept and turning point.

Matthews (1986) supports the notion of identity transformation once treatment

has ended for the infertile individual. He reports that validated aspects of identity support the reconstructed identity. Infertile individuals gravitate towards forming social alliances with persons most similar to themselves. They may become more involved with friends and children in order to experience parenting vicariously and may occasionally identify certain advantages of childlessness to justify their situation.

Daniluk (1991) suggests that infertility strikes at the core of the self, and the emotional impact of such an experience may persist forever. However, she views resolution as occurring when grief ceases to be disabling, and options other than biological parenthood are pursued. Individuals begin reconnection with significant others and infertility is regarded as having provided a positive influence on personal and marital development. Other research has also confirmed the positive effects of acceptance of childlessness on marital adjustment. (Ulbrich, 1990, ).

Atwood (1992) supports the constructivist view when she suggests that infertile individuals must create a new reality around their marriage and children. Dissonance occurs until people are able to take in new information and change their belief systems. They will begin to interact with others whom identify with similar belief systems.

## Conclusion

There is a great deal in the psychosocial experience of infertility literature that lends support to this grounded theory model. Feminist concerns of connectedness and nurturing are addressed in women's self identities as potential mothers. Cognitive theories related to dissonance and resulting distress support the overall process of adaptation to infertility. The "griefwork" model is confirmed within the context of response to cognitive dissonance.

As the emphasis of the research to date has not dealt with the normality of this process, coping strategies have not been broadly investigated. Evaluation of new evidence and shifting self schema are addressed in some of the descriptive literature dealing with "resolution", and cognitive theories related to adaptation to crisis. Resolution of the infertility crisis is now regarded as a time of shifting self-concept to accommodate the reality of reproductive failure.

The "journey of infertility" model does not represent a linear process, but rather a cumulative and overlapping one that can accommodate multiple losses and recurring grief responses. Normal reactions at various times of the infertility experience are described, and the experience of women is removed from the realm of pscyhopathology. By viewing successive changes and strategies of adaptation over time, this model provides an overview of the process that allows the client and therapist to understand the normality of the experience, promotes identification with the experiences of similar others, and provides guidance and reassurance that it is possible to return to a fulfilling life.

## Limitations and Suggested Research

Limitations of this study include a small sample size and limited demographic composition of sampling. Five participants were interviewed, and all of the women had similar socio-economic demographics. All had received treatment for infertility at the Regional Fertility Program in Calgary and had not experienced the disruption of travelling great distances to access care.

Unlike other research methods, however, generalization is not the primary goal of grounded theory. The discovery of theoretical relationships in the phenomenon

being studied offers an opportunity for theory testing, further investigation, and refinement. The experience of infertility is such a complex and enduring process that opportunities for testing and modifying the theory appear limitless.

Further qualitative investigation of the reported phenomena could involve male partners and individuals of various socio-economic and cultural backgrounds. Further investigation of the normal coping processes that facilitate adaptation would be helpful in the counselling setting. The cyclical utilization of hope and hopelessness also warrants further study, especially related to times of non-receptivity to clinical information and appropriate times for counselling intervention.

While most of the counselling strategies suggested by available research focus on support and on encouraging communication with significant others, it would appear that different strategies may be required at the various points of the infertility journey. Further evidence of the effectiveness of various counselling strategies at different stages would be helpful.

A re-evaluation of the concept of resolution and processes that may potentially lead to an endpoint may diminish some of the ambiguity and mystery that this state presently represents. Findings from this study imply that resolution does not just happen over time, but that it requires the development of strategies and shifting schemas.

## Counselling Implications

The recognition of powerlessness and lack of control experienced by women involved in infertility treatment is critical for counsellors and health care providers working within a reproductive technology clinic. As physicians have traditionally held

the power in doctor-patient relationships, advocacy of client rights, especially in the early, more distressing stages of infertility is required. Psychoeducation for clients and health care personnel may encourage a philosophy of egalitarianism.

Participants from this study indicated that the learning of assertive strategies, taking control of the treatment process, and maintaining connections with spouse and other significant others were vital to emotional health. While women approached the redefinition of ideals, they promoted self-care as a priority.

Some women suggested that they were less likely to be receptive to educational material, especially related to risk rates, at the hopefulness stage of their treatment cycle. This is important for health care providers to recognize in terms of the timing of client education, and the offering of emotional support. Remaining hopeful required intense concentration and avoidance of pessimistic information. After women experienced treatment failure, they were more receptive to information that would assist them in the re-evaluation of their treatment strategies. This would be an appropriate time for health care providers to follow-up with their clients for debriefing and education related to future treatment.

Identifying and explaining dissonance to infertile clients, and assisting them in developing strategies to cope with their distress is an important role for counsellors. Suggesting adaptation of self ideals is unlikely to be of benefit early in the infertility journey and may alienate the client. However, it is this counsellor's experience that most of the infertile clients referred to her are in the re-evaluation phase of the journey. Exploring the possibilities of childfree living, debating the advantages and disadvantages of further treatment, and encouraging self permission to end the

struggle, have been helpful to clients at this stage of the process.

The removal of this process from a perspective of psychopathology is important in guiding our counselling and future research efforts. However, clinicians must also be aware that failure to adapt to enduring stress may produce symptoms of psychiatric illness that require clinical intervention.

In conclusion, it is the belief of this researcher that a patient centred philosophy will promote the development of strategies that focus on the needs of the client rather than on the agendas of the health care institution. Counsellors may find patient advocacy difficult within the medical heirarchy, but evidence from this study indicates that infertile clients are extremely vulnerable to feelings of powerlessness, and the advocacy may be the most important role to play until the client is able to develop assertive strategies and take control of the management of her dilemma.

Appendix 1

REQUEST FOR VOLUNTEERS

RESEARCH STUDY: WOMEN'S PERSPECTIVES ON THE PSYCHOSOCIAL JOURNEY OF INFERTILITY

Researcher: Mary Pattinson MSc (Counselling) Candidate,
Department of Educational Psychology,
University of Calgary.

Supervisor: Dr. Sharon Robertson,
Department of Educational Psychology,
University of Calgary.

The purpose of this research project is to explore the emotional experience of infertility over time as described by women. In this project the viewpoints, words, insights and descriptions of the women participants will be used to develop a psychological theory that reflects their voices.

The findings from the research may improve our understanding of the emotional experience of infertile women and in turn influence our helping strategies, attitudes and understandings of this process.

Five to seven volunteers who have experienced two or more years of unsuccessful infertility treatment are required for the study. Each volunteer subject will be interviewed twice with a time commitment of three to six hours. Interviews will be arranged at a time and place that is convenient for you.

If you feel that this subject matter is too difficult for you to discuss, please do not feel obligated to participate. However, if you would like to volunteer to be involved with this study or if you would like more information prior to making a decision, please contact me directly at the following phone number: 283-8782.

Appendix 2

## INFORMATION FOR VOLUNTEERS

Although much research has focused on the physical components of infertility and its treatment, there is little research that looks at the emotional experiences of men and women as they journey through their treatment process. Recent studies have suggested that psychological factors may influence a person's fertility. Therefore it is important for researchers to learn from the experience of people what emotional factors accompany and are a result of experiencing infertility and treatment.

It is important for counsellors to learn about the emotional experiences of men and women. However, for a variety of reasons, men and women may have different emotional responses to infertility over time. Therefore, it is the aim of this study to develop a theory that describes the experience of women in long-term treatment for infertility. Conditions that make this experience more or less difficult will also be explored.

It is understood that talking about involuntary childlessness can be a very painful experience in itself. If you feel that it would be too difficult for you to discuss your infertility process at this time, please do not feel obligated to participate. There is the risk that discussing your process may make you feel very distressed.

However, if you are interested in participating, there may be benefit in sharing your emotions with someone outside of your usual support system. There is also the possibility that your contribution to this study will improve our understanding of the emotional experience of infertility and influence our attitudes and counselling.

If you decide to participate, a first and then later, a second interview will be arranged at a time that is convenient for both of us. Information from the interviews is taped, and notes are taken. However all of this information will be kept in strict confidence by the researcher and your name will be changed for the study records. You will have the chance to read the transcripts from your interview and correct, change or add what you think is important before your words and ideas are used for the research.

If you discover that discussing your experience causes you too much distress, you or I may suggest that you withdraw from the study and psychological support services will be made available to you. Of course, you may decide to withdraw at any time, for any reason.

There will be no monetary compensation to you for participating in this study, however, a summary of the study results will be made available to you at the end.

Although I will be asking you some questions, you are the expert on your own emotional experiences, and it is important that you feel that you can share any insights

or concerns that influence how you feel.

If you have questions or concerns at any time during the research process, you may contact myself (Mary Pattinson) at 283-8782; the project supervisor Dr. Sharon Robertson at 220-3586 or the Office of the Associate Dean (Research and Resources, Faculty of Education) at 220-5626.

If you decide to participate, you will need to carefully read and sign the consent form that I will provide. Thank you for taking the time to read this information.

Mary Pattinson,
Department of Educational Psychology,
Masters in Counselling Student,
University of Calgary, Alberta.

Appendix 3

## CONSENT FOR RESEARCH PARTICIPATION

I hereby agree to participate in the research investigation entitled "The psychosocial journey of infertility: Women's perspectives", conducted by Mary H. Pattinson, under the supervision of Dr. Sharon Robertson, of the Department of Educational Psychology at the University of Calgary. The research project is expected to provide a better understanding of how women experience infertility.

I understand that audiotaped interviews and notes will be used to develop a detailed description of my experiences. I understand that I will be interviewed twice, that the amount of time required will be three to six hours and that there will be no monetary compensation.

I understand that my participation is completely voluntary, and that I have the right to withdraw from the study at any time without penalty. I also understand the investigator's right to terminate my involvement at any time.

The general plan of this study has been outlined to me, including any possible known risks. I understand that discussing my experiences may put me at risk for emotional upset and distress. A potential benefit of participation may be found in the cathartic value of sharing my experiences with a counselor. I also understand that it is not possible to identify all potential risks in any procedure, but that all reasonable safeguards have been taken to minimize the potential risks.

I understand that my identity will be kept strictly confidential. A pseudonym will be chosen by myself to identify transcripts and written reports from my participation. The key listing my identity and the group-subject code number will be kept separate from the data in a locked file accessible only to the project researcher, and it will be physically destroyed by shredding at the conclusion of the project. I understand that only the project researcher and project supervisor will have access to the tape recordings obtained during my participation and that the interview tapes will be erased upon completion of data analysis. I will have access to my interview transcripts and the opportunity to delete, expand or change any information I have provided.

I understand that the results of this research may be published and/or reported to government agencies, funding agencies, or scientific groups, but my name will not be associated in any way with any published results.

I understand that, if I have questions at any time, I can contact Mary Pattinson at 283-8782, the project supervisor, Dr. Sharon Robertson at 220-3586, or Dr. Christine Gordon, Associate Dean, Research and Resources, Faculty of Education at 220-5626. I have received a copy of this consent form.

_____ _____

Date Signature of participant

_____

Signature of researcher

Appendix 4

## DISTRIBUTION OF THEORETICAL CODES

| | | | | | |
|---|---|---|---|---|---|
| Goal of motherhood | 1 | 2 | 3 | 4 | 5 |
| Preferred career | 1 | 2 | 3 | 4 | |
| Idealization | 1 | | 3 | 4 | |
| Expectations | 1 | 2 | 3 | 4 | 5 |
| Assisted conception | 1 | 2 | 3 | 4 | 5 |
| Procreative sex | 1 | | 3 | 4 | 5 |
| Failed role | 1 | 2 | 3 | 4 | 5 |
| Effort | 1 | 2 | 3 | 4 | 5 |
| Non-support | 1 | 2 | 3 | 4 | |
| Comparing | 1 | 2 | 3 | 4 | 5 |
| Excluded | 1 | 2 | 3 | 4 | |
| Anxious | 1 | 2 | 3 | 4 | 5 |
| Angry | 1 | 2 | 3 | 4 | |
| Guilty | 1 | 2 | 3 | 4 | 5 |
| Stasis | 1 | 2 | 3 | 4 | |
| Ambiguity | 1 | 2 | 3 | 4 | 5 |
| No control | 1 | 2 | 3 | 4 | 5 |
| Less value | 1 | | 3 | 4 | |
| Silence/disconnection | 1 | 2 | 3 | 4 | 5 |
| Non assertion/compliance | | | 3 | 4 | |
| Depression/sorrow | 1 | 2 | 3 | 4 | 5 |
| Powerlessness | | | 3 | 4 | 5 |
| Ritual | 1 | | 3 | 4 | |
| Blaming others | 1 | | 3 | 4 | |
| Concentration | 1 | | 3 | 4 | |
| Searching/researching | 1 | 2 | 3 | 4 | 5 |
| Tentative acceptance | 1 | 2 | | 4 | 5 |
| Doing something | 1 | 2 | 3 | 4 | 5 |
| Evaluating | 1 | 2 | 3 | 4 | 5 |
| Maybe adoption | 1 | | 3 | 4 | |
| Taking control | 1 | 2 | 3 | | 5 |
| Preparation for treatment | 1 | 2 | 3 | 4 | 5 |
| Preparation for failure | 1 | 2 | | 4 | 5 |
| Negotiation with doctor | 1 | 2 | 3 | 4 | 5 |
| Asserting | 1 | 2 | 3 | | 5 |
| Seeking support from spouse | 1 | 2 | 3 | | 5 |
| Buffering from mother | | 2 | 3 | | |
| Finding nurturing | 1 | 2 | 3 | 4 | 5 |
| Nurturing pets | 1 | 2 | 3 | 4 | |
| New friends | 1 | 2 | | | |

| | | | | | |
|---|---|---|---|---|---|
| Maintained friendships | | | | | 5 |
| Distracting | 1 | 2 | | | 5 |
| Hopefulness | 1 | 2 | 3 | 4 | 5 |
| Hope peaks | 1 | 2 | 3 | 4 | 5 |
| Intentional surrender of hope | 1 | 2 | 3 | 4 | 5 |
| Failure & resignation | 1 | 2 | 3 | 4 | 5 |
| Rebounding | 1 | 2 | 3 | 4 | 5 |
| Positive pregnancy test | 1 | 2 | | 4 | 5 |
| Pregnancy loss | | 2 | | 4 | 5 |
| Repeated treatment failure | | 2 | 3 | 4 | 5 |
| Considering alternatives | 1 | 2 | 3 | 4 | 5 |
| The endpoint | | 2 | 3 | | 5 |
| Diminished hope | | 2 | 3 | 4 | |
| Personal sacrifice | 1 | 2 | 3 | | 5 |
| Philisophical shift | 1 | 2 | 3 | | 5 |
| Me first | 1 | 2 | 3 | | 5 |
| Socializing | | 2 | 3 | 4 | |
| De-idealization | | 2 | 3 | | 5 |
| Self-confidence | 1 | 2 | 3 | | 5 |
| Infertility as positive | 1 | 2 | 3 | | 5 |
| Uncontrollable nature | 1 | 2 | 3 | 4 | 5 |
| Normal activities | 1 | 2 | 3 | | 5 |
| Stronger marital intimacy | | 2 | 3 | | 5 |
| Ambivalent motherhood | | 2 | | 4 | |

Appendix 5

## SAMPLE OF SUBSTANTIVE CODES

### Loss of Control: Powerlessness and Anger

Participant 1

don't know why, wondering, no explanation, why me?, angry, can't control this, frustrated, feel depressed and serious, lethargic, loss of control over life plan, confused, don't understand, exasperated, fear of unknown possibilities, painful waiting, frustrated goals, wasted efforts, no privacy, unable to give employer notice re sick days, life out of control, waiting for next catastrophe, other problems insignificant, unexplained infertility

Participant 2

feel immobilized, no motivation, no control, feeling depressed, decreased interest, waiting is painful.

Participant 3

unexplained infertility prevents planning, difficulty waiting, life is out of balance, no control, other experts, feel depressed and unhappy, at rock bottom, black days, traumatized by doctor, doctor lost chart, I'm always a nice person, need to take control, getting bulimic.

Participant 4

not responsible for infertility, excruciating waiting, feel awful and angry, resentful for waiting, time pressures re biological clock, feel depersonalized by doctor, medical choices not complied with, at mercy of uncontrollable factors, sex by instruction, feel frustrated, conception left to fate, can't control environment: other's control adoption, doctor controls treatment, society in control of the way you see yourself, doctor stopped treatment.

Participant 5

couldn't control pregnancy outcome, knot in cord, stillbirth devastated, not in control of conception, no explanation re infertility, no proof, sadness and terror, depressed, what will happen next?

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