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UNIVERSITY OF ALBERTA

PREGNOLOGY: THE PROCESS OF GETTING PREGNANT THROUGH SCIENCE

BY

RHONDA ELIZABETH HARRIS

A THESIS
SUBMITTED TO
THE FACULTY OF GRADUATE STUDIES AND RESEARCH
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DATE: 2 October 1992

Trust in the Lord with all your heart,
and do not rely on your own insight.
In all your ways acknowledge him,
and he will make straight your paths.

Proverbs 3: 5,6

DEDICATION

This thesis is dedicated
to my husband, Gerald, who has
given me his never-ending love,
encouragement, and support
as I pursued graduate studies.

In loving memory of
Orville Fifield
who gave me "permission"
to pursue Human Sexuality
as a health-care issue
in addition to his
mentorship and friendship.

ABSTRACT

The purpose in this study was to generate a theory which would help explain the process that women experience as they undergo medical intervention for their infertility. This process was investigated by using grounded theory methodology. Data was collected in a total of 31 interviews with 17 women who were currently experiencing infertility or had previously been infertile. Both primary and secondary infertility cases were represented.

All of the participants had the goal of becoming pregnant and having children. When they could not achieve pregnancy, these women felt that they were fulfilling neither their own nor society's expectation of them.

As the participants told their infertility stories, several of them referred to their pursuit of pregnancy through medical intervention as "scientifically getting pregnant." This process has been captured in the abstraction entitled "Pregnology: The Process of Getting Pregnant Through Science." Pregnology is comprised of three stages which are sequential and occur "over time." These stages are: (a) the entry into medical intervention, (b) the intervention, and (c) the exit from medical intervention.

Once the participants undertook Pregnology, their lives were placed under the microscope as they were confronted with the focuses of medical intervention, that is, those of reproductive physiology and medical technology. Private sexual behavior became public knowledge. Having a menstrual period became a matter of open discussion and also a source of grief for the participants.

For most of the participants, the lack of fertility that they experienced governed their lives. Two core themes that emerged were related to the strategies that the participants employed to make decisions in addition to protecting themselves and/or others from risk. These have been named "balancing the scales" and "protective governing."

PREFACE

It has been my experience, as an infertile woman, that few medical procedures evoke as emotional a response as do those aimed at creating new life. Other interventions work towards...saving human life. They are rightly viewed as valid. Yet, the very nature of medicine being a party to the very instant of conception...raises [a] tremendous subjective reaction---"Are we playing God?" "Is eugenics or unlimited tampering with life in search of the 'perfect baby' the next step?"

At the bottom of the list of considerations of the technology and ethics of reproductive medicine is the patient...herself----a very real desire to procreate, bring forth new life, have a family----one of humanity's most natural and powerful urges.

[In my mid-twenties]...pelvic inflammatory disease...ravaged my reproductive system. I was left with one blocked fallopian tube...and one ovary. I was also left with my dream of having my own family. My only hope lay with a partnership with medicine.

Through the clocked ovulation cycles, seemingly endless semen samples delivered in an undignified room in a clinic, blood tests [for] hormone [levels], ultrasounds...laparoscopies, hysterosalpingograms, and attempts at in-vitro fertilization, I encountered the full range of compassion and scorn of the health-care professionals treating me. I remember a woman taking a blood test chiding me for not accepting my fate, and an ultrasound tech lecturing me as she used a vaginal probe to count my egg follicles. Infertile women, she felt, were nature's way of controlling global overpopulation. Some viewed me, and patients like me, as "desperate" and blamed society for making women feel they must be "baby making machines" to justify their existence.

I encountered technically brilliant but emotionally illiterate physicians who had no sense they were dealing with a highly vulnerable patient whose most cherished dream had been dashed over and over again. My solace was often found with the nurses who took the time to care for me, body and soul. These were women who treated my desire to get pregnant with dignity and respect....'Pregnology' is reflective of that discernment.

Those of us seeking medical assistance to achieve pregnancy...have been relegated to a backroom in health care. Yet we are among the more committed and courageous of all patients seeking a cure. We are seeking dignity and partnership from the medical professional and community at large. We want the recognition that the use of medicine to create...pregnancy...is at least as noble, heroic, and valid as open heart surgery, cancer therapy, and all other forms of therapy that play in the margins of possibility to yield the greatest possible result: life itself.

Written by Leah
A Study Participant

ACKNOWLEDGEMENTS

I would like to acknowledge those people who assisted me in the completion of this thesis research project.

I would like to thank my co-supervisors, Dr. Peggy Anne Field and Dr. Patricia Valentine, for sharing their expertise in qualitative research methodology Dr. Field's insight into maternal-child nursing and Dr. Valentine's background in women's health-care provided guidance and support to me as I pursued this thesis project. In addition, I am extremely grateful for their continued patience and faith in me as a graduate student. I would like to extend a special thank-you to Dr. Field for her enthusiasm and support of this research project as she joined the thesis committee following the oral defense and ethical review of the thesis proposal. I would also like to thank Dr. Brenda Munro for her interest and participation as an external committee member.

I would like to thank Dr. Vangie Bergum for her assistance, as co-supervisor, in the preparation of the thesis proposal for the oral defense and ethical review.

I am indebted to those women who participated in this study. In particular, I would like to thank these women for spending time with me as they willingly shared painful and very intimate aspects of their infertility experiences. Each of these women has greatly contributed to my understanding of what it is like to be infertile and to pursue pregnancy through medical intervention.

In addition to his never-ending love, encouragement, and faith in my abilities to pursue graduate education, I would like to thank my husband, Gerald, for the support he has shown me in this thesis project. I am very grateful for Gerald's technical support; this support was especially felt in computer technology as I wrote and compiled the thesis in addition to choosing the audio-recording equipment I required for interviewing the study participants. I am indebted to Gerald for the unique term, "Pregnology," which captures the process that the participants passed through as they pursued pregnancy through medical intervention.

I would like to acknowledge my peers in the nursing graduate program. I gained insight into Pregnology as we shared many moments in lively discussion. The written presentation of this research project was greatly enhanced as I received editorial comments from those peers who read all or selected chapters of this thesis.

I attended a qualitative research/grounded theory support group as I conducted this research project. The members of this multidisciplinary group were from the faculties of Education and Nursing and included the following people: Nancy Ann Fowler, Judith Keating, Nancy MacNeil, Glenda Meeberg, Tom Potter, Tracy Shaben, and Ineke Vergeer. Numerous discussions with these people provided insight into the many issues pertinent to the conduct of qualitative research.

Finally, I would like to acknowledge the support I received from family and friends as I undertook the endeavour of graduate education.

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CHAPTER 1

INTRODUCTION

STATEMENT OF THE PROBLEM

It is estimated that 85% of couples achieve pregnancy within one year of trying to conceive (Menning, 1988). Despite this easy attainment of pregnancy for most people, approximately 15% of the population (Christianson, 1986; Keye, 1984; Menning, 1988; Morse & Van Hall, 1987; Shapiro, 1982) or one in every six couples (Kraft, Palombo, Mitchell, Dean, Meyers, & Schmidt, 1980; Menning, 1988) of childbearing age will experience difficulty. Couples unable to conceive after one year of unprotected sexual intercourse are medically labelled as being *infertile* (Speroff, Glass, & Kase, 1989).

The prevalence of infertility is explained by several factors. In response to the increased availability of contraception (Robertson, 1986) and the change in work roles (Robertson, 1983, 1986), women are postponing childbearing. This deference allows for the influence of endogenous age-related biologic factors to reduce a woman's ability to conceive. In addition, the postponement of childbearing increases risk of exposure to reproductive hazards (infectious, occupational, and environmental factors) that may adversely affect the woman's fertility (Caplan, 1986; Robertson, 1986). Changes in sexual beliefs and practices have also increased the prevalence of infertility. For example, the trend towards earlier age of first intercourse plus multiple sexual partners contributes to the increased frequency of sexually transmitted diseases (Robertson, 1986). Such diseases are known to predispose pelvic inflammatory disease (PID) which is a frequent cause of infertility. In addition, the usage of particular contraceptives, such as the intrauterine device (IUD), can cause infertility secondary to PID (Caplan, 1986; Needleman, 1987; Robertson, 1986). Finally, with the development of specialized diagnostic techniques (hormonal analysis, laparoscopy), health-care professionals are able to identify persons suffering from impaired fertility with increased reliability (Caplan, 1986). The combination of these factors has resulted in a greater number of individuals and couples who are being identified as infertile.

Previously, infertile couples "founded a family" through public adoption (Holbrook, 1990; Mazor, 1978). Today, however, many infertile couples do not view adoption as a viable option because there are few babies available (Francis & Nosek, 1988; Poteet & Lamar, 1986; Wadlington, 1983). This diminished supply of babies available for adoption is due to several societal practices, such as the widespread use of contraception, the legalization of abortion, and the trend that many single women are now keeping their babies rather than surrendering them for adoption (Holbrook, 1990). In addition, infertile couples are often confronted with lengthy waiting periods when seeking adoption (M. Shinyei, personal communication, April 11, 1989). According to the Adoption Services of Alberta Social Services, adoptive parents can expect to wait five years before receiving a "preferred" child, that is, a child who is healthy, Caucasian, and under one year of age (Alberta Advisory Council on Women's Issues [AACWI], 1988).

In response to their strong desire for children and the difficulties encountered in the adoption process, many infertile couples turn to the health-care system for assistance (Andrews, 1984). Although many controversial issues surround the medical care of infertile couples (Caplan, 1986; Crowe, 1985; Fishel, 1988; Garrett, Baillie, & Garrett, 1989; Kass, 1987; O'Donovan, 1984; Shannon, 1987; Singer & Wells, 1983; Snowden, Mitchell, & Snowden, 1983; Uniacke, 1987; Ward, 1983), reproductive specialists are providing basic infertility services to these couples (AACWI, 1988). In addition, specialists are developing new and more sophisticated ways of managing infertility (AACWI, 1988; Robertson, 1986). This attention that infertility has received has established it as a legitimate health-care concern. Information about infertility and its medical management is widely publicized through the media (book releases, popular magazines, news coverage, television documentaries) (Fishel, 1988). This publicity brings to infertile couples an awareness of their options in management (Lien & Russel, 1989) and a desire to seek medical treatment. Therefore the majority of infertile couples do seek medical intervention at some time (Amelar, Dublen, & Walsh, 1977 as cited in Sadler & Syrop, 1987; Woollett, 1985).

Within the literature, infertility has been addressed primarily as a medical problem, focusing on the physiological aspects of human reproduction (Anand, 1984; Daniluk, Leader, & Taylor, 1987). Although the assessment and management generally requires a medical approach, the problem permeates all aspects of a couple's life. Therefore it is difficult and inappropriate to separate the "medical" and "non-medical" aspects of infertility (Covington, 1987).

To date, most of the literature dealing with the non-medical (personal, psychological, social) aspects of infertility has concentrated on the psychological origins of infertility (Valentine, 1986) and the relationship between infertility and psychopathology (Karahasanoglu, Barglow, & Growe, 1972 as cited in Daniluk et al., 1987; Mai, Munday, & Rump, 1972; Platt, Ficher, & Silver, 1973). Although addressing infertility from these perspectives contributes to the quality of care given to infertile persons, other issues need to be considered. According to Anand (1984), it is important to attend to the personal, psychological, and social aspects of infertility because the need for medical treatment arises out of them. Since the medical care of infertility has a significant impact on the health-care system (Blenner, 1990), particularly in terms of various resources (expertise from various health-care professionals, equipment, financial support), it is crucial that health-care professionals attend to these particular aspects of infertility. This is especially relevant in the midst of budget cuts in the health-care system. It is essential that nurses, as members of the multidisciplinary team that provide health-care services to infertile persons, recognize and attend to the personal, psychological, and social consequences of infertility to provide comprehensive care to their infertile clients (Frank, 1984; Morse & Van Hall, 1987). This approach may support and enhance the emotional and physical health of couples who experience infertility.

The personal, psychological, and social aspects of infertility have primarily been addressed through counselling. It is believed that counselling will help infertile persons deal with their childlessness (Bresnick & Taymor, 1979; Leader, Taylor, & Daniluk, 1984; Lukse, 1985). Infertile persons have stated that they would like counselling services offered to them, especially when they are undergoing medical intervention (Daniluk et al., 1987; Freeman, Boxer, Rickels, Tureck, & Mastroiaani, 1985; Lalos, Lalos, Jacobsson, & Von Schoultz, 1985a; Lalos, Lalos, Jacobsson, & Von Schoultz, 1985b; Lalos, Lalos, Jacobsson, & Von Schoultz, 1985c). These people have qualified their request by specifying that they would like to receive this counselling from someone other than a physician (a nurse) (Daniluk, 1988).

Counselling has been strongly advocated as part of the nursing care provided to infertile persons (Frank, 1984; Woods, 1981). To counsel and support infertile clients, nurses need to understand how clients experience infertility and its medical management.

Although the research literature describes the psychosocial effects of infertility and its management, there are several limitations in the quality of this literature. Of approximately 270 articles reviewed, only 66 were specifically identified as being written by nurse authors; the remaining articles were written by people from various health-related fields (medicine, psychology, social work). Thus a major portion of the infertility literature comes from perspectives other than nursing. From a philosophical perspective, it is questioned whether nurses can effectively practice nursing while using knowledge obtained from other professions (Donaldson & Crowley, 1986).

Another limitation of the infertility literature pertains to the basis from which it is written. Rather than being based upon the systematic study of infertility (research), most of the literature is anecdotal (Daniluk et al., 1987; Sandelowski & Pollock, 1986). Although some of this literature (12 articles) is written by people who have identified themselves as having experienced infertility, the majority of these anecdotal accounts were written by health-care professionals describing how they perceive people to experience infertility. Frequently, these descriptions are based on clinical observations while caring and interacting with infertile persons (Daniluk et al., 1987; Lalos et al., 1985b). Findings obtained by this approach may have limited reliability and validity. According to Keye and Deneris (1983), professionals may under- or over-estimate the impact of infertility on clients' sexuality; this danger of incorrect estimation may carry over into other areas of the infertility experience. If professionals base their descriptions of the infertility experience on incorrect evaluations, the descriptions become purely illusionary, thereby presenting an inaccurate portrayal of this experience. Many of the claims made by health-care professionals regarding infertility and its medical management have not, to date, been corroborated to any great extent by persons who have experienced infertility. This lack of corroboration makes the researcher question whether these descriptions accurately reflect the true experience of infertility and its management as perceived by infertile persons.

Despite the voluminous amount of descriptive literature, it remains inadequate. According to Stern and Pyles (1985), the research literature

> is insufficient in expanding nursing knowledge because facts alone do not explain the underlying processes of those phenomena. As such, nurses need more than descriptions. They want to know how, when, and where phenomena occur so that they can better understand, predict, and control situations. (p. 1)

Thus it is crucial that nurses have theory to draw upon to assist them in providing optimal care for those persons experiencing infertility.

Responding to the need for nurses to attend to more than the medical aspects of the client's infertility and the limitations identified within the current infertility literature, the researcher proposed to conduct a study investigating how infertility, specifically its management through medical intervention, is experienced by people. Since infertility affects both men and women, it is recommended to consider both partners jointly as the infertility client (Batterman, 1985; Clapp, 1985; Menning, 1980). Despite this, the researcher decided to include only women in this particular study. The rationale underlying this decision included: (a) medical intervention for infertility generally entails more participation from women than men (Bernstein, Potts, & Mattox, 1985; Draye, Woods, & Mitchell, 1988; Link & Darling, 1986; Mazor, 1984); (b) existing literature suggests that infertility and its management are experienced differently according to gender (Conway & Valentine, 1987; Draye et al., 1988); (c) previous researchers (Link & Darling, 1986; Miall, 1985; Raval, Slade, Buck, & Lieberman, 1987) have encountered difficulties recruiting male participants; (d) when participating in a research study, women have been more willing than men to talk to the researcher about their infertility (Woollett, 1985); and (e) the researcher has a particular interest in the health-care of women.

PURPOSE OF THE STUDY

The purpose in this research study was to generate a theory which would help explain the process that infertile women experience when they undergo medical intervention (testing, treatment) for infertility.

RESEARCH QUESTIONS

This research study was guided by the following questions:

1. How do women decide that it is time to seek medical care for infertility?
2. What does it mean to women when they receive the diagnosis of infertility?
3. How do women describe their experiences of undergoing medical intervention for their inability to get pregnant?
4. Why do women continue with medical intervention when it does not result in the achievement of pregnancy?
5. How do women decide that it is time to terminate medical intervention?

SIGNIFICANCE OF THE STUDY

The practice of nursing has traditionally included a maternal-child speciality which involved caring for pregnant and labouring women in addition to caring for the babies born to these women (Olshansky, 1985). More recently, the scope of maternal-child nursing has expanded to include problems such as infertility.

Nurses typically give care to infertile persons within the setting of an infertility clinic. However, nurses may also encounter these clients in various hospital departments (surgical, obstetrical, gynecological) and community settings (e.g. physician offices, family planning clinics, sexually transmitted disease clinics, infertility support groups). According to Bernstein et al. (1985), nurses are generally the "first-line" persons for the infertile couple as they undergo medical intervention. As such, nurses are in a unique position to address the health-care needs of infertile clients. To provide appropriate and effective care to infertile clients, nurses must have a sound knowledge base and an indepth understanding about how infertility may be experienced (Bernstein et al., 1985; Blenner, 1990; Draye et al., 1988; Hirsch & Hirsch, 1989; Lalos, Jacobsson, Lalos, & Von Schoultz, 1985; Olshansky, 1988; Sherrod, 1988; Valentine, 1986; Woods, 1981).

The findings from this study will contribute to nursing knowledge by generating a theory from a nursing perspective. This beginning theory will help to explain the process that women experience as they undergo infertility testing and treatment. This theory will provide nurses with further insight into the infertility experience, thereby assisting them in the assessment, planning, and implementation of appropriate care to meet the various needs of infertile female clients.

CHAPTER 2

REVIEW OF THE LITERATURE

Ambiguities associated with the infertility label involve discrepancies pertaining to an event which is generally viewed as being "physiologic" in nature only, although the event also has a "social" dimension to it (Miller, 1978 as cited in Sandelowski, 1987). The event of "becoming" infertile is described by Sandelowski (1987) who writes:

> [Couples]...used contraceptives to delay childbearing, presuming they were fertile. Their infertility existed on a physiologic level but was not discovered until they attempted to conceive. The failure to conceive, the subsequent search for medical assistance and the pursuit of an infertility career led to the emergency [*sic*] of infertility on a social level as...[they] began to be identified by themselves and by others as having a fertility problem. (p. 72)

In reflection of this statement, the review of the infertility literature will be summarized in three sections: (a) pursuing pregnancy on one's own, (b) pursing pregnancy through medical intervention, and (c) the psychosocial meaning of infertility.

PURSUING PREGNANCY ON ONE'S OWN

Pursuing pregnancy on one's own will be presented in two sections: (a) deciding to pursue pregnancy, and (b) when pregnancy fails to occur.

DECIDING TO PURSUE PREGNANCY

As adults, much of our lives are centered on issues relating to reproduction, parenthood, and raising a family. According to the AACWI (1990), "the predominant view of a 'family' in our society is one of the traditional nuclear unit: one mother, one father and 'their' child or children" (p. 21). Pronatalism, a belief which encourages people to reproduce (Peck & Senderowitz, 1974 as cited in Miall, 1985), often poses the question of "when" one will have children as opposed to "whether" one will have children (Cook, 1987; Shannon, 1987). This belief is powerfully advocated, especially for married adults (Reese & Smyer, 1983 as cited in Woollett, 1985; Veevers, 1980 as cited in Miall, 1985; Woollett, 1985), and is often included in familial, religious, and ethnic/cultural values (Office of Technology Assessment, 1988; White, 1988). Although the previous "all-pervasive" endorsement of parenthood has been reduced (Link & Darling, 1986), most people include parenthood in their life-plans (Cook, 1987; Daniluk, 1988; Link & Darling, 1986; Walters, 1987; Woollett, 1985). Daniluk (1988) notes that only 5% of the world's married population chooses to remain childless voluntarily.

Couples frequently venture upon parenthood for reasons other than the basic desire to have children (Christie & Pawson, 1987; Menning, 1988). Common motives underlying the decision to have children include: (a) the perception that it is time to begin having a family

(Bergum, 1989); (b) the desire to meet societal expectations regarding family life; (c) to gain entry into adulthood and assume full adult status (Brashear, 1989a; Burns, 1987; Mazor, 1978; Menning, 1988); (d) for role fulfillment; (e) to prove oneself as a sexual person; (f) to "re-live" one's own childhood (Menning, 1988; Payne, 1978); (g) to provide a sibling for a current child; (h) to confirm the relationship and express the love between the partners (Lalos et al., 1985); (i) to provide grandchildren for one's own parents (Burns, 1987; Payne, 1978); and (j) "the wish to foster the development of the next generation to leave something of oneself in the world beyond one's own lifetime" (Mazor, 1978, p. 155). The experience of pregnancy rather than parenthood may be desired by the couple, especially by the woman (Bydlowski & Dayan-Lintzer, 1988; Menning, 1988), because she desires to experience the bodily changes that occur with pregnancy, to recapitulate a previous pregnancy, and/or to breast-feed. Women may also desire pregnancy for narcissistic reasons (feeling special and pampered while being pregnant). Finally, couples may desire pregnancy to ensure genetic continuity (Menning, 1988) and to have a child who would have a physical resemblance to them (Lalos et al., 1985).

Pregnancy is often a planned event for many couples. Assuming that they are fertile, couples will prevent pregnancy by using various methods of contraception, believing that sometime in the future they will discontinue contraception and "get pregnant" without difficulty (Becker, 1990; Christianson, 1986; Larkin, 1985a; Lukse, 1985; Menning, 1988; Woods & Luke, 1984); in regard to conception, Sandelowski, Harris, and Holditch-Davis (1990) state, "Not so very long ago, the prevailing assumption about conception (reflected in debates on overpopulation, adolescent pregnancy, and elective abortion) was that it was easy to do but hard to avoid" (p. 273). Pregnancy is frequently postponed to ensure marital stability, develop careers, and gain financial security (Batterman, 1985).

Although pregnancy is intentionally prevented, couples will think about becoming parents. For example, couples will imagine what it would be like to be pregnant and/or parents (Olshansky, 1985, 1987a). When anticipating parenthood, couples will view themselves as three-person families rather than as couples or two-person families. While preparing for the desired baby, couples will make lifestyle changes, such as purchasing larger homes in areas where schools are located. In their homes, couples will commonly leave one room undecorated or unused, thereby saving it for the nursery (Burns, 1987).

When the time is considered "right" to begin their families, couples will stop their contraceptive practices and approach pregnancy with an attitude of either "letting it happen" or "trying" to get pregnant (Olshansky, 1985, 1987a).

WHEN PREGNANCY FAILS TO OCCUR

When pregnancy fails to occur, couples are usually surprised and shocked (Covington, 1987; Frias & Wilson, 1985; Mazor, 1984; Menning, 1979, 1980, 1984b, 1988). At this time, couples may deny that a problem exists. Statements commonly expressed at this time include "This can't happen to me!" (Menning, 1988, p. 111), "It's going to happen soon" (Frias & Wilson, 1985, p. 44), or "Surely next month we'll get pregnant" (Stigger, 1983, p. 23). Couples may declare that "Such matters are 'in God's Hands,' or up to Mother Nature" (Stigger, 1983, p. 23). Couples may rationalize why pregnancy has not been achieved by using excuses, such as denying that pregnancy is being sought (Frank, 1984; Larkin, 1985b; Mazor, 1978; Menning, 1979; Woollett, 1985), stating that they are not trying hard enough to conceive (Larkin, 1985b; Woollett, 1985), or that they are unsure whether they really want children as yet (Mazor, 1978; Woollett, 1985). Some couples may continually deny that a fertility problem exists despite the persistence of the childless state over several or many years (Menning, 1984b; Wilson, 1979). Frias and Wilson (1985) note that women have a more difficult time denying their inability to achieve pregnancy because they have a monthly reminder (a menstrual period) of their failure to conceive.

A fertility problem is usually suspected when pregnancy fails to occur after about one year of trying to conceive (Lalos et al., 1985a). However, some women will panic and become concerned when they do not get pregnant after several months of trying (Mazor, 1979; Olshansky, 1985; Stigger, 1983). Some couples will seek medical advice immediately upon suspecting infertility (Woollett, 1985). Other couples will simply accept their difficulties with achieving pregnancy, thereby making no attempt to overcome their childless state. Finally, other couples believe that they can solve their childless state by following various suggestions or "home-remedies" received from written literature and the media (McCormick, 1980).

In their initial attempts to solve their fertility problems, couples may modify their sexual practices. For example, they will "try harder" to get pregnant by having sexual intercourse more often (Frank, 1984) in addition to changing positions of intercourse (Olshansky, 1985, 1987a). Couples will time sexual activity so that it coincides with the woman's ovulation (Draye et al., 1988; Olshansky, 1985, 1987a). Both partners may also change their practices during and immediately following intercourse in an attempt to promote the union of the gametes (sperm, egg). For example:

> Stopping penile movement immediately after ejaculation followed by a delay before removing the penis from the vagina and a 30-60 minute postcoital rest with the woman on her back have been suggested to improve the odds that the sperm will find the desired route to the tubes. (Gray, 1980, p. 23)

Women may also stand on their heads following intercourse (Quindlen, 1987; Stigger, 1983). Men will often make lifestyle changes in hopes of increasing their fertility potential. For example, men will stop taking hot baths/showers and will wear boxer shorts rather than briefs in order to improve sperm production (Marchand, 1988). In their state of desperation and vulnerability, couples will often try "anything and everything," such as acupuncture, astrology, faith healing and hypnosis, despite how silly or ridiculous it seems to them (Quindlen, 1987). According to Olshansky (1985, 1987a), couples at this stage have assumed an identity of self as infertile which is informal in nature because "it has not been 'confirmed' and 'formalized' through medical diagnosis" (Olshansky, 1987a, p. 59). To push aside this informal identity, couples will engage in informal fertility work which involves the suggestions/home-remedies just described.

If couples cannot achieve pregnancy through this informal fertility work, the next step for them to take is to seek medical assistance (Stigger, 1983). However, some couples decide to forego this option, thereby giving up their pursuit of fertility (Olshansky, 1985). It is suggested that these couples do not seek medical assistance because: (a) they are still denying that a fertility problem may exist (Callen & Hennessy, 1989; Mazor, 1978; Sandelowski & Pollock, 1986; Shapiro, 1982; Van Keep & Schmidt-Elmendorff, 1975); (b) they may fear a negative diagnosis from the physician; (c) they want to avoid the physical pain and emotional stress involved with medical intervention; (d) they are reluctant to give up control over their own attempts to get pregnant (Lalos et al., 1985b); and/or (e) they fear destruction of their reproductive organs (Griffin, 1983).

In contrast, other couples will continue their quest for parenthood by purposefully seeking medical assistance, thereby indicating their recognition and willingness to accept the possibility of a fertility problem existing (Mahlstedt, 1985; Matthews & Matthews, 1986; McCormick, 1980; Stigger, 1983). It is suggested that these couples are motivated to seek medical assistance because of the: (a) anxiety and frustration felt by their inability to achieve pregnancy (Seibel & Taymor, 1982); (b) psychosocial effects experienced by their infertility (Honea-Fleming, 1986); and (c) hope that pregnancy will be achieved through treatment (Woods, Olshansky, & Draye, 1991). It is believed that women may undertake medical intervention in an attempt to atone for feelings of guilt arising from previous deeds done, such as abortion, extramarital affairs, history of a sexually transmitted disease (STD), homosexual thoughts/actions, and masturbation (Mazor, 1979; Menning, 1979, 1980, 1982, 1984b). These deeds are frequently viewed as causing infertility (Mazor, 1979; Menning, 1979, 1984b; Clapp, 1985). In addition, infertility is often seen as being a punishment for such deeds (Goodman &

Rothman, 1984; Mazor, 1978; Menning, 1980, 1984b). Mazor (1978) states that women "may begin to think magically about bargaining with God---about undergoing a certain amount of suffering [through medical intervention] in exchange for a pregnancy" (p. 151).

PURSUING PREGNANCY THROUGH MEDICAL INTERVENTION

When couples are unable to achieve pregnancy on their own, they usually seek medical assistance within one year or less (Becker, 1990; Sandelowski, Harris, & Holditch-Davis, 1989); spending time trying to achieve pregnancy without seeking medical help after a year's time has been viewed by infertile persons as "wasting time" (Sandelowski et al., 1989). It is noted that these couples are generally otherwise healthy and have had little experience with the health-care system prior to experiencing infertility (Fleming & Burry, 1987; Mazor, 1984).

Medical intervention (infertility testing and treatment) can take anywhere from 6 to 12 months or longer to complete (Lukse, 1985; Link & Darling, 1986; Fleming & Burry, 1987), thereby allowing an opportunity for pregnancy to occur following each test or treatment (Link & Darling, 1986). As infertile persons pursue pregnancy through medical intervention, the phenomenon of "reframing desire," as developed by Sandelowski et al. (1989), is present: "Once the desire for children was affirmed but unfulfilled, the reframing of desire involved altering the desire to have a baby naturally to having it with medical help" (p. 225).

In the beginning, couples will often invest a large portion of their time in medical intervention. This attitude is exemplified in the comment, "Let's not skip a single month, because it could be the one" (Hirsch & Hirsch, 1989, p. 19). As time passes, couples may decrease their involvement in medical intervention. Although couples perceive pregnancy to be a high priority in their lives, they do not view it as an "all-encompassing" goal to be sought after. This change in attitude is exemplified in the comment, "Hold off this month because we are...." (Hirsch & Hirsch, 1989, p. 19).

With the passage of time and additional medical intervention, feelings of despair, urgency (Hirsch & Hirsch, 1989), and anxiety (Cook, 1987) are often felt as "each month seems like another opportunity lost for conception" (Cook, 1987, p. 466). Because women may also sense that time is running out for their attainment of parenthood, they count how many years they think that they have left to conceive (Sandelowski & Pollock, 1986).

As women pursue pregnancy through medical intervention, they often let their careers suffer (Mazor, 1978), either by postponing career goals (Baram, Tourtelot, Muechler, & Huang, 1988; Milne, 1988; Sandelowski, 1988; Sandelowski & Pollock, 1986) or giving up career opportunities (Mahlstedt, 1985; Milne, 1988). In addition, women may avoid making career changes which may interfere with the activities associated with medical intervention (being unable to leave the work place in order to attend medical appointments) (Mahlstedt, 1985). Thus women's pursuit of fertility often becomes their career or occupation (Sandelowski, 1988; Sandelowski & Pollock, 1986). Several authors believe that this subordination of the woman's career to the medical care of her infertility is a strategy used to cope with the demands of medical intervention (Baram et al., 1988; Mazor, 1984; Milne, 1988; Sandelowski, 1988; Sandelowski & Pollock, 1986). In contrast, Olshansky (1987a) has theorized that the central focus of the infertility, while the career focus assumes a peripheral position, is part of the process by which infertile persons take on the identity of self as infertile:

> This identity becomes central....[Infertile persons] eventually attempt to "shed," "push," or "diminish" this identity to the periphery and "get on with their lives." For these individuals, infertility becomes all-encompassing, taking on a central focus in their lives as they "work" actively to intervene in this problem. Other important identities...such as career identity, are "pushed to the periphery. (pp. 57-58)

When interacting with health-care professionals, one often expects them to be caring and sensitive. When undergoing medical intervention for infertility, women have not found this to be the case. For example, women's sadness about their lack of children has been enhanced while receiving care from nurses who have "chatted" about their own children (Conway & Valentine, 1987). Women have been placed on obstetrical wards while being hospitalized for testing/treatment procedures (Conway & Valentine, 1987; Valentine, 1986). In addition, women often attend infertility appointments with physicians whose waiting-rooms are full of "pregnant bodies." Situations such as these are emotionally difficult for infertile women to endure (Valentine, 1986).

When undergoing medical intervention, infertile couples may incur financial costs since most health insurance companies do not cover the medical care of infertility. This lack of financial coverage occurs because infertility is frequently not viewed as a disease (Brashear, 1989b). In addition, the treatment of infertility may be considered elective in nature (Millard, 1991). Currently, Alberta Health Care does not cover the financial costs involved with the various diagnostic tests unless they are performed for reasons other than infertility (Alberta Health Care, personal communication, April 30, 1992). However, treatment medications, such as Clomid and Lupron, are financially covered by Alberta Health Care for up to 80% of the cost (personal communication, April 30, 1992). Infertility treatments, such as artificial insemination using donor sperm (AID) and in vitro fertilization (IVF) are not financially covered by Alberta Health Care (AACWI, 1988).

The medical care of infertility offers hope to the infertile couple (Kuczynski, 1989; Olshansky, 1988; Sandelowski et al., 1989). Thus infertile couples are often optimistic, believing that treatment will be successful and result in the achievement of pregnancy (Baram et al., 1988; Cook, 1987; Lalos et al., 1985; Millard, 1991; Wilson, 1979; Woollett, 1985). With advances having been made in the medical care of infertility, an increasing number of women do achieve pregnancy (Katz, Marshall, Romanowski, & Stewart, 1985; Stewart & Glazer, 1986). Although the percentage of success varies according to the infertility diagnosis (Cook, 1987), it is estimated that between 50% and 60% of couples under medical care do achieve pregnancy (Garner, 1985; Goodman & Rothman, 1984; Leader et al.,1984).

The remainder of this section, pursuing pregnancy through medical intervention, is presented in four parts: (a) acquiring medical assistance, (b) undergoing infertility investigation, (c) undergoing infertility treatment, and (d) scheduling sexual activity.

ACQUIRING MEDICAL ASSISTANCE

The need for medical assistance is generally recognized by women rather than men (Lalos et al., 1985b; Lalos, Lalos, Jacobsson, & Von Schoultz, 1986; McGrade & Tolor, 1981). This assistance is also sought more often by women than by men (Draye et al., 1988; Hertz, 1982; Lalos et al., 1985b, 1986; Miall, 1985; Rosenkvist, 1981; Whieldon, 1989) probably because: (a) women want to receive medical advice; (b) more health-care services are available to women (Draye et al., 1988); (c) it is more socially acceptable for women to express feelings and concerns about their health (Nathanson, 1975 as cited in Draye et al., 1988); (c) the reproductive failure is initially perceived as being the woman's problem (Miall, 1985); and/or (d) women's role often includes being the primary person who assumes responsibility for creating a family (Becker, 1990). When men seek medical assistance for infertility, it is often motivated by their partners' desires, encouragement, or nagging (Draye et al., 1988). By actively seeking medical help, couples perceive themselves as exerting control over their lives (Sandelowski & Pollock, 1986; Woollett, 1985); women, in particular, feel in control because they view themselves as doing something to help themselves (Sandelowski & Pollock, 1986).

The first medical contact that couples have is often with a nurse (Sherrod, 1988; Woods, 1981), a family physician (Menning, 1984a; Trepanier, 1985), a general practitioner (Menning, 1984a), or a gynecologist (Lalos et al., 1986; Larkin, 1985b; Mazor, 1978; Trepanier, 1985; Woods, 1981). Medical intervention is usually not initiated unless the couple has been attempting to conceive for at least one year (AACWI, 1988; Menning, 1988). In Alberta, this guideline is generally applied to older couples (mid-late 30's) while younger couples are advised to try for a longer duration (AACWI, 1988). However, younger couples are encouraged to seek medical help sooner if either partner has had a problem related to fertility (STD, endometriosis, orchitis) (Menning, 1976).

If pregnancy has been attempted for at least one year, basic fertility tests (monitoring the woman's ovulatory patterns by charting her basal body temperature daily) will generally be initiated. If the couple receives the dreaded confirmation of infertility, they usually feel disappointed and depressed (Wilson, 1979). They may go from physician to physician with the hope of attaining a more favourable prognosis (Batterman, 1985; Menning, 1988; Shapiro, 1982; Stigger, 1983). Couples may also seek "second opinions" from other physicians when this preliminary investigation fails to diagnose and/or cure a fertility problem (Menning, 1984a). In addition, infertile persons may seek care from other physicians when they perceive their current physicians are lacking knowledge or expertise in the care of infertility; these persons often view their actions as taking control of their situations (Blenner, 1990).

If a diagnosis and/or cure is not reached at some point during the preliminary investigation, couples will be referred to an infertility specialist (Olshansky, 1985). Since infertility services are in popular demand, couples may currently wait anywhere from 6 to 12 months before being seen by a specialist at one infertility clinic located in Alberta. Couples must meet several criteria in order to attend this particular clinic. For example, couples must demonstrate that they are in stable heterosexual relationships of three or more years in length. Couples must also be seeking infertility treatment for medical reasons only (AACWI, 1988), that is, not for sociologic reasons, such as the avoidance of heterosexual intercourse by homosexual persons (Andrews, 1987; Kirby, 1986), persons who do not want to contend with the emotional involvement often associated with heterosexual intercourse, or persons who are unable to find a suitable heterosexual partner with whom to have a child (Overall, 1985; Robertson, 1983). Thus single or lesbian women may not be granted access to infertility services (AACWI, 1990).

UNDERGOING INFERTILITY INVESTIGATION

In the initial period of being under medical care, couples undergo extensive testing to determine the etiology of their infertility. Since infertility has assumed a "couple" dimension, by virtue of the fact that its etiology involves male and/or female factors, both partners are included in the diagnostic workup (Chelo, Noci, Barciulli, Bigagli, Biagioli Coppini, Masciandaro, & Romani, 1986; Link & Darling, 1986).

In addition to health histories (general, menstrual, reproductive, sexual) and physical examinations, the diagnostic workup includes various tests which evaluate the physiological conditions needed for conception. These tests include: (a) the basal body temperature (BBT) charting (evaluate ovulatory function); (b) the endometrial biopsy (evaluate ovulatory function); (c) the hysterosalpingogram (HSG) (evaluate tubal patency), (d) the post-coital test (PCT) (evaluate the compatibility between the cervical mucus and sperm), (e) the laparoscopy (evaluate the pelvic organs, especially the reproductive organs, through direct observation), and (f) the hormonal assays (evaluate ovulatory function). One additional test, semen analysis, is performed to evaluate sperm adequacy (Olds, London, & Ladewig, 1984).

Undergoing infertility investigation is often stressful and can spark many feelings in the infertile person. For example, questions asked during the history-taking may be perceived by the person as being inappropriate, demeaning, threatening (Keye, 1984), or embarrassing (Davis, 1984 as cited in Davis & Dearman, 1991). Feelings of guilt may surface as past events (STD, previous abortion) are recounted and attributed to the infertility during the history-taking (Goodman & Rothman, 1984). As results are obtained from other diagnostic tests, feelings of guilt and unworthiness may re-surface as infertility is attributed to past deeds (Clapp, 1985; Goodman & Rothman, 1984; Griffin, 1983; Leader et al., 1984; Menning, 1979, 1988). The identification of factors causing infertility can lead to partners placing blame on each other regarding who is responsible for the infertile state (Frias & Wilson, 1985; Wilson, 1979); according to Honea-Fleming (1986), the "process of assigning responsibility...is a frantic attempt to make sense of a nonsensical situation" (p. 29).

Infertile couples may perceive some of the diagnostic tests as having "questionable" value. When this happens, the testing period may be viewed by the couple as "wasting time" (Sandelowski, 1988; Sandelowski & Pollock, 1986). Tests that prove unsuccessful (not discovering the etiology underlying infertility) may also be viewed as "time-wasters." In response to this "inappropriate" usage of time, couples frequently become frustrated and angry (Sandelowski, 1988).

Other feelings may be experienced by infertile persons as they undergo infertility investigation. For example, Malhstedt (1985) states that "the...[BBT] chart becomes a graphic representation of hope, frustration, and failure" (p. 339). One test in particular, the PCT, is often embarrassing for women to undergo (Cook, 1987; Larkin, 1985b). Women have also expressed various fears about diagnostic laparoscopy. These included the fear of: (a) pain and tiredness in the postoperative period; (b) not waking up from the general anesthetic; (c) saying something embarrassing while under general anesthetic; (d) distress and negative feelings anticipated if the laparoscopy suggested a poor prognosis; (e) requiring further operations to manage their infertility; (f) their husbands devaluing them if the laparoscopy had negative results (Wallace 1983, 1984 as cited in Edelmann & Conolly, 1986); (g) dying while under general anesthetic; (h) choking during extubation; and (i) extensive vomiting during the postoperative period (Lalos et al., 1985b). In addition to experiencing these feelings, women often endure physical pain as they undergo invasive tests, such as the endometrial biopsy (Goodman & Rothman, 1984).

Although test results frequently point to likely causes of infertility, the differing standards of interpretation for results allow for the inexactness of a definite identification of the cause underlying the infertility (Sandelowski, 1987; Sandelowski & Pollock, 1986). This has led infertile women to wonder about "when and under what circumstances individuals 'become infertile'" (Sandelowski, 1987, p. 72). For example, women have questioned "at what point did a man have a sperm count that was inadequate?" (Sandelowski & Pollock, 1986, p. 142). Receiving contradictory interpretations of test results, such as the sperm count, from different physicians also contributes to the ambiguity and uncertainty surrounding the cause(s) of infertility (Sandelowski, 1987; Sandelowski & Pollock, 1986).

Further uncertainty exists when a cause for the infertility is not discovered. The inability to find the cause of the infertility has been attributed by women to the "'inexactness' of a pseudoscientific field of medicine in which they were the 'guinea pigs' with whom physicians 'tinkered '" (Sandelowski & Pollock, 1986, p. 142). Thus women may not be given a definite diagnosis or they may be offered multiple diagnoses to explain the presence of infertility. The diagnosis of endometriosis has been viewed by some women as an "ambiguous" or "rubber stamp" diagnosis (Sandelowski, 1987; Sandelowski & Pollock, 1986), with its "'debatable' presence and severity determined by the physician's 'mood'" (Sandelowski & Pollock, 1986, p. 142).

In most cases, a specific cause for infertility is discovered (AACWI, 1988). According to Olshansky (1985, 1987a), the person assumes a more formal identity of self as being infertile as a result of the medical diagnosis and the clinical confirmation received.

UNDERGOING INFERTILITY TREATMENT

Olshansky (1985, 1987a) has further suggested that infertile persons engage in formal fertility work when they undergo infertility treatment. She found that persons managed their identity of self as being infertile in three specific modes as they undertook treatment. In the first mode, the infertility identity was shed to the periphery of one's life when women achieved pregnancy as a direct result of treatment which corrected the cause(s) underlying the infertility. Such treatments are either medical or surgical in nature. For example, anovulatory women are routinely treated by inducing ovulation with various pharmacologic agents, such as clomiphene citrate (Clomid) or human menopausal gonadotropin (Pergonal) while women with endometriosis are often treated with Danazol (Speroff et al., 1989). Endometrial tissue may also be surgically removed through laparoscopy. The second mode by which Olshansky (1985, 1987a) found persons managing their infertility identity included pushing that identity to the periphery of one's life when pregnancy was achieved as a result of treatment which circumvented the cause(s) underlying the infertility. Treatments of this particular nature, such as artificial insemination or in vitro fertilization, allowed pregnancy to occur, however, the cause(s) underlying the infertility remained. When pregnancy was not achieved, either through corrective and/or circumventive treatment(s), persons unsuccessfully manage their infertility identity in the third mode through remaining "in limbo."

Undergoing infertility treatment will be presented in three sections: (a) determining which treatment(s) to pursue, (b) actively pursuing treatment, and (c) terminating treatment.

The Determination of Which Treatment(s) to Pursue

When the etiology underlying the infertility is discovered, specific treatments are routinely identified which will either correct or circumvent the factor(s) causing the infertility (Olshansky, 1985, 1987a). Frequently, these treatments are routine and conventional in nature. However, couples will sometimes be offered the New Reproductive Technologies (NRTs), such as AID, IVF, or gamete intrafallopian transfer (GIFT), in the course of their treatment (Andrews, 1984). Recognition has been attributed to the development and usage of these non-coital techniques as being major technological advancements and scientific breakthroughs in the management of infertility. Despite this, these newer ways of reproducing are giving birth to a host of complex problems. For example, the Baby M case, involving the artificial insemination of a surrogate mother, has resulted in a vicious struggle between the involved parties regarding who should have custody rights to Baby M. (Garrett et al., 1989). A more recent case involves a white woman giving birth to a black baby, who was "supposedly" artificially inseminated with her white husband's sperm (Associated Press, 1990).

When pursuing pregnancy through medical intervention, infertile persons are confronted with the decision regarding their acceptance or rejection of the offered treatments (Larkin, 1985c). In some cases, the decision is made for them by external factors, such as their financial situations. For example, several of the NRTs are very expensive (IVF costs about $4000 to $5000 per treatment cycle; GIFT costs about $1500 per treatment cycle) because they are highly sophisticated techniques (Larkin, 1985c). Since these "hi-tech" treatments are often not financially covered by health insurance companies, there are usually limited to middle to upper income bracket couples (Needleman, 1987; Olshansky, 1988).

Responding to the "urging" received from health-care providers (Bellina & Wilson, 1985; Olshansky, 1988) in addition to their own "inner drive" to overcome their childlessness, many couples are anxious to undertake any treatments which offers the hope of parenthood (Frankel, 1978; Lalos et al., 1985a; Leiblum, Kemmann, Colburn, Pasquale, & DeLisi 1987 as cited in Brashear, 1989b and Leiblum, 1988; Olshansky, 1988; Wilson, 1979), even if the hope is slight (de Zoeten, Tymstra, & Alberda, 1987; Frankel, 1978; Wilson, 1979). Infertile persons, especially women, are often willing to pursue emotionally and physically discomforting treatment options (IVF) because they believe that this is the only possible way that pregnancy will be achieved (Stewart & Glazer, 1986). One woman participating in Stewart and Glazer's study "remarked several times that she is eager to do IVF again, because she feels that if a couple is truly dedicated to having a baby, they are willing to go through anything to accomplish that goal" (p. 107). It is noted that when couples reach IVF, they have often exhausted all other means of having their own biological child (Fagan, Schmidt, Rock, Damewood, Halle, & Wise, 1986). Viewing IVF as their "last chance" at achieving pregnancy (Milne, 1988; Needleman, 1987), couples will pursue it with the attitude that it is "the final step" (Freeman et al., 1985), "the end-of-the-line" (Shaw, Johnston, & Shaw, 1988), or "the end of the road" (Dennerstein & Morse, 1985) treatment for their infertility.

By trying "any and every" treatment, infertile persons assure themselves that they have done everything possible to achieve pregnancy (Larkin, 1985b; Lorber, 1987; Olshansky, 1988). Infertile persons often approach treatment with this particular attitude in an attempt to avoid anticipated feelings of regret in the future re: not pursuing all treatments available to them (de Zoeten et al., 1987; Sandelowski et al., 1989). Lauritzen (1990) states, "For once an individual is presented with a treatment option, not to pursue it is, in effect, to choose childlessness and to accept responsibility for it" (p. 41). It has been suggested that infertile persons must know that they have done everything possible to overcome their infertility in order to adapt to their loss of fertility (James & Hughes, 1982 as cited in Connolly, Edelmann, & Cooke, 1987). Schinfeld, Elkins, and Strong (1986) note that it is often difficult to obtain "informed" consent regarding the acceptance of the treatments because infertile persons are usually very intent on achieving pregnancy. This difficulty surrounding informed consent involves the person ignoring or disregarding the side-effects, the potential complications, and/or the low success rates associated with the various treatments.

There are times, however, where infertile persons do not simply accept treatment options at "face value," that is, the option is viewed as a means to the end of achieving pregnancy. In their study, Sandelowski et al. (1989) found that infertile couples "engaged in...an accounting process as they...weighed the options...accessible to them and then constructed their own calculus of pursuit" (p. 223). These couples evaluated their situation about a particular option in a calculating manner by constructing a matrix of resources including emotional and physical energy, time, and money. By applying this matrix of resources, in addition to considering the benefits and liabilities involved in pursuing a given option, these couples decided whether they would pursue the option in question. Sandelowski et al. (1989) illustrate this decision-making process with examples:

> They considered the time available to them to pursue options such as...IVF...given their ages and the age limits of these ventures, and the loans they could secure to do IVF....Couples considering IVF perceived the 20 percent chance of succeeding with this procedure alternatively as improving or declining with each try and therefore alternatively worth or not worth the high cost of repeated attempts....Couples who perceived the 20 percent chance to have a child by IVF as good odds, or 'better than no chance' to conceive at all, were willing to undergo the emotional and bodily traumas of this procedure....[One couple] decided that they were unwilling to do infertility any longer because they perceived it as unduly risking emotional health and marital stability. (p. 223)

The consideration of various resources and liabilities was also present in a study conducted by Baram et al. (1988). In this study, the respondents cited various reasons why they did not re-enter the IVF program: (a) high financial cost, (b) advanced age, (c) low success rate, (d) unwillingness to undergo further surgery or physical pain, (e) emotional distress, and (f) the IVF process was difficult to cope with.

Frank (1990) also identified several factors of varying levels of importance which influenced the decision-making surrounding the acceptance/rejection of treatments. Factors having a high level of importance included: (a) personal beliefs, (b) partner's beliefs, and (c) physician advice. Factors having a moderate level of importance included: (a) the emotional stress involved, (b) the probability of treatment success, and (c) the failure of previous treatment to achieve pregnancy. Factors having a low level of importance included: (a) opinions of family and friends, (b) legal implications, and (c) religious beliefs. In addition, Frank (1990) found that infertile persons prefer treatments which are more routine, less intrusive, and non-controversial in nature (medical regimens, surgical procedures, artificial insemination using partner's sperm) while treatments involving greater complexity (AID, IVF) were less acceptable.

In situations where one partner's desire to undertake infertility treatment is greater than his/her partner's desire, particular treatments may be pursued under obligation (Olshansky, 1988) or coercion (Leiblum, 1988). Sometimes, this leads to marital disruption, especially when large amounts of money and low success rates are associated with the treatment (IVF).

When the etiology of infertility remains unknown, specific treatments cannot be identified and undertaken. Rather, couples will frequently continue with diagnostic testing, searching for a cause for their infertility (Olshansky, 1985). In addition, couples may try certain treatments despite any rationale for the treatments (Olshansky, 1985; Sandelowski et al., 1989).

The Active Pursuit of Treatment

The active pursuit of treatment will be presented in two sections: (a) the various patterns of pursuit that infertile couples may take when going through medical intervention, and (b) the experience of pursuing treatment.

The Patterns of Pursuit

Sandelowski et al. (1989) investigated infertile couples' transition to parenthood through biotechnical means or adoption. They identified six different patterns of pursuit which various couples took as they went through medical treatment. These patterns of pursuit are:

1. "Sequential tracking" was the first pattern of pursuit. This pattern was exhibited by couples "who elected to 'exhaust one route before we start another' such as trying one or a variety of treatment options in tandem for a limited number of cycles before selecting one of the many adoption tracks available" (p. 223).

2. "Backtracking" was the second pattern of pursuit. In this pattern, couples restart the medical regimen with a new physician or they return to a previously attempted treatment.

3. "Getting stuck" was the third pattern of pursuit. This pattern involved several repetitions of the same treatment regimen. The persistence with a particular treatment was motivated by "seeing, believing, or being encouraged by their physicians that persistence paid off" (p. 223). Additional rationale underlying this pattern included "technology was steadily improving and the doctors 'get to know you more as an individual and your body' every time [a treatment such as] IVF was tried" (p. 224).

4. "Paralleling" was the fourth pattern of pursuit. This pattern involved "the attempt to pursue simultaneously and actively (rather than merely 'thinking about,' 'talking about' or 'looking into' and option) multiple tracks" (p. 224). Paralleling, which was most often used by infertile persons who were desperate and in a panic, "was a means to 'maximize the options' while minimizing the time wasted in pursuit" (p. 224).

5. "Taking a break" was the fifth pattern of pursuit. In this pattern, couples took a break from their treatment for variable periods of time, from several months to years, for a variety of reasons, such as a move to a new location, financial restraints, and the need to recover from failures/losses. By taking a break from treatment, these couples experienced positive consequences, such as recapitalizing their financial, psychic, and physical reserves.

This particular pattern of pursuit has been reported by others (Goodman & Rothman, 1984; Olshansky, 1985).

6. "Drawing the line" is the sixth and final pattern of pursuit that Sandelowski et al. (1989) identified. In this pattern, couples stopped infertility treatment. This particular pattern will be discussed later under the section, "The Termination of Treatment."

The Experience of Pursuing Treatment

When undergoing various treatment options, infertile women may be exposed to potentially dangerous and life-threatening risks (Sandelowski, 1987; Sandelowski & Pollock, 1986; Wilson, 1979). For example, ovulation induction with Pergonal has the side-effects of overstimulation of the ovaries, multiple births (Larkin, 1985c), fatigue, moodiness, headaches, and weight gain. In addition to submitting to daily injections of the medication, which are often uncomfortable, women must also submit to frequent blood tests (Leiblum, Kemmann, & Lane, 1987 as cited in Leiblum, 1988). Undergoing a laparoscopy for the removal of endometrial tissue from the pelvic cavity exposes the woman to surgical risks. With their concerns about safety, women have wondered "whether the 'unnatural' treatments used to cure infertility would paradoxically 'inflict sickness' on them" (Sandelowski & Pollock, 1986, p. 142).

As infertile persons undergo treatment, they often have high expectations that treatment will be successful (Lalos et al., 1985a; Leiblum, 1988; Woollette, 1985). This optimism is especially present among women undergoing IVF. Despite knowing that IVF has a low success rate, many women believe that they will be the "lucky ones" to achieve pregnancy (Baram et al., 1988; Milne, 1988; Needleman, 1987). In their optimism, these women will frequently over-estimate the chances of success for achieving pregnancy. For example, the women participating in a study conducted by de Zoeten et al. (1987) believed that their chances of achieving pregnancy was 51% after three attempts with IVF; in actuality, the chances of conceiving following three attempts of IVF was 38% at the particular health-care facility where the IVF was performed. This optimism surrounding treatment is also present in procedures which are less involved compared to IVF. For example, Wallace (1985) found in her study that a portion of infertility patients believed that having a laparoscopy was a sufficient curative procedure and that further surgical intervention would not be required to rectify the infertility problem. Woollette (1985) found that the persons participating in her study were also very optimistic about achieving pregnancy despite the fact that they had extensive knowledge about infertility and its treatment. Woollette provided the following explanation for this discrepancy:

> Interviewees...appeared very optimistic, suggesting extensive knowledge was not necessarily associated with a very accurate cognitive appraisal of their position. It was perhaps helping to make better sense of what was happening but it was not being used to adjust to the possibility that they would never become parents. (p. 478)

A sense of "eternity" may be felt by women as they wait to see if treatment is successful (Sandelowski & Pollock, 1986). During this time of waiting, there is much uncertainty regarding whether or not pregnancy will be achieved (Milne, 1988). It is not unusual for women to be "tuned in" to their bodily functioning, observing for signs indicative of pregnancy (Mazor, 1978, 1984; Stewart & Glazer, 1986). For example, one woman in Stewart and Glazer's (1986) study perceived that "every little abdominal twinge was a cause for panic lest it be her 'period arriving'" (p. 106). During this time of uncertainty, women will often plan their daily lives around the possibility of becoming pregnant. Living life in this fashion is described by one woman who stated, "During the time I hope I'm pregnant, I'll eat right...and not lift heavy things" (Sandelowski, 1988, p. 157). Several of the women participating in Milne's (1988) study took even more precautions by putting themselves on strict bedrest for two weeks following an IVF attempt in the hopes that pregnancy had been achieved.

When pregnancy was not achieved, infertile persons might try to explain "why" this was the case. Rather than focusing on the physiological aspects of procreation and/or technical aspects of the treatment undertaken, it is not unusual for these persons to attribute the non-achievement of pregnancy to themselves (Milne, 1988; Sandelowski et al., 1989). One woman illustrated this self-blame when she stated, "What did I not do that was right that would have made a difference?" (Sandelowski et al., 1989, p. 224). When this same woman finally achieved pregnancy on her fourth attempt with IVF, success was attributed to "having taken 'better care of myself'" (p. 224).

In addition to explaining why pregnancy had not been achieved, women will often experience a variety of feelings. For example, women will often feel depressed with the onset of menstruation (Lalos et al., 1985a; Mazor, 1978, 1984). Hopefulness turns to despair when treatment fails, especially if the woman and her partner have invested much hope, energy, and money in the treatment (Olshansky, 1988). They will often feel cheated and believe "that their 'right' to reproduce has been taken away from them" (Baram et al., 1988, p. 188). They may also feel shocked, dismayed, and frustrated when they cannot achieve pregnancy, and yet, they have been successful in other areas of their lives (Baram et al., 1988; Milne, 1988). In addition, women may feel angry at themselves for not getting pregnant (Baram et al., 1988); Davis (1987) has noted that infertile persons "may feel a sense of obligation to the physician to succeed since the physician is perceived as trying hard to help them" (p. 34). These feelings of anger may also be directed towards the health-care staff (IVF team) for not making pregnancy happen (Baram et al., 1988). According to Mazor (1978), a woman may specifically become angry "with the doctor for withholding the treasure [of pregnancy] from her; the doctor may be perceived as a powerful...figure who may grant or deny the power to make babies" (p. 146).

The Termination of Treatment

Although some physicians provide guidelines recommending when treatment should terminate (Bellina & Wilson, 1985), patients generally have the responsibility making the final decision. It is suggested by Baram et al. (1988) and Van Hall (1983) that health-care personnel (physician, IVF team) are reluctant to counsel unsuccessful couples to end treatment because they are caught up in successful treatment outcomes. For example, one physician did not counsel infertile couples to discontinue until the physiological cause(s) underlying the infertility were discovered; one of his patients had 133 artificial inseminations and two operations before achieving pregnancy. In response to this woman's situation, the physician asked, "'Should I have told her to stop trying?'" (Lord, 1987, p. 61). Couples often wish that their physicians would reach a point where they recommend that they should stop treatment (Conway & Valentine, 1987).

For many infertile persons, it is difficult to terminate medical intervention because it means that they must come to terms with a childless future (Gaze, 1990). Because of this, women have found it virtually impossible to stop medical intervention, especially when the infertility diagnosis and treatment are ambiguous (Sandelowski, 1987; Sandelowski & Pollock, 1986). Although continuing with medical care would impose hope and hurt on them, these women have "felt that to give up when success might be waiting around the corner would hurt more" (Sandelowski & Pollock, 1986, p. 143). Other women will persist with medical care because they "[delay] the 'end' by not allowing it to arrive" (Sandelowski & Pollock, 1986, p. 143). This delay is frequently accomplished through the manipulation of time during medical intervention (Sandelowski, 1988; Sandelowski & Pollock, 1986). This is described by one woman:

> I've got three more months on Pergonal . . . I was supposed to go back . . . around Thanksgiving for my fourth . . . Pergonal episode. I asked (the doctor) if I could go off of it for a month or two because of it being the holidays. I used that as an excuse but I think what I was doing was prolonging my time. I was buying my time, so to speak. I don't want the end to come. (Sandelowski, 1988, p. 157)

Other infertile women will set time limits on their treatment, however, upon reaching them, they will extend the limits (Sandelowski, 1988; Sandelowski & Pollock, 1986).

In contrast to continuing with treatment, some infertile persons will terminate it only when they are forced to do so by various influences. For example, women may discontinue attempts with IVF only after (a) they have reached the trial limit of attempts; (b) they have reached the age limit of undertaking IVF (Milne, 1988); (c) their financial resources have expired; and/or (d) their reproductive abilities have come to an end (Morse & Dennerstein, 1985).

For other couples, the decision to stop treatment occurs after they have tried all possible treatments, thereby proving to themselves (Baram et al., 1988; Conway & Valentine, 1987; Olshansky, 1988) and others (prospective grandparents) that they have made all attempts to overcome infertility (Lalos et al., 1986). Baram et al. (1988) state, "IVF failure provided some measure of freedom....These individuals now believed that they had done everything possible to have a biological child and were finally able to 'close the book' on their infertility" (pp. 184-185).

Sandelowski et al. (1989) found that the participants in their study "drew the line," that is, stopped treatment, at various points throughout the medical care of infertility, "depending on when they became 'fed up' with, or were no longer willing to invest in, medical solutions" (p. 224). One woman in this study, for example, terminated medical intervention when she found the process of diagnosis and the Clomid treatment to be degrading and futile. Although they had drawn the line by not actively, aggressively, or seriously trying to achieve pregnancy through medical intervention, these participants still retained the "faint" hope of achieving pregnancy.

Upon terminating medical intervention, in the absence of achieving pregnancy, infertile persons are confronted with other options, such as pursuing adoption or choosing to live a child-free life and putting their energies into other areas of their lives (career) (Baram et al., 1988). Sandelowski et al. (1989) found that when couples chose adoption, the phenomenon of "reframing desire" was present: "Couples...had to ask themselves the right questions: "It's not, Do you want to adopt? It's, Do you want children? You weigh the two things, Either have a child that's adopted or don't have children" (p. 225).

According to Olshansky (1987a), when infertile persons accept either of these two alternative options, adoption or child-free living, they are reconciling their infertility "because the underlying cause of the infertility is not corrected nor is pregnancy achieved through technological means" (pp. 61-62). By doing so, infertile persons are coming to terms with their inability to have their own biological children. In addition, Olshansky (1987a) theorized that "this reconciliation process allows the identity as infertile to 'diminish,' taking on a peripheral position in their lives" (p. 62).

SCHEDULING SEXUAL ACTIVITY

When undergoing medical intervention, infertile couples are requested by their physicians to engage in sexual intercourse during the woman's suspected time of ovulation (the time when the ovum or egg is released from the ovary). In addition, there are times when couples are instructed to abstain from sexual intercourse. Taking a medical/health-care approach to this scheduling of sexual activity, Oke and Wood (1987) state: "Sexual activity is no longer a spontaneous act of love and joy but must be done according to a set routine---as it were, standing orders!" (p. 344). When complying with such orders, couples often feel a loss of control in their sexual relationships (Millard, 1991) and may feel like "sexual robot[s] being controlled by the physician" (Bernstein & Mattox, 1982, p. 313).

This scheduling of sexual activity, which is done for the purposes of achieving pregnancy and for testing, has underlying physiological principles involving the life spans of the human sperm and ovum. The fertilizable life span of the sperm is commonly given as 48 hours while the ovum retains the ability to be fertilized between 12 and 24 hours following the time of ovulation (Speroff et al., 1989). Thus the union of the gametes, through sexual intercourse, must be attempted relatively close to the time of ovulation in order for conception to occur. To avoid the monthly cycle of feeling hopeful with the subsequent disappointment associated with the non-achievement of pregnancy, couples may avoid sexual intercourse (Keye, 1984; Valentine, 1986), believing that "[they] didn't have to worry about not getting pregnant if...[they] didn't have sex" (Valentine, 1986, p. 66). Scheduling sexual intercourse to coincide with ovulation is also required for the PCT when evaluating the compatibility between the cervical mucus and sperm. Engaging in sexual intercourse for these reasons can be threatening to the couple since the intercourse will be evaluated, either for the result of conception (Gray, 1980) or for the presence and motility of sperm found in the cervical mucus during the PCT (Drake & Grunert, 1979).

In addition to engaging in sexual activity, infertile couples are also instructed to abstain from sexual activity which involves the ejaculation of semen. If ejaculation occurs frequently (daily or more often), sperm counts may be depressed (Woods, 1981). To ensure that an adequate number of sperm are available for fertilization, couples are routinely advised to engage in sexual intercourse on an every-other-day basis during the time of ovulation (Menning, 1988; Woods, 1981). Abstinence is also required for diagnostic testing involving the PCT and semen analysis. To obtain representative test results, the PCT requires a period of abstinence for about 48 hours (Woods, 1981) while the semen analysis requires abstinence for two or three days (Speroff et al., 1989).

Grayshon (1989) notes that "in our culture, details of 'trying' for a baby naturally [through sexual intercourse] are kept personal. One does not ask how a couple got on 'trying' the previous night: that is honoured as a secret between the couple" (p. 12). In contrast to couples who achieve pregnancy with little difficulty, the infertile couple's sexual relationship becomes the ménage à trois when they pursue pregnancy through medical intervention and their sex life is guided by the thermometer (BBT chart) or by physician instruction. This concept of "three in the bed" is experienced further by the couple when details of their sexual relationship are made public knowledge (Menning, 1988; Salzer, 1986). This loss of privacy often occurs when the engagement in sexual intercourse is recorded on the BBT chart. Menning (1988) states: "Converting sexual relations to little X's on a chart...makes public something that most couples consider very private and do not ordinarily keep a running scorecard on" (p. 124). Davis (1987) expresses similar thoughts by stating that the BBT chart "may be perceived by the couple as a 'report card' of their sexual behavior" (p. 33); Menning (1988) cites one woman as saying, "I bring my [BBT] charts to the doctor like a child bringing a report card. Tell me, did I pass?....Did I have sex at all the right times as you instructed me?" (p. 113). The privacy of the couple's sexual relationship may also be invaded when they undergo testing, particularly noted with the PCT. This was expressed by one woman: "A private part of your life is suddenly taken into the doctor's office. It's like putting on a performance and being judged for it afterward" (Larkin, 1985b, p. 53). In addition, the couple may feel as if "their sex life [is] viewed through a microscope" (Larkin, 1985b, p. 53) when they undergo the PCT. Thus as couples experience infertility, their "lovemaking...[becomes] a clinical function laid bare to a battery of white-coated doctors and probing technicians" (Panuthos & Romeo, 1984, p. 8).

Throughout the infertility literature, several clichés have been coined with the scheduling of sexual intercourse. For example, engaging in sexual intercourse has been referred to as "sex on demand" by Menning (1988) while Falik (1984) calls it "homework" for the couple to complete. Seibel and Taymor (1982) describe it as "the couple ceases to 'make love' and instead attempts to 'make a baby'" (p. 138) while Drake and Grunert (1979) refer to it as "This is the night" syndrome. One woman in Harkness (1987) referred to it as "egg night syndrome." Sandelowski et al. (1990) call it "choreographed" sexual intercourse. In contrast, engaging in sexual intercourse for the purposes of achieving pregnancy and diagnostic testing are referred to "sex for coverage" (covering the time of ovulation) and "sex for evaluation" respectively by Honea-Fleming (1986). Since the woman's ovulation time is most often identified by observing the BBT chart (Kraft et al., 1980; Whieldon, 1989), many women will consult their charts to see "when" they need to engage in or abstain from sexual activity; scheduling sexual activity in this particular fashion has been referred to as "sex by the calendar." The term, "scheduled sex" (Larkin, 1985b), will be used in the remainder of this chapter in order to maintain consistency.

To accommodate the need for scheduled sex, couples will often plan their lives around their sexual relationships. For example, the couple may reject plans (vacation, employment, education) that will interfere with scheduled sex (Frank, 1984; Mahlstedt, 1985; Shapiro, 1982). Couples may take extraordinary measures to ensure that they engage in scheduled sex. Salzer (1986) cites an example of this: "One woman told of her flights to various cities around the country where her husband was attending business meetings in order 'not to lose a month'" (p. 94).

When planning for scheduled sex, it is commonly believed that "'It is the woman's responsibility to arrange the intercourse at the right time' and 'It is the man's job to carry through [with] the intercourse'" (Lalos et al., 1985b, p. 211); Debrovner and Shubin-Stein (1975) note that it is common for women to assume this new role of initiator in their sexual relationships when experiencing infertility. Women have expressed difficulty engaging their partners in sexual activity, a task often requiring deviousness (Sandelowski & Jones, 1986) or seductive behavior (Gray, 1980). Davis and Dearman (1991) found that women coped with scheduled sex by using several strategies including: (a) creating romantic environments, such as having a romantic dinner; (b) wearing sexy lingerie; (c) being creative with sexual activity "by varying the places, positions, and times they engaged in sex" (p. 225); and (d) concealing their times of ovulation from their partners so that they would not attribute sexual overtures to scheduled sex. Rather than initiating sexual activity indirectly, some women will use a direct approach. For example, Drake and Grunert (1979) stated that "one husband reported that his wife would call him during the day to 'advise' him that night was important for successful intercourse" (p. 544). Leiblum (1988) has noted that anovulatory women are particularly intent on scheduled sex when they are having ovulation induced through medication.

Feeling resentful and frustrated with having to perform for scheduled sex, men may outrightly refuse to engage in sexual intercourse (Keye, 1984). Men may also become "unavailable" for intercourse by using various excuses often involving health, travel, and work (Debrovner & Shubin-Stein, 1975). Another avoidance tactic, as identified by Salzer (1986), includes "provoking a fight just before it's time to go to bed" (p. 95).

Participating in scheduled sex creates a situation where the partners must perform sexually on demand (Griffin, 1983). Although the woman can experience minimal sexual excitation and still satisfy her reproductive functions, a man cannot; a man must be sexually excited to some degree before he is able to function sexually (erection, penetration, ejaculation) (Debrovner & Shubin-Stein, 1975; Walker, 1978). Although it has been reported that men will often experience sexual dysfunction, such as erectile difficulties (impotence) (Berk & Shapiro, 1984; Drake & Grunert, 1979; Elstein, 1975; Debrovner & Shubin-Stein, 1975; Keye, 1984) and retarded ejaculation (Key, 1984) during scheduled sex, couples may deny such difficulties with sexual performance (Morse & Dennerstein, 1985).

When sexual dysfunction occurs, the partners may feel sexually inadequate (Frank, 1984; Mahlstedt, 1985). Partners may seek extramarital affairs to: (a) redeem poor sexual performances (Debrovner & Shuber-Stein, 1975); (b) regain positive feelings about one's sexuality (Berk & Shapiro, 1984; Burns, 1987); and (c) recapture the enjoyment associated with sexual activity (Burns, 1987; Debrovner & Shubin-Stein, 1975; Rommer & Rommer, 1958). Men may also seek extramarital affairs to prove their ability to impregnate (Debrovner & Shubin-Stein, 1975; Rommer & Rommer, 1958) while women may seek them with the purpose of getting pregnant (Rosenkvist, 1981).

When participating in scheduled sex, the focus of the activity is on penile-vaginal penetration (Freeman, Garcia, & Rickels, 1983). An additional goal includes having the man successfully ejaculate and adequately deposit his semen inside his partner's reproductive tract (Elstein, 1975; Leiblum, 1988). With this particular goal in mind, the man may lose his ability to be sexually gentle and sensitive toward his partner (Elstein, 1975). In addition, the partners may spend little time on sexual foreplay (Ansbacher & Adler, 1988; De Vries, Degani, Eibschitz, Oettinger, Zilberman, & Sharf, 1984; Salzer, 1986). Dyspareunia (painful sexual intercourse for the woman), which may be caused by insufficient sexual arousal leading to a lack of adequate vaginal lubrication (Crooks & Baur, 1983), has been reported by infertile women (Ansbacher & Adler, 1988; Baram et al., 1988).

When discussing the implications of infertility and its management on the sexual relationship, Honea-Fleming (1986) states: "Rather than focusing on each other, as is usual in a...sexual interaction, these [infertile] couples focus on a product, a procedure" (p. 30). This supports Leiblum's (1988) comment that "unwanted infertility is not conducive to good sex" (p. 134). Although some couples report that their sexual relationships are not affected negatively by their infertility (De Vries et al., 1984; Freeman et al., 1983; Morse & Dennerstein, 1985; Salzer, 1986), there are several unpleasant effects of scheduled sex because there is a strong emphasis on the procreative function of sexual activity. For example, this emphasis reminds the couple of their desire for pregnancy (Debrovner & Shubin-Stein, 1975) and their failure to conceive (Clapp, 1985; Mahlstedt, 1985). Couples have found that their sexual relationships have lost spontaneity because sexual activity has become a mechanical act to be carried out at a required time (Berk & Shapiro, 1984; Falik, 1984; Kraft et al., 1980; Menning, 1988; Morse & Dennerstein, 1985; Rosenkvist, 1981). It has been reported that infertile couples engage in sexual intercourse only for the purpose of conceiving a pregnancy (Lalos et al., 1985a). When conceiving a pregnancy is unlikely (during the non-fertile phases of the woman's menstrual cycle), engaging in sexual intercourse is often viewed as being a purposeless or useless activity to pursue (Battaglia, Graziano, & Scafidi Fonti et al., 1983; Freeman et al., 1983). Thus it is not unusual for infertile persons to abstain from sexual activity during the non-fertile times (Ansbacher & Adler, 1988; Elstein, 1975; Drake & Grunert, 1979; Gray, 1980) with the rationalization of "Why even bother with sex if there is no chance of pregnancy?" (Keye, 1984, p. 763).

The preoccupation with the procreative function of sexual activity during ovulation can create an atmosphere of depersonalization regarding the reproductive capabilities of each partner, especially the man. This depersonalization is expressed throughout the infertility literature in statements, such as "One of the husbands...accused her of not really caring for him but only wanting to 'make a baby'" (Drake & Grunert, 1979, p. 543); "He may also feel that his wife has no interest in him as a person, only in his sperm and his ability to impregnate her" (Salzer, 1986, p. 94); "The husband felt that he was being...'used' as a breeder" (Ansbacher & Adler, 1988, p. 58); and "'I felt like a babymaking machine,' says [one man]....'Whether I was tired or had a lousy day at the office I still had to have intercourse on certain days if we wanted a real chance at having a baby'" (Larkin, 1985b, p. 53).

THE PSYCHOSOCIAL MEANING OF INFERTILITY

The psychosocial meaning of infertility will be presented in four sections: (a) the value attributed to fertility, (b) living as an infertile woman within the fertile world, (c) coping with childlessness, and (d) the loss and grief of infertility.

THE VALUE ATTRIBUTED TO FERTILITY

> Little girls are...reminded of their future roles as mothers, as witnessed by the unending supply of baby dolls and other paraphernalia of mother-hood sold in toy stores and marketed by the media. Many women have been raised to believe that...mother[hood] is important. (Leiblum, 1988, pp. 139-140)

To be childless represents a violation of social norms in a society where having children predominates (Miall, 1985). People who are childless by choice (voluntarily childless) have been characterized as being odd, objects of pity (Uniacke, 1987), selfish (Lauritzen, 1990; Uniacke, 1987; Veevers, 1979 as cited in Miall, 1985), emotionally immature, psychologically maladjusted, immoral, sexually inadequate, unhappily married (Veevers, 1979 as cited in Miall, 1985, p. 385), and uncaring (Lauritzen, 1990). In contrast, infertile persons (involuntarily childless) conform to social norms by virtue of wanting children, however, they violate the norms simply because they do not have children (Veevers, 1972 as cited in Sandelowski, 1988). Infertile persons may be perceived by others as being abnormal, deficient (Miall, 1985), unworthy (Mahlstedt, 1985), incomplete (Leiblum, 1988; Mahlstedt, 1985), sexually inept, or asexual (West, 1983).

In addition to being without children, infertile persons often become deviant according to the norms of society by the way they choose to manage their childlessness. This type of deviance is described by Sandelowski (1988):

> The infertile...are deviant because they are consumers of controversial technologies such as donor insemination and in vitro fertilizations....[Infertile persons] are in the lamentable situation of wanting to conform by having children, but they are criticized for pursuing any available means toward parenthood....By urgently demanding and consuming advancements in reproductive technology to treat infertility, the infertile are paradoxically both running with and against the tide....They are charting new frontiers in "baby making"....[There is] an awareness of going counter to conventional means of achieving biological motherhood. (p. 158)

Because of the sensationalism and controversies surrounding these new and unconventional ways of achieving pregnancy, infertile persons may be reluctant to tell others about their participation in them. This reluctance to share, which often leads to social isolation for the infertile person (Strickland, 1981 as cited in Milne, 1988), may result from the person's inability to admit failure to reproduce addition to avoiding questions, sympathy, criticism, or gossip from others (Baram et al., 1988).

Being socially conditioned for the role of motherhood, as described by Leiblum (1988), infertile women may feel like failures simply because they have internalized "the assumption of fertility and the mandate to reproduce" (Fleming & Burry, 1987, p. 38). This sense of failure may persist because they are not meeting the norms or expectations of society (Woods & Luke, 1984). Thus the infertile woman may feel unworthy because she believes that her self-worth is defined by her procreative ability (Falik, 1984; Leiblum, 1988).

When pregnancy is not achieved, women will often have concerns regarding the integrity and the intactness of their bodies. They may feel that their bodies are damaged (Mahlstedt, 1985; Mazor, 1978) or defective (Batterman, 1985; Mahlstedt, 1985; Rosenfeld & Mitchell, 1979; Sandelowski, 1988). In addition, women may question their gender identities.

For example, women may feel unfeminine (Woods & Luke, 1984) and incomplete as women (Kraft et al., 1980; Leader et al., 1984; Mahlstedt, 1985). Some women have described themselves as "feeling like 'neuters,' not belonging to any group classifiable as male or female" (Mazor, 1984, p. 27).

The value given to having children may be so great that a couple's relationship is threatened (Anand, 1984). For example, in some social groups, a woman's inability to conceive may be grounds for marriage dissolution (Gray, 1980; Menning, 1988; Stigger, 1983). When couples do not belong to such groups, they are confronted with their level of commitment toward their relationships. Each partner must come to an understanding with the question, "Do I want to be with you regardless of whether we can have child?" (Larkin, 1985b, p. 51). The person who is infertile may be afraid that his or her partner will seek another partner who is fertile (Batterman, 1985; Brashear, 1989a; Mahlstedt, 1985; Mazor, 1978, 1984; Menning, 1988). In contrast, the infertile person may consider leaving his or her partner, thereby giving the partner the opportunity to have a child with a partner who is fertile (Batterman, 1985; Lalos et al., 1985a, 1986; Mahlstedt, 1985; Wilson, 1979). Divorce has been considered as a viable option to remaining in a childless marriage (Garner, 1985; Rosenkvist, 1981).

LIVING AS AN INFERTILE WOMAN WITHIN THE FERTILE WORLD

Infertile persons constantly meet the fertile world on various levels, such as family and friends with children (Stephenson, 1987), advertisements relating to children and families (Larkin, 1985b; Sandelowski & Jones, 1986; Stephenson, 1987), and holidays (Mother's Day) celebrating fertility and family life. Situations such as these continually remind women of their infertility (Sandelowski, 1988).

Women's experiences of being infertile and living within the fertile world will be presented according to five themes: (a) unfairly singled out, (b) not fitting in/being left out, (c) no one understands, (d) social comparisons, and (e) coercive social exchanges.

Unfairly Singled Out

Infertile women often feel a sense of injustice when other women can achieve pregnancy. This feeling is frequently tied to the observation of several groups of women, such as those who elect abortions (Mazor, 1984; Sandelowski, 1988; Sandelowski & Pollock, 1986), abuse/batter their child(ren) (Mazor, 1984; Menning, 1988; Sandelowski, 1988; Sandelowski & Pollock, 1986), and get pregnant "accidentally" (Sandelowski & Pollock, 1986). According to Sandelowski and Pollock (1986), "the [infertile] women's antagonism and estrangement from fertile people often spread to their relationships with God, whose plan in giving children to people who did not want or appreciate them was unfathomable to them" (p. 144). In contrast, there are some women who are not angry at God and simply await for His plans for them to unfold (Sandelowski & Jones, 1986; Sandelowski & Pollock, 1986).

Infertile women have also felt a sense of unfairness when going through adoption proceedings: "for adoption agencies to question infertile couples' motivation to have children (when fertile couples' motivations were never questioned)" (Sandelowski, 1988, p. 150).

Not Fitting In/Being Left Out

When living in the fertile world, infertile women often feel as if they do not belong. This feeling is expressed in women's statements about "not 'fitting in,' and of being 'lost out' from the fertile world" (Sandelowski, 1988, p. 148). When socializing with women who have children, infertile women will often feel "left out" simply because they "'don't have a whole lot in common,' and [are] unable to contribute to typical female conversation" (Sandelowski & Jones, 1986, p. 175). These feelings of "not fitting in" and "being left out" contribute to the women's feelings of differentness and social isolation (Daly, 1989; Lalos et al., 1985a).

Rather than belonging to the fertile world, infertile women may feel as if they have their own little world: "'there's just like a club of us' trying to gain admission to...the 'special club of motherhood'" (Sandelowski, 1988, p. 148).

No One Understands

Infertile women generally believe that "fertile Myrtles" (Sandelowski, 1988, 1990; Sandelowski & Jones, 1986), that is, normal women who have little difficulty in achieving pregnancy, do not understand the problem of infertility simply because they have not experienced infertility (Daly, 1989; de Zoeten et al., 1987; Sandelowski, 1988, 1990; Sandelowski & Jones, 1986). Because of this lack of understanding from others, women will often feel a sense of isolation and otherness (being different from other people) (Sandelowski, 1988; Sandelowski & Jones, 1986).

In contrast, infertile women feel that they are understood by other infertile women. Because of their shared understanding, women will frequently form a special bond or "sisterhood" with each other (Sandelowski, 1988, 1990; Sandelowski & Jones, 1986; Sandelowski & Pollock, 1986). The women participating in Milne's (1988) study viewed this sharing with other infertile women as being a major source of support while going through the IVF experience. In addition, the women in Baker and Quinkert's (1983) study sought information from others who were also experiencing infertility problems. Daly (1989) notes that women decrease their social isolation when they have shared with other infertile women.

When an infertile woman achieved pregnancy, this gave hope to the other women. This hope had its origin in the belief, "If they could do it, so could their friends" (Sandelowski & Jones, 1986, p. 185). Despite this, the sisterhood felt among the women was threatened, and sometimes even broken, when a woman became pregnant. The still-infertile women felt much resentment to the once-infertile-now pregnant women; this resentment has been likened to the feelings of watching a thin person attending a Weight Watcher's group (Sandelowski, 1988, 1990). In addition, the still-infertile women did not feel that the once-infertile-now pregnant women really belonged to the world of infertile persons (Sandelowski, 1988). This was particularly noted when women debated about "who" should be allowed to attend infertility peer support groups (can a women continue to be a member of the group when she achieves pregnancy?) (Sandelowski, 1990; Sandelowski & Jones, 1986).

Social Comparisons

When investigating women's experiences of infertility, several researchers (Sandelowski, 1988; Sandelowski & Pollock, 1986) have found that infertile women compare themselves to other women, including both fertile and infertile women. This social comparison "enabled women to evaluate where they 'fit into the scheme of things' and to find the 'slide rule' that allowed them to measure whether they were better or worse off or 'at least equal to everybody else'" (Sandelowski, 1988, p. 151). According to Sandelowski (1988), "women compared themselves to other women...to make themselves feel better about their situations, to heal their wounded self-esteem, and to reduce the distance they perceived between themselves and fertile women" (p. 152).

Making these social comparisons could make the women feel either normal or abnormal. For example, women would often compare themselves to other women who have experienced infertility and who have achieved pregnancy. This comparison gave the women a sense of normality in addition to giving them assurance that they, too, would achieve pregnancy (Sandelowski, 1988; Sandelowski & Pollock, 1986). There were times when the women felt lucky in comparison to their fertile associates. For example, Sandelowski (1988) cites one woman as feeling lucky because she did not have the hassles associated with the raising of children. In contrast, social comparisons sometimes resulted in having the women feel abnormal. This sense of abnormality was strongly felt when the women observed that they were the only ones without children (Sandelowski & Pollock, 1986).

Social comparisons also occur among infertile women on several levels. For example, women have compared themselves on the cause(s) underlying their infertility. Mazor (1984) notes that women who ovulate may consider themselves to be "more normal" than those women who do not ovulate. In addition, women may debate "about whether it is 'better' or 'worse' to have a male infertility problem... whether it is 'better' or worse' to have a diagnosis of absolute infertility or to go on thinking that there is a lingering chance for a pregnancy" (Mazor, 1984, p. 29). Women whose infertility has been explained by diagnoses other than endometriosis (blocked fallopian tubes) have felt fortunate because they perceive their diagnoses as more easily treated than endometriosis (Sandelowski, 1988; Sandelowski & Pollock, 1986). When this type of comparison occurs, a sense of competition is often felt among the women (Sandelowski, 1988).

Social comparisons will also occur among the "still-infertile" women and the "once-infertile-and-now-pregnant" women (Sandelowski & Jones, 1986). When these comparisons were made, the line between infertility and fertility was obscured: "Women who had achieved pregnancy...were...confused about whether they had ever really been infertile...or whether they would continue to have difficulty conceiving...in the future. These women appeared to exist between two worlds, identifying with 'both sides'" (Sandelowski, 1988, p. 154).

Coercive Social Exchanges

The concept, coercive social exchanges, which is identified and labelled by Sandelowski and Jones (1986), refers to the social "interactions in which...the participants [infertile women] felt they were being forced to give or receive information or emotional support" (p. 174). Although the development of this concept is accredited to Sandelowski and Jones, elements pertaining to it are scattered throughout the infertility literature. There are three basic types of coercive social exchanges: (a) being forced to tell, (b) putting on a happy face, and (c) having coercion in reverse.

Being Forced to Tell

Menning (1988) notes that if people talk about their infertility, they open themselves up to other people's advice regarding how pregnancy can be achieved. Thus to protect themselves from the advice of others, infertile persons will often not disclose their infertility to other people. Despite this, women have described situations where they have been forced to tell others about their infertility and/or lack of children. For example, infertile women have been confronted with quizzing questions, such as "When are you starting a family?" (Larkin, 1985b), "How come you're not pregnant yet?" (Goodman & Rothman, 1984, p. 90), or "Where are your kids?" (Sandelowski & Jones, 1986, p. 175). Responding to such questions, some women will "tell the truth" about their childlessness in order to prevent further questioning in addition to not letting people assume that children are not wanted (Sandelowski & Jones, 1986). To protect themselves from having to discuss their infertility, couples will often isolate themselves from others (Larkin, 1985b; McCormick, 1980; Millard, 1991; Stephenson, 1987; Valentine, 1986).

Rather than telling the truth, some women have "pretended" to be voluntarily childless while answering these questions (Sandelowski, 1988; Sandelowski & Jones, 1986). Common responses used to hedge these questions include "we are practicing, we're still young, what's the hurry[?]" (Goodman & Rothman, 1984, p. 90), and "we're having too much fun, or that I enjoyed my career too much to have a child" (Larkin, 1985b, p. 50). Other women have pretended that being without children was of no concern to them, responding with comments like "they were not 'worrying about it,' and that when 'God was ready,' they would have a child" (Sandelowski & Jones, 1986, p. 176) It is believed that women pretend to be voluntarily and/or uncaringly childless in order to cover their feelings of abnormality, inferiority, and inadequacy, in addition to protecting their self-esteem.

Women who work outside the home have felt compelled to tell their coworkers about their infertility for a variety of reasons. For example, one woman told her co-workers about the side-effects of Danocrine (moodiness, irritability) in order to preserve her relationships with them. Another woman felt compelled to tell her co-workers about her infertility so that they would not assume that she had a serious illness (Sandelowski & Jones, 1986).

Rather than women telling others about their infertility, sometimes their treatment measures will give the story away. For example, druggists will identify infertile women by filling their prescriptions for fertility drugs, such as Clomid (Sandelowski & Jones, 1986).

Putting on a Happy Face

There are times when infertile women put on a happy face (a facade) in order to preserve their relationship with others. Common situations where this may occur include an infertile woman attending a baby shower for a pregnant friend or relative and a woman announcing her news of pregnancy to the infertile woman (Sandelowski, 1990; Sandelowski & Jones, 1986). To protect themselves from having to put on a happy face, some infertile women will avoid social situations which are focused on fertility and the family (Menning, 1988; Millard, 1991; Sandelowski & Jones, 1986).

Some women feel compelled to put on a facade around their partners in order to protect them from their own sadness surrounding the infertility. For example, one woman went to a psychiatrist with the explanation of "I can go [to the psychiatrist] and cry and talk about it and not worry anybody else" (Sandelowski & Jones, 1986, p. 179). Women may also feel that they have to put on a happy face in order to secure their partners' support during the management of their infertility.

Having Coercion in Reverse

The third type of coercive social exchange that infertile women experience is the situation where the coercion is in reverse, that is, "the women perceived not only themselves, but also others as feeling constrained in their interactions because of the infertility" (Sandelowski & Jones, 1986, p. 180). An example of this social exchange is when a woman does not share her news of pregnancy with the infertile woman because she does not want to hurt the infertile woman with the news of pregnancy (Sandelowski & Jones, 1986).

Infertile women may also experience coercion in reverse when they interact with their partners, especially when the women had to "extract material and emotional support from their spouses" (Sandelowski & Jones, 1986, p. 181). Women lack the material support of their partners when the partners are reluctant to submit to infertility testing and to engage in sexual activity during the time of ovulation. The lack of emotional support occurred when the husbands did not provide an environment conducive to sharing of feelings surrounding the infertility and childless state (Sandelowski & Jones, 1986).

COPING WITH CHILDLESSNESS

When reviewing the infertility literature, five basic strategies that people, particularly women, use to cope with their feelings surrounding their infertility were identified. These include strategies of: (a) increasing space, (b) being the best, (c) looking for hidden meaning, (d) giving into feelings, and (e) sharing the burden.

Increasing Space

Infertile persons often cope with their infertility by increasing "the space between themselves and their...infertility" (Davis & Dearman, 1991, p. 224). This coping mechanism is exemplified in three different ways. First, women have distracted their thoughts from the infertility by staying busy with various activities, such as hobbies (Davis & Dearman, 1991), taking holidays, educational classes, and work (Fleming & Burry, 1987). Olshansky (1987b) found that by becoming more involved with their careers, women focused on the "success" in their professional lives rather than on the "failure" of not achieving pregnancy. In contrast, however, Olshansky (1987b) also found that some women cope with their infertility by focusing on it intently by integrating it into their careers. For example, a female psychologist began to include infertile persons in her counselling practice.

Second, women often distract their thoughts from the infertility by avoiding people (siblings who have children) or situations (baby shower) which reminded them of their infertility (Davis & Dearman, 1991; Fleming & Burry, 1987; Kraft et al., 1980; Lalos et al., 1985a; Mazor, 1984; Menning, 1988; Millard, 1991). Menning (1988) notes that people will often taken extraordinary measures to distance themselves from their infertility. For example, they may: (a) quit a job which involves children, (b) move from a neighbourhood of families to a neighbourhood which does not have families, or (c) cut off ties with friends who have children. However, some couples will attempt to compensate for their own childlessness by becoming involved with other people's children (Lalos et al., 1985a; Sandelowski & Jones, 1986). In another study, Lalos et al. (1985c) found that men compensated for their lack of children by approaching other people's children, however, women purposefully avoided them.

Third, Davis and Dearman (1991) found that women distracted their thoughts from the infertility by not talking to others about their infertility except for their partners. This avenue of distraction allowed the women to "avoid admitting to others that they had a problem" (p. 224).

Being the Best

"Being the best" (Davis & Dearman, 1991) is another way women cope with their infertility. Although the women acknowledged that they could not control their infertility, they could control other aspects of their lives. For example, several women controlled their personal appearances and body weight through dieting and exercising.

Looking for Hidden Meaning

Women will sometimes cope by looking for hidden meaning in their experiences of infertility. This hidden meaning has been found in various ways. For example, some of the women in Davis and Dearman's (1991) study rationalized the benefits of not having children (they would not have to worry about problems with their figures and parental responsibilities). Other women believed that being infertile was God's will and that it was beyond their control (Baker & Quinkert, 1983). Still others believed that they were experiencing infertility for a specific purpose. For example, one woman in Davis and Dearman's (1991) study stated: "We're more active in our church...with the youth. I feel they are my children" (p. 225). Still other women believed that if having children was God's will, they would eventually achieve pregnancy (Davis & Dearman, 1991). Participants in Baker and Quinkert's (1983) study also found that there were benefits of the infertility experience, however, these benefits were not specified. Finally, women have found comfort from their existing children (Baker & Quinkert, 1983).

Giving into Feelings

Davis and Dearman (1991) found that women coped with their infertility by expressing their feelings of sadness and frustration, which was often done through crying. When they were feeling depressed, especially with the onset of menstruation, women would also give into their feeling by either neglecting various household tasks or giving themselves special attention by indulging themselves through buying new clothes.

Sharing the Burden

Another mechanism used by women to cope with their infertility is by sharing the burden of it with someone else (Davis & Dearman, 1991). It was especially helpful to talk with other infertile women because they understood the problem of infertility. It was particularly beneficial to talk with a woman who had previously been infertile and had achieved pregnancy; sharing the burden in this way gave the women hope that they, too, would achieve pregnancy. In addition, women found that affirmation regarding the normality of their feelings could be attained by sharing the burden with other infertile women.

Woollette (1985) found that women coped by sharing the burden of their infertility with health-care professionals. In this sharing, infertility was acknowledged as being a problem and attempts were made to overcome it. In addition, some of the women's infertility situations were seen as "interesting cases" by the medical staff; Woollette stated that "this helped compensate for otherwise overwhelmingly negative views and feelings about infertility and was sometimes an impetus to keep going with tests" (p. 477).

Women will also share the burden of infertility with their husbands (Davis & Dearman, 1991). According to several authors (Baram et al., 1988; Bierkens, 1975 as cited in Conway & Valentine, 1987; Conway & Valentine, 1987; Valentine, 1986), women will often find their partners to be their primary source of support while experiencing infertility. For example, women undergoing IVF found their husbands to be supportive, both physically (taking over household tasks when resting from surgery) and emotionally (talking about feelings and concerns) (Stewart & Glazer, 1986). Despite this, some couples found their partners to be a source of stress rather than a source of support.

Research indicates that women's desire for a child is often higher compared to men's desire (Battaglia et al., 1983; Chelo et al., 1986; Conway & Valentine, 1987; Daly, 1989; Goodman & Rothman, 1984; Rosenkvist, 1981). When the partners have an unequal investment in the goal of having a child, there will often be a different level of support given towards the achievement of that goal. For example, it has been reported that women sometimes have had to "force" material support out of their partners when undergoing medical intervention. For these women, a lack of support was demonstrated in their partners' reluctance to submit to infertility testing, to engage in scheduled sex, and to provide semen specimens for analysis (Sandelowski & Jones, 1986; Sandelowski & Pollock, 1986). There are times, however, when the desire to have a child and the commitment towards attaining that goal are shared equally between the partners. When this happens, the bond between the partners is often strengthened (Davis, 1982 as cited in Davis, 1987; Davis, 1984 as cited in Davis, 1987; Bierkens, 1975 as cited in Davis, 1987).

In addition to the receipt of material support, the partners may have difficulty in supporting each other emotionally. Menning (1982, 1988) notes that this may occur because of difficulties surrounding the communication between the partners. For example, the woman may have trouble describing her despair to someone who has never menstruated. Similarly, the man may have difficulty sharing his feelings over scheduled sex to someone who does not have to have an erection and an ejaculation during sexual intercourse. The partners may also be unable to support one another because of the differences in the support needs of the individual partners (Valentine, 1986).

THE LOSS AND GRIEF OF INFERTILITY

"At the heart of reproductive loss is the loss of a child" (Conway & Valentine, 1987, p. 51). Although this is the most obvious loss that infertile couples suffer, other losses are the woman's loss of opportunity to experience physiological components of childbearing (pregnancy, delivery, breastfeeding), the loss of genetic continuity (Anderson, 1989; Conway & Valentine, 1987; Edelmann & Connolly, 1986; Keye, 1984; Menning, 1982, 1988; Valentine, 1986), and the loss of carrying on the family name (Keye, 1984; Menning, 1979).

Additional losses include the loss of: (a) a relationship (Brashear, 1989b; Conway & Valentine, 1987; Mahlstedt, 1985); (b) an acceptable body image; (c) health; (d) sexual identity; (e) security; (f) a hope, fantasy (Mahlstedt, 1985) and life dream (Menning, 1988); (g) self-esteem (Conway & Valentine, 1987; Mahlstedt, 1985); (h) privacy (Draye, 1985; Mahlstedt, 1985); (i) "fitting in" with the fertile world (Mahlstedt, 1985; Sandelowski, 1988); (j) control over bodily functions (Baram et al., 1988; Brashear, 1989a; 1989b; Conway & Valentine, 1987; Mahlstedt, 1985; Menning, 1988; Valentine, 1986); and (k) control over life-plans (Brashear, 1989a; Davis, 1987; Katz et al., 1985; Mahlstedt, 1985; Menning, 1988; Stigger, 1983). These losses contribute to the grief felt during the infertility experience (Batterman, 1985; Berk & Shapiro, 1984; Kraft et al., 1980; Mahlstedt, 1985; Rosenfeld & Mitchell, 1979; Sawatzky, 1981; Seibel & Taymor, 1982).

Grieving the loss of reproducing is difficult for infertile persons for several reasons. Since infertility is the loss of a "hoped-for" child, it represents a potential loss rather than an actual loss. In addition, infertility is surrounded with much uncertainty about whether or not fertility is really lost (Menning, 1988). This is particularly likely when an inconclusive diagnosis of infertility is given and a spontaneous pregnancy could occur in any cycle (Menning, 1984b).

Thus infertile persons are frequently in a position where they are "neither absolutely capable nor incapable of procreation" (Sandelowski et al., 1989, p. 222). Dealing with this uncertainty, infertility may not be grieved for until menopause when the woman's childbearing years come to an end (Menning, 1984b, 1988).

A lack of social support experienced by infertile women often contributes to difficulty in grieving for infertility (Menning, 1984b, 1988; Stephenson, 1987). It comes in a number of different forms. When couples keep their infertility hidden from others, they cut themselves off from potential sources of support (Menning, 1982). In addition, the existence of infertility is "invisible" to others, thereby not allowing others to be aware that their support is needed by their infertile associates. Infertility may be negated as a loss by society. Specifically, members of society may not acknowledge the devastation that infertility brings to people who desire to have children. This negation of infertility is present in comments, such as "You can always adopt!" (Menning, 1988, p. 119); "You don't know how lucky you are!" (Menning, 1988, p. 119); "You don't know how lucky you are not to have to change all those diapers. You don't know how lucky you are not to have stretch marks" (Honea-Fleming, 1986, p. 30); and "Be glad it isn't cancer" (Menning, 1988, p. 119). Finally, infertile couples may lack social support when their "significant others," such as extended family members and close friends, are geographically separated from them (Menning, 1984b, 1988).

SUMMARY OF LITERATURE REVIEW

The process that women pass through as they undergo medical intervention for their inability to achieve pregnancy has not been explored by researchers to any great extent. Several research studies have been purposefully conducted on this process while other studies have provided results that contribute to the understanding of this process. Despite this, the bulk of the literature pertaining to women's pursuit of pregnancy through medical intervention is of an anecdotal or descriptive nature. As noted in Chapter 1, the literature on infertility is insufficient for the expansion of nursing knowledge. Thus there is clearly a need for further research to investigate the process that women pass through as they seek to achieve pregnancy through medical intervention.

CHAPTER 3

METHOD

The purpose in this research study was to generate a theory which would help explain the process that women pass through as they undergo medical intervention for infertility. When conducting a research endeavour, it is important to choose a research method which is appropriate for the underlying nature of the research, in terms of the research question asked, the purpose of the research study, and finally, the nature of the phenomena to be studied (Bogdan & Biklen, 1982; Field & Morse, 1985).

In this chapter, the methodology underlying this research study will be discussed by addressing four areas: (a) the qualitative method selected, that is, grounded theory, (b) the research design, (c) the issues of reliability and validity, and (d) the ethical considerations.

GROUNDED THEORY

Using a qualitative research approach, the researcher investigated the process that women pass through as they undergo medical intervention for their inability to achieve pregnancy. This approach is suitable for areas of inquiry where the experience and perceptions of people are sought, the meanings attached to given situations are desired, and where there is little information existing in the area of inquiry (Chenitz & Swanson, 1986; Field & Morse, 1985).

In this study, the researcher used a qualitative research method called grounded theory as developed by Glaser and Strauss (1967). The foundation of grounded theory rests in the theoretical perspective of symbolic interactionism (Olshansky, 1987a; Stern, Allen, & Moxley, 1982), with the underlying premise that "persons construct meanings for phenomena based on the interactions that they have with one another within a social context" (Olshansky, 1987a, p. 56). Although a person's world may be perceived by others as being disordered or nonsensical, the grounded theorist assumes that the person has made order and sense of his or her environment (Hutchinson, 1986). Another assumption of grounded theory is that "all of the concepts pertaining to a given phenomenon have not yet been identified, at least not in this population or place; or if so, then the relationships between the concepts are poorly understood or conceptually underdeveloped" (Strauss & Corbin, 1990, p. 37). Working from this basis, the purpose of grounded theory is to generate theory rather than to test an existing theory (Corbin, 1986b). The theory is "grounded" in empirical data (Hutchinson, 1986; Stern, 1985) collected from individuals who have had personal experience with the area of inquiry (emic perspective).

Using a combination of inductive and deductive approaches to theory construction, grounded theory aims to explain the phenomenon under study (Stern, 1980). This explanation is provided as data are interpreted and conceptualized in a conceptual scheme (Strauss & Corbin, 1990). In this scheme, events are related to one another in terms of conditions and consequences. Specifically, the scheme identifies: (a) the conditions under which a particular event occurs, (b) the conditions under which the occurrence of a particular event varies, and (c) the consequences of the occurrence of a given event.

Since theory is classified as an ever-developing entity by grounded theorists (Simms, 1981), the use of grounded theory allows unknown areas of a phenomenon to be explored in addition to gaining new perspectives on the familiar areas of a phenomenon (Stern, 1980). A further assumption underlying grounded theory is "that each such group shares a specific social psychological problem" (Hutchinson, 1986, p. 114). With the assumption that infertile women do share a common experience, the researcher embarked upon this study with the aim of generating a theory which would explain the process which women pass through as they undergo medical intervention for infertility. Findings from this study may reveal new aspects of the process as experienced by infertile women in addition to gaining more insight into those aspects of the process which are already known.

Using grounded theory methodology, the theory generated is always grounded in the data collected from the study participants. Different researchers may generate different and yet equally plausible theories while analyzing the same data. This difference in the theories generated is explained by the theoretical sensitivity of each individual researcher. Citing Strauss and Corbin (1990) as a reference, Gamble (1991) states: "theoretical sensitivity refers to the personal ability of the researcher to be be [*sic*] insightful, to give meaning to data, to understand and to illuminate the pertinent features of the information received from participants" (p. 16). Theoretical sensitivity is gained through several avenues including the researcher's: (a) professional and/or personal experience with the phenomenon under study, (b) review of written literature pertaining to the phenomenon under study, and (c) interaction with the data during data collection and data analysis (Strauss & Corbin, 1990).

RESEARCH DESIGN

The research design of this study will be discussed under three topic headings: (a) the sample, (b) data collection, and (c) data analysis.

THE SAMPLE

The sample for this study will be discussed in terms of theoretical sampling, the recruitment of the sample, sample size, and sample characteristics.

Theoretical Sampling

When using grounded theory, the researcher recruits participants who meet the informational needs of the study; selecting participants on this basis is referred to as theoretical sampling. When using this particular type of sampling, the researcher strives to select participants who have the three qualities of a "good" informant, that is, the participant is: (a) knowledgeable about pursuing pregnancy through medical intervention by virtue of her personal experience with such a pursuit, (b) reflective about her pursuit of pregnancy through medical intervention, and (c) willing to share her personal experience of her pursuit of pregnancy through medical intervention with the researcher (Morse, 1989); it is noted that all of the selected participants had these qualities. Participants are selected with the underlying assumption that "all actors in a setting are not equally informed about the knowledge sought by the researcher" (Morse, 1986, p. 183).

Basic to theoretical sampling is the underlying canon that the selection of the participants is an event which occurs simultaneously with the data analysis: the data analysis guides the selection of future participants who are believed to further the development of the theory (Glaser, 1978; Glaser & Strauss, 1967; Strauss & Corbin, 1990). In this study, however, the researcher deviated somewhat from this in that the participant selection and data analysis did not occur simultaneously. Rather, the researcher recruited the participants, collected all the data, and then began to generate the theory through analyzing the data. This sample was therefore purposive rather than theoretical. It is noted, though, that prior to collecting data from subsequent participants, the researcher reviewed the data collected from the previous participants interviewed; the researcher did this review by doing a detailed reading of each interview transcript.

Recruiting the Sample

The researcher focused on two groups of infertile women: (a) women who were currently in the process of pursuing pregnancy through medical intervention, and (b) women who had previously pursued pregnancy through medical intervention and who had resolved their infertility through achieving pregnancy, adopting, or remaining child-free. In addition, the researcher sought out *negative cases* to identify variation in the process experienced during the pursuit of pregnancy through medical intervention (Glaser & Strauss, 1967). Including negative cases had two implications for this study. First, since most women do seek medical care for their inability to achieve pregnancy, negative cases would include those women who have not sought medical assistance. Second, it was anticipated there would be commonalities among women's experiences of medical intervention and that these "atypical" cases would help ensure that all accounts of the pursuit of pregnancy through medical intervention were represented, thereby providing a richer and more complete description of the process that occurs. These three groups of infertile women were recruited through media advertisement and social networking.

Media advertisements were undertaken in two ways. First, posters, which were printed on "golden rod" coloured paper (Appendix A), were placed in various locations, such as near the infertility clinic, hair salons, sun-tanning centres, food stores, and educational settings; one participant was recruited through this avenue. Second, notices (Appendix B) were placed in two local newspapers; nine participants were recruited in this way. Seven additional participants were recruited through social networking. Thus a total of 17 participants were involved in this research study.

Prospective participants indicated their interest in the study by contacting the researcher by telephone. When the researcher was unable to answer telephone calls, prospective participants were able to leave a message on an answering machine; upon connecting with this machine, prospective participants received a message from the researcher (Appendix C).

During an initial telephone conversation, the researcher screened the callers using a pre-developed screening form (Appendix D) to ensure that the inclusion criteria were met. This criteria included four points. First, the participant had to define herself as infertile, that is, the participant believed that she was having or has had difficulties getting pregnant, regardless of the cause(s) (male and/or female factor) underlying the infertile state (Miall, 1985). Second, the participant had to speak fluent English. Third, the participant had to be in a heterosexual relationship (marriage, stable non-marital) at the time when she was experiencing infertility. Fourth, the participant had to be able to meet with the researcher for face-to-face interviews within the metropolitan city where the study was conducted. After ascertaining the prospective participant's eligibility for the study, plans were made to meet in person to further discuss her participation in the study.

Sample Size

In qualitative research, it is common to use small sample sizes to keep the data manageable (Field & Morse, 1985; Sandelowski, 1986). It is difficult for the researcher to estimate sample size prior to conducting the study because "sampling...continues until all the major variables that have evolved from the data are explored and the categories that pertain to them are saturated" (Corbin, 1986b, p. 97). Data saturation refers to "[when] the researcher can answer, via the data, questions regarding the cause, context, consequences, and so on of the particular code...[and] when no new conceptual information is available to indicate new codes or the expansion of existing ones" (Hutchinson, 1986, pp. 124-125).

Seventeen women participated in this study. Of these women, 14 were primary participants (data was collected from these participants for the primary purpose of generating the theory) while the remaining 3 were secondary participants (data was collected from these participants for the primary purpose of validating the generated theory).

Sample Characteristics

Glaser (1978) states "that the analyst should not assume the analytic relevance of any face sheet variable such as age...social class, race, skin colour etc., until it emerges as relevant" (p. 60). Despite this, demographic information and infertility/fertility characteristics were systematically collected, using an *Information Collection Sheet* (Appendix E) in order to help orient the reader to the research sample (Glaser, 1978; Stern, 1985). To maintain the anonymity of the study participants, only aggregate information is provided.

During the time of the study, all of the participants resided in the metropolitan city where the study was conducted. The participants' ages ranged from 24 to 39 years, with a mean of 31.8 years. All of the participants except one were married; the one participant was in a stable relationship. The duration of these relationships ranged from 12 months to 120 months, with a mean of 61.8 months. The participants had varied ethnic backgrounds including: Croation, Dutch, English, French, German, Hungarian, Irish, Italian, Polish, Portuguese, Russian, Scottish, and Ukrainian. Similarly, the participants had varied religious backgrounds including: Anglican, Atheist, Calvinist, Christian, Protestant, and Roman Catholic/Lapsed Roman Catholic. Educational levels of the participants included: junior high school (n=1), high school (n=3), post-secondary education (n=7), and university degree (n=6). Participants' occupational backgrounds included: clerk, coordinator, government employee, health-care professional, publisher, receptionist, supervisor, and teacher. The employment status of the participants varied according to full-time (n=9), homemaker (n=2), homemaker/part-time (n=3), homemaker/part-time/self-employed (n=1), homemaker/self-employed (n=1), and casual (n=1). Participants' categories of family income ranged from $20,000-$50,000 (n=9) to more than $50,000 (n=8).

Two groups of infertile women participated in this study. When the data were being collected, 10 of the 17 participants were experiencing infertility. The remaining seven participants had experienced infertility for 13 to 45 months, with a mean of 26.1 months, prior to the study; all of these participants had achieved pregnancy, either after they had discontinued medical intervention in the absence of pregnancy (n=3) or while undergoing medical intervention (n=4). Two participants had created a family through adoption (n=1 public adoption, n=1 private adoption); one of these participants continued to pursue pregnancy through medical intervention while the other one had decided to discontinue medical intervention when pregnancy was not achieved.

Using Menning's (1988) classification of infertility (primary infertility exists when there is no previous history of a successful pregnancy; secondary infertility exists when there is a history of one or more successful pregnancies), 14 participants were experiencing/had experienced primary infertility while the remaining 3 were experiencing/had experienced secondary infertility. It is noted that many of the participants had unsuccessful pregnancies, such as miscarriage (n=7) and ectopic pregnancy (n=1). Finally, at the time of the first interview, two of the participants were pregnant (17 and 28 weeks gestation).

With the exception of two participants, a female physiological problem was found to be the cause underlying the infertile state: (endometriosis [n=6], tubal blockage [n=5], anovulation [n=6], luteal phase defect [n=2]; cervical mucus incompatibility [n=3], Stein-Leventhal syndrome [n=1]); in three of these cases, fertility was further compromised by low sperm counts. For the remaining two participants, the cause of their infertility had not been identified.

The participants underwent various infertility treatments including: (a) Bromocriptine (n=1), (b) Clomid (n=12), (c) Danazol (n=4), (d) Depomedral (n=2), (e) Intrauterine Insemination (n=2) (f) In Vitro Fertilization (n=1), (g) Lupron (n=2), (h) Progesterone Suppository (n=2), (i) Provera (n=2), (j) surgical procedures (n=4), and (k) thyroid medication (n=1).

Among the 17 participants, the length of time under physician supervision ranged from 1 to 96 months, with a mean of 27.5 months. The highest levels of specialized medical care received included: (a) 1 participant being under the care of a general practitioner for less than 1 month, (b) 5 participants being under the care of a gynecologist, for 2 to 24 months, with a mean of 11.2 months; and (c) 11 participants being under the care of an infertility specialist, for 2 to 84 months, with a mean of 29.8 months.

DATA COLLECTION

The following discussion, describing the data collection, will be presented under two topic headings: (a) the interviewing, and (b) the setting.

The Interviewing

Upon confirmation of the prospective participant's eligibility, plans were made to meet in person. During the initial meeting, the researcher attempted to build rapport by "chatting" with the participants about general topics of interest (weather, living arrangement, current child[ren], pets). Quite often, the participants would prepare tea or coffee during this time of chatting. Many of the participants asked the researcher if she had children and/or if she was planning to have children sometime in the future; one participant went one step further, asking the researcher if she, herself, was experiencing infertility. Aware of the sensitivity surrounding such questions, the researcher attempted to answer these questions honestly by simply stating that: (a) she did not currently have any children, (b) she was not planning to have children in the "near" future, and/or (c) she was not experiencing infertility at that particular point in time. The researcher suspects that, by asking these questions, the participants were perhaps seeking some identification or similarity with the researcher, in terms of reproductive desires and/or status.

Prior to beginning the formal interview, the researcher reviewed the study with each participant. After the participant's questions had been addressed, the researcher obtained the participant's written consent regarding her involvement in the study (Appendix F).

The researcher invited the participants to begin telling their stories about being infertile and pursuing pregnancy through medical intervention. This invitation was given by initially asking the participant the broad and open-end question, "Tell me about your infertility experience." When the participant did not know "where" to begin, the researcher suggested that she tell her infertility story from a chronological perspective. If the participant required further guidance in telling her story, the researcher asked a question pertaining to a particular aspect of the infertility experience ("Tell me what happened when you couldn't get pregnant on your own"). All of the interviews were audio-recorded.

Initially, the interviews were unstructured, with the interview content being directed by the participants' stories. In contrast to this, the focus of subsequent interviews was directed by the issues and concerns raised in previous interviews. Questions became more specific and structured as the researcher sought: (a) clarification of data collected in previous interviews, (b) expansion of concepts/categories as identified in the previous data collected, and (c) verification of data collected from other participants. There was at least one month between the subsequent interviews with the same participant.

Although data was collected through an "interviewing" technique, the researcher sought to gather this data through a "conversation" with the participant (Oakley, 1981; Swanson, 1986) rather than through the traditional interviewing format. The researcher believed that the informality offered by the conversational tone enhanced data collection by: (a) creating an environment in which the participant felt that she could "freely" tell her own story about infertility, and (b) allowing the participant to talk about areas of her infertility and its medical management that were not anticipated by the researcher. A dialogue was used throughout the interviews by using generality statements (Some women worry about the safety of the various treatments they undergo for their infertility. What do you think about this?) and ubiquity statements (When did you first suspect that it was time for you to quit treatment?). The researcher also used a variety of probes to facilitate the participants in telling their infertility stories. These probes included silence (waiting), neutrality (hmmmm....ummmm), chronology (What happened after you first received the diagnosis of infertility?), detail (Can you tell me more about why you thought that it was time to quit treatment?), clarification (I don't quite understand), and explanation (Can you tell me why you decided not to quit treatment?) (Swanson, 1986). Several participants supplemented their verbal accounts of their infertility stories with diagrams.

Each primary informant was interviewed twice, for a total of 28 interviews. Once a conceptual framework had been developed through data analysis, validation was sought from three participants (one primary and two secondary participants). Although these validating interviews contained elements of the interviewing format, as previously described, they were conducted somewhat differently. The researcher presented the conceptual framework to the participants through: (a) giving a verbal explanation of the framework, and (b) having the participants read a written account of the framework. A validating discussion occurred around the verbal and written presentation of the framework.

Once the interview was completed, the researcher collected demographic and infertility/fertility characteristics, using an *Information Collection Sheet* (Appendix E). At this same time, written permission to use any written information given during the interview was sought, using a special consent form (Appendix G). All of the participants completed a *Participant Request Form* (Appendix H), indicating that they wanted to obtain a summary of results upon completion of the study.

The researcher closed each interview tentatively with the participant. Tentative closure allowed the researcher the option of contacting the participant later, either for gathering additional information, for a follow-up interview, and/or for the verification of data obtained from previous interviews.

The data collected in the interviews were supplemented with fieldnotes which described the context in which the interviews had been conducted. Examples of such contextual elements included: (a) the attire of both the participant and researcher, (b) the time when the interview began and ended, (c) the drinking of tea, coffee, or juice during the interview, (d) the location of the interview (kitchen area, living room), (e) the interruptions (ringing of the telephone) that had taken place during the interview, and (f) the emotional affect (nervousness, laughing, crying) of both the participant and researcher. These fieldnotes were written immediately after each interview.

The Setting

The researcher aimed to conduct the interviews in a setting which was convenient and comfortable for the participants. Therefore the researcher allowed the participants to decide where the interviews would take place. In response to the participants' requests, all of the interviews but four were conducted in the participants' homes. These interviews were generally held either in the kitchen area or the living room, depending on the preference of the individual participant. In one situation, however, the researcher specifically requested to conduct the interview in the living room because it was noted, in a previous interview, that the "humming" of the refrigerator interfered with the audio-recording of the interview. Sitting around the kitchen table or in the living room, in addition to enjoying refreshments, contributed to the informal atmosphere surrounding the interviews.

Three of the four remaining interviews were conducted in the participants' offices located at their place of employment. These interviews assumed a more formal nature as they were conducted "across the desk," while sitting in hard-back, straight chairs, and without the drinking of tea or coffee. Despite this, the participants appeared comfortable and relaxed. Data collected in these interviews were comparable to data collected in the home settings in terms of the amount of data collected and the degree of detail contained with the data.

Rather than being interviewed in person a second time, one participant was interviewed by telephone. This change in the interviewing setting was influenced by the participant's comment during the first interview that she felt more comfortable talking to people on the telephone; this participant appeared to be more relaxed and conversant on the telephone. As a result, the telephone interview contained greater depth and detail and was longer than the in-person interview. The first interview was 30 minutes long while the second interview was 90 minutes long.

DATA ANALYSIS

Once the data had been collected on audio-tape, the researcher began the task of transcribing the recorded data verbatim. The researcher temporarily interrupted the task of transcribing to record her initial thoughts pertaining to the data. A cover page (Appendix I) was attached to each transcript to help the researcher keep an account of the particulars surrounding each interview conducted.

When using grounded theory methodology, data analysis begins at the initiation of data collection and continues as an ongoing process throughout the duration of the study (Corbin, 1986a, 1986b; Glaser & Strauss, 1967; Swanson, 1986). After a transcript of an interview was made and reviewed for accuracy, it was converted into an ascii file. Using the computer program, Ethnograph (Seidel & Clark, 1984), this ascii file was then converted into a format amenable to coding the interview transcript (transcript had a wide right-hand margin, allowing space for the researcher to write in codes). The researcher started the analysis by reading through each transcript carefully, thereby obtaining an overview of the transcript content. The main themes contained in the transcript were recorded as they were identified.

Once the main themes were identified, the researcher began to read each transcript on a line-by-line basis, identifying the incidents or facts contained within the data. Each incident/fact contained within the data was identified by asking questions such as, "what is this?" and "what is happening here?" Once identified, each incident/fact was given a code label which reflected the substance of that particular incident/fact, thus the term "substantive coding." These substantive codes, which were often the exact words used by the participants, were hand-written in the right-hand margin of the "ethnographed" transcript. To ensure full theoretical coverage, each incident/fact within the transcript was placed into as many codes as possible.

Open coding the data resulted in many code labels or concepts. Through the technique of constant comparison, similarities and differences were noted between the code/conceptual labels. Labels observed as having similarities were clustered together under a higher-ordered concept called a category. Using this technique, the large number of code/conceptual labels were reduced in number. It is noted that constant comparison occurred between the code/conceptual labels identified in: (a) the data collected within a given interview, (b) the data collected in the first and second interviews with the same (primary) participants, and (c) the data collected in interviews with different participants.

As categories emerged through the constant comparison of the code/conceptual labels, the researcher attempted to explore and establish linkages among the categories through the usage of "axial coding." By asking questions of the data (why, what, when, who, where), in addition to reading and re-reading the data, the researcher was able to identify the antecedents, context, intervening variables, and consequences of the categories. Linkages among the categories were hypothesized. Confirmation of these linkages was sought through the continued rereading of the data; hypothesized linkages which did not receive confirmation from the data were modified. Through the testing and modification of hypotheses, the relationships between the various categories were developed; the categories were then placed within a conceptual framework. To obtain an overview of all categories and linkages, the researcher diagrammed her analytical scheme of the emerging theory. The process of seeking and receiving care for infertility was identified in this and it centered on "Pregnology: The Process of Getting Pregnant Through Science."

A conceptual framework, outlining the process that infertile women undergo as they pursue pregnancy through medical intervention, was developed and then validated by three participants. One primary participant was interviewed a third time because she was viewed as being a "really good" informant, in terms of her (a) experience with the medical management of infertility, (b) her ability to reflect and articulate on her infertility experience, and (c) her willingness to be interviewed a third time. Three secondary participants also validated the conceptual framework; since these participants were "new" to the study. It was believed that they would provide verification without having been biased from previous interviews. It is noted that two of these secondary participants validated the conceptual framework through face-to-face interviews. The third secondary participant provided verification by reading the findings chapter which presented the framework; rather than verbally discussing this account with the researcher, this participant conveyed her thoughts pertaining to the credibility of the framework through written comments.

While analyzing the data, the researcher thought of numerous ideas, hunches, and hypotheses pertaining to the participants' experiences of infertility and its medical management. To avoid losing these thoughts, the researcher recorded them in memos. Each memo was dated, numbered, and given a title name which reflected the content of that particular memo. In addition, the source underlying the memo was recorded; when the source involved a particular passage of a transcript, that portion of the transcript was identified by the numbered lines as provided by the Ethnograph format. As the memos were typed, they were printed on "pink" coloured paper and stored in binders in order of the memo number; storing the memos in this fashion allowed for an "organized" collection of memos and prevented their misplacement and/or loss. Finally, the researcher kept a "running list" of all memos written. This list, which identified each memo by its number and corresponding title name, allowed the researcher to maintain a summary of her thoughts within a "manageable" number of pages.

In the initial stages of data analysis, the content of the memos was frequently descriptive; that is, the researcher primarily described various events observed within the data. However, as the data analysis progressed, the memos became more analytical in nature. Through constant comparison, relationships among the observed events were hypothesized.

As these relationships were confirmed by the data, events were identified as antecedents, context, intervening variables and consequences. As such, the memoing involved both inductive and deductive analytic processes: "One conceptualizes (inductive) when coding and memoing and then assesses (deductive) how the concepts fit together" (Hutchinson, 1986, p. 123).

When analyzing the data, the researcher employed several distinct analyzing techniques: substantive/open coding, constant comparison, axial coding, memoing, and diagramming. Although these techniques have been described as if they were employed in a linear manner, these techniques occurred in a circular manner, frequently being employed simultaneously.

RELIABILITY AND VALIDITY

The researcher's primary goal was to generate a theory that would conceptualize and accurately describe the process that infertile women experience as they pursue pregnancy through medical intervention. To attain this goal, the researcher addressed the issues of reliability and validity.

In qualitative research, validity refers to "the extent to which the research findings represent reality" (Field & Morse, 1985, p. 139). Thus the researcher aimed to collect relevant, comprehensive, and detailed data (Morse, 1986) which would be representative of women's pursuit of pregnancy through medical intervention. To achieve this objective, the researcher selected participants who possessed the qualities of a "good" informant (participant) to ensure that the pursuit of pregnancy through medical intervention was described with accuracy and detail.

The researcher aimed to elicit data freely from the participants by using two specific strategies. First, the researcher conducted each interview using a conversational approach (Oakley, 1981; Swanson, 1986) rather than the traditional interviewing format. Second, the researcher conducted the interviews in a location which was relaxing, comfortable, and familiar to the participant.

The researcher conducted a second interview with each primary participant. The researcher believes that this repeated contact with the participants contributed to the development of a trusting relationship which facilitated open and honest discussions. According to Field and Morse (1985), a greater level of intimacy between the researcher and the participant contributes to the accuracy of the information shared between them.

Prior to data collection, each participant was made aware that the researcher was a nurse. Chenitz (1986) notes that the nurse image can be advantageous while collecting information from people. She states: "the nurse image...gain[s] the confidence of informants. People identify nurses with caring, nurturing role....People will talk to nurses and reveal to them content that they may not be so willing to disclose to others" (p. 85). In addition, each participant was made aware that the researcher was not associated with any health-care facilities related to the care of infertility (infertility clinic, staff member of physicians and adoption agencies). According to previous research (Friesen, 1988), the researcher's lack of affiliation with a health-care facility related to the study's directive facilitated the collection of personal and detailed data from participants.

The researcher attempted to achieve comprehensiveness of the generated theory by employing several strategies. A number of participants (N=17) were interviewed to ensure that variations in the experiences of infertile women. Variations in the experience were also sought by seeking negative or atypical cases (Glaser & Strauss, 1967; Morse, 1989); it is noted that three negative cases were discovered (one participant made the conscious decision not to pursue medical intervention for her infertility; one participant defined herself as a "problem pregnancy" rather than being infertile; one participant did not tell her partner about her difficulty with achieving pregnancy). The researcher prepared for each interview by reviewing previous interview transcripts and memos. This approach allowed the researcher to identify areas of the emerging theory and to explore and enlarge upon them through specific questioning of the participants. Finally, the researcher collected data from the participants until data saturation was reached.

The data collected from a particular participant was verified by asking other participants about similar data. This verification of findings contributed to the researcher's confidence that the collected data were, indeed, accurate and representative of infertile women's pursuit of pregnancy through medical intervention. Once generated, the theory was further reviewed and validated by four participants. As noted by Friesen (1988), credibility of the generated theory is obtained when participants provide feedback which confirms the proposed theory; using Sandelowski's (1986) words, a qualitative study is credible "when it presents such faithful descriptions or interpretations of a human experience that the people having the experience would immediately recognize it from those descriptions or interpretations as their own" (p. 30). In addition to validating the generated theory, these participants identified several areas of distortion, bias, and variation contained within the theory. The researcher made modifications to the theory based on the feedback received from these participants, When reporting the generated theory, the researcher has illustrated and substantiated the study results through the generous usage of excerpts taken from the interview transcripts as recommended by LeCompte and Goetz (1982).

Reliability refers to "the measure of the extent to which random variation may have influenced the stability and consistency of the results" (Field & Morse, 1985, p. 139). The researcher conducted all the interviews with the participants, which were audio-recorded. The researcher was able to detect and question any inconsistencies noted in the data collected in addition to seeking clarification and/or expansion on data which were vague or ambiguous in nature. In addition, the primary participants' descriptive accounts of their infertility and its medical management were observed for similarities and/or differences across the first and second interviews conducted.

The researcher's personal preconceptions, values, and beliefs (Hutchinson, 1986) about the study's subject matter can influence data collection and analysis, thereby affecting the validity and reliability of the findings in the study. In order for the researcher to explore and understand infertile women's pursuit of pregnancy through medical intervention, it was important for the researcher to become aware of her stance regarding human reproduction (value given to parenthood, women as childbearers, infertility). The importance of this self-awareness is describe in the following excerpt:

> If such bracketing (of values) is not done, the scientific enterprise collapses, and what the [researcher] then believes to perceive is nothing but a mirror image of his [her] own hopes and fears, wishes, resentments or other psychic needs that he [she] will then not perceive is anything that can reasonably be called social reality. (Berger & Kellner, 1981 as cited in Hutchinson, 1986, p. 115)

The researcher attempted to attain this self-awareness by recording her thoughts about human reproduction in a journal/diary in addition to discussing matters relating to human reproduction with other people, such as thesis supervisors, nursing colleagues, and members of a qualitative research support group. The researcher explored the knowledge gained through this self-awareness with the participants; this process facilitated the collection and analysis of data.

The researcher compared, clarified, and verified the data through repeated interviews with the participants. By using the techniques designed for data analysis (Chenitz & Swanson, 1986; Glaser & Strauss, 1967; Glaser, 1978; Strauss & Corbin, 1990), the researcher attempted to generate a theory which logically emerged from the empirical data collected. Throughout the data analysis, the researcher met with her thesis supervisor(s) periodically to discuss various aspects of the emerging theory.

ETHICAL CONSIDERATIONS

Various strategies were employed to ensure the ethical conduct of this research study. First, the researcher received ethical approval from the Faculty of Nursing Ethics Review Committee, University of Alberta, prior to conducting this study. Second, written informed consent was obtained from the participants regarding their participation within this study (Appendix F) in addition to the usage of any written information they gave to the researcher (Appendix G); signed copies of these consent forms were given to each participant. All participants were informed about the nature of the study including the purpose of the study and the participating requirements. Each woman was aware that her participation in the study was completely voluntary and that she retained the right to refuse her participation. In addition, each participant was aware that she could withdraw from the study at any time. The participant retained the right to refuse answering any question(s) and/or discussing any topic raised during an interview. The participant also retained the right to stop the interview at any time by stating her wishes, either verbally or in writing, to the researcher without consequence. Each participant was given the opportunity to ask questions about the study; these questions were addressed by the researcher. The participants were aware that the audio-recorded interviews would be erased at the completion of the study, and that the interview transcripts would be kept indefinitely by the researcher. Each participant was aware that the information she gave to the researcher would be used for this study only. Participants were aware that anonymous excerpts from the interview(s) may be used in written reports and/or verbal presentations of the study and that such accounts of the study would not contain her name or initial(s). Rather, a fictitious name would be assigned to her at the researcher's discretion and would be used in these accounts of the study. Each participant was aware that she could obtain a summary of the study results at the completion of the study; permission to send a copy of this summary to the participants via mail service was obtained by having the participant complete a *Participant Request Form* (Appendix H). The summary of the study results will be accompanied by a letter from the researcher, thanking the woman for participating in the research study.

Additional measures were undertaken to safeguard participant anonymity and confidentiality. Only the researcher knew the names and telephone numbers of the women participating in this study. The signed consent forms were stored in a locked desk located away from the interview recordings and transcripts. In the transcripts, the participants and all other people referred to throughout the interview were identified by their first initials rather than by their names. The audio-recorded interviews were not listened to by anyone but the researcher. None of the interview transcripts were read, in their entirety, by people other than the researcher and her thesis committee members. All audio-recorded interviews and corresponding transcripts were identified by a numerical coding system rather than by the participants' names. Any identifying information contained within the text of the interview transcripts was omitted and/or changed. As previously mentioned, all written reports and/or verbal presentations pertaining to this study will identify the participants by fictitious names rather than by their real names and/or initial(s).

The researcher was sensitive to the fact that the participants may be experiencing psychological/emotional distress because of their inability to achieve pregnancy. Thus prior to conducting the study, the researcher secured the services of a counsellor who was available to provide counselling services to any of the participants. Although they were aware of this, none of the participants requested a referral to this counsellor.

The women involved in this study were aware that although they may not directly benefit from participating in the study, they may find it helpful talking to the researcher about their infertility experiences. Several participants did, in fact, express this particular benefit. For example, "It's been nice to...talk to someone and [for] someone to...just listen...instead of—telling me, 'Ya, relax'....You've just been there to sit and listen....I appreciate you listening" (Tiffany) and "It was like the first time I felt [that] somebody was listening in the medical profession....That's the way I thought. And it felt good" (Leah).

CHAPTER 4

FINDINGS

The purpose in this study was to generate a theory which would explain the process that infertile women pass through as they undergo medical intervention for their inability to get pregnant. While all of the participants in this study had very unique "happenings," their experiences of managing their infertility also contained many common elements. The data analysis revealed that the participants sought pregnancy in a very different way than women who have little or no difficulty conceiving.

Several participants referred to themselves as "scientifically getting pregnant" as they engaged in the various activities required for medical intervention. This process is captured in the description entitled, "Pregnology: The Process of Getting Pregnant Through Science." In this chapter, the major findings related to Pregnology as well as the similarities and differences among the participants are illustrated with verbatim excerpts taken from the interview transcripts. To maintain participant anonymity, any identifying characteristics have been altered or removed. Because all but one of the participants was married, the participants' partners will be referred to using the term "husband." This term will be qualified as "living in a stable relationship" in situations where the marital status of the participant is of significance. Since the majority of participants referred to their physicians as "doctor" rather than "physician," the term "doctor" will be used. This term will be specified as "family doctor," "gynecologist," or "infertility specialist" in situations where the doctor's level of expertise is of importance. When discussing their doctors in relation to the management of their infertility, all of the participants identified their doctors by gender. To protect the anonymity of the doctors, the guidelines for nonsexist language, as provided by the American Psychological Association (1983), will be employed.

Seventeen women participated in this study. The fictitious names given to these women and their biographical/infertility characteristics are presented in Table 1.

Prior to presenting the stages of Pregnology, the context under which the participants pursued pregnancy will be discussed. This chapter will conclude with a summary of Pregnology.

THE CONTEXT OF PREGNOLOGY

Becoming pregnant and having a family to raise was important for the participants. When they felt ready to start having a family, they first attempted pregnancy on their own. The importance attributed to this process provided the context for the eventual pursuit of pregnancy through medical intervention.

Table 1. Biographical/Infertility Characteristics of the Participants

Participant	Age (1)	Infertility (2)	No. of Children Pre–Infertility	Pregnancy Achieved by Treatment	Termination of Medical Care (4)/ Pregnancy after Termination	Created Family Through Adoption
Ruth	31	P	0	No	Yes/Yes	No
Madeline	37	S	1	No	No	No
Holly	32	P	0	No	Yes/Yes	No
Eve	37	P	0	Yes	No	No
Greer	33	P	0	No	Yes/No	Yes
Grace	31	P	0	No	No	No
Gina	35	P	0	Yes	No	No
Jacqueline	34	S	1	Yes	No	No
Judith	30	P	0	Yes	No	No
Ginny	26	P	0	No	No	No
Gillian	28	P	0	No	No	Yes
Tiffany	28	P	0	No	No	No
Hilary	24	P	0	No	No	No
Rachel	35	P	0	No	Yes/Yes	No
Leah	39	P	0	No	Yes/No	No
Kate	30	S	2	No	No	No
Nora	31	P	0	– (3)	No	No

1 – At time of study

2 – Primary Infertility (P): exists when there is no previous history of a successful pregnancy
Secondary Infertility (S): exists when there is a history of one or more successful pregnancies

3 – Nora decided not to pursue medical intervention

4 – In absence of Pregnancy

THE IMPORTANCE OF PREGNANCY AND PARENTHOOD

The importance of pursuing pregnancy and parenthood was embedded in the reasons cited for desiring these life events in addition to the consequences of not being pregnant and/or being without a family which included one or more children. Inherent in these were intrapersonal and marital implications.

Intrapersonal Implications

Almost all of the participants wanted to become pregnant and have a family in order to fulfill intrapersonal needs. For example, Greer wanted to satisfy her curiosity: "I wanted to see what my husband and I could reproduce, what she/he would look like." Other participants sought a life-meaning through pregnancy and the parenting role. This was expressed in comments such as "I want...someone who I can take care of and raise and love" (Nora) and "To have the sense of accomplishment and the title of parents. I felt that having children would give us purpose and meaning to our lives" (Greer). For Hilary, it was important to have a biological child because she, herself, was adopted. The importance of having a genetic connection with her own child was evident when she stated, "My [adoptive] parents...don't look like me and they don't have my traits and my genes....I think being adopted...ties into it all and it makes it [getting pregnant] all kind of necessary." Although Nora is not adopted, she also emphasized the hereditary aspect of parenthood: "I want...people that I can call my own...family...someone who looks like me." Gillian, who had created a family through adoption, wanted to become pregnant so that she could experience the bodily changes that occur with pregnancy in addition to being able to nurse a child.

In contrast to the participants who were having difficulty "forming" a family by having their first child (participants experiencing primary infertility), Jacqueline and Kate were trying to get pregnant with their second and third child respectively. When reflecting on her current family size and her desire to get pregnant again, Jacqueline stated, "I did have a sense that it [having one child] wasn't...a complete family....To me, having a complete family would be having one more child....That's what I felt...would constitute our family." In contrast, Kate desired a third child to fulfill a life dream: "I'd consider it [having two children] a complete family with the four of us....Having that third [child], it would just be a nice little addition...because I've always [had] that dream in my mind that we'd...[be] a family of five people."

In addition to being able to re-live her own childhood, Eve viewed pregnancy and raising children as a means of maturing and gaining entry into the adult world:

> It is important developmentally...[for] an adult...to have children, to go through...recognized stages...[or] rights of entry or passage...in[to] our society....If you don't enter into those...there's a sense...of being an outsider....[Children] are really important...to have a sense that we're part of the mainstream...[and helps] us feel that we've come of age...[and] reached a level of maturation.

Eve's reference to being "an outsider" was felt among most of the participants on various levels. On the first and most basic level, the participants felt different in that they could not achieve pregnancy while other women could: "I felt like I was a woman but when it came to getting pregnant, I felt, 'I'm not like other women. I can't...do it'" (Holly).

Seeing other women achieve pregnancy when they, themselves, could not often induced a mixture of feelings in the participants. They might have feelings of bitterness towards pregnant women: "[My girlfriend] had two children and did not want any more. And she got pregnant....I did think, 'Well, that's certainly a rip off'....I did feel some bitterness....[For] some people, it seemed to be so easy" (Jacqueline). This feeling of bitterness was also expressed by Leah who stated, "There would...be moments where bitterness [would hit me]...when you see other women getting pregnant and you're not." In addition, the participants had feelings of jealousy when they saw other women achieve pregnancy: "I have a lot of friends who are pregnant right now. I'm really happy for them...[but] a little part of me is jealous about their situation" (Hilary) and "It makes me kind of jealous...gees, my one girlfriend a guy can sneeze in her direction and she can get pregnant" (Ginny). The participants would often question as to why other women could get pregnant and they, themselves, could not achieve pregnancy. For example, "I wanted them to tell me [of their news of pregnancy]....but I did think, 'Well, why not me?'" (Jacqueline) and "When you find out that one of your girlfriends is pregnant...you feel like, 'I'm happy for them. But...why can't it be me?'" (Gillian). A sense of unfairness was also felt among the participants as they saw other women, who they saw as being "poor" candidates for parenthood, getting pregnant:

> I'd find out that these young girls were pregnant and it really upset me because I thought..."Here's a young girl who's not married. She's not even finished school. She's having a baby....She's not ready to have one. Whereas me, I'm in my 30's. We're ready to have this baby....There'd be no problem having this baby, bringing it up and stuff like that"....I really think it's unfair. (Holly)
>
> The [women]...that really bother me [are the] ones that get pregnant easily...a single person or somebody that has...five...or four kids and they're always having another one and...they can't afford [another baby] or...they don't spend the time with their kids that they should be doing. (Grace)

The participants felt a further sense of intolerance as they witnessed their fertile peers complain about and/or mistreat their own children. This was expressed in comments such as "This...friend of ours...has a baby....She's a real complainer....I feel like...shaking her and saying...'Don't you know how lucky you are to have what you do [have] instead of...complaining all the time?'" (Grace), "When I see people mistreating their children, I get...upset" (Jacqueline), and "I...feel outraged by people who have children that abuse them" (Gina).

In addition to being without a child(ren), several of the participants felt different compared to their fertile peers on the basis of the age at which they had children. For example:

> All my family had had kids at 19. And there I was, already 25 and then 28....I turned 29 and I was still...childless. None of my family in four generations had ever been that old. (Ruth)
>
> In comparison to my sisters [and] all my friends, they all had their babies...between 20 and 25. My sister-in-law...[is] the same age as me. Her oldest one is 10...30 is not old but I just thought, "Well, in comparison to my friends...I'm having my babies...[when] I'm older." (Holly)

For Eve, this feeling of differentness continued even after she had achieved pregnancy: "[Our friends'] families are all five years older than us. We're not in the same situation at all....Most of them are now getting back into the work force and we're still having babies." Eve elaborated on what this differentness entails for her now:

> When I go visiting, I'm aware that my kids are in their messy stage and...they're going to spill stuff on their floors...It's not such an issue if their kids are doing it, too. But...when these people's kids have gone through that stage, their house now is relatively clean. So...I don't know...whether I should take my dust buster and...a mop with me.

The participants continued to be "outsiders" when their lack of a family involving one or more children resulted in isolation from their fertile peers: "Once...other people started having children around us, socially, we had fewer contacts...with the same people....There is a kind of loneliness" (Eve). Several participants expressed feelings of isolation when their friends' children interfered with socialization. For example: "You'd phone and they couldn't talk because they were busy with their kids....There came a point with many of them...there was no [good] time to phone" (Eve), "[My husband] and I can get up and go anywhere we wanted. Whereas with them...they just couldn't go out all the time" (Holly), and "When I talk on the phone, I say, '...do you guys want to come over for a barbecue....?' And she goes, 'Well Ginny, your house isn't really that kid-proof'" (Ginny).

Even when they were able to socialize with their fertile peers, the participants had a feeling of not belonging or not fitting in. This "left out" feeling was expressed when the participants described various social events they had with others who had children. For example: "We're at these dinner clubs...[people are] always talking about their kids and I just felt really left out" (Leah), "There was a Tupperware party that my friend had....There were two pregnant women and everybody else had children except me....I felt so left out" (Holly), and "I'm invited to my girlfriends' kids' parties....It's just like, 'Well, when am I going to be able to invite them over to my house for my birthday parties?'....[It's] like...a 'left out' feeling" (Tiffany). Several of the participants experienced this "left out" feeling when they were not able to contribute to child-focused conversations: "I was sitting around with...my girlfriends....They...[were] all talking about children....I try to get into the conversation...there isn't really much that I can say" (Ginny). Rather than not contributing to the conversation, Holly found that conversation focusing on children was "boring" to her (it is speculated here that Holly may be distancing herself from child-focused conversations in an attempt to protect herself from feeling the pain of not having her own child[ren]): "I really didn't have an interest [in talking about children]. Like, 'I don't have any children. It doesn't matter to me if [your son is]...sitting this week'....So I found that I was kind of bored." There were several participants, however, who did not feel left out of conversations focusing on children because they had previously been pregnant and/or they had had previous contact with babies/children:

> A lot of my girlfriends that...are pregnant or have been pregnant, I can relate [to]. I can have a good conversation about that because I've been pregnant myself....I [can] talk about my experience with them. (Nora)
>
> I've been babysitting long enough that...I probably have more answers than a lot of my girlfriends with new babies do....We can talk baby-talk and I can be just as involved except that I don't have...the comparing [with my own baby]. (Tiffany)

The final level on which the participants felt a sense of differentness was focused on the participants being denied the courtesy which is often shown to persons who have children. This particular type of differentness is described by Eve and Ruth respectively:

> You don't have any rights until you have [children]....[When you don't have children,] you can't be busy. You can't be tired. You can't be worried. Your life isn't important. What you do isn't important....There [was] a sense that we should be continually available....All of our vacations were slotted out. "Eve and [her husband] were off at Christmas and at Easter"....All summer long, "[Eve and her husband have] nothing to do....We'll just go up and see them. They can...entertain us"....We were definitely, regardless of age, being looked upon as little kids with no rights, with no needs....I find that now, with the children people...give us more leeway [and] more respect....We're big people now and we're acceptable....What [we] do is very important....We have a right to be tired. We have all these rights that we were denied before [when we didn't have children].
>
> I understand the support I get from my family now [since I've had my son]....Before [my son] was born, they [Ruth's parents] came to my house three times....I'd phone and invite them to dinner and they would say, "No." They didn't feel like it or they had other things to do....Now, when I phone and invite them to dinner, they usually come....I know it's because I have [a son]....They showed [no interest] until I had

> children....I'd go over to [my parents'] house for a whole evening and they didn't ask me anything....They would just pay attention to my nieces and nephews....Our family didn't exchange adult gifts [at Christmas]. They only exchanged kid gifts. So every year, I bought gifts for my nieces and nephews. But when it came time to open [the gifts] under the tree, there was nothing for [my husband] or I....This Christmas we must've got 40 gifts.

Marital Implications

In addition to fulfilling their intrapersonal needs, several of the participants wanted to become pregnant and raise a family in order to meet marital expectations. This was expressed in comments such as "My daughter's [almost a teenager]....I divorced her daddy when she was [really young]....It wouldn't be devastating to me not to have another child....I think it might...have more of an affect on him [stable partner]" (Madeline) and "I want to be able to give that [children] to [my husband]....That's something that he wants" (Tiffany).

When they could not achieve pregnancy, the participants had the feeling of "I'm not fulfilling my role as a wife" (Tiffany). Specifically, the participants felt that they had let their husbands down. For example, "I always had a sense that I...had let [my husband] down. I hadn't produced the children" (Eve) and "I feel that I've let [my husband] down that I can't just get pregnant" (Gillian). Feeling that they had let their husbands down by not producing the expected child(ren) led to the participants experiencing feelings of marital insecurity. This was expressed in comments such as "I was thinking, 'If we could never have children...would he leave me for somebody who could?'" (Tiffany) and "I'm always afraid he's going to leave me...for someone who can have kids" (Leah). Similar feelings were also described by Eve who stated:

> I wasn't...sure [if] I wasn't going to get the boot....I wasn't sure that we weren't going to find some reason why we needed to separate and get divorced....I was terrified that our relationship was going to fall apart....I don't know if I ever actually thought that he'd [husband] leave. But at the very least, that I would become a non-issue. Like we would just inhabit the same home...but have no relationship....He would go out shopping...and he would be gone a little longer than I thought. I used to get terrified. I'd think that he...had left.

Leah, in fact, attributed her inability to achieve pregnancy as being a cause underlying the dissolution of a previous marriage. Believing this, Leah questioned her worth as a woman:

> My opinion [is] that my inability to conceive was a cause in the breakdown of marriage...having lots of children was very important to him....I believe that his concern that I couldn't have kids was a large one and that was very painful....It left me feeling less than adequate as a woman and like a failure....When I was finally divorced...I really doubted whether...any other male would want me.

Leah is currently in a new marital relationship and while she feared for the security of the relationship, Leah told her current husband prior to marriage about her previous experience with infertility. She did this in an attempt to protect herself from another marital dissolution:

> I felt we were getting to the point where we were deepening our commitment....I felt that it was very important that he knew....I absolutely did not want anything to happen again after the fact....Having been through a marriage...[which had] broke[n] down because [of] it....It was...a weighing of fear. Which was the greater fear? The fear that he would leave me now or the fear that he would leave me after we were married and feel betrayed that he wasn't told?....It was one of those things where you feel scared.

Rather than experiencing a feeling of marital insecurity (afraid that her husband would leave because pregnancy was not achieved), Grace questioned her own desire to stay in her marriage: "Part of being married is having your family [children] besides having your husband....What I've been [thinking]...these last few months [is] like, 'Do I still want to be married if I can't have children?'" In contrast to Grace, most of the participants did not question their own desire to remain married despite their inability to achieve pregnancy: "I didn't get married to have kids. I got married because I love my husband....We didn't start off having kids. So it wouldn't be something that was something brand new, not being with kids" (Hilary).

ATTEMPTING PREGNANCY ON THEIR OWN

While all of the participants knew they wanted to be pregnant at some point in their lives, they had initially decided to delay pregnancy and during this time, the participants prevented the occurrence of pregnancy by using contraceptive measures. Since pregnancy was not desired, the participants did not perceive this initial lack of pregnancy as being problematic.

The decision to delay pregnancy revolved around issues pertaining to the participants' relationship with their partners and the practicalities of living (financial stability, owning a home). When delaying pregnancy for these reasons, the participants were, in effect, balancing their desire for pregnancy and/or subsequent parenthood with other aspects of their lives.

Participants frequently delayed pregnancy in an attempt to "get ready" for the event and/or the subsequent raising of a child. The desire to become a parent and raise a family was the underpinning of getting ready: "[Being ready means] really wanting them [children]...being emotionally in a...state when you...want them" (Eve). The relationship that the participants had with their partners was also an important element in the notion of getting ready: "We have been together for seven years and we felt, 'Well, let's get married and...start having a family'" (Ginny). For Grace, in particular, the status of "being married" was not enough. Rather, the marriage relationship had to reach a certain level of maturity/development before she and her husband felt ready to get pregnant and raise a family: "[My husband] thought it was better for us to spend time [a couple of years], just the two of us and get to know each other and...getting settled...instead of, all of a sudden, having a child."

Being ready also entailed addressing the practicalities associated with pregnancy and raising a family: "There are things I have to do to phase myself out of my job, to phase myself into a period of financial dependence...[and] fix up the house...to satisfy the practical needs" (Madeline) and "You have to be financially ready for it. You wouldn't want to have debts and loans....I'd feel better knowing that I...had a clean [financial] slate" (Hilary). For Ruth, being ready implied a balance between her career development and the assumption of the parenthood role: "I was ready to [give up work]....I had got where I wanted in work....I had...made a name for myself so...when I applied for jobs in the future people would know me....So I felt ready." In contrast, the balance between career and the parenting role was the reverse for Greer: "I had moved to a new city and was not working. Being a stay-at-home-mom was the logical thing to do. Not until our infertility did my personal goals (i.e., education and career changes) start to become important."

Several of the participants assessed their readiness to start a family from a long-term perspective. This frequently involved the participants' own personal philosophies surrounding the parenting role, especially in relation to the age at which one would be in the parenting role: "I didn't want to be having kids when I was 40 [years old]. I would much rather have them when I was younger...so you could...enjoy them a little more [and] keep up with them" (Rachel). For Ginny, in particular, getting ready meant dealing with the practicalities of raising a family as they related to her own philosophy regarding the parenting role:

> My husband was working on the oil rigs....I've seen...[where] the husband works on the rigs, he goes away for two weeks and comes home for a week...I said, "That's wrong....I'm not going to raise a family on my own. I want you to get a job in [the city] so...you can come home every night to see your kid instead of coming home for a week and then you're gone for two weeks and the kids will wonder, 'Where's Daddy?'"

Several participants also considered the needs of their current children when getting ready for another child. For example:

> [My daughter's] at the age now...where I could have that quality time with the baby and still have quality time with her...I didn't want to have children close together...'cause I wanted to have those years of quality time...to spend with her. (Gillian)

When they felt ready for pregnancy and/or the subsequent raising of a family, most of the participants embarked upon the task of achieving pregnancy. For two participants, however, this did not occur because of the participants' health histories. Due to unusual circumstances in her health history, which contraindicated pregnancy, the first participant, Holly, was medically advised not to get pregnant despite her psychological readiness for pregnancy; when Holly's health-status improved and stabilized, she then attempted pregnancy with the approval of her doctor. For the second participant, Grace, pregnancy was sought as a treatment for endometriosis, even though she was not psychologically ready to get pregnant. Not knowing that she would have difficulty getting pregnant, Grace proceeded to attempt pregnancy on her own following the medical advice.

For most participants, the task of getting pregnant was embarked on with the expectation that they would have little difficulty. This expectation was expressed in comments such as "I always thought, '....Have baby. Okay. That's it!'....Nobody ever...looks ahead and sees any problem" (Tiffany) and "I went in and had my I.U.D. [intrauterine device] removed...I thought, 'That's it! Next month, I'm pregnant'" (Holly). When talking about the expectation that pregnancy would be easily achieved, Grace commented about the lack of preparation she had for the infertility experience: "In the Catholic Church...children are always the thing....Nobody ever thought...'What are you going to do if you can't have children?' And...all of a sudden you're affected with it....[It's] like, 'So what do you do now?'"

This expectation that pregnancy would be easily achieved was often the result of the participants having no knowledge of infertility. For most participants, this lack of experience was frequently felt in reference to their "fertile" peers. Ginny noted this when she stated, "I don't know anybody that is infertile. All my girlfriends...have to do is have a guy sneeze their way and they're pregnant." For Kate, the lack of experience with the difficulty of getting pregnant was felt on a more personal level:

> [My son] was first try....And [with my daughter]...we were away at the cottage and didn't have any birth control and it was...like, "Could you get pregnant?" And I said, "Well, if I do, it doesn't matter. I'm ready for another one." And bang! I was pregnant. So to go two and a half years [without getting pregnant]...was a real switch. Usually, it was easy.

Tiffany believed that she would be able to achieve pregnancy easily despite previous gynecological surgery, as her doctor had told her that it would not interfere with her ability to get pregnant.

Several participants did suspect that they would have difficulty with getting pregnant. This was based on previous problems the participants had experienced with their menstrual cycles: "I just knew that I was going to have problems....[When] I was...15 [years old], I ended up laying on the floor in school with such bad period cramps" (Ginny).

THE STAGES OF PREGNOLOGY

Pregnology is comprised of three stages (Figure 1): (a) the entry into the health-care system; (b) the intervention, and (c) the exit from medical intervention. In the first stage, when the participants suspect that they may be infertile, they seek medical assistance, and subsequently receive confirmation that their inability to get pregnant is a problem requiring medical intervention. The second stage, the intervention, is comprised of three phases. First, the participants decide to intervene. Second, the participants engage in infertility work, that is, they endure the various activities required by medical intervention, in the hopes of achieving pregnancy. Finally, the participants experience the letdown when they do not achieve pregnancy. In the third stage, participants exit from medical intervention, either by getting pregnant or deciding to discontinue medical intervention in the absence of pregnancy. Since these stages occurred "over time" and in a sequential manner, Pregnology is identified as being a process.

The participants progressed through the three stages of Pregnology by using two core strategies, "*balancing the scales*" and "*protective governing.*" The participants used the first strategy, *balancing the scales*, when they made decisions surrounding the management of their infertility. When making such decisions, participants sometimes employed a second strategy, *protective governing*. This term was borrowed from Juliet Corbin's research study pertaining to a pregnancy complicated by chronic illness (Corbin, 1986a; Corbin, 1987; Strauss & Corbin, 1990). In this study, *protective governing* is defined as a strategy whereby participants *protected* or shielded themselves and/or others from a perceived risk.

STAGE ONE: THE ENTRY INTO MEDICAL INTERVENTION

The entry into medical intervention occurred in three phases: (a) the participants suspected that they were experiencing problems with achieving pregnancy, (b) the participants sought medical assistance for their inability to get pregnant, and (c) the participants' inability to get pregnant was confirmed as being a problem requiring medical intervention.

Suspecting a Problem

All of the participants identified "a problem" when they were unable to achieve pregnancy after a certain period of trying on their own. A problem with getting pregnant was often suspected when pregnancy was not achieved within a year of trying: "When we started and tried for a year, we decided that...there's a problem" (Hilary). In contrast, Judith and

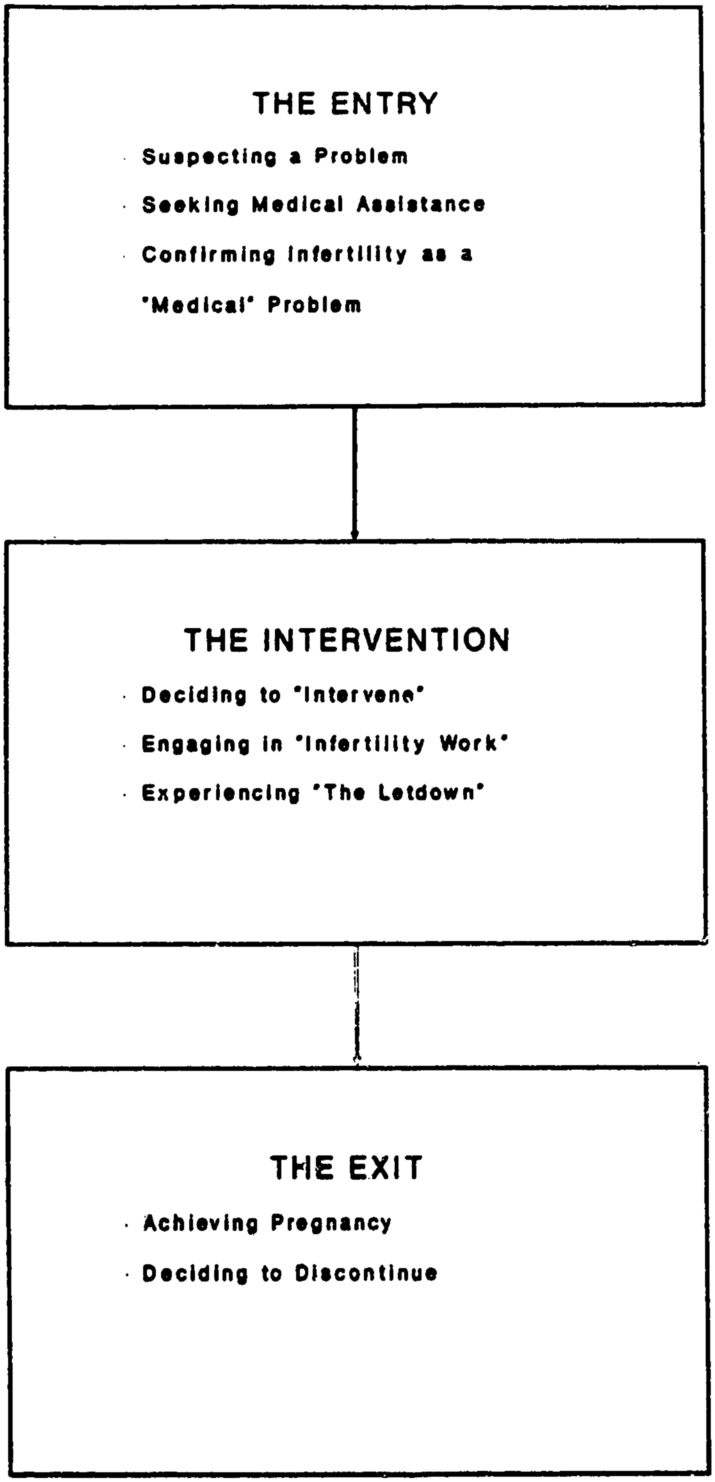


Figure 1. The Stages of Pregnology

Tiffany suspected a problem earlier when they did not become pregnant after six to eight months of trying while Nora waited for ten years before suspecting a fertility problem: "After [ten] years of not getting pregnant....I realized that there...obviously must have been a problem....Out of all that time...you'd think I'd gotten pregnant at least one time."

Seeking Medical Assistance

Most of the participants sought medical assistance when they first suspected that they might be having fertility difficulties. Kate and Eve, however, delayed seeking medical assistance despite their inability to achieve pregnancy. For Kate, this delay was related to the reason she attributed to her lack of pregnancy: "We were living [down East] at the time....We just decided, '...Now [I'll get pregnant]'...and it didn't happen....We were moving...back [here]....So I said, 'Oh well, it's just the stress of moving.'" For Eve, seeking medical assistance was purposefully delayed for several reasons. As noted in the following excerpt, the strategies of *balancing the scales* and *protective governing* underlie Eve's explanation:

> I would have liked the baby to have happened naturally....I really wanted that...magical experience of finding out...."Oh my God! You're pregnant....When did it happen?"....I held off [from seeking medical assistance] for that reason....I was [also] sorting through an awful lot of...personal problems related to my career...in that sense, I wasn't emotionally ready...to be pursuing yet at another front....This [infertility] was in [illegible] battle....I was just recovering from the last one. And so I didn't really feel I had the emotional strength to head off into...that.

Eve's reluctance to seek medical assistance was also influenced by her belief underlying "when" medical care should be sought: "My mother was such a hypochondriac, always running to the doctor....I wasn't going to go run to the doctor every time...I thought there was...a problem. So I was...trying to be patient and...take things in stride." It is noted that although Eve delayed seeking medical treatment when she was unable to achieve pregnancy, she did seek medical advice because infertility had already been experienced in her husband's family:

> I raised it [suspicion of infertility] with my doctor...[whose] attitude was, "...if that becomes a problem, then you deal with it"....[My husband] was concerned, not because he had doubts about me but because...his brother's wife had...problems [getting pregnant].

Seeking medical assistance for infertility was initiated by the participants with one exception. In Kate's situation, medical assistance for infertility was inquired about when her husband sought medical care for scrotal pain from a urologist. Following her husband's inquiry, Kate sought assistance from her own doctor regarding her inability to get pregnant.

Because of a geographical move, Nora did not have access to a doctor from whom she had previously received medical care so she asked a friend for the name of a doctor.

However, in *balancing* her desire to seek medical assistance for her inability to get pregnant with the effort of obtaining that assistance, Nora rejected this referral as the doctor lived outside the city and the driving time for a visit was judged to be too long. Rather, Nora sought medical assistance through medi-centres because she believed that:

> There are good and bad doctors everywhere. I can go into a regular practice...and find crummy doctors I don't like....It's like a hairdresser....You can go to a $6 haircut place and find the best hairdresser in the...world....You just never know when you're going to find one [a doctor] or where.

All of the participants but Nora presented their inability to get pregnant as being the reason for visiting their doctors. For Nora, the seeking of medical assistance was initiated by a health-care concern other than the inability to achieve pregnancy. As such, the infertility was presented as a "secondary" concern and was not the primary reason for visiting the doctor: "I'll go for my...sixth month check-up or whatever....I'll just go and see...Dr. K [about it] whenever I have something go wrong." Nora did not provide a rationale why she sought medical assistance for her infertility in this way.

Confirming Infertility as a "Medical" Problem

Once the participants had sought medical assistance, they passed into the third phase of entering into medical intervention. In this phase, the doctor determined if the participant's inability to get pregnant was a problem requiring medical intervention. This determination was most often made on the basis of how long the participant had been unable to achieve pregnancy. Frequently, the inability to get pregnant was defined as a problem if the participant had gone at least one year without achieving pregnancy.

There was often a difference of opinion between the participants and their doctors when the doctors assessed that a year wasn't "that long" to try: "What do you mean a year's not very long? That's a long time...because in my mind, if I wanted to get pregnant this month, I should have gotten pregnant this month, not a year later...or two years later" (Holly). When giving this medical assessment, doctors often rationalized the participants' inability to achieve pregnancy as due to "poor timing," that is, the participants' engagement in sexual intercourse was not coinciding with the participants' fertile periods (during the ovulatory phase of the menstrual cycle). Thus the participants were advised to "try longer" (two more years).

Participants responded to this in one of two different ways. Several participants simply accepted their doctors' assessment and advice by attempting pregnancy on their own for the additional time. Hilary chose an alternate course of action by seeking a "second opinion" from another doctor whom she had been referred to by her own mother. Based on Hilary's menstrual history (irregular menstruation) and BBT charts indicating anovulation, this second doctor gave medical confirmation that Hilary's inability to get pregnant was, indeed, a problem requiring medical intervention.

Obtaining medical confirmation of infertility may be more difficult for women who have previously achieved pregnancy. For example, Kate found that her husband's urologist was reluctant to investigate for infertility:

> Dr. Z came out and said point blank that...since he's [Kate's husband] had kids before...that it's basically just timing...[sexual] intercourse [with ovulation] and...eventually, it'll happen. And that they wouldn't do any testing. So...you're sort of put on the back burner if you've had kids before.

All of the participants but Hilary indicated that they accepted the identity as being an infertile woman. This acceptance was most often evidenced in two ways. First, the participants frequently referred to themselves as being "infertile." And second, the participants accepted the researcher's reference to their difficulty with achieving pregnancy as being infertile. Hilary presented the negative case. At the time of the last interview, Hilary believed that she is going through a process of "becoming" infertile, however, she does not view herself as being infertile. When Hilary described this process, she defined the term, "infertility," in a particular way. As noted in the following excerpt, Hilary may be denying her infertility identity when she uses her definition:

> I think infertility means that you can't conceive....I'm not there yet....I classify myself as a problem pregnancy. Like I obviously cannot get pregnant easily....I think infertility's the final outcome of not being able to get pregnant....There's a lot of different tests you go through...things that you have to do....And then, finally, when nothing happens that's when...you classify yourself as being infertile....I don't feel that I'm infertile yet. If I've gone through every test and tried everything to get pregnant then I'd [say]..."Ya, I am infertile"....I think there's a chance that I can get pregnant....Until a doctor...tells me differently, then I'll believe that.

STAGE TWO: THE INTERVENTION

Once their inability to get pregnant was determined to be "a problem" requiring medical intervention, the participants entered the second stage of Pregnology. This stage, the intervention, is comprised of three phases: (a) deciding to intervene, (b) engaging in infertility work, and (c) experiencing the letdown.

Deciding to "Intervene"

Once the infertility problem was diagnosed the participants were confronted with the decision whether or not to pursue medical intervention. As most of the participants viewed intervention as a means of achieving pregnancy, they decided to proceed with it. Ginny, however, had ambivalent feelings towards medical intervention, especially at the infertility clinic:

> [There] was a...period where I was saying, "Oh, should I...really go to the infertility clinic? Or should I just say, 'To heck with it and get pregnant on my own?'" 'cause I'm deathly scared of doctors and needles and all that kind of...stuff.

Despite these ambivalent feelings, Ginny did proceed with treatment. Her decision illustrates the strategies of *balancing the scales* and *protective governing*: the emotional pain associated with not pursuing medical intervention (putting herself at risk for the continued inability to achieve pregnancy) was greater than the unpleasantness associated with medical intervention (physical pain); Ginny attempted to *protect* herself from her continued inability to get pregnant by deciding to accept intervention.

All of the participants but Nora decided to intervene. Nora, who had undergone surgery for blocked fallopian tubes several years before, gave two reasons for her decision. The first reason was related to Nora *balancing* her infertility with the rest of her life: "I've been so busy lately with company and everything else. So I haven't really been doing anything [about my infertility]." Nora, who previously conceived a pregnancy which ended in a stillbirth, also *balanced* the consequences of pursuing medical intervention and not getting pregnant with the chances of achieving pregnancy:

> When I've been to the doctor, I've mentioned...what's happened....And Dr. K says, "Don't get your hopes up. Chances are very slim that you'll have another baby"....[When] you get that said to you...it's like... "Should I bother any more?"...'cause...I go there. I talk about it. I get excited about it and hopeful....I don't like...building up my hopes and having them fall [when I don't get pregnant]....I've had so many doctors just say...like, "It took you [over 10 years] to get pregnant the first time and that was kind of a fluke....So...don't get your hopes up 'cause chances are like one in a million that it'll ever happen again"....If I had little better odds...like...a hundred out of a million...I would probably try a little harder [and undergo medical care].

Through this particular *balancing of the scales*, the strategy of *protective governing* is also present: by not pursuing medical intervention, Nora is *protecting* herself from the excitement and hope surrounding the possibility of getting pregnant, only to later suffer a letdown when pregnancy is not achieved.

Engaging in "Infertility Work"

Upon deciding to intervene, the participants began to engage in numerous activities aimed at overcoming their infertility. As Leah commented, medical intervention represented hope: "I remember...reading...about the birth of Louise Brown, the first test-tube baby. And so I thought, 'Well, science and technology will find some way to rescue me from this peril of infertility.'" Despite the hope that medical intervention offered, the participants still felt much uncertainty surrounding their achievement of pregnancy:

> "Hang in there." Ya, I remember Dr. J saying that...the concept was time...like "How long do I have to hang in there for?"....I thought, "....This could be years. It could be months. It could be weeks. Like who knows?" (Holly)

> It's almost...an added torment that I...have a uterus and a functioning ovary. So I've always had this possibility [of getting pregnant]....If I did have a hysterectomy, it would be final....Uncertainty is really about the whole thing. I don't know if I'm going to be 60 years old and childless or not. (Leah)

For some participants, permanent sterility would almost be preferable to the uncertainty of not knowing whether pregnancy would occur. Kate noted that this could be accomplished by interfering with the physiological functioning of either partner's reproductive system: "I say to [my husband]...'Well, why don't you...get a vasectomy? And then the decision is made and we won't have [to] think about it [getting pregnant] any more.'"

For several participants, living under this veil of uncertainty interfered with their life plans. While *balancing* their infertile state with other aspects of their lives, such as participating in an upcoming wedding and planning vacations, the participants routinely entertained the thought of being pregnant. This was illustrated in comments such as "[My husband's] sister is getting married in [a few months' time]....The months would get close and I'd think, '...if I got pregnant now, I could still wear that [bridesmaid] dress'" (Kate), "I delay...scheduling annual leave [for holiday time] because I'd like to save it for an eventual extension of a maternity leave" (Madeline), and "We would talk about camping...in the summer and we'd say, '...if this baby's born in June, then July probably wouldn't be that great'" (Jacqueline).

The uncertainty surrounding "when" pregnancy would be achieved interfered with the participants' plans to pursue their careers. For example, Eve made the conscious decision to not pursue a career in an attempt to *protect* both herself and a prospective employer from a possibly short-term employment situation:

> I couldn't...pursue [a] career because...I couldn't see me walk[ing] in and saying, "...I'd like to work here," and then springing it on them six months later that I was pregnant....I couldn't see me coping with the job when I did get pregnant because I knew I was going to be uptight because it had taken so long.

Another participant made the conscious decision to avoid a career change until after she had had her children: "I kept saying, 'Oh, I'm going to wait till after I have children....' And now, I'm still waiting. Like how many years have I wasted? Like I probably could have had two careers by now" (Grace). In contrast, Jacqueline attempted to advance her career by going to university while receiving treatment. Such a decision was directed by Jacqueline's thoughts rather than by her feelings:

> I was in [a degree] program at the University...I thought that we might not have this child so I [thought that I] should get on with something....I worked really hard at it but my soul and spirit were not in it....What I yearned for was the baby, not the degree.

For many of the participants, engaging in the infertility work became the central focus in their lives while other aspects assumed a more peripheral nature. This concentration on getting pregnant was expressed in comments such as "I had blinders on....That's all I could see" (Holly), "Baby. Baby. Baby. That's all I think [about]" (Tiffany), and "Everything in my life...revolved around this business of trying to get pregnant" (Jacqueline).

As the participants carried out their infertility work, they would often dream about getting pregnant and having children. Such dreaming was illustrated in comments such as "I always used to think of me being pregnant...me and my big, fat belly" (Holly), "I sit and daydream about...being at home on maternity leave...with a baby" (Tiffany), "I was thinking about...finally having a baby and putting this birth announcement in the paper" (Hilary), and "I kind of sit back and think, '...I wonder what my kid would look like. Would he have [my husband's] nose or my toes?'" (Ginny). The participants would also visualize their future parenting experiences. For example, Holly stated, "I could see...me taking it [baby] out and buying clothes for it...and taking it out for walks and things like that."

Engaging in infertility work involved the participants going to infertility appointments and optimizing the reproductive factors involved in the conception of a pregnancy. As they engaged in this infertility work, participants were building up hope for their achievement of pregnancy.

Going to Infertility Appointments

The participants' decision to pursue medical intervention for their infertility resulted in the need to go to numerous appointments with their doctors and other health-care professionals. The purpose of these appointments was generally to undergo diagnostic procedures and infertility treatments. Participants also went to appointments to receive test results. Going to these appointments involved scheduling and attending the appointments.

Scheduling Appointments

The purpose underlying a particular appointment was the foremost consideration as to when appointments were scheduled. When the purpose of the appointment was to have the participant undergo various diagnostic procedures or receive infertility treatment, the appointment was scheduled during the appropriate time of the participant's menstrual cycle. For example, appointments were scheduled during the ovulatory phase of the menstrual cycle when the participant was undergoing a PCT or when she was receiving intrauterine insemination. Appointments attended to obtain test results were made according to the participant's own preference in time and when an appointment-opening was available.

Infertility appointments were routinely scheduled during the working hours of the office from which the health-care professional practiced. Any diagnostic or treatment procedure done under the direction of the infertility specialist was scheduled within the working hours of the hospital in which the specialist had privileges. Scheduling appointments were not problematic for most of the participants. For Gina, however, infertility treatment was "missed" because of the working hours of the infertility clinic: "There were two months...where we had to forget about it [intrauterine insemination]...because my ovulation had occurred over the weekend [when the clinic was closed]."

Attending Appointments

Once the participants had their appointments scheduled, the next task was to attend. This involved: (a) doing preparatory work prior to attending the appointments, (b) appearing at their appointments, and (c) playing a waiting game.

Doing Preparatory Work. Although some of the appointments required the participants to simply "show up," many of the participants had to do preparatory work prior to attending. In the most general sense, this preparation entailed the participants making themselves physically ready for their appointments: "I have a shower...to be clean....I don't want to go all grubby....It's like going to the dentist....You brush your teeth just before...[the dentist] looks at your teeth." There were some appointments, however, which demanded the participant to do more extensive preparatory work. For example, when having a PCT done, the participants had to engage in sexual intercourse prior to testing. As noted in the following excerpt, Ruth incorporated her life (the time when she would engage in sexual intercourse) into the management of her infertility (having the PCT done) in an attempt to meet the time-restriction associated with this particular diagnostic test: "They book the test for 11:00 [in the morning]...you're kind of [like], '...that's [not] going to work, doctor....My husband's at work....' So at 8:00 in the morning...you...have sex because at 9:00, you're having the test." When having the PCT done, Ruth noted that the preparatory work involving sexual activity was compulsory in nature:

> You have to have sex....It's like, "Does it matter if you feel like it or not?" Your test is booked....So you have to go at a certain time....You can't just phone the doctor and go, "I didn't feel like it this morning. Can I re-book for another morning?"

Other types of appointments required different activities in advance. For example, Ginny was responsible for obtaining a Lupron prescription needed for a treatment appointment:

> It was easy when it was at the University [hospital] because it was just go park and go get it and then go upstairs to the [infertility clinic]. But when you have to run...all [the] way across town [to get the prescription]...you have to...book it [appointment] so [that]...you can get to...wherever you are going in time to be back...for your appointment.

In most cases, Ginny did not find it problematic to obtain the Lupron prescription. Twice, however, when the prescription was unavailable at the University hospital, Ginny coped in the following ways:

> The University hospital is the cheapest [$365]. Twice...the University didn't have it....The first time...they didn't...I had to change my appointment....Every month after that, I'd phone ahead to make sure they had it....The last shot I had, they didn't have it again until the day after my appointment. I said, "To heck with it. I'm not going to wait another day and...miss another day of work. I'm just gonna go get it for four-0-seven [$407] at...[another pharmacy]."

As noted in the second method of coping, Ginny incorporated her infertility into her life as she *balanced* her worklife (missing time from her employment to attend her infertility appointment) against the cost of the medical treatment for her infertility.

In addition to preparing themselves physically, participants prepared themselves cognitively for their appointments. This preparation generally involved the participants thinking of questions that they wanted to ask their doctors: "If I had certain questions I wanted to ask I would write them all down...probably the evening before" (Kate). Rather than writing their questions down on paper, other participants would just keep their questions "in their heads." Grace noted that, depending on the purpose of the appointment, this type of preparation was not always necessary: "All those months I did go there [infertility clinic] for inseminations, there wasn't really anything to ask....You just go in and have your procedure done and you go home."

Appearing. Participants who worked shiftwork or on a part-time basis generally attended their appointments during their time off from work. In contrast, participants who worked full-time and during regular working hours left their place of employment to attend their appointments. In doing so, these participants incorporated their lives into the management of their infertility. Judith, however, did not accept the consequences of having to leave her place of employment to attend her appointments. As the following excerpt indicates, the strategies of *balancing the scales* and *protective governing* were present in Judith's rationale underlying her decision to quit her employment so that she could attend her infertility appointments with a clear conscience:

> [It] got to the point where I was taking so much time off work that I quit because it wasn't fair to everyone else at work because they were always covering...for my work. So I quit....I would have a doctor's appointment...once or twice a month....I

> had...[several] laparoscopies and a laparotomy....[You] take six weeks off at one time...and then each laparoscopy is a week off.

When the participants took time off from their employment to attend their appointments, some explained why they were missing work to their supervisors while others did not. The decision to tell, or not to tell, their supervisors was related to their supervisors suspecting that they were abusing the benefits package in order to take time off from work to attend medical appointments. From the participants' viewpoint, the suspicion that they were abusing the benefits package was related to how often they would need to attend appointments. Holly, who worked within a small organization, told her supervisor why she was missing work whereas Madeline, who worked within a large organization, did not:

> I went there [infertility clinic] five or six times. So I thought, "Well, how am I going to explain this?" So...I said [to my supervisor], "...[my husband] and I...[are] trying to have a family and we're not being successful. So I have to go for a series of tests....I hope that you understand that I'm going to have to miss some work"....I just wanted [my supervisor] to be aware so he didn't think that I was just missing work.

> Employees [at my place of work] have a fairly generous benefits package for medical absences....I just advise my supervisor that...I'll be gone....I know some people are more generous about giving details...but I don't feel any compunction at all about being very vague....I don't go that often enough that they could suspect abuse....So no explanation is required.

Although Madeline did not routinely give information regarding why she left work, she was prepared for a possible confrontation:

> If there were some questions...I could say..."Ya, I'm going to have a D & C [dilatation and curettage]." At my age, that kind of thing isn't unusual. The people...I work [with] are within my approximate age-bracket. Sometimes, we make off-the-cuff, tongue-in-cheek comments about [the] body's falling apart when you get to 35....I put it in that same general light.

When having to take time off from their employment to attend appointments, the participants generally did not plan their worklife around their scheduled appointments. However, Madeline prepared her worklife in advance so that her attendance at the appointments would not jeopardize her work: "When I came back, I said, 'Yes, I...have...to be away for minor surgery....These are the days. Tell me if there's anything that you want me to have done before I go.'"

While attending their appointments, some of the participants were accompanied by their husbands while others were not; the husbands' absence was generally due to their being at their own place of employment. Several husbands did take time off to attend the appointments with their wives. In this situation, the strategy of *balancing the scales* was present: the husbands' presence at the appointments was deemed to be more important than the husbands' loss of time at the employment and the potential loss of wages.

The husbands' accompanying or not accompanying their wives to the infertility appointments was also influenced by the purpose underlying the appointment. Most of the participants did not consider it to be important for their husbands to accompany them when they were having non-invasive procedures done, such as reviewing the BBT chart, because these procedures were something with which they could cope themselves. Participants did, however, want their husbands to be present during the appointments where something major was being done, such as a laparoscopy or an endometrial biopsy, because the participants felt that they then needed their husbands' support:

> I'm not going to ask [my husband] to come if I'm just having a test to see...if my ovaries are swollen 'cause I'm on Clomid....If Dr. Q is just taking blood and looking at my BBT chart he doesn't have to come. But if Dr. Q is going to...say, "Okay I want to do another lap[aroscopy] on you I want you to come in...", I'll say [to my husband,], "Can you come with me please?" (Ginny)

In such instances, husbands took time off from their own employment in order to accompany their wives to the infertility appointments.

Playing a Waiting Game. When attending their appointments, the participants waited to see their doctors, a minimum of 15 minutes to over 2 hours. Most of the participants accepted this, however, Holly avoided this waiting game by scheduling her appointments so that she was first in line to see her doctor: "I'd usually ask...for the first appointment in the morning so I wouldn't have to wait very long."

The participants described various ways in which they played this waiting game. For example, Holly and Ginny stated respectively, "I read a book. I'd...take...a big, raunchy novel to keep my mind occupied" and "Last time I was there [infertility clinic], there was a lady...we started talking because it's such a long wait there." In addition, the participants often watched other patients in the waiting room, observing for various characteristics. For example, Ginny noted the fertility status of the other patients: "You have people [at the infertility clinic]...who have two or three kids with them. And you think, 'What are they doing at the infertility clinic?'" In addition to this, Ginny observed the activities of the other infertility patients. When describing one waiting period at the infertility clinic, she expressed a feeling of uncertainty:

> You're sitting and watching all those people come and go and they are all carrying little vials. And some are carrying boxes...you're sitting there, thinking, "Well, I wonder if I'm going to have to do that. I wonder if that costs anything." And then you see the sign on the wall saying, "Semen washing, $80"...and you're thinking, "...should I bring money next time?"....So you're sitting there going, "I don't know if...."

As the participants waited for their appointments, they also observed the age-differences between themselves and the other patients. When this happened, the participants often felt a lack of normality. This was expressed in comments such as "I'm younger than most patients that are there [infertility clinic]....There might be some people my age [26 years old]...but most of the people there are 30, 35 [years old]" (Ginny) and "A lot of people [at the infertility clinic] look...a way older than I am....I'm 31 [years old]....They look 35-ish...if not older" (Grace).

Optimizing the Reproductive Factors

For conception to occur, the anatomical and physiological functioning of both the female and male reproductive systems must be intact to some degree. The optimization of the reproductive factors was accomplished through four strategies: (a) undergoing an infertility workup, (b) undergoing infertility treatment, (c) increasing the sperm count, and (d) engaging in scheduled sex.

Undergoing An Infertility Workup

As the participants embarked upon medical intervention, efforts were taken to discover the cause(s) underlying their infertility. This was accomplished by having the participants go through an infertility workup which consisted of various diagnostic procedures, such as BBT charting, HSG, endometrial biopsy, laparoscopy, and hormonal assays. The infertility workup also involved two additional tests, the PCT and the semen analysis, both of which demanded the involvement of the participants' husbands. While undergoing these diagnostic procedures, the participants began to "live under the microscope" as their doctors and other health-care professionals (laboratory and X-ray technicians) scrutinized their reproductive systems.

When their doctors suggested doing diagnostic procedures, all of the participants but one accepted them without question. Holly, in particular, expressed excitement surrounding these testing procedures: "...I'm so excited....We're going to do these tests....Dr. J is gonna tell me what's going on"....Maybe [with] this [test]...Dr. J will] find something"....It was like...'I'm getting a step closer...to my dream [of getting pregnant].'"

Having a desire to discover the cause(s) underlying their infertility, the participants proceeded with the workup with a particular attitude that Tiffany clearly expressed: "I went into this...hoping that one of my tubes were blocked....They'll blow it open and we'll get pregnant....It's like...if your leg's broken, they put it in a cast and they fix it." For Holly, a cause underlying her infertility was not discovered. As a result, she "didn't feel very good about it because...when there's nothing to correct, then you feel...lost. Like...'How can I correct this problem if I don't know what it is?'" Being unable to identify a particular cause underlying the infertile state resulted in much uncertainty for Holly. Even when a cause had been identified, uncertainty remained for several of the participants. From Hilary's perspective, undergoing additional testing was viewed as a way of removing this uncertainty: "I'm ovulating [while on Clomid] but maybe...the tubes are blocked....If I...had the laparoscopy, then a lot of questions would be answered."

Although Kate accepted the BBT charting, she raised several objections when the HSG was suggested. While none of the other participants expressed financial concern surrounding any of the diagnostic tests, Kate's primary objection with the HSG was cost: "It's not covered by Health Care....My husband is up in arms against paying anything extra....We...discussed [it] like, 'Do we want to pay to have this done?'" The strategy of *protective governing* is illustrated as Kate further explained the decision-making process surrounding the HSG: "If they don't find that the tubes are blocked then they'll do another procedure....Since there's a fee for this [HSG], there'll probably be a fee for everything else...I'm not about to start spending dollars and dollars and dollars." Kate continued to use the strategy of *protective governing* as she questioned whether she wanted to discover a cause underlying her infertility:

> To verify that the tubes aren't blocked [is] to have the test [HSG] done....One thing about not having the test...is that...I don't need to know...that, "No, it couldn't have happened." I could live with the fact that it's just the timing [of sexual intercourse with ovulation]...and that the door's not closed [pregnancy could still be achieved]. Whereas if I went and Dr. Z said, "Yup, your tubes are blocked"...then it'd be a decision to make whether we open them or not....So this way....[I'm in control of the situation] in making the decision....It's not, "Your tubes are blocked. You're not going to have any more kids"....I would really rather not know [the cause] 'cause I'm afraid that if I found out that it was him [husband], maybe a part of me would hate him for it....If I found out that it was me, a part of me would hate me for it and I'd think, "What did I do wrong? Did I ever have an infection that I didn't deal with properly?"

Despite these considerations surrounding the HSG, Kate considered having the test done. However, having the procedure involved deciding "when" (during which menstrual cycle) she would have it done. Kate used the strategies of *balancing the scales* and *protective governing* when she made this decision: "Last month, I just pushed it [HSG] by because I thought with the wedding [Kate is participating in the wedding party]...coming up in case there's really bad cramping...I didn't want it to ruin my month."

For most of the participants, undergoing these diagnostic procedures was a traumatic experience. For example, Holly expressed a feeling of abnormality when she stated, "Dr. J recommended that I...take my temperature [BBT] and chart it....The thought kept coming to my mind, '....Why can't I be normal?....Why do I have to take my temperature every morning and chart it down?'" In addition, several of the diagnostic procedures involved enduring physical pain, especially with the HSG and the endometrial biopsy. This is described by Holly and Gina respectively: "It was painful, that one test [endometrial biopsy]....Dr. J shoots some kind of dye into...your tubes....You get a really, really, heavy [and painful] cramp" and "Some of those tests are incredibly uncomfortable....Ouch!....The one test that I really absolutely hated...is the endometrial biopsy. It was incredibly painful." Rather than feeling physical pain with such tests, Leah felt more of an emotional or psychological discomfort: "Some people said that it [HSG] was painful...it wasn't....The actual surgery stuff doesn't bug me so much as...what's going to be the outcome."

Other psychological aspects of the infertility workup were identified. For example, the participants frequently expressed feelings of embarrassment and humiliation, especially when the procedures involved the public viewing of normally private parts: "Sometimes you're in X-ray and they're putting dye in and watching it go up your tubes....You're lying there in stirrups and people are going in and out of the room....I found that humiliating" (Ruth). The participants also perceived a threat to their lives, especially when they underwent general anesthetic. For example:

> I don't like...being put to sleep....It's just the fear...of being put under....You can think of all these things that could happen...."What if my heart stops....? What if I stop breathing?....What if this happens?"....I don't want to die. (Gillian)

For Ginny, the fear of dying as a result of undergoing general anesthetic for a laparoscopy was so great that she was unwilling, at the time of the last interview, to repeat this diagnostic procedure. The rationale Ginny used illustrates the strategies of *balancing the scales* (the fear of death is greater than the desire to pursue diagnostic testing) and *protective governing* (Ginny is *protecting* herself from the perceived risk of death by purposefully deciding not to undergo general anesthetic):

> I don't feel that I would do it again....I am scared of the surgery....I had a scare last time....I remember laying [in the recovery room]...thinking, "....My blood pressure is going down. I'm going [to] die"...that really scared me....That's weighing...a lot on me, going in for another surgery 'cause I'm scared...that if they put me out again...then my blood pressure's gonna [go down and] that I'm gonna die.

The stress surrounding the infertility workup was often related to the participants' inexperience with the testing procedures. As tests were repeated and the participants gained familiarity, usually their stress levels were reduced: "The first one [laparoscopy] was the worst. The two after that weren't as bad....You kind of knew what to expect....It was...the fear of the unknown, going under [general anesthetic] the first time" (Gillian). The physically invasive diagnostic tests also proved to be less stressful if the participants had had previous experience with other medically invasive procedures (past surgery). This is expressed by Leah and Tiffany respectively: "I'm kind of a veteran around surgery now. So...that [laparoscopy] didn't scare me" and "Surgeries really don't scare me...because I've been through so many....[I was scared] when I first started going for them....I know what to expect now....The unexpected is always...the worst." The participants' perceptions of the physical diagnostic tests were additionally influenced by the conditions (day surgery) which the tests were done under: "It's [laparoscopy] day surgery. Like to me anything you go for in day surgery, it can't be too complicated. Otherwise, they wouldn't be doing it on a day surgery basis" (Grace)

Some of the testing procedures were viewed as more of a nuisance than anything else. For example, the BBT charting, which is done to determine ovulatory function and requires that the participant take her oral temperature every morning prior to rising, was often viewed as being "a bother" to do. This was expressed in comments such as "It got to be...kind of a drag doing it...because you have to roll over, put the thermometer in your mouth....I'd have to try and stay awake for five minutes while I held this in my mouth" (Grace) and "[I'd] wake up in the morning....I'd roll over and stick it in my mouth and roll back over and hit the snooze button....It was just more of a pain in the butt more than anything else" (Rachel). As the participants did the BBT charting over a period of time, it became a part of their normal, daily routine. This is noted by Ginny and Kate respectively: "Taking my temperature's a normal thing because I've been doing it for so long" and "I've been doing it [BBT charting] for so long that it's just a force of habit....You do it when you wake up in the morning without even thinking."

Although most of the participants simply endured the inconvenience of BBT charting, Ginny looked for ways to facilitate the process. For example, Ginny found a thermometer that made the task easier to do:

> The good thing about the one [thermometer] I bought is that it's one of those digital ones...you turn it on, stick it in your mouth, and go back to sleep. It'll beep three times when it is done...all you do is press the off button and put it away. Then when you get up in the morning, it's got a memory on it...you press a button and then you can record it. You don't have to get out of bed at 6:00 in the morning to record your temperature.

There are several factors that may affect the accuracy of the BBT chart. Such things include the participant's sleeping patterns (having a late night), rising prior to taking the temperature, the taking of medication, and the presence of illness. Participants responded differently to these factors. Most of the participants acknowledged the potential for the inaccuracy by indicating the occurrence of these situations on the BBT chart. This behaviour, which also had the effect of putting the participant's life under the microscope for all to see, was noted by Gillian: "If you were out late the night before, you were up late or you worked night shift or you have a cold, you've got to mark all this on your...[BBT] graph." Rather than simply acknowledging the potential for inaccuracy, Kate changed her lifestyle habits so that the accuracy of her BBT chart would be enhanced. For example:

> You take it [temperature] before...you stand up and do stuff. I know that if I got up in the middle of the night, maybe that's going to throw me off. So when I'm in bed, I don't get up even if I have to go to the bathroom. I wait until morning.

The participants who worked shiftwork frequently had concerns about the accuracy of their BBT charts, especially as it related to "when" they should be taking their temperatures:

> [When] I was working shift...I was never too sure when I was supposed to be taking my temperature....Working days, it was no problem....You'd wake up in the morning. But when you were working nights you didn't wake up in the morning. You went to bed in the morning. So I would just take my temperature when I woke up...because...it was the temperature after you had rested...for the BBT. And then when you switched over, you'd be taking your temperature within twelve hours of one another....You'd kind of wondered how accurate the picture was...especially if I was working nights right around the time when I was supposedly ovulating. (Rachel)

In addition to marking their temperatures on the BBT chart, the participants were requested, by their doctors, to record when they had engaged in sexual intercourse. Giving this information to the doctor often resulted in the participants feeling like they were under the microscope: "Dr. Q knows when my husband and I make love...because I have to record it....So it's kind of like you are under a microscope....Even when you're in your bedroom...you're still being monitored" (Ginny). Many of the participants perceived this request as being an invasion of privacy into their sexual relationships. For example, Eve stated, "It was...very invasive....Not everybody has to check in and tell people when they've made love." For Eve, showing the doctor her BBT chart extended into a "confession of wrong doings": "Originally, I was marking in...a whole month....You were supposed to have [sexual] intercourse every other day....[When] you had it two days in a row...it was like a confession."

The participants employed several strategies to *protect* themselves from this invasion of privacy into their sexual relationships. For example: "I never marked intercourse on my [BBT] chart....I figured, 'Everybody knows that's when you're going to do it.' So I thought, '...I'm [not] going to put [it on]'....I wasn't...anxious to let everybody know when I had sex" (Rachel) and "We only kept [a] chart...of that one week [during ovulation]....Nobody really knew if we had intercourse any other time during the month...because we only kept track of that one little segment" (Eve). Although Eve did not want to record when she engaged in sexual intercourse on her BBT chart, she did comply with her doctor's request. The rationale underlying Eve's decision involved the strategy of *protective governing*:

> I knew that they [doctors] were going to ask us to prove it....I wasn't going to have anyone...telling me to do it again....Dr. A would say, 'They don't know for sure. They can't tell for sure. Go back and do it for two or three months and come back'....[That] would've put us behind a few months because they would have asked me to do that.

There were participants, however, who did not mind letting their doctors know when they had engaged in sexual activity. Holly expressed this in a way that is typical of this group of women:

> I felt...'This is a medical thing. Dr. J needs to know this....It was like, 'Dr. J knows that we had intercourse but like Dr. J wasn't there. So Dr. J doesn't know what happened'....Dr. J just knows that it happened. So no, it didn't really bother me...to let Dr. J know that.

One other diagnostic procedure, the PCT, was also perceived by Eve to be an invasion of privacy into her sexual relationship, thereby placing her under the medical microscope:

> I did have...problems, emotionally, with the PCT....I felt...like a laboratory specimen....The only thing worse would have been to have been asked to do it in a laboratory where people were watching through a window...being instructed when to and then coming in with the evidence....That was the aspect that was most difficult.

Eve elaborated further on the invasion of privacy felt in relation to the PCT when she stated, "You have to make love that morning...and then you come in. They know you've done it....We normally don't do that, go around with banners [saying], 'We just made love,' [to] the world....That's very, very private, very personal."

For some of the participants, their reproductive systems were discovered to be functioning properly which created feelings of normality. For the participants who discovered that their reproductive systems were not functioning normally, the feelings were different. For example:

> Dr. Q says I'm on a really long cycle....A supposedly normal female does it every so many days [28 days]. I take 43 or 44 days. So this is a lot different....Dr. Q says...that most normal females...ovulate between the 11th and 14th day. Well, here I am ovulating on my 18th and 19th day. (Ginny)

This feeling of abnormality was reinforced in the written literature that the participants read. Based on this literature, the participants were not prepared for the reality of doing their BBT charting. For example, Jacqueline stated, 'There is a...little sheet that comes with the thermometer....[My BBT chart] was certainly a way more spazzy [*sic*] than...that sheet...led me to believe." Ginny described a similar experience:

> This book [Insights into Infertility]...tells you...this is the way your chart should look when you take your temperature every morning....Maybe it is just an exaggerated model of it....A bunch of crap for me....They should also show...don't freak out, don't phone your doctor like I did and say, "...what's going on with this chart? How come

> my temperature is dropping below what [is on] the chart and I have to write my own numbers on the chart?"

For all but two of the participants, physiological factors underlying the infertile state were discovered in the participants' bodies (endometriosis, anovulation, tubal blockage), and this made the participants take ownership of the infertility. This ownership was expressed in comments such as "I felt like it was my problem...because medically, it was my body" (Jacqueline), "It was my problem....[My husband] had had his sperm count and...it was all fine....The laparoscopy had shown...there was a blockage. It was clear that something was...wrong in my system" (Eve), and "As far as I know, [my husband's] fine...just from those...sperm counts he's had. So...it's me" (Gillian). Gillian supported her belief that the infertility was "her" problem further by observing her husband's potential fertility with another woman: "I know the problem is with me....If [my husband] was married to somebody else, he'd probably have his 'own' children." Of these participants, only Leah expressed feelings regarding the burden of physiologically owning the infertile state:

> I took [my husband's] sperm sample last time to the [infertility clinic] for analysis and it was really low....His count has always been very, very high....I said..."Oh well, so the problem could be yours"....I was almost grateful that someone else could share the problem...[and that] it was off my shoulders for a while.

Although many of the participants owned their infertility at the physiological level, they did identify their infertility as being a combined problem that they shared with their husbands. The participants expressed this ownership in comments such as "It's both of ours in the sense [that we can't have a baby]....You have to deal with it as a couple but it's my body that has problems, not his" (Grace), "It is [a shared problem] because...together, we can't have the children....Even if it's physically mine...it involves both of us as a couple" (Gillian), and "It's our problem...'cause I wouldn't be doing this...if I was single. If I was single, I wouldn't want to have a baby by myself. It's something that he and I both want together" (Ginny). Several participants also defined the ownership of the infertility in terms of which partner was responsible for carrying out the activities associated with medical intervention. For example:

> It just felt like it was all my problem...'cause it was my responsibility....I took the [Clomid] pills...[and] accepted the responsibility of saying, "Okay. Fine. I've taken the Clomid this month. I'm going to have to have sex this month." (Rachel)

> I feel that it was...my project....It wasn't something that we were doing together....Physically, it meant that I had to go for all the testing, take the Clomid, take the Progesterone, and I was the one who kept track of the calendar. I was the one that always had to go to the doctor. My husband didn't once go to the doctor...except for his sperm test...he just carried on [with] what he was doing in life and I didn't. (Jacqueline)

When causes underlying their infertility were discovered, the participants began to put themselves under the microscope as they examined the circumstances surrounding the cause(s). For example:

> My mom had a hard time getting pregnant....It took her four and a half years to get pregnant with me. And then it took her four and a half years on hormone pills to get pregnant with my sister....My grandmother had a hard time, too....So, in my case, it looks like it's hereditary. (Ginny)

> I just wonder, "Why? Like where would these problems [come from]? Like how do they arrive there?....How did I end up with both [a] mucus problem and endometriosis?"....Another thing about endometriosis. They [doctor] said it could be hereditary. But nobody else in my family has it....That's the one thing I can't figure out like there are three other sisters and then plus my mom...[they've all] had kids....What happened in the chain of kids...? (Grace)

For Grace, knowing the cause underlying her infertility caused her some distress, especially since other people knew that she had endometriosis:

> They really don't know [for] sure how endometriosis comes. But I remember...[reading in a book that] one of the things was from having [sexual] intercourse while you have your [menstrual] period....If somebody else is reading about endometriosis and they read that and they know that I have that, they [will] think, "Oh well, that's from..." It just kind of bothered me 'cause...I find...it's a dirty time of the month....It [is] really unappealing [to me]....But...that's written in a book and other people would be reading that.

In the most basic sense, the cause underlying the infertile state meant that the participants' ability to achieve a pregnancy was compromised. For several participants, however, the cause underlying their infertility held an additional meaning. For example, the participants who had endometriosis experienced painful menstruation. In contrast to this "invisible" pain associated with endometriosis, Madeline exhibited "visible" manifestations associated with Stein-Leventhal Syndrome (polycystic ovarian disease). Madeline discussed what these manifestations meant to her:

> My spouse asks me, "Why do you spend half an hour in front of the mirror everyday?" I don't tell him that I'm plucking...little hairs off my chin. "Why are your legs so bristly?"....I have quite a thin spot on [the] top of my head. I have to spend an extra 10 minutes in the morning, blow-drying my hair in a particular way and using particular products so that...the physical manifestations of masculinization are...buried. There are those practicalities about dealing with the effects.

The majority of participants felt that they were healthy despite the discovery of a cause(s) underlying their inability to get pregnant: "I still think I'm healthy....I'm not going there [infertility clinic] 'cause I'm sick" (Grace). Rather than believing herself to be completely healthy, Hilary expressed being in a state somewhere between "being healthy" and "being sick": "It's not deterring my health....It's just preventing me from conceiving....I'd say

[I'm]...border-line healthy, border-line sick....You're not a 100% sick. But you're half sick, half healthy." In contrast, Eve perceived herself as being ill rather than healthy because the cause underlying her infertility had extended to body parts other than her reproductive system:

> If the endometriosis had been confined to the reproductive tract, I would've regarded myself as...healthy....[When the doctor] told me that it was involved with my bowel and that I might be looking at surgery that was at the point when I felt that I wasn't [healthy]....That was the critical part for me because...the reproductive tract can be taken out and discarded and you can continue....When we're talking [about the] digestive tract, we're talking [about] some pretty important stuff here.

Having to undergo bowel surgery for the endometriosis resulted in Eve feeling a sense of entrapment: "[I felt] trapped by the body....'These things are happening in your body. You've got to go through this [treatment]"....This isn't something you choose to do but the rest of your existence is dependent on it."

Undergoing Infertility Treatment

For most of the participants, pursuing treatment was specifically directed at the achievement of pregnancy. For Madeline, however, the rationale for the treatment alternated between reasons pertaining to the infertile state and gynecological reasons. As noted in the following excerpt, Madeline *balanced the scales* between issues relating to life or death:

> I'm going to Dr. H and having the D & C's more for gynecological than obstetrical reasons...because I have the propensity to develop uterine cancer....A thing out there...for Dr. H is, "Well, a hysterectomy's something that we won't consider right now...because she wants to get pregnant." I get the feeling that Dr. H's actively treating my uterine condition if there is one or assessing me...for the development of it....The pregnancy...is sort of a residual issue that Dr. H uses to consider [treatment]....A person who's going to have uterine cancer makes a deal of their own mortality rather than their own motherhood first.

Undergoing infertility treatment occurred in two phases through the acceptance or rejection of a particular treatment and the actual taking of the treatment.

Accepting/Rejecting Infertility Treatment. In the participants' experiences, the acceptance or rejection of the various infertility treatments at the medical level was generally determined by the cause underlying the infertile state. For Holly, however, a cause underlying her infertility was not discovered so she did not pursue any treatment. Deviation from this guideline occurred when Eve pursued ovulation induction prophylactically, that is, when an anovulatory state did not exist. The strategy of *protective governing* was illustrated when Eve viewed the ovulation induction under these circumstances as "an insurance":

> We had had the [Danazol] treatment [for the endometriosis]....It's six months after you're off the Danazol...when the peak number of pregnancies happen...and then it declines after that. And this was [my] sixth month....Since I wasn't pregnant...and now

> coming on the decline [I started taking Clomid]....It was...an insurance...that I would ovulate that month just in case I might not.

Once a cause had been discovered, treatments that would either rectify or overcome the cause were identified. For example, inducing ovulation through Clomid administration was a medically appropriate treatment for anovulatory participants. When treatments were identified as being appropriate for the underlying cause of the infertility, the treatments had to receive further evaluation in relation to the individual participant. This acceptance or rejection of the treatment by the doctor was most often assessed on the basis of the participant's health status: "My [doctor] won't give me Clomid...until I'm down below a certain weight. [My doctor] said that it just complicates things and that it's not going to work anyway" (Madeline).

When they were offered infertility treatments, the participants then had to decide either to accept or reject them. Most of the participants readily accepted the treatment(s) that their doctors offered them because they believed that they would, indeed, achieve pregnancy through them. However, when the offered treatments (IVF) involved a low success rate in addition to a high cost, participants were more hesitant to accept a suggested treatment:

> We had talked about IVF....It was very, very expensive....Plus, they don't do it here....I would have to...take time off from work and go [to another city to have it done]....Plus, the success rate isn't that good, anyway. So we didn't know if we'd put ourselves through that. (Grace)

When their doctors offered such treatments to them, the participants would examine the various factors involved with a particular treatment. Through *balancing* the various factors, the treatment would either be accepted or rejected. For example, several participants questioned their acceptance of "high-tech" treatment options, such as IVF and gamete intra-fallopian transfer (GIFT), primarily on the basis of financial cost. For example, "[There's] in vitro. That all costs money....$4,000 or $5,000....Like that's just for the initial [attempt] and then, down the road, you can go again....That's not just [the] extra kind of money we have sitting around" (Grace) and "Medically, it [GIFT] was an option but it wasn't, financially, an option....The procedure would cost thousands of dollars....It was just out of the question. We didn't have that kind of money" (Eve). Grace also looked at the financial cost of IVF from a long-term perspective: "If you have a baby [through IVF] and then...you can't afford to take care of it, then that isn't fair." The participants also considered the success rate of a treatment option while deciding whether to accept or reject it. When the success rate was low, the treatment was often rejected: "It [IVF] doesn't have a very high success rate....I'm not that big a gambler" (Eve). In contrast, a treatment was more likely to be accepted by the participants when it had a higher success rate; as noted in the following excerpt which illustrates this acceptance of a treatment, Grace assessed her chances of getting pregnant in light of *balancing the scale* (before and after treatment; her own chances of achieving pregnancy versus that of other "normal, healthy" women):

> [My doctor] did tell me after this [Lupron] treatment stops, my chance would be about 50%....I think that's pretty good because...nobody's chances are ever a 100%....I can't remember if it's 60 or 70% [for a normal healthy female]. So when [my doctor] told me 50%, I thought, "Oh well, it sounds good to me....Let's do it." (Grace)

Several participants viewed going with very expensive treatments having low success rates, such as IVF, as being the evidence of high desperation. This was expressed in comments such as "To me, that's the...thing of desperation" (Holly) and "[When you do that,] you are grasping at straws. It's your last resort" (Eve). Although Nora is currently not undergoing medical care for her infertility, she is considering various treatment options, such as IVF. The strategies of *protective governing* and *balancing the scales* are illustrated in Nora's decision-making process surrounding this treatment:

> Every time you try it [IVF], it's [thousands and thousands of dollars]...and there's only a 10% chance that [it will work]....That's a lot of money for that kind of a [success rate]....We just don't have that money to spend....Every time you try...you pray that it's going to work...and it doesn't work....That's such a big letdown every time you do it.

The participants' acceptance or rejection of other treatment options were also based on the personal philosophy that they and/or their husbands had surrounding family. For example:

> They asked me if I want[ed] to go on the sperm donor list [for artificial insemination]....We talked...and we decided that there was no way....[My husband] said, "If you're going to do that, you might as well...hop into bed with somebody else"....I wouldn't be comfortable....We want...something that we could create together. Not anybody else's...whether it's adopting or someone else's sperm. (Grace)

Taking the Treatment. Once they had accepted a particular treatment, the next step for the participants was to take that given treatment. Several of the treatments were of a short-term nature. For example, ovulation induction through Clomid administration was a treatment which was completed over five days of the menstrual cycle. During that menstrual cycle, the participants attempted to achieve pregnancy by engaging in scheduled sex. If pregnancy was not achieved, the participants repeated the Clomid in their next menstrual cycle. Another example of a short-term infertility treatment included a participant undergoing intrauterine insemination in an attempt to by-pass the incompatibility between her cervical mucus and her husband's sperm. With this particular treatment, the participant underwent the intrauterine insemination during the ovulatory phase of her menstrual cycle. As with the ovulation induction with Clomid, the intrauterine insemination was repeated in the following menstrual cycle when pregnancy was not achieved.

In contrast to these treatments, there were two participants who pursued the long-term infertility treatment, Lupron administration. In this treatment, the participants took a monthly injection of Lupron over a period of six months. During this time, the participants did not attempt to get pregnant, either through sexual or technological means. Once the Lupron treatment was completed, the participants attempted pregnancy.

The treatments discussed thus far were pursued on an out-patient basis, that is, the participants were not hospitalized. Several participants, however, pursued surgical treatment which required hospitalization. For Ginny, this was a new experience: "I just went through major surgery, the first time I have ever been in the hospital...for major surgery." Such surgery was done for the treatment of blocked fallopian tubes and/or endometriosis. For two participants, an ovary and/or fallopian tube were removed. Although one participant did not express any concerns regarding this loss, the other did:

> Losing...the left side [ovary and fallopian tube] was no issue to me. My attitude was, "It wasn't doing me any good anyway." So it wasn't of any value. My doctor had assured me that I could function quite well without it....What did concern me were the long-term effects...because I was in my early 30's at the time....I had raised that with [my doctor], "Does this mean that you go into menopause...instantly?"....Dr. A said, "Well...you can go on the hormones"....Reading lately about different hormones...there are certain concerns about [that]. (Eve)

Many of the participants experienced side-effects associated with the treatments pursued. For example, participants experienced the various side-effects associated with ovulation induction through Clomid administration:

> I've gained about 10 pounds in the last seven months....I get really severe hot flashes. The doctor said that...it's probably closer or worse than when you're in menopause....I think I'm kind of testy sometimes...like snappy and moody and kind of PMS'y. (Hilary)

> I had incredible mood swings....I would get the most incredible hot flushes....I'd be sitting there and then, all of a sudden, I'd just get this wave of prickly heat....My periods were...a lot crampier, a lot heavier....a lot more breast tenderness. A lot more fluid retention....an exacerbation of premenstrual syndrome. (Rachel)

Experiencing these side-effects of Clomid were often not confined to the participants' personal lives; rather, such side-effects were often felt by the participants in other parts of their lives, such as their place of employment: "I find them [hot flushes] very, very uncomfortable especially when I'm working in an office where the heat is intense...and...the air conditioning doesn't work. I have to walk [around]...or just leave the room 'cause it...is unbearable" (Hilary). Although several participants had undergone surgical treatment for their infertility, Ginny was the only one who focused on the side-effects experienced with such treatment:

> When I had my operation...I couldn't figure out why...my brain seemed to be so far away....I kept asking the doctor, "....Why do I feel so brain-dead?"....[My doctor] said that it could have been a combination of the anesthetic...[and] a steroid...plus they also had me on morphine...[and] this Lupron....I was just an unbelievable air-head. I couldn't drive a car...it was scary.

Ginny described another "physical" side-effect of the surgical treatment which affected her body-image: "I have this scar on me [from surgery]....It's six or seven inches long....It actually makes my body look...unattractive."

After they pursued their treatment(s), especially surgical treatments, many of the participants had the expectation that they would be able to achieve pregnancy immediately. This expectation, however, was not fulfilled by Ginny who stated, "I get out [of surgery] thinking...'It's all over and done with...now, we can start trying to get pregnant.' And then they slap this six month hormone shot [Lupron]...on us." Nora, who underwent surgery for blocked fallopian tubes some years ago, also experienced a similar situation:

> [I had] surgery on both my tubes....The first thing the doctor said to me after...surgery [was]...."You'll never be able to have kids on your own." It was like, "What?!"....I was under the impression I was going to be able to...start having kids right away.

Undergoing infertility treatment was one way in which the participants optimized their reproductive functioning. Although the participants sometimes experienced ill-effects with the treatments, they were willing to pursue them because they believed that they would achieve pregnancy by doing so.

When pursuing the various treatment options, financial expense was sometimes incurred by the participants. Medical treatments, such as ovulation induction with Clomid administration and Danazol treatment, were partially covered financially through the participants' health-care insurance plans or their husbands' plans: "My husband's company pays...80 or 90% percent of it [Clomid prescription]" (Hilary). Ginny, however, was responsible for the entire financial payment of her Lupron treatment and this particular treatment was very expensive:

> The prices are outrageous. Like...[one place in the city] want[s] $545 for one shot of it. Where I was getting it for $365 at the university for my first shot and then GST [goods and service tax] came in and it went up to four-O-seven [$407]....That's the cheapest in [the city].

In contrast to Ginny, Grace, who was planning to pursue Lupron treatment in several months time, was informed that the financial cost of Lupron was covered by a health-care plan: "They [nurses] weren't sure if it [Lupron] was covered by Health Care....So when I got home, I phoned Blue Cross...and yes, it was covered." In contrast to these medical treatments, several participants were responsible for paying for the financial costs involved with more extensive treatments, such as intrauterine insemination and IVF. For example, "Having all of these [intrauterine] inseminations done....I'm paying for all of this out of my [own] pocket. Like you don't get no funding for any of this" (Grace) and "[IVF] is about $6,000 to $8,000 [as a total figure]....We paid that one [first attempt at IVF]....It was about $6,000, that one" (Leah). As they undertook medical intervention, several participants anticipated attempting IVF at some time later in the future; when entertaining this possible treatment option, these participants considered ways in which they would cope with the financial expenses associated with IVF. For example, Ginny stated:

> There might be another expensive one [IVF] at the end....It's $8,000 [for] one try....They [doctors] said to plan to spend $20,000 'cause...it usually takes two times. And plus your room and board and food and living expenses [when you're having it done in another city]....We can get the money in our RRSPs [Registered Retirement Savings Plan]...or just take out a loan [from the bank].

Increasing the Sperm Count

Optimizing the male partners' reproductive capabilities involved increasing the sperm count. This was generally accomplished through the two strategies of scheduling of sexual intercourse and avoiding situations which are known to lower the sperm count.

Scheduling of Sexual Intercourse. The male partners' sperm count was generally optimized by having the participant and her husband abstain from sexual intercourse for a certain length of time prior to uniting the gametes (sperm, egg), either through sexual or technological means (intrauterine insemination). This is explained by Eve and Grace respectively: "We had that week [during my ovulation] slotted off...and you're timing....Every other day, you have to wait [to have sexual intercourse] for the sperm to build up" and "When you go for the insemination, you're not suppose to do it three or four days before...so...there...[were] lots...[of] sperm." Other participants further explained the need to time sexual activity in an attempt to increase the sperm count in comments such as "If you do have a moment where you feel that you might want to have intercourse...you have to check and see if that is a day that you're allowed to" (Ruth) and "We're both in the mood and then you...think, 'Well gees, maybe we better wait a day 'cause I might ovulate tomorrow...[to] make sure your sperm count's up'" (Ginny). Although the participants only referred to the avoidance of the specific activity of sexual intercourse, theoretically, it would include the avoidance of any sexual activity, such as fellatio (oral stimulation of the penis) or masturbation, that would result in the ejaculation of semen.

Avoiding Activities. In several of the participants' situations, an attempt was made to increase or at least not lower the count further by having their husbands avoid particular activities which are known to lower the sperm count. For example: "We knew that he had a low sperm count....The interventions to manage that [included]...no hot baths and avoiding tight shorts and tight pants and things like that" (Rachel). There were times when husbands did not avoid these types of activities. This resulted in marital disruption for Rachel: "He knew...the reasons for not taking hot baths and things like that. And yet, he continued to do it. And I thought...'You just don't care.'....That really made me angry [at him]." Gina also experienced a similar situation:

> You're angry at your husband...because...there always seems to be some things that [he is] doing that...could be possibly handled a bit differently that might affect the outcome....For example, having lots and lots of hot baths or...playing soccer three or four times a week and...smoking too many cigarettes.

Engaging in Sexual Intercourse

For most of the participants, an attempt to unite the gametes was accomplished through sexual intercourse. For three participants, however, there were factors involved in their reproductive functioning (cervical mucus incompatible with husband's sperm; blocked fallopian tubes) which presented barriers to unite the gametes in this normal way. Thus these participants attempted to unite the gametes through technological means (intrauterine insemination, IVF). One of these participants, Grace, did not believe that she could successfully achieve pregnancy through intercourse: "We still had intercourse but I didn't think of it as a way that I'm gonna get pregnant....From what I understand about this [cervical mucus incompatible with husband's sperm], it's impossible." Although there was an incompatibility with the cervical mucus and semen, the second participant, Gina, attempted to unite the gametes through intercourse when her ovulation occurred over the weekend and she was unable to receive intrauterine insemination at the infertility clinic: "The [infertility] specialist said to me, '...why don't you...neutralize yourself [cervical mucus]...and try this baking soda douche? At least that way, you can feel like you're still working towards it [by having intercourse]....' So we did." Similarly, the third participant, Leah, believed that she could possibly get pregnant despite the knowledge that she had blocked fallopian tubes: "There's always a little part of me that thinks, 'I know there's no miracle.' But there's a part of me that goes, 'Every period counts.' So....I do try to make love around that time [of ovulation]." Although Leah engaged in intercourse during her ovulation time, she acknowledged that the procreative element in her sexual relationship was diminished or absent. Leah's awareness that a procreative element did not exist influenced her feelings towards sexual activity:

> I'd say it's [sexual relationship] been impacted by all of this [infertility]...because the procreative end of it doesn't exist for us....It's taken something out of our sex life....It's lost a very special meaning....It's great to have sex when you're not trying to get

> pregnant. But to always have that possibility, "Oh, I forgot my pill." Or...even [to] have it back-burnered for some time...that, "Okay, now we'll have it just for the sake of sexual passion but we can introduce the element of procreation." When that's not there...it's just sex....Its purpose is questioned.

Attempting to unite the gametes through sexual intercourse required the participant to: (a) identify the time during which they would engage in intercourse, (b) manage the need to engage in scheduled sex, and (c) fulfill the obligation of scheduled sex.

Identifying the Time. Uniting the gametes through intercourse implied that the participants would engage in such activity during the suspected time of their ovulation. This time was most often determined by the participants' BBT chart; thus the engagement in sexual activity became "sex by the calendar." Several participants also identified their suspected time of ovulation by observing other bodily signs indicative of ovulation. For example, Gillian stated: "I know because...I get very nauseated. I have Mittleschmerz pain in my side. My mucus is...very thin and very stretchy. And my cervix is very soft and open." Other participants identified their ovulation time through the use of ovulation detecting kits: "I was using the ovulation predictor kit and knew exactly when I was ovulating" (Madeline).

Once the participants identified the suspected time of their ovulation, they would then schedule sexual activity during that time. Although several participants were advised to engage in intercourse everyday, most were instructed to do so on an every-other-day basis during this time. Compliance with this was expressed in comments such as "Some doctors say, 'Make love every second day' and some doctors say, 'Every day'....[So I do it] every other day or every day" (Hilary) and "You're supposed to have sex every other day in that period [of suspected ovulation]. So...[it would] be [days] 11, 13, 15, [and] 17 [of my menstrual cycle]" (Rachel). None of the participants but Greer admitted to planning other aspects of their lives around these days of suspected ovulation, when sexual activity was scheduled. Greer stated, "Educational or social commitments were either rejected or postponed and vacations and business trips were synchronized by ovulation schedules."

Although most of the participants were given advice by their doctors regarding "when" to engage in sexual activity, Holly and Rachel received additional advice concerning this. Holly and Rachel describe this advice respectively: "My doctor used to tease me and say, 'Well, make it fun'" and "Dr. Y would...go over the instructions...[have intercourse] every other day....I'm sure out of every appointment...[my doctor] would turn around and say, 'Well, have fun trying.'"

When the suspected time of ovulation was not easily identified, especially according to the BBT chart, the participants would "cover" that time period. Hilary explained how she did this when she stated, "We haven't...been able to circle the date when I actually ovulate....To be on the safe side, [my doctor] said to do it from [days] 12 to 17 [of my menstrual cycle]." Kate also described how she covered her suspected time of ovulation:

> If I've had sex on this day and the temperature drops the next day, then that night, Wow! 'cause I would not have wanted to have missed that day. And maybe to [leave intercourse to] the next day, it'd be too late. So...you might do it twice in a row...just to make sure you [have] got the time covered.

Managing the Need. For many of the participants, the need to engage in scheduled sex often occurred when either they and/or their husbands were not interested in engaging in sexual activity. This situation was emphasized by Kate who stated, "When you're ovulating, it's kind of like, 'It's time to perform'....You have to have sex when you're really not wanting to or [you're] not quite in the mood." This loss of control in the sexual relationship was further described by two other participants:

> It didn't matter how tired you were or how bad the day had [been]....It was the concept of having to. There was no consent....It wasn't something that you could decide to do or...you would like to do. "Like" never came into it. (Eve)
>
> You feel like you've lost control....You have to do something that you really don't want to do....There were times when we were supposed to have sex and we really didn't want to...but I would force [my husband] and then force myself. (Rachel)

The participants employed various strategies which would help them accomplish the task of engaging in scheduled sex. The importance of these strategies was acknowledged by Rachel: "You think, 'Well gees, I'm going to have to do something to make sex more exciting tonight'....You have to try and do something...so that it's more pleasant." The most common strategy that participants used was the creation of a social setting which would facilitate their engagement in sexual activity. Sometimes, this social setting was created simply through the showing of affection: "As soon as he'd [husband] come home from work, I'd rush up and give him big kisses and hugs and...things like that...he'd sort of get the idea" (Rachel). At other times, the participants created the social setting through more extensive plans. These plans were described in comments such as "With our polaroid camera, I took some pictures in a negligee....[When] he came home, he was like, 'Wow!'" (Kate) and "I'd cook a nice dinner and we'd have a little wine with dinner....[I'd] try to make it more of a romantic event" (Rachel). Ruth also described how she created a social setting which would facilitate her engagement in scheduled sex:

> We'd...go out to dinner. Sometimes, you went to a hotel....I had some costumes and...we had scene nights. Like one night, [when my husband] came home, I had a beach...set-up. I moved all the furniture to the dining room. And I had a sun-lamp and I was in a bathing suit. And we had a picnic.

Rather than using strategies shortly before engaging in scheduled sex, Kate attempted to heighten her husband's libido several hours before the anticipated time of sexual activity: "Sometimes just getting things ready. Leave a little note stick it in his lunch....I'd just say...[something] like, 'When you get home be ready to turn the oven on,' or...'Get warmed up,' or....'I'll be waiting for you.'" In contrast to these strategies, Eve attempted to make a pleasant social environment by avoiding situations which would decrease the likelihood of engaging in sexual intercourse: "We can't have a tiff tonight. It doesn't matter what he [husband] says. It doesn't matter what happens. We can't have a tiff. Tonight's the night!"

Fulfilling the Obligation. Once the participants came to the time of their suspected ovulation, they were then faced with the task of fulfilling the obligation of scheduled sex. There were times, however, when participants made the conscious decision not to fulfill the obligation of scheduled sex; when this happened, the participants incorporated their infertility into their lives. This situation is illustrated by a comment made by Kate: "This month...it was 11:00 [at night] before [my husband] got home and I had a bad day with kids....I didn't wait up for him. I went to bed and...said, 'Tough!'" Rachel also provided a similar example:

> I'd come home from work and I'd just be exhausted....You'd...think, "....Tonight's the night we have to have sex and the last thing I want to do is have sex"....You try...[to] get your husband interested and he's not interested at all. And you kind of say, 'To hell with it."

In most cases, the decision to not fulfill the obligation was acceptable to both the participants and their husbands. Rachel, however, experienced marital disruption: "We ended up fighting about it [scheduled sex] more than we ended up doing it....He just wouldn't be up to it or didn't want to....Quite often, I would get very angry...with him." Rachel's fulfillment of the obligation was also influenced by shiftwork: "We were changing back and forth between working my shift and [my husband] was working some shiftwork, too. So it was 'hit and miss.'"

When they did not fulfill the obligation of scheduled sex, participants frequently felt that their participation in medical intervention had been wasted. This feeling was expressed in comments such as "I always had to visit the doctor when I was on Clomid to make sure that the ovaries weren't getting too big. So that was kind of a wasted visit" (Jacqueline) and "When our schedules didn't mesh, we never did have sex....You kind of wasted these...[Clomid] pills. Going through all this havoc and side-effects for nothing" (Rachel). The participants also felt a sense of a "missed opportunity" when they did not fulfill the obligation of scheduled sex: "Some months ended up getting really lost...there was a sense of missed opportunity...maybe that gambling mentality of, 'This might have been the only chance.'" Eve also identified the consequence of not fulfilling the obligation of scheduled sex when she stated, "To not fulfill our obligation that night...you might lose a whole month....the pressure was on. '....If we don't, then it'll be another month.'" Rather than simply accepting this consequence, Kate, in particular, attempted to re-capture the missed opportunity:

> I knew that if we had sex tonight...that was a day I could get pregnant. But...we were just too exhausted....You just don't feel like it...even though you know it's the crucial time you let it slip. And you don't mind letting it slip to the next morning. And then you think, "Gees! Missed it...." And then you would have sex that next night...thinking, "Well gees, maybe this is okay. Do you think the egg's still hanging around?"

At other times, participants and their husbands simply accepted the need, as being willing to engage in scheduled sex in an attempt to avoid "missing" an opportunity for conception to occur. This was expressed in comments such as "You have [had] a horrendous day and you're just wiped out and you still have to [engage in scheduled sex]....That could be the one day that I'm going to ovulate...and I wouldn't want to [miss it]" (Hilary) and "I'd say, 'Ya, we have to do it [scheduled sex] because otherwise, what if this is the right day?' So we decided to go through the motions even though you really didn't feel like it" (Jacqueline). In these instances, the participants incorporated the infertility into their lives. Three participants explained why they were motivated to fulfill the obligation:

> It was like, "This is something we have to do"....It is a temporary ends to a means. We both knew it wouldn't last forever....You can live with anything for a short period of time knowing [that]...there's an end to it. (Ruth)
>
> It is hard when you are under a microscope and Dr. Q is going like, "You ovulated here. You should have been doing it here"....When you're under the microscope...that's when you're sitting back thinking, "Hmmmm. Well, if we don't do it here, the doctor's going to say that we should have been doing it here. So let's go to the bedroom and let's do it." (Ginny)
>
> There were...times that...he [husband] just...didn't seem interested at all [in engaging in scheduled sex]....He [would]...turn his back to me and say, "Ah. I can't, too tired"....I'd say, "But we should. We have to....I took these pills."....I'd figured, "I can't not try because if I take the Clomid...why waste the drug?"....You take the pills. So you've got to have sex. (Rachel)

Rachel observed a loss of control over her sexual relationship when her engagement in sexual activity was driven by the knowledge that she had taken Clomid: "You have no control over your sex life any more. It seemed that way...because you weren't having sex because you wanted to. You were having sex because you took these pills."

Fulfilling the obligation of scheduled sex implied that the participants and their husbands engaged in sexual intercourse for the primary purpose of procreating rather than for pleasure. Thus the engagement in sexual activity was often viewed as the means to the end (the achievement of pregnancy). This was expressed in comments such as "You're not having sex just for the pleasure of having sex...and...being close to someone you love....You're doing it because you want to procreate" (Rachel) and "You want to...conceive a baby out of it. So it's not just lust and passion" (Hilary). When engaging in sexual activity for "making a baby" as opposed to "making love," participants often viewed sexual intercourse as a "chore" to accomplish: "Sex is not what it used to be....It's a chore because...you're not making love to show your love to each other any more. You're making love to have a baby" (Tiffany).

When intercourse was being engaged in for "making a baby" rather than for "making love," it became a mechanical task to be accomplished at a specific time. As such, participants experienced a loss of spontaneity in their sexual relationships: "When we were supposed to have sex, it was so forced....Neither one of us really expressed much interest in it....It wasn't the spontaneous and loving thing that it had been before" (Rachel). Approaching the sexual relationship from this perspective, a sense of depersonalization surrounded it because the sexual partners were valued for their procreative attributes as opposed to their humanity. As Rachel commented, "One night, [my husband] said to me...'You...want me to perform just to have kids. That's it.'" While under these circumstances, several participants differentiated their engagement in sexual intercourse in terms of "making love" and "having sex." For example:

> Lovemaking becomes a sexual thing. It becomes...a physical function....Lovemaking involves...your emotions. It's something you're doing to satisfy your relationship. Sex becomes more of an animal function, more of a physical need....It becomes irrelevant to who it's with or how you feel about them....You're satisfying a physical drive....It came [to] a point where that's what was going on....We were doing it for physical reasons [achieving pregnancy]. It was no longer a matter of getting into...our emotions. At that particular [time], our minds were irrelevant. (Eve)

When the conception of a pregnancy was unlikely to occur (during the non-ovulatory phases of the menstrual cycle), the participants' desire to engage in sexual intercourse was sometimes absent. This was especially felt by Kate who stated, "After the time went you couldn't care less if you had sex or not 'cause it didn't mean anything....Even if you had it, you weren't going to get pregnant....It was kind of like, 'What's the point?'"

Initially, engaging in scheduled sex was not problematic for many of the participants. Over time, however, this task became more difficult to complete. This was expressed in comments such as "For the first few months...it was sort of a game....After a while [three or four months], it...lost its novelty" (Rachel) and "You might view it as a bit of an adventure or something funny, originally. But you don't after you've done it for 12 or 13 months....There's nothing very humorous about it" (Eve). In contrast, Jacqueline found fulfilling the obligation of scheduled sex to be more stressful in the beginning rather than towards the end:

> Initially, I think it put some pressure on us...like, "We have to do this for this result...rather than just spontaneously because you want to"....We found after awhile...it would be the right time and we would just think, "Oh! That's nice."

Fulfilling the obligation of scheduled sex permeated every aspect of the participants' actual engagement in sexual activity. For example, there was frequently a role reversal regarding "who" would initiate sexual activity. This is described by Hilary and Rachel respectively: "I'm the one...initiating it while before, it was...the man always did the initiating" and "It was always me...instigating sex. It was...never him...which is abnormal because...both of us seem to initiate sex...equally as the other does [when infertility was not being experienced]." The time leading up to the point where the participants and their husbands engaged in sexual intercourse also experienced changes: "If you know...you're going to ovulate that particular day and he's not in the mood at all, then the woman does all the foreplay to get sex" (Kate). When attempting pregnancy, the participants focused on penile-vaginal intercourse rather than on other forms of sexual activity, such as fellatio or masturbation:

> When you're trying to get pregnant, like if you have oral intercourse or whatever you stop just before....It has to be intercourse. Like you don't want him to ejaculate...when he's not inside because then you think, "....You waste it"....If you're not trying to get pregnant, then it wouldn't matter.

The actual experience of sexual activity was also different for the participants when they were seeking pregnancy compared to when they were not seeking pregnancy. This was expressed by Holly who stated, "Sometimes, we didn't even kiss. That was how bad it was. It was just, 'Let's just do this.'" Kate also described the changes she experienced as she engaged in sexual activity:

> You've just gone through the motions....The passion's not there...you go to bed and it's man on top of woman and you go through it...and it takes five seconds and it's over....With other times...it can be an hour long.

While engaging in intercourse, the hope of conceiving a pregnancy was sometimes in the participants' thoughts: "We'd be making love and I'd think, 'A baby, please. A baby'" (Holly). The participants acknowledged that engaging in scheduled sex was more difficult for their husbands than it was for them. Despite this, they generally denied their husbands experiencing difficulty with sexual performance (erectile difficulties). Jacqueline, however, did make such an admittance: "The only time [my husband] had trouble was when...I had to go in for the PCT and we had to have intercourse at 7:30 in the morning."

After engaging in intercourse, the participants frequently changed their activities in an attempt to increase the likelihood of conception occurring. These changes were identified in comments such as "They say...to put pillows underneath yourself after. Don't get up....I've done all that stuff so...the semen doesn't run out" (Gillian) and "I would always stay in bed on my back [after having intercourse]....When I was trying to get pregnant...you have to keep the semen inside of you so you just lay there" (Jacqueline). Immediately following intercourse, it was not uncommon for the participants to think about conceiving a pregnancy and having a baby. These thoughts are expressed by Nora and Tiffany respectively: "Every time we finish making love, it's like, 'Please God, let it happen now'" and "After having intercourse, all you do is lay there and talk about babies."

Experiencing "The Letdown"

Participants experienced a letdown when they discovered that they had not achieved pregnancy: "I really hope [for] it [pregnancy]...and then when it doesn't happen...it's a letdown" (Nora). This led the participants to: (a) acknowledge the letdown, (b) consider the worth of medical intervention, (c) experience the emotional wound of the letdown, and (d) respond to the letdown.

Acknowledging the Letdown

When the participants initially began medical intervention, they generally expected that they would, indeed, become pregnant. Thus they were not prepared for not getting pregnant.

For the participants, the most obvious sign that pregnancy had not been achieved was the onset of menstruation: "There's nothing more real...than...bright red blood....It's pretty undeniable [that you're not pregnant]" (Leah). Knowing that menstruation is an indicator that pregnancy has not been achieved, many of the participants were consumed with the activity of "looking for blood." Doing this activity was illustrated in comments such as "Every time you go to the bathroom, [you're] looking for blood...you're looking to see whether or not you're getting your period" (Jacqueline) and "Every time when I went to the bathroom, I was afraid to wipe because there might be red on the tissue" (Ruth). For the majority of participants, seeing blood meant that pregnancy had not occurred.

Participants who had previously experienced miscarriage also looked for blood; for these participants, the sight of blood held a specific meaning: "You're looking...to [see] whether or not you're going to have a miscarriage" (Jacqueline). When participants attributed the presence of blood as being a sign of miscarriage, most of them sought medical care. Rather than doing this, Leah took *protective* action: "I usually lie down in case it's...a miscarriage. If I lie down, it'll prevent it." The meaning of menstrual blood remained with the participants, even after a pregnancy had been achieved and delivered. This was especially true for Ruth who stated, "Every time I menstruate or go to the bathroom, I still look at that tissue....My first day of menstruation is an unsettling day for me...it brings back all those feelings." In a second interview, Ruth elaborated on her feelings surrounding menstruation:

> I don't even mark my menstruation down on the calendar any more. When I went for my check-up, I had no idea when my last menstrual period was. I knew I had had one...but I really didn't know what days. I had [to]...guestimate....It's almost like I've gone back the other way. I'm not going to keep count at all....I grew to just absolutely hate my menstruation.

Bodily signs other than menstrual blood also indicated to the participants that they had not achieved pregnancy. For example, "I had all the other symptoms [indicating that I wasn't pregnant]....[I] get [premenstrual] cramps and [I get] cranky. And [my] face breaks out. And [I] gain a pound or two" (Kate). Finally, participants knew that pregnancy had not been achieved when they had not attempted to unite the gametes, either through sexual or technological means. This is noted by Kate and Ruth respectively: "Some months, you know you won't get pregnant...because you missed [having intercourse during] those days [of suspected ovulation]" and "There were a couple months...there wasn't much chance of me getting pregnant because we just didn't feel like it or he [husband] was out of town."

As time passed and they did not get pregnant, the participants came to realize that achieving pregnancy was not a guarantee of medical intervention. Having this experience of "failed" intervention, participants began to prepare themselves for the event of not achieving pregnancy. This preparation often entailed approaching the suspected time of menstruation with an attitude of guarded optimism in an attempt to *protect* themselves from the emotional hurt which was usually felt when pregnancy had not been achieved:

> I'm not gonna get my hopes up. It's not worth it. It's hard on me [when I don't get pregnant]....When Dr. F finally says to me, "Yes" or "No," then that's when I'll believe [it]. But until then, it's not worth it to get all excited because I've been let down so many times. (Hilary)
>
> From about the 27th or 28th day on, I'd be looking for it [menstrual period] and it wouldn't come. And I'd think, "Ah! Wow! Well, maybe [I'm pregnant]"...and get a little bit excited. Not really [excited] because I'd had too many disappointments in the past....I figured, "I'm not going to get excited....I'm not going to worry about it...because...it's not going to do any good. So I'll just wait and see if I get my period. (Rachel)

Whereas these participants appear to have reached a state of guarded optimism, Tiffany demonstrated her continued ambivalence:

> I don't get myself as worked up any more....When it [menstrual period] comes, it comes....I kind of think that way but I kind of don't....You have to say like, "I'm not going to worry about it." But yet, I am...even to go for a pregnancy test or making love....In my heart, it's just like, "We're going to make a baby" or "It's going to be positive." But yet, my mind is saying..."Don't do this to yourself"....That's something that I found was very hard trying to decipher on which feeling to go with....Do I try to

> relax and try to calm myself down or do I just go with the excitement?....It's just a feeling that I kind of got....Like I'm going, "Okay. Well, it's [pregnancy test] negative." But I keep thinking, in the back of my mind or in my heart...this other feeling..."Well, [I could be pregnant]."

Although many of the participants prepared themselves emotionally for the letdown, none but Leah prepared themselves physically. Leah described this physical preparation in the following comment:

> This time [third attempt with IVF], I set up a plan for myself in case I did [get my period]....I bought a really nice pair of panties and...[had] a pad in it already....I was preparing that if my period comes, that...[I'd] have something...to take care of myself.

When the participants acknowledged the letdown, they became aware of the consequence of the letdown, that is, they were still in the pursuit of pregnancy. This was illustrated in comments such as "[When I got my period], I was just, 'Oh well, here it is again. I have to try again'" (Holly) and "You get your period....And then you think, 'Oh, I've got to take those...[Clomid] pills again.'" (Rachel).

Considering the Worth of Medical Intervention

When they did not achieve pregnancy, the participants felt that their participation in medical intervention had not been worth it to date but they still looked to the future. This notion was expressed in comments such as "It'll all be worth it in the end...'cause then I'll have a baby" (Ginny) and "At this immediate point in time, no, [it hasn't been worth it] 'cause....I haven't got a baby out of it. But it'll all be worth it in the end...when I get the baby" (Tiffany). Although these participants have assessed the worth of intervention to be "zero" currently, they still persist with it. This decision is supported by the strategy of *balancing the scales*: when *balancing* the worth of intervention in terms of time, the participants place a greater weight of importance on the future worth, when they anticipate the achievement of pregnancy, while giving a lesser weight of importance on the current worth, when pregnancy is not achieved.

Although many of the participants had not, at the time of the final interview, achieved pregnancy, several participants gave recognition to the fact that the management taken thus far has contributed to the possible resolution of their infertility. This was expressed by Hilary who stated, "I've gone over these hurdles....I might be half way there or a quarter way there but at least I've accomplished this much. I've done much more than I would've a year and a half ago." Similar feelings were echoed by other participants:

> It's worth it to me now...'cause...I know that...my insides could have a baby....I know that I'm normal inside now because Dr. Q cleaned out both my tubes whereas before it didn't matter whether an [egg] flowed down there because it couldn't get through. My tubes were blocked. So now, at least I know that they're going to flow down. (Ginny)

> It has...furthered me in seeing that I may not get pregnant....I'm closer to it...knowing that I gave it...everything. So if I let go of this it's complete 'cause I did....There's no, "I could've." It's knowing that I gave it everything. So that makes it worth it. (Leah)

There were other benefits from medical intervention, even when pregnancy was not achieved. For example, there were positive effects in relation to endometriosis, increased closeness in the marriage, and the adoption of a daughter which gave an added dimension to the life of both partners. It also made the partners more aware of their own physiology:

> If I had been able to get pregnant, we never would have adopted [our daughter]....There's that extra special bonus in our life....It [infertility] has brought us together in a way that...some couples don't get to experience because they don't have that problem....It makes another extra bond between you. (Gillian)

> It's brought us closer together....I can say to [my husband] like..."My cervix is opening. I'm shedding out all the lining of my uterus" and he knows exactly what I'm talking about. Whereas...years ago, a female would never say that to her husband....It's made me more aware of my body more so than I ever knew before [the infertility]. (Ginny)

For Kate, the experience of infertility led her to reflect on what her goals and priorities were in her life: "It makes you think more about yourself and what you really want out of life for yourself and for your family...where your priorities are and what you really want." Through experiencing infertility, several participants also came to know the full value and appreciation they had for children: "I came to realize that being home with kids probably meant more to me than what I [had] thought....Before [the infertility], I never really understood how important having children was to me" (Ruth). This particular benefit of the infertility experience was reiterated by Leah who stated:

> Going through this [infertility], I've certainly seen the value of motherhood...and kids....Having had it taken away from me, it's value and appreciation...are much more enhanced than what I thought was just some inconvenient part of my life that I'd have to fit in with my career schedule.

Several of the participants developed compassion for people who were also experiencing life struggles. This was expressed in comments such as "The only benefit is maybe the compassion that we can now have for other people in similar kinds of situation[s]. Not just infertility but anything that's that big of [a] struggle" (Eve) and "It's a very...good experience...because...it does help to develop some feeling of empathy for other people in the struggles that they have in their every day life" (Gina). Finally, Ruth felt confident about her ability to meet future life challenges simply because she "made it through" the infertility experience: "I have been through something really tough and I made it. And I don't think that anything will really knock me down again."

When reviewing the worth of medical intervention in terms of "achieving pregnancy" and "other benefits," a typology of participants can be constructed (Figure 2). All the participants viewed their participation in medical intervention as being ultimately "worth it" if and when they achieved their goal of pregnancy. In addition to getting pregnant, these participants reaped other benefits from the medical intervention. As such, the ultimate worth of their participation in medical intervention was surpassed when they achieved pregnancy *and* experienced additional benefits from the intervention (**cell a**). One participant achieved pregnancy through medical intervention, however, she did not experience any additional benefits. As such, this participant realized the ultimate worth of her participation in the intervention, however, the worth was not surpassed as it was for those participants depicted in cell a (**cell b**). Many of the participants have not yet achieved pregnancy. Despite this, these participants have experienced other benefits of medical intervention, as previously described. As such, these participants have not yet realized the ultimate worth of their participation within medical intervention. These participants are continuing to engage in the various activities of medical intervention in the hopes of eventually achieving pregnancy (**cell c**).

Effect of Treatment

		+	-
Success of Getting Pregnant	+	**Ultimate Worth Surpassed** a	**Ultimate Worth Realized** b
	-	c **Ultimate Worth Not Yet Realized**	d **Ultimate Worth Questioned**

Figure 2: Typology illustrating the relationship between the success of achieving pregnancy and the effects of medical intervention.

In the final typology, the ultimate worth of intervention is questioned. It includes those who have experienced neither the achievement of pregnancy nor other benefits from the medical intervention (**cell d**). This latter group of participants did one of two things. Two participants discontinued the intervention when they experienced various ill-effects (marital disruption, emotional hurt felt in response to the letdown) rather than benefits other than pregnancy. One participant continued treatment while questioning its ultimate worth, hoping that she would eventually achieve pregnancy.

Experiencing the Emotional Wound

Emotional pain was most often felt with the onset of menstruation. It included feelings of depression, frustration, devastation, and hopelessness. These feelings were expressed in comments such as "It got depressing and frustrating...after you got your period" (Grace), "That period is just like devastation. It's like hitting rock bottom. Everything you've hoped for is...gone" (Tiffany), and "When your period came...you'd cry...[and] I would...be so cranky. I'd be so down in the dumps" (Gillian). The participants also felt the emotional wound of the letdown when they got a negative result on a pregnancy test: "I thought for sure it [pregnancy test] was positive....They [staff at doctor's office] said, '...it's negative.' And I was like, 'Ah! I can't believe it.' I tried not to sound too disappointed even though I was devastated inside. (Hilary)

This emotional wound of infertility went beyond the events of menstruation and a negative pregnancy test. For example, many of the participants felt a sense of failure when they did not achieve pregnancy: "There's failure...because really all the success would be measured by is if you get pregnant. Everything else is a failure....Each month, you're no closer to your goal than you were the day you started" (Ruth). This sense of failure was often directed at one's body and one's lack of control over their bodily functioning. This was expressed in comments such as "I felt like my body had failed me....I felt like my body and [my mind] were not quite in sync" (Jacqueline) and "It's the powerlessness to deal with something that most people can and I can't....I can deal with a lot of things legal matters and...difficult people and technical questions...but I can't [deal with] that [bodily functioning]" (Madeline). A sense of betrayal was sometimes felt when experiencing the letdown: "I definitely felt...that I had been betrayed some place along the line by some...supernatural force....There's no reason why I should be picked out or singled out....They could have dealt the cards a little bit more evenly" (Eve). Furthermore, several participants perceived their infertility as being a punishment for ill-deeds done in their pasts. For example, Eve said, "That's part of my upbringing that if something bad happens to you, it's your own doing....For me, it [the infertility] was related to...premarital sexual exploits....I may have been messing around when I shouldn't have been messing around." Greer expressed anger at herself when reflecting on her past: "I was angry at myself for everything [such as previous relationships, use of the birth control pill for extended periods of time] I did in my past that may have contributed to our infertility."

Responding to the Letdown

When the participants did not achieve pregnancy, they routinely repeated medical intervention. As time passed by, often months evolving into years, the participants became more desperate as they were caught up in the vicious cycle of repeating the various activities. For many of the participants, a feeling of desperation was often felt in response to "being up against the clock" in terms of their ages. For example, Tiffany stated, "It took [my mom] five years between my eldest sister and my middle sister. But I keep thinking, 'I don't have five years.' Not at 28 years old and not when my husband's [in his mid-30's]." The participants stated that they were able to persist with medical intervention simply because "there's a light at the end of the tunnel and it'll all work out in the end" (Hilary) or "there was an end in sight...and we knew that we wouldn't have to continue with this forever" (Eve). Although not explicitly stated by many of the participants, the persistence with medical intervention, even in the absence of achieving pregnancy, was undergirded by the hope that their participation would, indeed, be worth it in terms of achieving a pregnancy. For example, Grace stated, "We'd say like, 'Why are we doing all this?' Like hopefully, it's worth it."

Many of the participants were willing to experience the ill-effects associated with the interventions simply because they wanted to get pregnant so badly. As indicated in the following excerpt, the participants' willingness to do this was guided by the strategy of *protective governing*:

> I realize...there's a problem [anovulation] and at least there's something [ovulation induction through Clomid administration] that can help my problem....If that's what it takes, that's what it takes...[even] if I have to go through these hot sweats...I hope that it will be worth it. If it doesn't happen...at least I tried....I can't live my life thinking, "If I could've...."....So that's just the facts of life...if you want to have a baby.

In addition to repeating medical intervention, participants responded to the letdown using a variety of strategies: (a) changing doctors, (b) releasing themselves from the responsibility of the infertility, (c) feeling better off or lucky in comparison to other people, (d) adopting, (e) parenting vicariously, (f) ventilating their feelings and concerns surrounding their infertility, (g) normalizing, (h) involving their husbands, and (i) escaping from their infertility. The participants employed the strategies of repeating medical intervention and changing doctors in an attempt to achieve pregnancy; the remaining strategies were employed in an attempt to change their personal responses to their inability to achieve pregnancy. Many of these responses to the letdown are strategies of *protective governing*.

Changing Doctors

When the participants did not achieve pregnancy while under their doctors' care, they generally transferred the management of their infertility to another doctor who had advanced medical expertise in the areas of childbearing and/or infertility. To *protect* themselves from the risk of receiving inadequate or sub-optimal medical care, often believed to potentially result in the continued inability to achieve pregnancy, the participants changed doctors. By changing doctors, the participants believed that they were receiving "the best" medical care for their infertility, thereby increasing the likelihood of achieving pregnancy.

Changing doctors frequently occurred when the participants were referred from a general practitioner/family doctor to a specialist (gynecologist, infertility specialist) or from one specialist to another (gynecologist to an infertility specialist). Although the participants preferred continuing care under their own general practitioner, family doctor or gynecologist, most of them did not object to being referred to the infertility specialist because they believed that they would then receive the best medical care available. The participants' acceptance of a referral to a specialist was often influenced by their previous experience with specialists. For example, the participants who had previously received medical care from a specialist did not have negative feelings about seeing an infertility specialist; in fact, these participants actually wanted to be under the care of a doctor who had advanced expertise in the area of childbearing and/or infertility management.

Eve, however, was reluctant to accept a referral to the infertility clinic. Eve described her reluctance to pursue care from an infertility specialist in comparison to her husband, who had a different upbringing surrounding the receipt of medical care. In addition, Eve's reluctance was further increased by her doctor's attitude towards the referral to an infertility specialist:

> I think it's partly [our] upbringing....They [husband and friends who are Ukrainian] don't believe in messing around...with lackies down the list....They were raised to feel themselves to be important whereas I was raised to feel that I was not very important....Their attitude is, "I'm important and I want the best. And if this [doctor's] the best in the city, then that's who we want to see"...whereas my attitude is..."Am I deserving to go?"....I did feel that way going to the infertility clinic....I felt that I was wasting the...[specialist's] time....That was...aggravated by the fact that the gynecologist told me...that they couldn't do anything for me at the infertility clinic. So I really did feel very uncomfortable....It was important that I was a candidate [for the infertility clinic].

Once under the care of the infertility specialist, most of the participants believed that they were receiving the best medical care available even when they did not get pregnant while under such care. This was expressed by Madeline who stated, "I like [the] reputation Dr. H has....Who would I go to? From my perception, Dr. H's one of the best." For this reason, Madeline did not seek to change doctors. Madeline made this decision by using the strategy of *balancing the scales* (*balancing* the emotional cost of seeing another doctor against the continuation of medical care under her current infertility specialist): "I have a long and complicated gynecological history and Dr. H's got it all there....It saves a lot of explaining if I had to go to another person." Grace also decided against transferring to another doctor for similar reasons: "Dr. I's been looking after everything. So it doesn't make too much sense [to change doctors]....If I wanted to see one of those [other] doctors...how long would it be before I get to see one of them?"

In contrast to the majority of participants, Gillian changed doctors on her own initiative, to a second infertility specialist when pregnancy was not achieved while under the care of the first specialist. This pattern, which can be classified as "Doctor Hopping," was validated by a secondary participant. Gillian explained her decision by stating, "Dr. D put me on Danazol....It's not working [pregnancy not achieved]. So I switched to another [infertility] specialist....I thought, 'Well, another opinion'....I switched to Dr. M...I had heard that Dr. M was really good." Following this, Gillian initiated a further transfer of her medical care to another doctor, this time to a gynecologist, when pregnancy was not achieved while under the care of the second infertility specialist. The rationale underlying this particular doctor hop was similar to that used in the previous one: "Nothing's been happening [pregnancy not achieved]....So [I'm going] to a gynecologist...[who] works a lot with infertility...and has been very successful....I thought, 'Well, try someone else. Another opinion...maybe Dr. N's got some other routes to take.'"

For most of the participants, the medical or technological expertise that their doctors offered them was valued as being the most important element of "the best" medical care available. These participants continued to stay under the care of their doctors even when their doctors did not address the emotional or psychological aspects of infertility. Such continuation with this type of medical care was justified through the strategy of *balancing the scales*: the value of the medical/technological expertise of the doctor was given a greater weight of importance compared to the doctor's attention to the emotional/psychological components of care. Having this emphasis in their practice of infertility management, these doctors gained the reputation of being "problem-solvers":

> The doctor's...a problem-solver....Dr. E doesn't really deal with...the emotional stuff....I just got the feeling from [my doctor] that that was [the] approach, "This person's infertile. These are the possibilities and we will...go through all the possibilities and solve the problem." (Jacqueline)

Although they acknowledged the value of the medical/technological focus of the infertility management, there were two participants who placed a greater amount of importance on the emotional/psychological management of their infertility care. When *balancing* these components of medical care in this fashion, these participants initiated the transfer of their infertility management to another doctor. For these participants, doctor hopping was a *protective governance* strategy used in an attempt to *protect* themselves from not receiving "the best" management in terms of emotional/psychological care.

For many participants, the receipt of the emotional/psychological care involved in their infertility management was related to the doctor-client relationship. When talking about this relationship, the participants focused on various factors which influenced the comfort level that they had with their doctors. For example, the participants felt that there was a greater understanding between them when their doctors had a family. This understanding was often related to the doctor "knowing" the participants' desire for pregnancy and the subsequent role of parenthood: "Dr. F's a [parent] and knows what it's like to want kids" (Hilary). Hilary attributed a previous doctor's desired childless state as being the reason why the doctor did not acknowledge her inability to get pregnant as being a problem requiring medical intervention: "I was...hurt that Dr. B said, '...come back in a couple of years'....I think Dr. B...took it the wrong way because Dr. B...doesn't want to have kids....I think that has something to do with it." Rachel also felt that there was a greater understanding between her and her doctor when she discovered that her doctor had experienced infertility: "Dr. Y's been through it [infertility]....It was nice...having [a doctor] who had been...through it [and] who...knew what was going on."

For several participants, previous experience with doctors of a particular age-group (a young doctor versus an old doctor) also influenced their comfort level with their doctors. The participants who had previous experience with an older doctor routinely felt uncomfortable with a younger doctor: "Dr. W's young [mid-30's]....I'm...still uncomfortable....Any specialists I have ever gone to are always older. So I think it's just what I've got used to" (Tiffany). In contrast, the participants who had previous experience with a younger doctor felt comfortable receiving medical care for their infertility from a younger doctor: "I like younger [middle to late 30's] doctors. I don't like old doctors....It would turn me off more....I've always had young [doctors]....And so Dr. I was young....Maybe it's 'cause that's what I'm used to" (Grace). Several participants also expressed a concern over the doctor's age as it related to the doctor's level of medical expertise. For example, Hilary stated, "Dr. F's about 40 [years old]....I'd rather go to a doctor that age than...someone like 90 years old because this [doctor]...keeps up on things....I guess I'm stereotyping, saying that older doctors are...just behind the times."

In addition, several participants had a concern over their doctors' ages as it related to the gender of their doctors. Specifically, this concern revolved around issues pertaining to human sexuality. This discomfort felt with a younger male doctor was described by Tiffany who stated:

> It just makes me [uncomfortable] 'cause Dr. W is young [mid-30's]....That's as old as my husband....With an older man, I always think..."You're just another piece of meat to him....This is his job." But [with] a young guy...you kind of think, "What's he thinking like, 'Well, she's a few pounds overweight,' or...'her breasts are a little thick'"....Like he's young. He must have thoughts like that....I don't think Dr. W is thinking sexual thoughts. I think it's more of what he's thinking of my body....I could almost date this guy whereas...[with an] old [doctor]...he's like your dad.

The comfort level participants had with their doctors was also influenced by their doctors' bedside manners. For many of the participants, the concept of "good" bedside manners involved their doctors' willingness to spend time talking with them: "They talk to you....Like they ask you how you are....They're willing to spend time....That's what it [good bedside manners] is. They don't stay two minutes and then they're gone" (Kate). When their doctors were willing to spend time talking with them, participants felt that their doctors cared about them. Conversely, they felt that their doctors did not care about them when their doctors did not spend time talking with them. However, failure to communicate did not result in the participants leaving their doctors. The strategy of *balancing the scales* supported this decision: the doctors' medical/technological expertise was deemed to be more important than the doctors' bedside manners. One participant, however, *balanced* these components of medical care in the reverse, leaving her doctor in hopes of finding a another doctor who would meet her emotional/psychological needs.

For Grace and Gillian, in particular, their doctors' unwillingness to spend time with them created feelings of depersonalization. They expressed these feelings when they stated respectively, "It's like a factory line there [infertility clinic]. They've got all these women coming in through the office and then back out the door again....You're just another needle in the haystack there" and "I felt very unimportant....It just felt like you herd cattle in and cattle out." Through the strategy of *balancing the scales*, two different consequences resulted from these feelings of depersonalization. Since the medical/technological aspects of her infertility management were more important than the emotional/psychological aspects of that care, Grace decided to continue her infertility management with her doctor. By *balancing the scales* in reverse to Grace, Gillian initiated the transfer of her infertility care to another doctor, in hopes of satisfying her emotional/psychological needs.

Releasing Themselves from the Responsibility

Several of the participants provided various explanations as to why they had not achieved pregnancy. By doing this, the participants attempted to *protect* themselves from taking the responsibility for the non-achievement of pregnancy. In other words, these participants were giving the responsibility of the letdown over to "something" or "someone" rather than assuming the responsibility themselves:

> There was...a sense of someone else taking the responsibility [for pregnancy not being achieved]. Dr. A's given you...a drug. Dr. A timed your whole cycle for you. If it doesn't work it's not something that I've done wrong....It's either the body's really, really failing or someone else...has miscalculated. (Eve)

> There was always a technical reason why it might not have happened....The [body] weight, the date of ovulation, the date of sexual relations. I'd like to think that I could [get pregnant] and the reason I didn't those...months was because everything wasn't right on. (Madeline)

Other participants gave the responsibility for pregnancy over to God. This was expressed in comments such as "I really believe that God has our lives planned out and He's in control. And if...it's not in His plan for us to have that...baby, then there's not much I can do about it" (Kate), "[I] put my faith in God and hope that someday He would bless us with it [pregnancy]" (Gillian), and "I look at it as a way He's [God] not ready to give that [pregnancy] to us yet" (Hilary). When giving God control over their fertility, the participants attempted to bargain. For example, "With my P.I.D. [pelvic inflammatory disease], they said they might have to give me a complete hysterectomy....I remember making one of those pacts with God....I said, 'If you...let me keep...my uterus...I'll start believing in you'" (Leah), "A promise to God that if I could produce a child, I would go to church every Sunday" (Greer), and "I'm going to try to lose...my [extra] weight....I think that that's God's way of saying, '....Once you've lost your weight, then you can get pregnant'....If God could grant me just one kid, then I'd be happy" (Hilary). In contrast, Gillian used the state of pregnancy as a bargaining tool as she negotiated with God for a child: "I had prayed and prayed...just to get pregnant....And then I said, '...if I can't get pregnant...at least bless us with a child [through adoption].'"

Although these participants asked God to grant them a pregnancy, they did not achieve it. When this happened, they questioned God. This was illustrated in comments such as "I prayed so hard for a baby and nothing ever happened....I talked to Him in my mind...told Him I was pretty upset...like, 'I think I've been a good person. Why are you doing this to me?'" (Holly) and "You think, '...why hasn't He answered my prayers yet? Is there going to be a better time for Him to answer our prayers?'" (Gillian). Some participants also expressed anger at God when they did not get pregnant: "I get really mad at God....It's kind of up to God to give me a baby and why won't God give me a baby?" (Leah) and "I was angry at God for giving me this problem to deal with" (Greer). There was also concern that God was unfair in that women who did not want babies conceived while they were left barren:

> I have...a few...girlfriends that have more kids than they know what to do with....One of them is...giving every kid up for adoption that she's ever had....There's mothers like that in the world....They just pop out kids left, right, and center. And then there's a person like me....I want kids so bad and I can't have them....Like why give a woman...kids when she doesn't even want them when a person like me want[s] them so bad and He [God] won't give me any. (Nora)

Feeling Better Off or Lucky

Comparing oneself to others who were less fortunate was another coping mechanism used by the participants. They considered themselves "better off" or "luckier" than the comparison group. This notion was expressed in comments such as "It's like...what Ann Landers used to say...you shouldn't feel bad if...your feet are mis-shaped...look at the person who can't walk....Like there's always someone worst off than you" (Jacqueline) and "You always think that you're pretty bad. But when you...look at other people in the world, you're really not that bad off" (Tiffany). It seemed that thinking of situations where they were better off/luckier than others was a way that the participants minimized their emotional hurt and protected themselves from feeling the full impact of their infertility.

Participants felt better off/luckier in comparison to several different groups of people. For example, participants often compared themselves to other infertile women, in terms of the cause(s) underlying the infertility, the age at which one was experiencing infertility, and the presence of current children:

> There are people...[who] have gone through this...but their problems are worse...than mine are...[such as] not having any ovaries or having cancer...in your cervix and having a hysterectomy....Like you can't have kids after that....I don't classify myself as that bad yet. (Hilary)
>
> I was fortunate because I had been in my...early 30's...when I was at the clinic. I think a lot of the women there were 38, knowing that after 40, there isn't much hope for them....So I didn't have that. (Ruth)
>
> I think of people who haven't had any...like my girlfriend who's gone through two in vitros and has been told...they [doctors] won't put her through any more....I think, "...I'm blessed to have two." (Kate)

Although feeling better off/luckier than other infertile persons, Gina felt disadvantaged in comparison to one particular group of infertile persons as she believed they were luckier than her in that they had been diagnosed as being untreatable so they could get on with their lives without needing to get pregnant:

> The people...I thought were luckier [than me]...were those people who were identified as being infertile and there was absolutely no way any medical intervention could make them pregnant....[These people] would say, "Oh well, at least [we've] got an answer to [our] question....[We] can get on with it [life and stop trying to get pregnant].

The participants also considered themselves as being better off/luckier when they compared themselves to people who were in undesirable life situations other than infertility. For example, "People that have [to] go through chemotherapy...and stuff like that....What I'm going through is minor compared to what they go through" (Hilary) and "The person that made me feel that way...was...a friend of mine who has...a severely handicapped child....The chances of...her second child [being handicapped] are very high, so...she probably won't have a second child" (Jacqueline). Holly, whose doctor had told her that she had "the worse" kind of infertility (unexplained infertility) still perceived herself as being better off/luckier when she compared herself to other people who were in different life situations:

> If things aren't going my way, I try to look at the positive side of it....I...say, "Well...this is the way it is. It could be worse....I know so and so who...have worse problems than I do."....I wasn't particularly looking at people that couldn't have children. It could've been...a single mom...like, "We've got it easy. We don't have children but at least we're not single parents."

In addition, the participants felt better off/lucky when they considered the good or the positive things that they had in their lives. As such, these participants were thankful for their own blessings. This was expressed in comments such as "I'm just thankful for what I have....I've got a boy and a girl....They're healthy and they're wonderful. So I can't complain" (Kate) and "I have a husband that loves me....We've got a beautiful [adopted] daughter....I've got a job....We've got our home. We're happy. And we both have [a] strong faith....I've got to count my blessings for that" (Gillian).

Adopting

When pregnancy was not achieved, the participants moved toward changing their goals. For many of the participants, the most common way of compensating for their lack of a child was by adopting a baby. However, they needed to be sure, in their own minds, that pregnancy was not achievable before they took this step. Adoption was definitely a compensation rather than a primary choice. Approaching adoption in this way was expressed in comments such as "Before we go through adoption...I wanna know that there's no way I can get pregnant myself and have our own kid" (Nora), "If we've tried every angle to...conceive...and have a child and we can't, well...we can adopt" (Hilary), and "If I was told, 'Today...I could not conceive and would not bear children' I would definitely adopt" (Tiffany). By having an unusual health history compared to the other participants, Holly was unique in that she applied for adoption while she was still undergoing medical intervention:

> I said to [my husband], "...what if it [previous medical treatment] did affect that part of me...and we can never have babies." He said, "Maybe we should keep our doors open and just put in for adoption and see whatever happens first." So that was...basically it....We wanted to keep our options [open]....If one didn't work out, then we'd have the other to fall back on.

Similarly, Leah pursued adoption while she was undergoing her third attempt with IVF.

Adoption was rejected by some of the participants on a variety of reasons. For example, several of the participants rejected adoption simply because it was financially too expensive for them to pursue. For Nora, the cost of a private adoption was *balanced* against the other financial costs that she currently had: "A few of them [private adoption agencies] have...[a] $3,000 fee....Right now, we have a few...bills that...take priority." Jacqueline considered an international adoption, however, it was later rejected in an attempt to *protect* herself and her husband from a financial crunch: "International adoption involves lots of money which we didn't have....It was...quite a few thousands of dollars....I didn't feel that we could ever manage that." Those participants who had had previous experience with adoption tended to be more accepting of adoption. This was expressed in comments such as "My husband was adopted by his...stepfather....So I don't think he has a problem with adoption" (Tiffany) and "Adoption...was less of an issue because it [had] already happened in the family" (Eve). For Eve, the acceptance of adoption was also influenced by the knowledge that, when the adoption proceedings were completed, they would not receive disapproval from their extended family members. The participant's current fertility status also played a role in deciding if adoption would be accepted: "If I had none [no children], I would adopt. But I have two" (Kate).

The participant's desire for pregnancy versus a child was also influential in determining whether adoption would be accepted. This was expressed in comments such as "It would be great...to have your own child but...raising a family doesn't mean that you have to actually give birth to them" (Hilary) and "It's great being pregnant...but...the outcome of being pregnant is...the point we're trying to get to....If adoption's the only way we can have a family, then...that's...the way we'd go" (Nora). When considering adoption, Leah likened her desire for pregnancy and the parenting role to that of a wedding and a marriage: "Pregnancy is nine months and motherhood is a lifetime....It's like a wedding is a day and a marriage is a lifetime....What I really want to do is to be a mom." As these excerpts indicate, the participants accepted adoption as a back-up plan primarily because they desired the outcome of pregnancy, that is, having a baby which would, in the end, give them a family to raise. Having accepted adoption on this basis, these participants were willing to replace the loss of having their own biological baby with a similar replacement, an adopted baby, rather than an older child. In this respect, Eve differed from the other participants:

> We weren't having a child of our own...there seemed to be some pretence about it [adopting a newborn]....That was...important to me. "If I can't have a child, then I'm not going to pretend....So we'll just skip babyhood [by adopting a preschooler] and go on as you might meet a friend"....You don't meet them as a baby and grow with them. You meet them at whatever age they're at and that's more how we were looking at it.

Several participants, however, were very cautious about accepting adoption as a compensatory plan in an attempt to *protect* themselves from the potential risks associated with adoption. For example:

> They [private adoption agencies]...want the natural mother to participate in the baby's life....I'm...afraid that if the natural mother has too much interference...then she's going to decide that she wants the baby back....I don't want to deal with that. (Nora)

> I could see years down the road, that they'd [birth parents]...want...[the child] back....You have to tell your child that [he's/she's] adopted...then years down the road, they want to find their real...parents. I don't wanna go through that. (Grace)

Three of the participants went through the adoption proceedings. This process put them "under the microscope" in that they had the "feeling that you have to prove [that] you...will be worthwhile parents" (Greer). For example:

> Everything's up for examination...the way you raise children, your values....We've been through...the personality index tests...interviews about our values....The psychologist looked at our marriage relationship. How I keep a house. Do we agree...on disciplinary issues...values? (Leah)

> They ask you everything from...your childhood to...what you would do with different experiences...."What were the taboos in your family?....How did your parents react to this situation? How did your parents react to that situation?...What would you like your parents to do that they didn't do?"....You had to have a copy of your marriage certificate...your medical records...your police report and your financial report. (Gillian)

Feelings of anger, differentness, and unfairness were all expressed by these participants. They continued to experience a loss of control and a sense of powerlessness as others decided whether or not they should have a child:

> When you get pregnant and have your own kids, no one's...checking your home...or how you live or what your values are...your opinions on disciplining children....You have to get permission to be [a] parent from someone else [when you adopt]....It's just one more case where parenthood is in the hands...of others....If I could get pregnant on my own I'd just be pregnant. There'd be nobody looking into our lives to say, "Well, I don't [think] they could [be a parent]." (Leah)

Parenting Vicariously

To *protect* themselves from a life that did not involve children, several of the participants experienced the parenthood role vicariously. The participants appeared to use this strategy as a means of compensating for their own lack of children.

This phenomenon of parenting vicariously was generally experienced by the participants becoming involved with other people's children: "If I can't have kids...then it's great...being around other people's kids" (Nora). Participants became involved with other people's children through several avenues. For example, Grace attended her niece's ball games and became a godmother while Ginny included her friend's daughter in a family-orientated situation, such as having a meal with her husband; Ginny referred to this as "renting a kid." Many of the participants also experienced parenting vicariously through babysitting their friends' children. As noted by Tiffany, the location where the babysitting occurred (participant's own home versus her friends' homes) could influenced the experience:

> When you're at somebody else's house...babysitting, you're sitting and you're watching T.V....You're not doing laundry or doing dishes....But when someone else brings a baby into your environment [home], you still do your everyday things....That's the kind of things we do when we have a family.

The final way in which the participants experienced parenting vicariously with other people's children was through their professional lives. For example, Rachel enjoyed working as an obstetrical nurse: "I was getting a lot of satisfaction working with these mothers and helping them breast-feed and helping them with their babies....[It was like,] 'If I couldn't have a baby...I'm sure going to help this woman.'"

Although many of the participants found that becoming involved with other people's children helped them through their infertility, this was not true for all of them. For example, Eve commented, "[It was] a painful experience...to take care of other people's children...when I didn't have my own....I didn't want someone else's children. I wanted my own." Judith expressed similar feelings:

> It would always hurt...we would babysit someone else's kids but...they would always go back to their mom....I wanted someone to say, "I love you, Mom" and stuff like that...not saying "Good-bye" and then they're gone....I wanted them...to stay with me.

For most of the participants, parenting vicariously was experienced through becoming involved with other people's children. For Leah, however, it was achieved through the caring of her animals: "I have the most...incredibly spoilt animals [two cats] around 'cause I lavish them with all that."

While most of the participants generally experienced the parenting role vicariously, Ginny noted that she experienced pregnancy in this way: "It's just like I'm going through their [girlfriends] pregnancies with them because....I'll sit with my hand on their stomachs, feeling the baby move."

Ventilating Their Feelings and Concerns

Most of the participants had their infertility "out of the closet," that is, others knew about their infertility. The importance for the participants to have an opportunity to ventilate their feelings and concerns surrounding their infertility was expressed in comments such as "[It's] not so much as letting people know about it [infertility] but talking about it....If I didn't have anybody to [talk] to, I would be eating myself out inside" (Ginny) and "I think that it's important to talk about it [infertility]....You can't keep it all bottled up inside" (Hilary).

All of the participants but Madeline talked to their husbands about their infertility. While living in a stable relationship, Madeline made the conscious decision not to tell her partner about her difficulty with conceiving a pregnancy because she was afraid that it "would be the determining factor...in the continuation of our relationship." Madeline's use of the strategy of *protective governing* became evident when she further explained her decision:

> I'm *protecting* my place in the relationship. This isn't the time to say, "Here's a good excuse for you to go." I don't want him to go. I want the relationship to last....I know that he wants to have kids....This [infertility] would be one of the things that would make or break the relationship.

Many of the participants talked to people other than their husbands about their infertility. In most situations, the participants found it valuable to talk with other infertile persons rather than their fertile peers. The fertility status of the confidant was important because it was the deciding factor that determined the confidant's ability to either sympathize or empathize with the participant. This was expressed in comments such as "I felt the most support...from people that I met in the infertility clinic or someone who had been through it [infertility]....I had a girlfriend who had [been through it]....So she knew...what I was feeling" (Ruth) and "I have friends who have kids and want this...for me...because getting pregnant is so easy and natural for them, it's very hard for them to understand the pain of it" (Leah). Jacqueline expressed similar feelings when she compared the experiences of infertility and death with one another:

> I felt close to them [other infertile women]. It was like we had something to share and here was someone that you could talk about it with and they would understand exactly what you meant and were feeling....[Infertility is] just like many problems in life. You just don't understand it unless you go through it....It's like if someone experiences a death in the family, you can feel sympathetic but you don't [feel] empathetic unless you've experienced it.

Grace's mother had a hard time understanding the problem of infertility because "every time she turned around, she was pregnant." Thus those women who were experiencing infertility or had experienced infertility and who provided the participants with empathy rather than sympathy gained the reputation of being "kindred spirits."

Although the participants found it easier to seek understanding from kindred spirits, none of them were involved with a "formal" peer support group. The participants provided various reasons for their lack of involvement:

> I've got lots of support....Right now, it's [peer support group] just not something that I need....Maybe if...they [doctors] say, "Well, I'm sorry Ginny...you can't have kids," then I might think about going...'cause then I might be in a different frame of mind [and] thinking, "Oh my God! I'll never have kids." But right now, I don't feel that I need it. (Ginny)
>
> I really didn't want to be involved in it...[because] I didn't wanna...talk to a whole bunch of total strangers, even though they were in the same situation. I just didn't feel comfortable doing that....If it was a more one-to-one, one-to-two, type of interaction [it would be okay]...but to go in and sit in a group session, I wasn't willing to do that. (Gillian)
>
> The idea of it just didn't appeal to me because quite often...when I start talking about something that's quite emotional or very close to me, I'll just start to cry....I don't want to do that in front of a bunch of people I don't know....I don't think it [would have been] that helpful for me....I thought, "Well...it's only been two or three years....Many of these people...[have] been trying for like 7 and 8 and 10 years....I don't want to go and have them look at me and say, 'Well, you've hardly even tried yet. Wait until it's been 10 years.'" (Rachel)

Whereas these participants focused on the emotional aspects of a formal peer support group, Madeline expressed a desire to become involved with such a group for the purpose of obtaining information:

> It's nice if it [emotional support] was there but that's not why I...[would be] going. It's information I'd like to get....I'd like to...talk to people who've used a particular type of procedure or subjected themselves to...regimens of whatever.

Although none of the participants participated in a formal group, there were several who were involved with an "informal" peer support group: "There are three or four girls that I work with that are having trouble getting pregnant....We would...have our own little support group and talk about all the things that we had been through" (Rachel) and "There was a whole network of people with whom I work that were having...[infertility] problems. So we had our own support group going" (Gina). When talking together as a group, these participants compared their treatments and the effects that infertility and its management had on their husbands, marriages, and lives.

In contrast to those participants who were "out of the closet" with their infertility, Eve and Madeline went "underground," that is, they did not talk about their infertility and its management with others. The rationale underlying this decision to go underground involved the strategy of *protective governing*. Eve decided not to talk about her infertility to others in order to *protect* herself from other people's "doctoring": "A lot of people...didn't know that we were having an infertility problem....We didn't want to open ourselves up...everyone else's doctoring....So...we primarily avoided the topic." In contrast, Madeline, who had Stein-Leventhal syndrome, attempted to *protect* herself from being viewed by others as abnormal and incomplete:

> It's [being infertile] just another indication that you're a little abnormal. I have enough indications that I'm not exactly normal...the manifestations...of hormonal imbalance. The extra hair here [chin area], thin here [top of head]...the masculinization features....It's the kind of thing that...distracts from your physical wholeness....Why should I talk about the negative aspects of my health?....People have enough reasons...to stereotype you or to pigeon-hole you or to be prejudice. I'm not even going to give them anything more to fuel the fire.

Normalizing

As suggested by Madeline, many of the participants sought to normalize themselves in comparison to others. Attempting to *protect* themselves from being different, the participants sought this notion of normality in two specific ways. Leah avoided associating with other infertile women in order to *protect* herself from the infertility identity:

> I didn't want anything to do with other infertile women....[I thought,] "Well, if I hang around them...," then I'm one of them. So I held them at arms' length....I refused to be supported by them when I was in the IVF clinic....They'd talk to me and I was just like an ice princess...'cause I was going to be different. I was going to be the one who was going to get pregnant....Really, they're just all mirrors of me. And so...if I was looking at them, I'd be looking at myself. That was very confronting. Like their pain is my pain.

Although another participant, Gillian, acknowledged that she was infertile, she was not yet willing to solidify that identity by attending a formal infertility peer support group because it was admitting that she had an infertility problem.

In contrast, a sense of normality was sought by other participants through associating with kindred spirits. These participants found it easier to live as an infertile person when they knew others who had similar states. A sense of normality surrounding the infertility identity was sought as these participants observed similarities between themselves and other infertile women. The participants generally sought this normalization through talking "in person" with kindred spirits: "I just wish I could talk to...[other infertile] women...maybe there's someone out there that's going through the same...thing I'm going through and we could talk about it" (Hilary) and "You might find a person there [formal peer support group] who has a problem just like yours....[It] would be interesting to talk to them and see how they've handled it and see what they've been told by their doctors" (Madeline). Several of the participants also sought to normalize their infertility identity by making contact with other infertile women through written literature: "That book I read [on infertility]...it's really helped....It's very normal for what I'm going through to be having these feelings....It's not...abnormal....Before [I read that book] I was thinking like, 'What's the matter with me?'" (Grace). Gillian's participation in this research study, in fact, was an attempt to normalize her infertility identity: "I was very interested [in this study]...to know what other women have gone through how other women feel about it how they deal with it...to see if...[other women's experiences are] comparable to my experience."

Reading was used to gain both a sense of emotional and physiological normality. The latter was harder to achieve as Kate explained: "I've read eight books on infertility....By the fifth book, they all say the same thing and it's...like, 'There's nothing new here'....You're looking for something different [that you] can say, 'Ah! That's my problem!'" It was difficult for the participants to find information specific to their problem so that they could recognize and identify with the descriptions that were provided: "I want to read a whole book about infertility and...[its] treatments and my problems....There isn't that specific information anywhere" (Madeline).

In addition to normalizing their infertility identity, participants became hopeful when they saw other infertile women achieve pregnancy. The participants expressed this hope in comments such as "There were...patients that I took a lot of comfort from because...they were having babies and they had had fertility problems....I'd get this glimmer of hope and think, 'Well...maybe it will happen [to me]'" (Rachel) and "Another girl I work with she couldn't get pregnant for the longest time...and then she finally got pregnant....[That] gives me incentive....It happened to them....That's encouraging" (Hilary). Despite gleaning hope from the news of pregnancy, it could also be a source of pain. Jacqueline noted this when she said, "I wanted them [kindred spirits] to tell me [about their news of pregnancy]....But...it did make me feel kind of crummy...because....I did think, 'Well, why not me?'" Hilary also questioned why a co-worker got pregnant while she, herself, did not:

> [We] were trying to get pregnant at the same time....I just found out that she is pregnant....I didn't want it to be a competition. I wanted her to get pregnant and I wanted me to get pregnant....Like I'm happy for her...but you also think, "Why couldn't it be me?"

The participants also became hopeful when they saw other kindred spirits achieve pregnancy following adoption. For example:

> It's when you've been diagnosed with being infertile and you can't have children and then you adopt. As soon as the adoption starts going through, kabang, the female is

> pregnant....That actually happened to my father's brother's wife....It could happen for me. (Ginny)

> [My husband's] mother and father...tried for a lot of years and could never had kids....As soon as they adopted a child she got pregnant....I've heard a lot of cases like that....So...who knows what's gonna happen around the corner? (Nora)

Although the participants found it helpful to interact with kindred spirits, it sometimes became a difficult situation when one of them became pregnant:

> When I got pregnant, they were all very happy for me. But I almost felt uncomfortable....I had moved on to a different stage and they were still left behind....We weren't on quite the same wave length any more....I feel more empathy towards them...because I've been there. But I also know what it's like to be a mother now and to have gone through a pregnancy and the delivery....[I've gone] the whole nine yards. (Rachel)

Involving Their Husbands

Husbands' involvement during the medical intervention generally focused on support for their wives. Based on the participants' experiences, the support was of two specific types. First, many of the participants felt supported emotionally when their husbands spent time with them, listening to their feelings and concerns surrounding the infertility and its management. The second type of support was an instrumental support, in which the husbands were actively involved in the activities associated with the medical intervention. A typology of support was developed, identifying the degree of the husbands' involvement (Figure 3). It is noted that, based on the participants' descriptions, that husbands fluctuated between the various typologies during the infertility experience.

Husband's Instrumental Support

Husband's Emotional Support	+	-
+	**Activist** a	**Side-liner** b
-	c **Co-operator**	d **Aggravator**

Figure 3: Typology illustrating the relationship between husband's instrumental and emotional support as perceived by the participant

The Activist. The husbands in this group were very willing to listen to their wives express feelings and concerns surrounding the infertility. Several of the participants stated that although their husbands did not always understand their feelings in various situations (when they cried when they got their menstrual periods or when a pregnancy test was negative), they still felt emotionally supported when their husbands simply listened to them express their feelings. In addition to supporting their wives emotionally, these husbands were also very willing to provide instrumental support. Such support took various forms. For example, several husbands took a leave of absence from their employment to attend the infertility appointments with their wives.

Although the husbands' attendance at these appointments frequently provided emotional support for their wives, instrumental support was also reaped when the participants were driven to and from their appointments. This support was especially needed when procedures, such as a laparoscopy, had been performed.

Although the initiation of scheduled sex was generally done by the participants, themselves, there were several husbands who were actively involved in the planning and/or initiation of the activity. Ginny, in particular, provided an example, following a laparoscopy under general anesthetic, where her husband provided instrumental support by bridging the communication gap between her and the doctor:

> [You] go in...be put out and come home....Dr. Q talks to you after and lets you know....You're not really coherent [when the doctor talks to you]...because you're so screwed up from being put out. So my husband always goes and he'll scribble down....Whatever Dr. Q is saying. He'll write it down so that when I get home...he can...tell me what Dr. Q said.

By becoming active in these ways, these husbands are viewed as activists in the infertility experience (**cell a**).

The Side-Liner. Another type of husband very similar to the activist is the side-liner (**cell b**). The side-liner provides emotional support to his wife through listening to her feelings and concerns. However, he does not provide instrumental support although he may want to do so; when this happens, the husband sits on the side-line. Based on the participants' situations, there was only one husband fitting this typology. Ruth's husband was unable to engage in scheduled sex because he was out of the city for several months at a time because of his employment. During this time, Ruth's husband provided emotional support by keeping in contact with her by telephone.

The Co-operator. A third type of husband is the co-operator (**cell c**). These men were similar to the activists by virtue of offering instrumental support to their wives, however, their level of active support differed. For example, there were several participants whose husbands would participate in scheduled sex only when requested to do so by their wives;

they would not assist in the planning of scheduled sex and/or initiate engaging in scheduled sex. Two participants, in particular, stated that their husbands would comply in providing a semen sample for analysis through masturbation, however, the delivery of the sample to the infertility clinic was the responsibility of the participant. In this group, the wives did not refer to talking with their husbands about the infertility.

Rather than receiving emotional support, several participants received comments from their husbands which negated their concerns regarding the inability to conceive. This was expressed in comments such as "[When] I was getting a bit upset...[my husband] would say, 'Don't worry about it'...or 'Just forget about it'" (Holly), "[My husband] sort of says, 'Well...if we can't [get pregnant], we can't.' He says like, 'Don't worry about it'" (Gillian), and "[My husband] just doesn't want to get serious about it. He'll always says to me, 'Don't worry about it'" (Hilary). In addition, the wives in this group stated that the desire for a child was unequal between the partners, with the wife having a higher desire for a child than the husband. The participants' perception of this unequal desire for a child was expressed in comments such as "We both [want children]....But he accepts [the infertility] a lot easier. If we don't have them, it's no big deal. Like he can go one way or the other" (Grace) and "I do...worry. It doesn't seem to matter to him" (Gillian). Although not explicitly stated by these participants, it appeared that these husbands were "going along" with their wives' wishes regarding fertility.

The Aggravator. The fourth and final type of husbands has been classified as an aggravator (**cell d**). There were two basic characteristics of the aggravator. First, the husband did not give any emotional support to his wife. This was evidenced by the husband's refusal to listen to the participant talk about her feelings and concerns surrounding the infertility. The second characteristic of the aggravator was that the husband did not provide instrumental support to his wife and this lack of support actually aggravated the management of the infertility. For example, fulfilling the obligation of scheduled sex was negated by Rachel's husband, who either unwillingly engaged in such activity or else refused. The fertility of two participants' husbands was potentially reduced when the husbands continued to engage in activities (hot baths, smoking) which are believed or known to reduce the sperm count. In contrast, Madeline felt that her own fertility potential was negatively affected when she did not receive her husband's support regarding lifestyle habits as they related to her weight problem:

> There's a lot about [my partner's] lifestyle that I've absorbed and accommodated that...is contributing to my weight problem....I put it to him in an ultimatum sort-of-fashion that, "Hey, I've talked to you many times over the past year about eating at

> 11:00 at night and never going anywhere [for] a walk....If you really are interested in having a child you have to...stop these things"....He's so insensitive to what I tell him are the effects of all of this [on my fertility]....I've tried to tell him, "....Fat women do have problems...getting pregnant"....He doesn't believe it's true....He's just calmly waiting for me to get pregnant....Each time he brings home a barrel of ice cream...I see...another roadblock to eventually achieving a weight that would accommodate pregnancy....Why is it that he just sort of glosses over my references to, "This weight is going to be a problem for us. Help me get rid of it"?

Escaping From Their Infertility

By distancing themselves from their infertility, participants found relief. This was achieved in a variety of ways. For example, several participants found their escape through their employment: "I just started this new job and I've been right into it....It keeps my mind off...of this infertility" (Hilary) and "It was...liberating to...go into a situation where nobody knew all that [infertility]...you could just, for awhile, pretend...or just forget about that part of life" (Jacqueline). Several participants did not escape from their infertility at work because they were reminded of their inability to achieve pregnancy when their co-workers became pregnant and talked about their pregnancies: "A lot of times, work upset me...because...girls were pregnant" (Holly) and "This young girl at work, when she came in and announced her pregnancy, I had to leave the office because I was going to cry" (Tiffany). Talk in the office often focused on children: "All the girls [at work] have either had babies or are pregnant....So you sit at lunch and that's all you hear....I feel like saying, 'Can we change the subject?'" (Hilary) and "All they talk about...is their kids....[I think,] 'Oh gees, can't these guys talk [about] something else?'" (Grace). Several of the participants, who worked within a hospital setting, were confronted with their infertility when they saw women pregnant who did not want to be pregnant and/or women who had had previous therapeutic abortions. For example: "It is hard...to think that these people [teenage moms] are coming in and they really didn't want to have these babies and I'd really like to have a baby and I was having trouble having one" (Rachel) and "When you have a[n] [obstetrical] patient who's had...several therapeutics and now they have this baby, you think ...'How many babies did you just throw away?' I could squash them....I feel very angry...like, 'What have you done?'" (Gillian).

The participants escaped from their infertility by becoming involved with other things in their lives. For example, Kate took an educational course: "I thought, '...if...I'm busy studying all the time...it'll take it off my mind'....It's keeping me busy. It gives you something to do during the day. So your mind is preoccupied some of the time." Another activity used was that of socializing with friends who did not have children. Grace and Holly respectively noted: "It's nice to be able to phone somebody and say, 'Hey, let's go do this'....They don't have to worry about [getting a babysitter]" and "We'd phone someone...[who] didn't have any kids...because even if you did go out with someone...[who] had children, they'd be talking about them...even if the kids weren't there."

Several of the participants escaped from their infertility in other ways. For example, Grace made her escape through an avoidance tactic: "I'm sick with trying to explain things to her [mother-in-law]....I thought, 'It's better to stay away from her than always having to try [to] explain things to her.'" Greer also escaped by avoiding people and events which reminder her of her infertility: "I would avoid baby showers, parties and family outings when I knew children would be present....I became very good at avoiding situations and people who would remind me of my infertility." Holly escaped by taking holidays: "Holidays are great....You were in a little dream-world....You didn't have to worry about [the infertility]. [You] forgot about everything." Although holidaying allowed Holly to "physically" escape from the management of her infertility, it did not necessarily provide a "mental" one: "Once in a while, I'd kind of touched back....When I was going to bed...I'd be laying there....A lot of times, I'd toss and turn and I'd...touch base again with what was happening."

STAGE THREE: THE EXIT FROM MEDICAL INTERVENTION

The third and final stage of Pregnology involves the participants' exit from medical intervention. According to the participants' experiences, there are two basic avenues of exit from Pregnology, the first and most desired exit involves the participant's achievement of pregnancy. The second involves the participant's decision to discontinue medical intervention despite not achieving pregnancy.

Achieving Pregnancy

When they undertook medical intervention, the participants lived under the microscope as they looked for bodily symptoms indicating that pregnancy had been achieved. For all of the participants, a late or missed menstrual period suggested pregnancy: "I've had a couple of times where...I was 10 or 15 days late and you're kind of hoping like, 'Well, maybe I'm pregnant'" (Ruth) and "When I missed my period there....I thought for sure I was [pregnant]" (Hilary). The participants also thought that they had achieved pregnancy when they experienced bodily symptoms other than a late or missed period. For example, "With my period...I get a lot of pain....I wasn't getting any of that. And then you get all these positive thoughts" (Grace) and "You'd be watching for signs...really full breasts, tenderness. Any kind of nausea" (Gillian).

When suspecting that they were pregnant, many of the participants had a pregnancy test done, either in a health-care facility or using a home pregnancy testing kit. There were two participants, however, who did not do this. For example, Rachel did not pursue pregnancy testing immediately upon suspecting pregnancy while Leah purposefully underwent an early pregnancy test prior to observing signs indicative of pregnancy. The decision as to "when" they would go for a pregnancy test was guided by the strategy of *protective governing*:

> I figured you'd have to wait at least two weeks after your [late/missed] period...before you got an accurate test. I didn't want to get my hopes up....There was no sense in going before it would show anything.
>
> I did take an early pregnancy test this time...because I hated the waiting so much....I didn't want to wait for that and have my excitement build with each day....It [pregnant test] was negative. At least I was prepared for the worst when the blood did come....In some way...that was better than getting the excitement built up.

When the participants got the "Big P," that is, when the pregnancy test result was positive, they received confirming information suggesting that they had, indeed, achieved pregnancy. For the four participants, achieving pregnancy meant that their dreams had come true. In addition, the achievement of pregnancy meant that medical intervention would be discontinued; it is noted that one participant continued with medical intervention (progesterone suppositories) in order to maintain the conceived pregnancy. For the participants who exited Pregnology in this way, the achievement of pregnancy was a very happy and joyous event.

Of the 17 participants, 8 achieved pregnancy while under medical care, but they lost their initial conceived pregnancies either through spontaneous abortion (n=7) or ectopic pregnancy (n=1). These eight participants re-entered Pregnology where they began to repeat medical intervention following their reproductive loss. Four of the eight participants have made permanent exits from Pregnology by achieving, maintaining, and delivering subsequent pregnancies; the remaining four participants are either continuing with intervention (n=1) or have discontinued it in the absence of pregnancy (n=3).

Discontinuing Medical Intervention

Of the 17 participants, 5 discontinued intervention in the absence of pregnancy. Several participants, who are currently in the stage of pursuing medical intervention, anticipate discontinuing treatment at some time in the future, even though they have not achieved pregnancy. In addition, several participants, who exited from Pregnology by achieving pregnancy, described times when they entertained the thought of discontinuing their treatment despite the absence of pregnancy. Based on the participants' experiences, it appears that they had to pass through a phase of "letting go."

Letting Go

Letting go of their pursuit of pregnancy through medical intervention was extremely difficult for the participants to confront. Jacqueline, who eventually did achieve pregnancy through intervention, commented, "You're caught up in the process [of medical intervention]...you continue because the more energy you put into it, the more you want to resolve [the infertility] and the more you don't want to abandon what you have already done." Thus the decision to discontinue medical intervention was almost unthinkable for the participants, even if there was only a small chance that they would eventually become pregnant: "As long as you have the possibility, it's very hard to turn your back on it regardless of how small the possibility is" (Leah).

Deciding to terminate or anticipating the decision to terminate the intervention without achieving pregnancy meant that they could "get on with their lives" by making plans that excluded having a family. When anticipating a "future" child-free life, the participants would sometimes speculate on what it would entail for them. For example:

> If we don't [get pregnant]...I'll make a career change....We both enjoy sports. So we thought..."We should buy season...tickets to hockey...or football games or start planning holidays." Like...all the things that people who have kids...can't do. (Grace)
>
> [After quitting the medical intervention,] I registered to go back and do my [degree]....I just said, "Forget it....We'll work our buns off, make big bucks, retire early, and travel. To heck with having kids." (Rachel)

Although Ruth was planning to compensate for her inability to achieve pregnancy by adopting a child, she chose to live a child-free life while waiting for the adoption to be realized. Ruth described this living arrangement:

> I had...put it behind me that I couldn't have kids....[My husband] and I had planned to go to Europe....I...got accepted...at the university....I had made these new plans....I knew that at the end of the tunnel, I was going to get a little baby....But in the meantime...I had made plans.

To discontinue medical intervention, the five participants simply stopped their participation in the required activities (diagnostic procedures; BBT charting, treatment protocols). For four of them, termination of treatment was done quickly. In contrast, the remaining participant, Rachel, made the "mental" decision to terminate intervention, but continued to participate. The inconsistency between Rachel's thoughts and actions continued for several months until finally, she abruptly stopped the medical intervention. As noted in the following excerpt, terminating medical intervention in this fashion was influenced by outside forces:

> I had just finished a 35 day cycle....The day before my period started, my sister-in-law had a baby....I just said, "Forget it. It's bad enough...to get your period and then here's this sister-in-law and she had a baby....I'm just going to quit trying"....The combination of those things...[was] contributing...[to] that.

According to the participants' experiences, "letting go" of their pursuit of pregnancy through medical intervention involved three factors: (a) doing everything possible, (b) perceiving risk, and (c) committing to pregnancy.

Doing Everything Possible

The first factor which influenced the decision to "let go" was whether the participants had attempted all medical interventions that were available and acceptable to them: "'I'm not going to get pregnant.' I'm not there yet [termination]...but I do feel closer. If this [third attempt at IVF] doesn't work, I'll know I'll be one step closer to saying that....This is the way that I'm doing it [letting go]" (Leah). This characteristic of letting go was also reflected in Jacqueline's comment: "A doctor would have to tell me, 'There's nothing else we can do for you'....There'd have to be some kind of closure, that's for sure." Holly stopped medical intervention simply because its continuance was perceived to be a fruitless activity as no treatment options were available. Artificial insemination was available to Ruth, but it was unacceptable. This resulted in Ruth's discontinuing medical intervention:

> Dr. V gave us the option of...having artificial insemination with someone else's sperm....I went back and told Dr. V that we weren't going to have [that]....I felt that if I was going to have someone else's child, I might as well adopt and we would both have somebody else's child.

Perceiving Risk

The second factor underlying the phase of "letting go" involved the participant terminating medical intervention when the continuation involved a perceived risk to either herself and/or to other persons. Using the strategy of *protective governing*, participants made the decision or were anticipating making the decision to terminate the medical intervention in an attempt to *protect* themselves and/or others from the risk(s) involved.

For Leah, the cost of IVF was high and she decided to protect herself and her husband from financial risk. She also anticipated that further attempts with it would be discouraged by the IVF team: "After three times [of IVF], they do sit down and talk with you about [further attempts], 'Maybe this is not working for you....We don't recommend you do this again.'" In addition to the financial concerns felt surrounding the continuation of medical intervention, Leah terminated treatment in an attempt to *protect* herself from the negative psychological effects associated with that intervention:

> It's always devastating when it [IVF] doesn't work [pregnancy not achieved]....I carried this feeling, "Why do I keep wanting something that I can't have?....Why do I keep banging my head against a brick wall?" So I decided to shelve it for awhile....I'm not going to try [IVF] again....It's been very painful and unsuccessful....I feel that it's time to...pursue some other things where I can feel some success.

Rachel accepted ovulation induction initially, when she lacked the personal experience with Clomid administration. Once she gained experience with the ill-effects associated with this particular treatment option (marital disruption experienced as it related to fulfilling the obligation of scheduled sex; mood swings), she rejected it because she believed that the side-effects of the treatment threatened the stability of her marriage. She terminated intervention in an attempt to *protect* her marriage from further instability resulting in possible dissolution of the marriage. When making this decision, Rachel *balanced the scales*: the importance of maintaining her marital relationship outweighed her desire to achieve pregnancy through intervention.

Several participants also entertained the idea of terminating medical intervention in an attempt to *protect* themselves and/or others from the risks associated with becoming pregnant and/or parenting at an older age:

> I [have] always said..., "If I don't have...children by the time I'm 35...then I'm not having any"....I want to, at that stage in my life, be able to go out and do things with the kids....I don't want to be...pushing 40 and...[just beginning to have] children....There's more medical problems then. (Gillian)
>
> I'll be [31 years old on my next birthday]. My other kids were born [when I was in my mid-20's]....So I'm wondering if I'm going to run out of energy this time around....Being a little older puts you [at] a little higher risk...problems with the child. Down's Syndrome...is one of the major ones. And then just being older...weight gain....The last one was [over nine pounds at birth] and they say they keep getting bigger...and then going through another caesarean and taking longer to heal....The kids are getting older. I'm looking at them leaving home....When...they're 20, I'll be 45. By the time the next one's 20, I'll be 52. (Kate)

As noted in the above discussion, terminating medical intervention was perceived as a strategy to *protect* oneself and/or others from a perceived risk. In contrast, Grace viewed the decision not to terminate as a *protective governing* strategy: "You don't know when to quit....If you do [quit], will you regret it years down the road? Like, 'Why didn't you try everything?'" Jacqueline took a similar position on the termination of medical intervention:

> I didn't want to extract myself because I didn't want to give up the hope of having another child....I had to continue in it or say that I'm not going to have any more children. And since I couldn't do that, I had to stay in this process.

Committing to Pregnancy

While undergoing treatment for their infertility, the participants' level of commitment toward pregnancy and having a baby fluctuated. For example, the level of commitment was often high when the participants experienced "positive" feelings towards the parenting of a baby. At other times, when the participants experienced "negative" feelings, the commitment towards having a baby decreased:

> When I was assigned to the nursery [at the hospital] and I'd get to spend a whole evening walking these babies, [I thought] "....I don't wanna have any kids" because they'd all be screaming....[However] when...you had...one and they'd be all snuggled in and you'd...be rocking them...you'd think, "Gees, it would sure be nice to have one of my own." (Rachel)

> You just get those pangs every time you see somebody with another baby. You think, "Ah! Wouldn't it be nice to have another little one"....[When] I look at the pictures of when they're [Kate's present two children] little, I think, "Oh, it'd be so nice to have another little one around"....When they drive me nuts because they're misbehaving...I think, "Oh, I can't go through this again." (Kate)

Kate's commitment towards getting pregnant a third time was also influenced by the other priorities in her life. When *balancing* these priorities, Kate uses the strategy of *protective governing*:

> It's [getting pregnant] one of those...nice-to-have things....If you had a list...you want this or that the baby's way up there. But it's not to the point where it's the only thing like groceries....My thoughts, right now, are, "I'm really looking forward to the honeymoon [second honeymoon celebrating a wedding anniversary] next year"....So having a newborn would interfere with that....If I got pregnant today, then...it means no honeymoon....It's kind of like, "...I'd rather go on a honeymoon...than have a baby."

In contrast, Jacqueline's level of commitment towards achieving pregnancy was decreased when she observed that the future achievement of pregnancy would have resulted in a long, almost "unacceptable" age-spread between their last child and the "future" child:

> We felt that it was really important for [our son] to have a sibling....The older [our son] got...the less pressing that need seemed. So I think just the time factor would have...become really relevant at some point. We would have said, "Well, it's just not worth it any more because...he's too old."

For the most part, these participants persisted with medical intervention regardless of their level of commitment towards pregnancy.

THE SUMMARY OF PREGNOLOGY

Pregnology is the abstraction which captures the process that the participants passed through as they pursued pregnancy through the science of medical intervention. This process is comprised of three stages. In the first stage, the entry into medical intervention, the participants were involved with three basic activities. These activities included suspecting that they had an infertility problem, seeking medical assistance based on that suspicion, and receiving confirmation that their inability to get pregnant was a problem requiring medical intervention. The second stage of Pregnology is the intervention. When in this stage, the participants decide to pursue medical intervention, they engage in infertility work (the various activities involved with the medical management of infertility), and they experience the letdown when pregnancy is not achieved. The third and final stage of Pregnology is the exit from medical intervention, either by achieving pregnancy or by deciding to discontinue medical intervention in the absence of pregnancy.

Two distinct properties of Pregnology were identified. First, the participants played a very active role. For example, they responded to their inability to get pregnant by seeking medical help and then by participating in the various activities demanded by the medical intervention. And second, the participants' pursuit of pregnancy was not linear; rather, it was ongoing and circular. This property became apparent when the participants repeated medical intervention because pregnancy had not been achieved.

When going through Pregnology, each of the participants wanted to become pregnant, however, they experienced difficulties in doing so (Figure 4). This, in effect, placed the participants in a state of imbalance: their desire to achieve pregnancy was not balanced with a bodily state of "being pregnant." Two of the participants "almost" achieved this state of balance when they adopted a baby; although these participants had achieved their "end" desire of creating a family, they had not achieved that end through pregnancy. Several of the participants reached a state of balance when they achieved pregnancy; however, this balance reverted to a state of imbalance when the achieved pregnancy was lost, either through spontaneous abortion (miscarriage) or ectopic pregnancy.

As the participants progressed through the stages of Pregnology, they used two major strategies, balancing the scales and protective governing. In addition, they lived under the microscope at various points throughout the process.

BALANCING THE SCALES

The participants used the strategy of balancing the scales when they made various decisions about their infertility and its management. First, the participants made decisions regarding the management of their infertility in relation to the rest of their lives (Figure 5). Frequently, the participants would weigh various factors relating to their infertility (reproductive functioning in terms of the phases of the menstrual cycle; treatment protocols) with other aspects of their lives (energy level, employment, marital relationship). In balancing these various factors, participants made decisions regarding whether their infertility or some other aspect of their lives would assume the dominant or primary role at any given point in time. When the participants' infertility played the primary or dominant role, the participants incorporated the rest of their lives into their infertility. Examples of this include: (a) the participants engaging in scheduled sex when either they and/or their husbands are not interested in sexual activity, and (b) the participants leaving their employment to attend infertility appointments. In contrast, when other aspects of the participants' lives assumed the

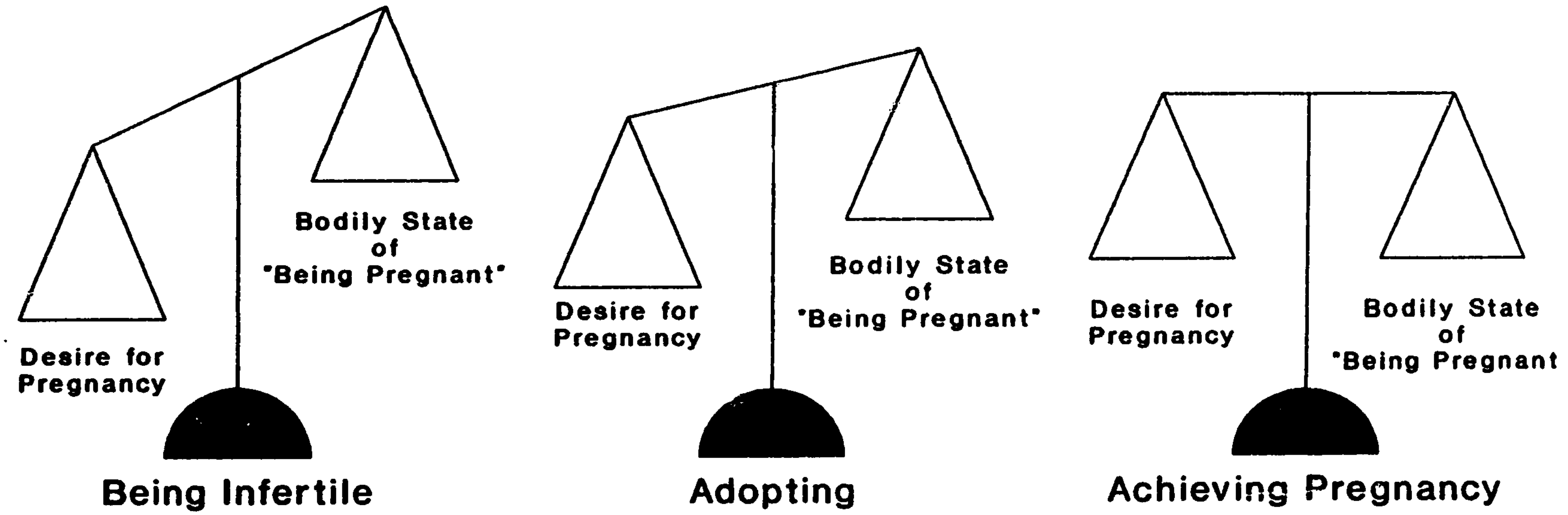
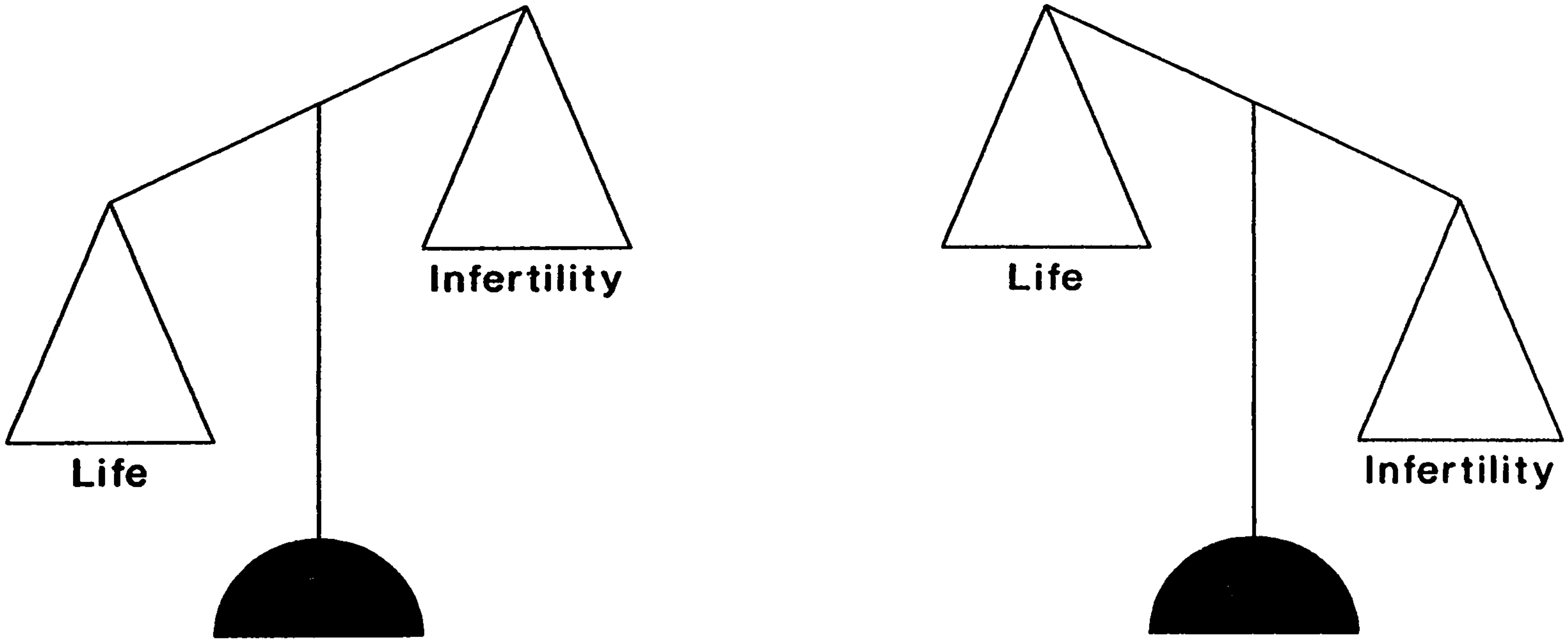


Figure 4. Balance Between Desire and Bodily State



Incorporate Infertility Experience Into Life

Incorporate Life Into Infertility Experience

Figure 5. Managing the Infertile State Within One's Own Life

primary or dominant role, the participants incorporated their infertility into their lives. Examples illustrating this include: (a) the participants deciding not to fulfill the obligation of scheduled sex, and (b) deciding not to go for medical intervention because one's own life is too busy and does not allow for time to be involved with medical care (as in Nora's situation).

The strategy of balancing the scales was also employed when the participants made decisions involving the acceptance or rejection of various management options available for their infertility (Figure 6). Although some of the treatment options, such as ovulation induction with Clomid, were readily accepted upon the doctor's suggestion, the participants used this strategy of balancing the scales when a particular option involved important factors to be considered, such as financial cost (IVF, private/international adoption), success rate (IVF), time-commitment (IVF) genetic continuity (AID, sperm, adoption). When making a decision, the participants often assigned these various factors a weight of importance, ranging from "very important" to "not really important." This ranking of importance was highly individualized. For example, the factor of genetic continuity was considered to be very important to some participants whereas others considered it unimportant.

The acceptance or rejection of a given management option was often determined by weighing the various factors surrounding that option. For example, the participant would balance the factors which were "in favour" (the pros) of the option with the factors which were "against" (the cons) the option in question. The participant would either accept or reject the option, depending on which side of the balance of the scale was outweighed. As decisions were made "over time" and under different conditions, the weighting assigned to the involved factors frequently changed. This change in balancing the scales could result in a different decision being made from one time to the next. For example, Rachel initially accepted ovulation induction through Clomid administration, however, she later rejected it when she gained experience with the side-effects of the medication. The decision to accept an option would contribute to the participant's state of balance; the decision would move the participant closer to her goal of becoming pregnant and/or creating a family. On the other hand, deciding to reject an option would not contribute to the participant's state of balance; the decision would not move the participant closer to her goal of becoming pregnant and/or creating a family.

PROTECTIVE GOVERNING

In this study, protective governing was defined as a strategy whereby the participants protected or shielded themselves and/or others from a perceived risk. The participants identified numerous risks as they progressed through medical intervention. For example,

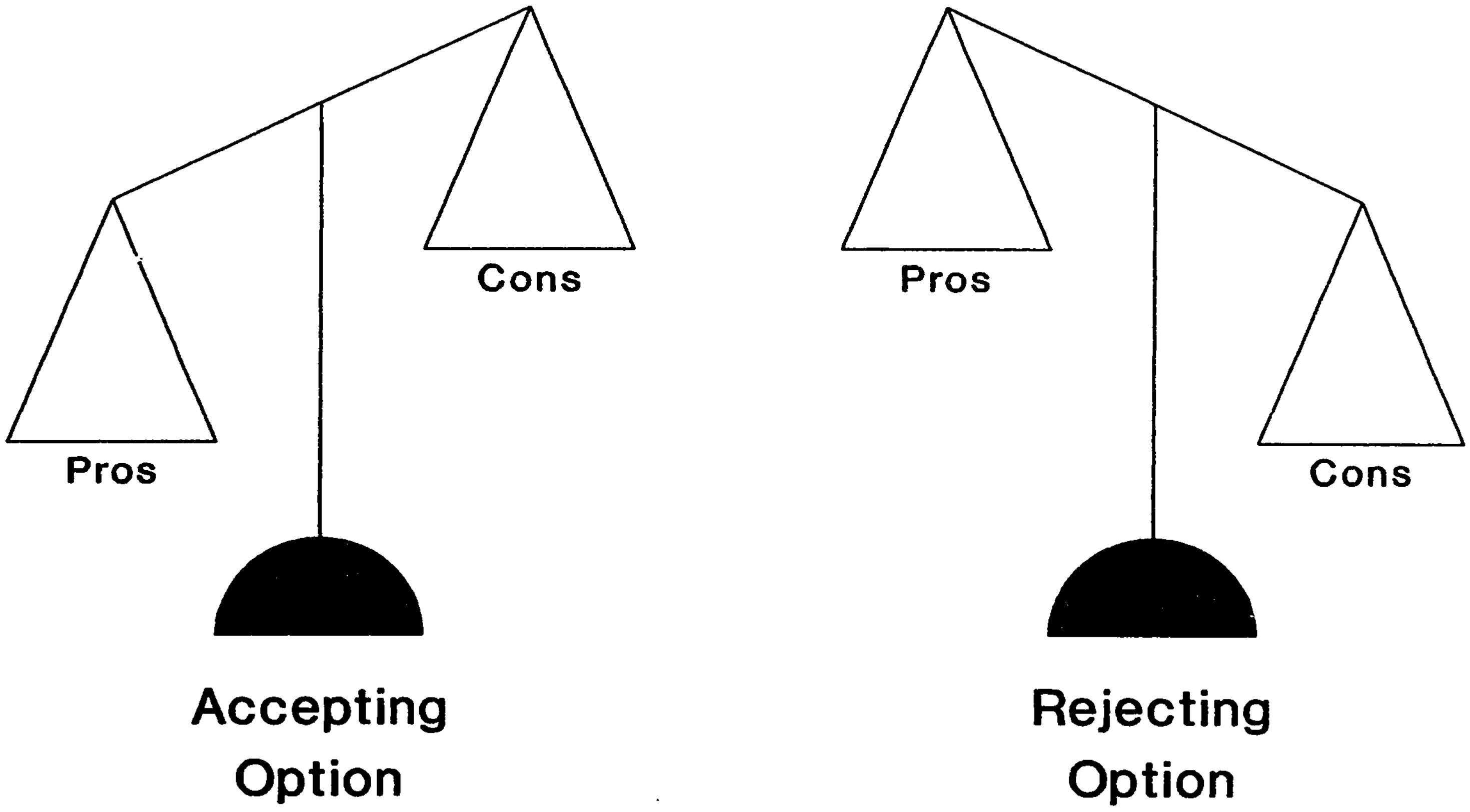


Figure 6. Accepting/Rejecting Management Options

several of the participants felt that the privacy surrounding their sexual relationships was placed at risk when they documented on the BBT chart "when" they engaged in sexual activity and later showed the doctor their BBT charts. To protect against this invasion of privacy, the participants used two strategies of protective governing including: (a) the participants did not document on their BBT chart when they had engaged in sexual activity, or (b) the participants marked when they had engaged in sexual activity during the suspected time of ovulation only. At other times during the menstrual cycle, their involvement in sexual activity was not recorded on the BBT chart.

The participants responded to the letdown by using several strategies which protected them from perceived risks. These protective governance strategies and the perceived risk(s) included: (a) changing doctors (risks: continued inability to achieve pregnancy because of inadequate or sub-optimal medical care, not receiving "the best" medical care, either in terms of medical/technological versus emotional/psychological care); (b) releasing oneself from the responsibility (risk: being responsible for the non-achievement of pregnancy); (c) feeling better off/lucky in comparison to other people (risk: feeling the full impact of infertility); (d) compensating (risk: not reaching their goal of parenthood at any level of attainment); (e) parenting vicariously (risk: living a life that excluded children); (f) ventilating their feelings and concerns (risk: not dealing with one's feelings and concerns regarding infertility and its management); (g) normalizing (risk: being different from others, either fertile or infertile women); (h) involving their husbands (risk: not receiving support from their husbands); and (i) escaping from their infertility (risk: confronting their infertility).

As they progressed through medical intervention, there were times when the participants did not protect themselves and/or others from the perceived risks of multiple births associated with ovulation induction or the risks associated with general anesthetic when undergoing a laparoscopy. This decision often occurred through the participants' balancing of the scales: the perceived risk was outweighed by another factor, most commonly by the high desire for pregnancy.

LIVING UNDER THE MICROSCOPE

While living under the microscope, the participants' infertility and its management were meticulously scrutinized. This examination generally involved three basic aspects. First, the anatomical and physiological factors involved in conceiving a pregnancy were examined. This examination was done by having the participant undergo an extensive infertility workup involving numerous diagnostic procedures (BBT charting, laparoscopy, endometrial biopsy, HSG, hormonal assays). Two additional tests, the PCT and the semen analysis, involved examining the male's reproductive functioning.

Second, the participants lived under the microscope as personal and private information became public knowledge when health-care professionals, most often strangers to the participants, examined the infertile state objectively through diagnostic procedures. An example of this invasion of privacy, reported by many of the participants, involved the situation where the participants informed their doctors via the BBT chart regarding their engagement in sexual intercourse.

And third, the participants lived under the microscope as they, themselves, looked through the lens to examine particular aspects of their infertility and its management. This examination was especially noted when the participants monitored bodily signs indicative of ovulation (reading the BBT chart, presence of Mittelschmerz, observation of cervical mucus, use of ovulation detection kits), the achievement of pregnancy (late menstruation, breast tenderness, lack of premenstrual symptoms, pregnancy testing) and/or the non-achievement of pregnancy (onset of menstruation, reading the BBT chart, symptoms of premenstrual symptom).

CHAPTER 5

DISCUSSION

The purpose of this study was to generate a theory which would help explain the process that infertile women experience when they go through medical intervention for their inability to achieve pregnancy. In the abstraction, this process is described as "Pregnology: The Process of Getting Pregnant Through Science." Using two strategies, balancing the scales and protective governing, the participants progressed through the three distinct stages of Pregnology: (a) the entry into medical intervention, (b) the intervention, and (c) the exit from medical intervention.

Four aspects of this research study will be addressed in the following chapter. First, the findings of this study will be discussed in relation to the literature that pertains to Pregnology. Second, the propositional statements derived from the findings will be presented. Third, the implications of the findings for nursing will be outlined. And fourth, the strengths and limitations of the study will be discussed.

REVIEW OF THE FINDINGS

The participants in this study were driven to achieve pregnancy. This drivenness among infertile persons has previously been noted by Olshansky (1988). The participants' drive to achieve pregnancy will be presented under the following headings: (a) desiring pregnancy, (b) attempting pregnancy on one's own, (c) including a third party in the goal of pregnancy, (d) enduring the aversive effects of medical intervention, and (e) the fading desire to achieve pregnancy. This review will end with a section on how the participants coped with their infertility and its medical management.

DESIRING PREGNANCY

According to Lazarus and Folkman (1984), commitment is a term used to "express what is important to the person, what has meaning for him or her" (p. 56). The commitments underlying the desire to become pregnant varied among the participants. The most common one cited was the fulfillment of a life dream, that is, the dream of becoming a mother. Several of the participants were already mothers, either because of previous children they had already borne or because they had created a family through adoption. Their reasons for seeking a subsequent pregnancy were to complete their families, to provide a sibling for a previous child, or to experience pregnancy. For one, it was important to have a biological child because she, herself, had been adopted. Having a genetic tie with a child was also important in order to have "someone" who physically resembled the participants.

Many of the participants gave additional reasons for wanting to achieve pregnancy, such as to "re-do" their own childhoods, to gain entry into the adult world, or so that they would not be isolated from their fertile peers. Other participants wanted to attain their life-meaning through the responsibility of parenthood. One participant desired pregnancy in order to secure her non-marital relationship. Several of the participants were afraid that their partners would leave them if they did not bear a child. This fear is documented within the infertility literature (Batterman, 1985; Brashear, 1989a; Mahlstedt, 1985; Mazor, 1978, 1984; Menning, 1988).

ATTEMPTING PREGNANCY

The drive or motivation to achieve pregnancy varied throughout the participants' reproductive years. Although they wanted to become pregnant at some time and have a family, most of the participants did not attempt pregnancy immediately upon entering a relationship. Rather, they planned for the event of pregnancy and/or the raising of a family by passing through a phase of "getting ready"; this phase has previously been identified by Becker (1990).

The notion of getting ready involved various factors for the participants. For example, being within a married relationship was often regarded as a prerequisite for parenthood. Getting ready for pregnancy and/or the subsequent raising of a family also included other factors, such as career development and ensuring financial stability. For the participants who already had children, the decision as to "when" a subsequent baby should be conceived was considered in relation to their current children's needs.

All but two of the participants attempted pregnancy once they had reached an acceptable level of "being ready." However, Grace was not psychologically ready for pregnancy but she attempted pregnancy as a treatment for her endometriosis under the advisement of her physician. Holly was psychologically prepared for pregnancy and the subsequent parenting role but her health history contraindicated pregnancy. She did not attempt pregnancy until her health-status improved and stabilized and she received approval from her physician. When the participants attempted pregnancy, most of them approached it with an attitude of "letting it happen" or "trying" to get pregnant, as described by Olshansky (1985, 1987a).

Many of the participants assumed that they would get pregnant easily. This belief, which is common among people (Becker, 1990; Christianson, 1986; Larkin, 1985a; Lukse, 1985; Menning, 1988; Woods & Luke, 1984), received support in several ways, such as receiving little or no preparation for the experience of infertility and having a life that did not include at least one child, not knowing anyone who has been infertile, and having achieved pregnancy previously with little difficulty. In contrast, two of the participants believed that they might have difficulty because they had experienced problems with their menstrual periods while another suspected infertility because it had previously been experienced in her husband's family.

In agreement with Lalos et al.'s (1985a) findings, most of the participants suspected a problem when they did not achieve pregnancy within a year of trying. However, suspecting a problem ranged from 6 months to over 10 years. Suspecting a problem at an early stage has been documented by several authors (Mazor, 1979; Olshansky, 1985; Stigger, 1983).

When the participants could not achieve pregnancy on their own, they did a primary appraisal of their situation. According to Lazarus and Folkman (1984), a primary appraisal focuses on the questions, "Am I in trouble or being benefited, now or in the future, and in what way?" (p. 31). The appraisal is considered to be stressful when it includes loss. All of the participants who were experiencing primary infertility had the two basic losses of never being pregnant in addition to not being a biological mother; two of the participants had attained the status of "being mothers" when they each adopted a baby, however, they still had these primary losses. The participants who were experiencing secondary infertility were already mothers but they were not mothers of the desired number of children. Many of the participants experienced the loss because they failed to fit in with their fertile peers. This particular loss has been felt by other infertile women (Daly, 1989; Lalos et al., 1985a; Sandelowski, 1988; Sandelowski & Jones, 1986) and was expressed in comments which specifically conveyed a feeling of being "left out" when interacting with their fertile peers. Furthermore, the participants lost control over their life-plans (Brashear, 1989a; Davis, 1987; Katz et al., 1985; Mahlstedt, 1985; Menning, 1988; Stigger, 1983) by not being able to achieve pregnancy when they wanted to.

INCLUDING A THIRD PARTY

Once the participants had appraised their inability to achieve pregnancy on their own as being stressful, they then did a secondary appraisal of the situation. According to Lazarus and Folkman (1984), this type of appraisal involves the question, "What can I do?" (p. 157). In this study, all the participants identified medical intervention as a way to cope with their inability to achieve pregnancy on their own. This finding has been noted by other researchers (Becker, 1990; Sandelowski et al., 1989; Woollett, 1985). Two participants delayed seeking this assistance. One delayed seeking medical assistance because she wanted to get pregnant "naturally," without the help of science while the second believed that her inability to achieve pregnancy was due to the stress surrounding a geographical move. Although this particular rationalization is not identified within the literature, infertile persons frequently use rationalization to explain why they have not achieved pregnancy (Frank, 1984; Larkin, 1985b; Mazor, 1978; Menning, 1979; Woollett, 1985).

When the participants sought medical assistance, they "reframed their desire" (Sandelowski et al., 1989) and accepted medical intervention to achieve pregnancy. It is recognized that medicine provides hope to persons utilizing the health-care system (Lazarus & Folkman, 1984; McGee, 1984; Miller, 1985). This is especially true for persons who undergo treatment for infertility (de Zoeten et al., 1987; Frankel, 1978; Lalos et al., 1985a; Leiblum, Kemmann, Colburn, Paspuale, & DeLisi, 1987 as cited in Brashear, 1989b and Leiblum, 1988; Olshansky, 1988; Wilson, 1979). Hope is a concept that involves a person having something to look forward to in the future (Hickey, 1986; Hinds, 1984; McGee, 1984). In addition, the hoping person believes that he or she can attain the future expectation (Dufault & Martocchio, 1985).

Reframing their desire implied that the participants were willing to include a third party (physicians, nurses, technicians), who were often strangers to them, into their goal of achieving pregnancy. This differs from most couples because the achievement of pregnancy is generally a private matter, often shared only between partners (Grayshon, 1989; Sandelowski et al., 1990).

The participants generally sought medical assistance from a physician from whom they had previously received medical care, most often a family doctor or a gynecologist. As noted in the literature, medical assistance is routinely sought by the woman rather than by the male partner (Draye et al., 1988; Hertz, 1982; Lalos et al., 1985b, 1986; Miall, 1985; Rosenkvist, 1981; Whieldon, 1989). This is supported by the findings from this study. Kate was the one exception as medical assistance was initially inquired about by her husband when he sought medical care for scrotal pain from a urologist. Following this, Kate also sought assistance from a physician from whom she had previously received care.

Upon receiving medical confirmation that their inability to conceive a pregnancy was a problem requiring medical intervention, all but one participant entered into the second stage of Pregnology, that is, the taking of medical intervention. The decision to not undergo medical intervention was made through the strategy of balancing the scales: there were items in the participant's life that were more important than the medical management of her infertility.

When the participants included the medical profession in their goals of achieving pregnancy, they were exposed to the two particular foci of assistance. The first focus was on the physiological functioning of the participants' reproductive systems through undergoing the various testing procedures. The participants began to "live under the microscope" as their reproductive systems were meticulously scrutinized by physicians, nurses, and technicians. The participants also assessed their ovulatory function by charting their BBT.

In addition to observing their ovulatory functioning, several of the participants examined their general state of infertility by reviewing their family histories for conditions, such as infertility and endometriosis. Two of the participants also examined their pasts, searching for an incident which may have contributed to their infertility, such as premarital sex or the extended use of the birth control pill.

In this study, the focus on reproductive physiology was also evident when the participants were required to engage in sexual intercourse during the suspected time of ovulation. Activities also included attempts to increase the husbands' sperm counts.

If the etiology underlying their infertility was determined, the participants were offered various treatments which might correct and/or circumvent the cause(s) underlying their infertility. After the participants had taken the treatments, especially if they had attempted to unite the gametes, they began to observe their reproductive functioning in terms of whether or not they had achieved pregnancy. This physiological focus involved looking for bodily signs indicative of pregnancy. Many of the participants were consumed with the activity of "looking for blood." Lack of menstrual bleeding was an indication that pregnancy might have been achieved. However, when vaginal bleeding did occur, it held an additional meaning, especially for the participants who had experienced miscarriages (spontaneous abortion), because it is one bodily sign of a threatened abortion (Olds et al., 1984). Some women took protective action, such as lying down. It has previously been reported that infertile women will often take protective measures when they believe that they may have achieved pregnancy (Milne, 1988; Sandelowski, 1988).

Other bodily signs indicative of the achievement of pregnancy, such a breast tenderness, were also sought. The participants assumed that they were not pregnant when they noted bodily changes indicative of the non-pregnant state. Such changes often related to premenstrual syndrome, such as irritability, weight gain, abdominal cramping, and acne (Lauersen & Whitney, 1987; Madaras & Patterson, 1981).

Having the foci on reproductive physiology and medical technology, the participants received little or no counselling on the emotional/psychological aspects of infertility and its management. This "medical" approach to infertility has been explicitly acknowledged by several authors (Dennerstein & Morse, 1985; Mahlstedt, 1985; Martin as cited in Becker, 1990;

Shapiro, 1986). This acknowledgement is supported by reports by infertile persons who wished they had received counselling for the emotional/psychological aspects of infertility during medical intervention (Daniluk et al., 1987; Freeman et al., 1985; Lalos et al., 1985a, 1985b, 1985c).

ENDURING THE AVERSIVE EFFECTS

Lazarus and Folkman (1984) stated that a person's commitment will determine how much effort he or she is willing to put forth to achieve the desired goal. In addition, they have noted a person's commitment to a particular goal, such as life, may be so strong that he or she is willing to undergo medical regimens which are aversive in nature. These characteristics of commitment were illustrated in the findings of this study. Specifically, the commitments underlying the drive to achieve pregnancy were so strong among the participants that most of them were willing to endure the aversive effects associated with medical care of infertility. The identified effects were: (a) spending time on the medical management of their infertility, (b) undergoing an infertility workup, (c) undergoing infertility treatment, and (d) engaging in scheduled sex.

Spending Time

The participants spent a considerable amount of time on the medical management of their infertility. Time was spent on preparatory work prior to the appointments, at the appointments, having various tests and treatment procedures done, and in obtaining medication, which frequently involved travel to a distant supplier.

For several of the participants, who worked shiftwork, infertility appointments were attended on their "days off," indicating a willingness to take time out of their personal lives to attend appointments. Whereas many of the participants, who worked regular hours, had to take time off. In addition, several of the participants had to take time off from their employment to recover from surgical procedures. Upon arriving for their infertility appointments, many of them had to spend additional time waiting to see physicians; this could vary from 15 minutes to over 2 hours.

Undergoing an Infertility Workup

Most of the participants were driven to discover "what" was preventing them from achieving pregnancy, so they were willing to undergo various testing procedures. One common procedure was the BBT charting. One participant changed her lifestyle in order to obtain an accurate temperature reading. Most of the participants merely noted changes in their routines on the chart. By doing this, the participants incorporated their infertility into their lives rather than their lives into their infertility.

The participants also needed to record "when" they engaged in sexual intercourse on the BBT charts. As noted by Menning (1988), converting sexual activity into "X's" on a chart is making public knowledge of something that is usually kept private between the partners. This privacy was further invaded when they showed their physicians the BBT charts. Several of the participants were willing to endure this type of invasion into their private lives because they believed that their physicians required this information in order to help them become pregnant.

Most of the participants underwent other testing procedures which were physically invasive and produced aversive effects. For example, many of the participants endured physical pain, especially with the endometrial biopsy and the HSG. These two tests also aroused feelings of embarrassment and humiliation as the participants physically exposed their bodies to various health-care professional, such as physicians, nurses, and technicians. This bodily exposure sometimes induced further feelings of discomfort, especially if the physician was a "young, male doctor."

When undergoing general anesthetic for the laparoscopy, several of the participants explicitly expressed the fear of dying. This particular fear appears to be common among infertile women (Lalos et al., 1985b). For one participant, the fear of dying was so great that she had decided not to have another laparoscopy.

Undergoing Infertility Treatment

The drive to achieve pregnancy was also evident as the participants pursued the various treatment options. Many of the participants were anxious to try any treatment that their physicians suggested, such as ovulation induction through Clomid administration, because they viewed it as a means by which they would achieve pregnancy. This blanket acceptance of treatment has been recognized by several authors (Frankel, 1978; Lalos et al., 1985a; Leiblum, Kemmann, Colburn, Paspuale, & DeLisi, 1987 as cited in Brashear, 1989b and Leiblum, 1988; Wilson, 1979).

There were many aversive effects associated with treatments, such as the financial cost and side-effects of the treatments undertaken (mood swings and hot flashes attributed to Clomid administration). In particular, side-effects of Clomid were not confined to the participants' personal lives; rather, they extended into other areas of the participants' lives. For example, it was difficult to work in the place of employment because of hot flashes. Despite these side-effects, the participants continued to pursue treatment.

Although several of the participants had undergone surgical treatment, only one commented on the side-effects she experienced. One participant described herself as "brain-dead" and being an unbelievable "air-head" when she recovered from one surgery. Her physician attributed her mental state to the combination of medications that she was receiving at the time. This reaction interfered with her ability to carry out her daily activities, such as driving her car. In addition, this participant believed that the six to seven inch scar on her abdomen made her look "unattractive." These reactions all relate to a sense of body-image, that is, one's mental image of his or her own body (Bille, 1977).

As the participants undertook treatment, they were faced with considerable uncertainty regarding whether pregnancy would be achieved. According to McIntosh (1976 as cited in Mishel, 1984), a state of uncertainty occurs when the person "is unable to accurately predict outcomes" (p. 163). Although the participants were unable to determine whether they would achieve pregnancy, many of them believed there was a chance of becoming pregnant because of the efforts made to optimize their reproductive factors. This particular situation of uncertainty corresponds to Lazarus and Folkman's (1984) concept of "event uncertainty," which focuses on the likelihood of a particular event occurring.

This uncertainty of "if and when" pregnancy would be achieved, noted by other authors (Milne, 1988; Sandelowski et al., 1989), was coped with in several different ways by the participants in this study. For example, Kate encouraged her husband to have a vasectomy, thereby interfering with his reproductive functioning. Other participants had a pregnancy test done which would indicate whether or not pregnancy had been achieved. Although living in this state of uncertainty was stressful for many of the participants because they found it difficult to make future plans (vacationing, career plans), several of the them welcomed it because it provided an element of hope that they may have achieved pregnancy. This hopeful aspect of uncertainty (Dufault & Martocchio, 1985) was illustrated when the participants "looked for blood": if they were not menstruating, many of the participants perceived it to be a possible sign of pregnancy. Many of the participants also coped with the uncertainty by approaching the suspected onset of menstruation with an attitude of guarded optimism. This coping strategy, which encompasses both the hope of pregnancy and the anticipation of non-pregnancy, has also been identified in the research findings of Sandelowski et al. (1990).

Although the participants underwent treatment, they did not always succeed in achieving pregnancy. When this happened, many of the participants considered that the treatment had not been worth it. Specifically, most of the participants felt that the worth of medical intervention was dependent on whether or not pregnancy was achieved.

Although some of the participants have not, to date, achieved pregnancy through treatment, they were still able to identify various benefits to their experience of infertility and its care. For example, Hilary, Ginny, and Leah all believed that the treatment taken thus far contributed to the overall management of their infertility. Gillian felt that sharing the experience of infertility with her husband strengthened the bond between them. In addition, Gillian attributed the adoption of a daughter, who she viewed as a blessing, to be the result of her inability to have her own biological child. Ruth and Leah also believed that, by experiencing infertility, they gained a greater appreciation for having a child of their own. In addition, Gina and Eve believed that they had developed compassion for others who are also going through distressing situations. According to Lazarus and Folkman (1984), acknowledging the positive features from a negative situation is one way of coping with the situation.

Many of the participants coped with the non-achievement of pregnancy by repeating treatment. This corresponds to the "getting stuck" pattern of pursuit (Sandelowski et al., 1989). This way of coping with the letdown is generally the standard practice in medicine (Speroff et al., 1989).

Engaging in Scheduled Sex

In this study, there were two components of scheduled sex. The first component involved the participants and their husbands abstaining from sexual activity in order for the husband's ejaculate of semen to be adequate in terms of the sperm count. Driven to achieve pregnancy, most of the participants and their husbands were willing to comply with this, even in the midst of heightened libidos.

The second component of scheduled sex involved the participants engaging in sexual intercourse during the anticipated times of ovulation in order to attempt uniting the gametes. This often occurred when the participants and their husbands were not desirous of engaging in such activity, for example, due to tiredness. There were times when the participants did not fulfill the obligation of scheduled sex, but mostly they did because they were both driven to achieve pregnancy and wanted to avoid missing the opportunity. For Rachel, the pressure to fulfill the obligation was very strong because she had taken Clomid to induce ovulation and she wished to avoid "wasting" these pills. This particular situation has been acknowledged in previous work (Leiblum, 1988).

The sexual relationship has three different foci which include: (a) recreational (engaging in sexual activity for the purpose of having fun); (b) relational (engaging in sexual activity for the purpose of sharing with a cared-for person); and (c) procreational (engaging in sexual activity for the purpose of having children) (Masters, Johnson, & Kolodny, 1992). As the participants engaged in sexual intercourse, the participants focused strongly on the procreational component. Frequently, the participants viewed sexual activity as being the means to the end, that is, conceiving a baby. When concentrating on the procreative aspect of sexual activity, the participants often lost the relational component. For example, one husband accused his wife of wanting him "only" for his procreative attributes, that is, his semen. Feelings, such as being a "babymaking machine" or a "breeder," have been expressed by other men whose partners are desperately seeking pregnancy (Ansbacher & Adler, 1988; Drake & Grunert, 1979; Larkin, 1985b; Salzer, 1986). Many of the participants and their husbands lost the recreational component that the sexual relationship often serves; when fulfilling the obligation of scheduled sex, it became a chore to complete rather than being a spontaneous and enjoyable activity. Several of the participants made the distinction between "making love" and "having sex."

Many of the participants were so driven to accomplish the task of scheduled sex that they assumed the role of being the initiator of sexual activity; it has been noted that although men traditionally play the role of initiator involving sexual activity (Crooks & Baur, 1983), infertile women often feel that they are responsible for initiating *scheduled* sex (Lalos et al., 1985b). For several of the participants, this was a new role while for other participants, it was a change in the role. Rather than being the initiator "sometimes," these participants were becoming the initiator "all the time." This particular change in roles has been noted by Debrovner and Shubin-Stein (1975).

THE FADING DESIRE TO ACHIEVE PREGNANCY

For most of the participants, the drive to achieve pregnancy persisted throughout Pregnology, even though pregnancy was not achieved. For several of the participants, however, the drive to achieve pregnancy faded. They did not desire pregnancy as much as they initially did. When this happened, these participants sometimes anticipated discontinuing their treatments. Although Jacqueline eventually achieved pregnancy through medical treatment, she acknowledged that terminating it would be very difficult: "You're caught up in the process...you continue because the more energy you put into it, the more you want to resolve [it] and the more you don't want to abandon what you have already done."

The desire for pregnancy faded for several reasons. It also fluctuated between "highs" and "lows" depending on whether there were currently "positive" or "negative" feelings towards the parenting of a baby. The drive to achieve pregnancy also decreased when having a baby interfered with other priorities in life, such as holidaying with the family. The desire for pregnancy also decreased for one participant when she observed that pregnancy would result in a long age-spread between her current child and the "future" child.

When the achievement of pregnancy was perceived as presenting a risk to themselves and/or others, many of the participants anticipated terminating treatment. An example of this was a threat to marital harmony resulting from scheduled sex. AID was unacceptable to another participant because it would result in an inequality, in terms of having a biological child, between her and her husband. Rather than having a child who was genetically related to only one partner, they pursued adoption. The decision to reject AID and pursue adoption in order to retain the "equality" between the partners has been previously identified (Notman, 1984). Other factors that decreased the desire for pregnancy included financial risk, increasing age of parents, and changes related to the parents' lifestyles. Terminating treatment corresponds to "drawing the line" pattern of pursuit which has previously been cited by Sandelowski et al. (1989).

STRATEGIES USED TO COPE WITH THE INFERTILITY AND ITS MEDICAL MANAGEMENT

Coping refers to the strategies used to manage external and/or internal demands that tax or exceed the resources of the person. Coping strategies may be either problem-focused or emotion-focused. When using problem-focused coping strategies, the person directs his or her efforts at managing the problem that is causing the distress. In contrast, emotion-focused coping strategies are used when the person focuses his or her efforts on managing the emotions that are aroused in response to the problem. Emotion-focused coping strategies are generally used when the problem cannot be modified (Lazarus & Folkman, 1984). In this study, the participants used two strategies to cope with their infertility and its medical management. These strategies were balancing the scales and protective governing.

Balancing the Scales

In this study, the participants used the strategy, balancing the scales, when they had to cope with the various decisions that they had to make surrounding the management of their infertility. When the participants used this strategy to make decisions, they were managing the decision-making process directly. As such, balancing the scales is considered a problem-focused coping strategy.

The participants were confronted with two general types of decisional conflicts, that is, the "simultaneous opposing tendencies within the individual to accept and reject a given course of action" (Janis & Mann, 1977, p. 46). The first conflict involved the participants making decisions about their infertility care in relation to the rest of their lives. The participants experienced this specific conflict on several different occasions, such as attending infertility appointments during the working hours of their employment and fulfilling the obligation of scheduled sex when not desirous to engage in such activity. When deciding on the course of action to be taken, the participants often weighed the various factors pertaining to their infertility care (testing and treatment regimens; phase of menstrual cycle) and their lives (marital relationship, energy level, employment). The weighting of factors is a part of the decision-making process (Janis & Mann, 1977). When the participants prioritized their infertility care over and above other aspects of their lives, they were actually incorporating their lives into their infertility. On the other hand, the participants incorporated their infertility in their lives when their infertility care took second place in relation to their lives. In this study, most of the participants incorporated their infertility care into their lives because they were intent on achieving pregnancy. The centrality that infertility played in the participants' lives corresponds to the findings of Olshansky's research (1985, 1987a).

Although many of the participants simply accepted the treatment options offered to them, several of them were faced with a decisional conflict when they were offered or anticipated being offered a given option (IVF) which presented the hope of pregnancy to them, however, it involved unfavourable terms for them (low success rate; a high financial cost; a heavy time involvement and/or commitment). As with the first decisional conflict, the participants made the decision or anticipated making the decision to either accept or reject the option by weighing the pros and cons associated with that option.

Protective Governing

Protective governing is the second strategy that the participants in this study used to cope with their infertility and its medical management. When using this strategy, the participants protected themselves and/or others from a perceived risk. They generally obtained this protection by making decisions that would shield themselves and/or others from the perceived risk. When used in this way, protective governing is a problem-focused coping strategy because the participants used it to cope directly with a perceived risk.

The strategy of protective governing has previously been identified by Juliet Corbin in her work pertaining to a pregnancy complicated by chronic illness (Corbin, 1986a, 1987; Strauss & Corbin, 1990). Corbin (1987) identified protective governing as being the general term that described the management strategies used by women to exert control over the potential risks threatening the outcome of their pregnancies. Specifically, these women attempted to control the physical risks associated with their chronic illnesses in order to maximize their chances of having a healthy baby. Similar to Corbin's (1987) definition, the participants in this study used the protective governance strategy in order to protect themselves from physical risks. For example, several of the participants have anticipated terminating infertility treatment when they reach an age where the risk of having a baby would present a health risk to them and/or the baby. Another example involves one participant's decision not to undergo a laparoscopy in order to protect herself from the potential risk of death that is associated with general anesthetic.

The women participating in Corbin's (1987) study used several strategies to maximize the physical health of their expected babies. This particular use of protective governing differs from that found in Pregnology. Specifically, the participants in this study used several specific strategies, which were protective in nature, in order to shield themselves from situational risks that were generally not threatening in terms of the physical health of themselves and/or others. The participants protected themselves from these situational risks, which were generally identified with the letdown, through the strategies of: (a) changing doctors, (b) releasing themselves from the responsibility of the infertility, (c) feeling better off or lucky in comparison to others, (d) adopting, (e) parenting vicariously, (f) ventilating their feelings and concerns surrounding their infertility, (g) involving their husbands, and (h) escaping from their infertility. These specific strategies of protective governing will be summarized and related to the literature in the following section. It is noted that the participants used some of these strategies to manage the letdown directly (problem-focused strategies) whereas others were used to cope with feelings that were aroused because of the inability to achieve pregnancy (emotion-focused strategies).

Changing Doctors

When the participants did not achieve pregnancy while under their physicians' supervision, they were generally referred to another physician who had advanced medical expertise in the area of childbearing and/or infertility management. The participants changed doctors to protect themselves from the risk of receiving inadequate or sub-optimal medical care. In essence, the participants changed doctors in an attempt to receive the best medical care possible. The notion of receiving care from "the best" physician has previously been identified by McGeary (1991). The receipt of medical supervision in these referrals is similar to the "backtracking" pattern of pursuit, as identified by Sandelowski et al. (1989).

Most of the participants in this study followed one of three basic paths of referral: (a) the general practitioner or family physician who referred the participant directly to the infertility clinic; (b) the general practitioner or family physician who referred the participant to a gynecologist who later referred the participant to an infertility specialist, and (c) the gynecologist who referred the participant to a specialist at the infertility clinic. One participant, however, deviated from these referral patterns in two ways. First, when she did not achieve pregnancy while under her infertility specialist, she initiated a transfer to another infertility specialist. This participant made a more radical deviation from the referral system when she transferred the management of her infertility from the second infertility specialist to a gynecologist. Underlying these particular patterns of changing doctors or "doctor hopping" was the belief that a different physician would probably have a different insight into the management of the infertility. The phenomenon of doctor hopping, which corresponds to Sandelowski et al.'s (1989) "backtracking" pattern of pursuit, has previously been identified by Chassé (1991).

Releasing Themselves From the Responsibility

In this study, several of the participants released themselves from the responsibility of achieving pregnancy when they experienced the letdown. They did this by providing specific reasons for "why" they had not achieved pregnancy. For example, one participant explained the letdown by saying that her physician had miscalculated her menstrual cycle and that had resulted in engaging in scheduled sex at an inappropriate time. The participants' reluctance to assume self-blame for the non-achievement of pregnancy does not support the work of Milne (1988) and Sandelowski et al. (1989).

Several of the participants also released themselves from the responsibility of achieving pregnancy by giving it to God. It has been documented that other infertile persons have used this strategy to cope with the non-achievement of pregnancy (Baker & Quinkert, 1983; Davis & Dearman, 1991; Sandelowski & Jones, 1986; Sandelowski & Pollock, 1986; Stigger, 1983). The strategy of giving God control over a situation has also been used by persons experiencing distressing situations other than infertility, such as bereavement (McClowry et al., 1987) and chronic illness (Miller, 1983). As the participants gave the event of pregnancy over to God, several of them attempted to bargain with Him. Bargaining action, which has been noted to occur among infertile persons (Mazor, 1978; Menning, 1988), corresponds to the stage of bargaining in the grieving process that people go through as they suffer a loss, specifically death and dying (Kübler-Ross, 1969).

Feeling Better Off or Lucky

It is acknowledged that a person's social network and the support it provides is a coping resource (Cohen, 1979 as cited in Panzarine, 1985; Hirsch, 1981 as cited in Panzarine, 1985; Lazarus & Launier, 1978 as cited in Panzarine, 1985 McCubbin, 1979 as cited in Panzarine, 1985; Mechanic, 1977 as cited in Panzarine, 1985). One function that social support serves is that of appraisal (House, 1981; House & Kahn, 1985). This appraisal support was illustrated in this study when the participants evaluated themselves as being "better off" or "lucky" based on the information received from others. This self-evaluation has been referred to as "social comparison" by social psychologists (Festinger, 1954 as cited in House, 1981; Jones & Gerard, 1967 as cited in House, 1981). Lazarus and Folkman (1984) have considered these positive comparisons to be an emotion-focused coping strategy.

The participants felt better off or lucky in comparison to other infertile persons. For example, believing that pregnancy is more difficult to achieve when the woman is older, Ruth felt lucky because she was only in her early 30's while some of the other women she saw at the infertility clinic looked older. Hilary also felt lucky because she had ovaries and a cervix while other infertile women did not. Infertile women comparing themselves to each other, in an attempt to evaluate themselves as being "better off," has been noted by other researchers (Sandelowski, 1988; Sandelowski & Pollock, 1986).

The participants in this study also felt lucky or better off when they compared themselves to people in undesirable situations other than infertility, such as having cancer or being a single parent. When evaluating their infertility situations from these perspectives, the participants were minimizing or downplaying the consequences their infertility had on them. This particular strategy has been used by chronically ill persons (Miller, 1983). A similar strategy, making light of the situation, has also been used by patients with newly diagnosed cancer (Weisman & Worden, 1976-77 as cited in Miller, 1983). It is noted that minimization is regarded as an emotion-focused coping strategy (Lazarus & Folkman, 1984). Finally, several of the participants in this study felt lucky when they considered the positives that they had in their lives, such as having a loving husband or having children who were healthy.

Adopting

When the participants did not achieve pregnancy, their goal went unfulfilled. Many of the participants felt that, if they could not attain the goal of pregnancy, then they would replace that goal with one that they could attain.

The most common way of compensating for their inability to achieve pregnancy was by adopting a baby. Although having a biological child of their own was the preferred way of having a family, most of the participants accepted adoption as a potential "back-up" plan if they did not achieve pregnancy. In agreement with Rothman (1989), these participants generally viewed parenthood beyond the genetic linkage.

When considering adoption, the participants were "reframing their desire." If they were not able to get a child through their own reproductive capabilities, then they were willing to adopt child. As noted by Sandelowski et al. (1989), this reframing of desire involved the weighing of two options: "Either have a child that's adopted or don't have children" (p. 225).

Although adoption negates the pregnancy and birthing experiences, it does provide a child to persons who want to be parents. In this instance, adoption can be viewed as a compensation that provides an equivalent in the parenting experience (*Webster's New World Dictionary of American English*, 1988).

Until the participants were unable to have their own biological child with the aid of medical intervention, most of them refused adoption. Two participants pursued adoption while they were undergoing infertility investigation and/or treatment. The strategy of coping with their infertility corresponds to Sandelowski et al.'s (1989) "paralleling" pattern of pursuit, where multiple tracks are actively pursued simultaneously.

Parenting Vicariously

Parenting vicariously is a strategy whereby the participants became involved with other people's children in order to protect themselves from a life without children. This particular finding is somewhat similar to those found in a study by McClowry et al. (1987). When investigating the grief process in the bereaved family, these researchers identified the "empty space" phenomenon, where "there's always [some]one missing" (p. 363). The participants in this study also experienced an empty space, where the "missing one" was the conceived pregnancy. Although "parenting vicariously" was conceptualized as a way of protecting the participant from a childless life, it could also be viewed as being a way to fill the empty space in the participants' lives.

The participants experienced parenting vicariously through becoming involved with other people's children by babysitting or by becoming a godmother. Rather than experiencing the parenting role vicariously through other people's children, one participant attained this role by lavishing maternal care on two cats. Only two studies were found that focused on the use of pets (companion animals) during the infertility experience (Blenner, 1991; Lalos et al., 1986). Blenner (1991) found that a companion animal, such as a cat or dog, served as a pseudo-child for the infertile person, thereby providing an opportunity for the person to assume a parental role and have an outlet for nurturance.

Ventilating Their Feelings and Concerns

Another strategy that the participants used to cope with the letdown of non-pregnancy was to ventilate their feelings and concerns to others. Talking and having other people listen to one's feelings and concerns, illustrates the emotional function that social support serves (House, 1981). The act of expressing one's feelings and concerns by infertile women has been conceptualized as "sharing the burden" by Davis and Dearman (1991). People in other types of distressing situations, such as newly diagnosed cancer (Weisman & Worden, 1976-

1977 as cited in Miller, 1983) or chronic illness (Miller, 1983) have also used talking to others as a coping strategy.

Various aspects of social support as a coping strategy are illustrated in this study. For example, the participants identified persons who could and could not provide emotional support. In addition to listening, a person provides emotional support when he or she empathizes with another person (House, 1981). One definition of empathy includes "the projection of one's own personality into the personality of another in order to understand the person better; ability to share in another's emotions, thoughts, or feelings" (*Webster's New World Dictionary of American English*, 1988, p. 445). Supporting the findings of other researchers (Daly, 1989; de Zoeten et al., 1987; Sandelowski, 1988, 1990; Sandelowski & Jones, 1986; Sandelowski & Pollock, 1986), the participants generally believed that the greatest understanding of infertility is felt by persons who have also experienced infertility. In this study, "other" infertile persons, particularly women, were identified as being "kindred spirits." In a similar vein of thought, the participants also believed that the problem of infertility could not be understood by persons who have never experienced it. Although several of the participants received emotional support from kindred spirits, others did not have access to this particular source of support simply because they did not know other infertile women. As House and Kahn (1985) stated, "social relationships must exist...before they can have a...supportive content or function" (pp. 88-89).

When persons, who have similar experiences, talk with one another, there is a possibility that they will experience a negative effect on the emotional distress rather than a positive one. For example, Hobfoll and London (1983 as cited in Hobfoll, 1985) found that women, whose loved ones were mobilized into the military during the time of war, experienced a "pressure cooker" effect when they shared their crisis with each other. Specifically, these women experienced feelings of anxiety because they were reminded of their common plight as they talked with each other. Rather than feeling a sense of anxiety, the participants in this study reported positive feelings, such as feeling comforted and having a sense of normality, when they talked with their kindred spirits.

Although most of the participants believed that they were understood by others who were also experiencing infertility, none of the participants were currently involved with a formal infertility peer support group, which is identified by House (1981) as being a formal source of social support. The participants cited various reasons for their non-involvement with such a group, such as having enough support already and not wanting to talk to strangers. These reasons correspond respectively to the perceived need for support (Hobfoll, 1985) and the quality of the social relationship that one has with another (House & Kahn, 1985). In addition, the theory of social exchange may apply here in relation to the participants not wanting to talk to strangers about their infertility. Specifically, it has been suggested that attempting to activate social support where there has been no prior social exchange may or may not result in the receipt of that support (Huesmann & Levinger, 1976 as cited in Hobfoll, 1985). Hobfoll's (1985) contention that self-help groups may be an exception to this is not supported by the findings from this study.

Normalizing

Normalization is a concept describing how people convey an impression of normality or normalcy to others (Knafl & Deatrick, 1986). In this study, the participants normalized themselves either as a non-infertile woman or as an infertile woman.

According to Miller (1983), a person experiencing an illness maintains a sense of normality or normalcy by "keeping signs and symptoms of illness under control or out of view from persons surrounding the individual" (p. 18). Although infertility is frequently not regarded as an illness (Brashear, 1989b), one of the participants in this study employed these strategies of normalization when she controlled the signs of Stein-Leventhal syndrome by plucking the hairs from her chin and shaving her legs in addition to disguising or hiding the balding areas on her head from others by using special hair products and hair styling techniques. This participant also normalized herself as a non-infertile woman by not talking about her infertility to others. Normalizing one's situation by limiting the information given to others through the act of concealing has been used by parents with a disabled child (Darling, 1979, 1982 as cited in Knafl & Deatrick, 1986; Voysey, 1972 as cited in Knafl & Deatrick, 1986).

Two of the participants in this study normalized themselves as non-infertile women by not associating with other infertile women. Leah avoided other infertile women because they were mirror images of herself as an infertile woman while Gillian would not attend an infertility peer support group because it would mean that she was admitting to having an infertility problem. Normalizing one's situation by limiting contact with others who are in similar circumstances has been used by parents with a disabled child (Birenbaum, 1970, 1971 as cited in Knafl & Deatrick, 1986; Darling, 1979, 1982 as cited in Knafl & Deatrick, 1986; Roskies, 1972 as cited in Knafl & Deatrick, 1986). In Gillian's situation, the strategy of not becoming involved with a formal infertility support group corresponds with Bierenbaum's (1970 as cited in Knafl & Deatrick, 1986) findings indicating that parents who had a disabled child limited their involvement in educational and treatment programs. Specifically, these parents believed that having a strong involvement in such programs would accentuate their identities as being parents of a disabled child and that their identities would not be of the conventional social order.

Rather than normalizing themselves as being non-infertile, several of the participants sought to normalize themselves as infertile women. This normalization, which involved the participants comparing themselves to other kindred spirits and noting the similarities rather than the differences, was sought and/or attained by talking "in-person" with other kindred spirits and/or reading about their experiences of infertility. This strategy of normalization corresponds to appraisal support (House, 1981).

Involving Their Husbands

Davis and Dearman (1991) found that women coped with their infertility by sharing the burden of it with their husbands. Other authors have noted that husbands have helped their wives through the infertility experience (Baram et al., 1988; Bierkens, 1975 as cited in Conway & Valentine, 1987; Conway & Valentine, 1987; Stewart & Glazer, 1986; Valentine, 1986). This is supported by the findings from this study.

Based on the participants' infertility stories, their husbands' involvement generally focused on the emotional and instrumental support given to their wives as pregnancy was pursued through medical intervention. The husbands provided emotional support by listening to their wives' feelings and concerns about infertility; involving their husbands in this way was an emotion-focused strategy that the participants used to cope with their infertility. The husbands provided instrumental support by spending time on the activities associated with medical intervention, such as accompanying their wives to the infertility appointments and engaging in scheduled sex; involving their husbands in this way was a problem-focused strategy that the participants used to cope with their inability to conceive.

According to the participants' situations, their husbands gave varying levels of emotional and instrumental support throughout the infertility experience. Based on this, four typologies were developed according to the type and amount of support that the husbands provided their wives. These typologies include the activist, the side-liner, the co-operator, and the aggravator. Characteristics of these four types of husbands have been noted throughout the literature. For example, the emotional support, as provided by the activist and side-liner, corresponds to the "expressive" style of first-time expectant fathers as identified by May (1980). The willingness and ability of the activist to provide instrumental support is similar to the "instrumental" style of first-time expectant fathers (May, 1980).

Characteristics of the co-operator were also discovered in the literature. For example, the participants in this group believed that their desire for parenthood was greater than it was for their husbands. The unequal desire for parenthood between the partners (Battaglia et al., 1983; Chelo et al., 1986; Conway & Valentine, 1987; Daly, 1989; Goodman & Rothman, 1984; Rosenkvist, 1981) corresponds to May's (1980) "observer" style of first-time expectant fathers. Specifically, these fathers did not have an emotional attachment to the pregnancy in addition to giving the impression that pregnancy was not important to them. In Pregnology, the participants also felt a lack of emotional support when their husbands expressed little concern when pregnancy was not achieved. Specifically, the participants in this group stated that their husbands made comments that negated their concerns over the inability to achieve pregnancy rather than validating them. This particular finding corresponds to May's (1980) "instrumental" style of first-time expectant fathers, where the emotional aspects of pregnancy were downplayed.

The final type of husband was the aggravator. Characteristics of this type of husband were also found in the literature. For example, husbands' unwillingness to listen to their wives feelings and concerns surrounding the infertility has been discovered by other researchers (Sandelowski & Jones, 1986). In addition to not providing emotional support, the aggravator participated in activities which actually aggravated the management of the infertility, such as being unwilling to engage in sexual intercourse during the suspected time of ovulation. This particular finding has previously been substantiated by other researchers (Sandelowski & Jones, 1986; Sandelowski & Pollock, 1986). This lack of instrumental support is similar to that of the "observer" style of first-time expectant fathers. Specifically, these fathers were unwilling to share in activities associated with pregnancy, such as attending prenatal classes (May, 1980).

Escaping From Their Infertility

Another strategy that the participants used to cope with the feelings aroused by their inability to conceive was to distance themselves from their infertility. This corresponds to Davis and Dearman's (1991) coping strategy of "increasing space" where the woman increases the space between herself and her infertility.

The participants in this study distanced themselves from their infertility through several avenues of escape, such as taking an educational course, holidaying, or becoming involved with their employment. These particular avenues have been identified by others (Davis & Dearman, 1991; Fleming & Burry, 1987; Olshansky, 1987b) as being strategies used by infertile persons, particularly women, to distract themselves from their infertility. Similar ways of distraction have been used by people facing distressing situations other than infertility, such as bereavement (McClowry et al., 1987) and chronic illness (Miller, 1983). This selective attention, that is, distracting oneself from the problem, is identified as an emotion-focused coping strategy (Lazarus & Folkman, 1984).

Two participants in this study escaped from their infertility by using the strategy of avoidance. For example, Grace avoided her mother-in-law who was always asking questions about the infertility while Greer avoided people and events, such as baby showers and family outings, which were reminders of her infertile state. The avoidance of reminders of infertility has been well documented throughout the literature (Bierkens, 1975 as cited in Davis, 1987; Davis & Dearman, 1991; Fleming & Burry, 1987; Garner, 1985; Kraft et al., 1980; Lalos et al., 1985a; Mazor, 1984; Menning, 1988; Millard, 1991). This strategy of avoidance has been identified as an emotion-focused coping strategy by Lazarus and Folkman (1984).

PROPOSITIONAL STATEMENTS

The following propositional statements were derived from the findings of this study:

1. Pursuing pregnancy through medical intervention is generally an emotionally and physically painful experience for women.
2. When experiencing infertility and its medical management, women will experience losses other than the inability to achieve a pregnancy (loss of control over their life plans; loss of privacy in their lives, especially within their sexual relationships; loss of fitting in with their fertile peers).
3. Experiencing infertility and its management often invade the physical, interpersonal, intrapersonal, and social spheres of a woman's life.
4. Although the medical management of infertility often assumes a primary role in women's lives, there are times when other aspects of their lives take precedence over the infertility management.
5. The pursuit of pregnancy through medical intervention affects people (husband) other than the infertile woman.
6. Although there are many emotional or psychological aspects related to infertility and its management, the intervention is frequently focused on reproductive physiology and medical technology. There is a role for nurses in addressing the psychosocial needs of women who undergo medical care for infertility.
7. Even if a pregnancy is achieved and results in a live birth, the life event of being infertile often remains with the woman.

IMPLICATIONS

The findings from this study have implications for nursing. These implications are directed in three areas: (a) nursing education, (b) nursing administration, (c) nursing practice, and (d) nursing research.

NURSING EDUCATION

The findings from this study have two major implications for nursing education. The first pertains to the education of students as they undertake their basic registered nursing education. It is important that nursing students are introduced to fertility difficulties, such as infertility. In addition, it is essential that students acquire *basic* skills that they can use when providing care to infertile clients. This would include skills in communication, client education, and counselling. Since infertility and its medical care revolve around women, it would be insightful to include topics relating to women's issues in nurse education programs.

The second implication pertains to the education of nurses who choose to practice in the field of infertility care, such as in the setting of an infertility clinic. It is recognized that many practicing nurses have not received formal education in infertility care (Oke & Wood, 1987; Phillips et al., 1985). Rather, nurses have generally received their education informally, often within the clinical setting. As noted by Phillips et al. (1985), receiving their training in this way often results in nurses having fragmented learning experiences in addition to having inconsistent standards in their clinical practice. To ensure a sound knowledge base and a continuity in the standards of nursing practice, it is recommended that nurses receive formal education during their orientation to an infertility clinic. This orientation would include a review of reproductive physiology as it relates to infertility and the various technical skills that are used when providing care to infertile persons. Nurses can continue their education by attending seminars and/or inservices related to infertility care. In addition, nurses are encouraged to do self-study activities, such as reading current professional journal articles that pertain to infertility care.

The acquisition of a knowledge base and various technical skills specific to infertility care is insufficient for nurses to give *expert* care to their clients. To provide such care, it is essential for nurses to gain skills in areas that relate to infertility. For example, because the state of being infertile touches on various aspects of human sexuality, nurses may be required to provide counselling in this area to their clients. To do this, nurses need to examine themselves with regard to their own sexuality in addition to being knowledgeable in the field of human sexuality. Providing expert care to their clients also requires nurses to be knowledgeable about various concepts that relate to the infertility experience. For example, the participants in this study experienced several different losses when they could not achieve pregnancy. To facilitate the grieving process related to these losses, nurses must be knowledgeable about the concepts of loss and grief. These additional areas of knowledge and skills required of nurses in order to provide expert care to their clients suggest that there is a need for the role of a clinical nurse specialist within infertility care.

NURSING ADMINISTRATION

It is acknowledged that the infertile population is demanding that their state of impaired fertility be addressed by health-care professionals, including nurses. To provide care to these persons, it is essential that administrators structure infertility care into the health-care system, along with other areas of reproductive care, such as family planning including contraceptive usage and elective abortion.

The nursing profession can help incorporate infertility care into the health-care system by taking a leadership role in influencing public policy regarding the provision of infertility services (support from the government pertaining to the financial costs surrounding the operation of an infertility clinic, financial coverage of the services used by infertile persons). Nurse administrators may play a role in the operation of health-care facilities that offer infertility services. For example, they can lobby for flexible working hours (evening and weekends), to accommodate women who are employed during the daytime hours.

The nursing profession can also help incorporate infertility care into the health-care system by expanding the nursing role to include activities beyond those traditionally practiced. For example, nurses can provide anticipatory education about the problem of infertility to the lay public in various ways, such as speaking to various civic groups (premarital classes), publishing infertility articles in lay magazines, and becoming involved with the production of educational radio and television programs that focus on health-care issues. When providing this anticipatory education, nurses can focus on various issues that relate to infertility. Examples of such issues include the role that body weight and exercise play in reproduction, the prudent use of particular contraceptives (birth control pill, intrauterine device), and the postponement of pregnancy until the later childbearing years.

Nurses may also wish to entertain the challenge of independent nursing practice (self-employment in nursing) (MacDonald & Zavers, 1992; Slauenwhite, Dewitt, & Grivell, 1991; Zwartjies, 1992) that focuses on the provision of care, such as counselling services, to infertile persons. Professional associations, such as the Alberta Association of Registered Nurses, could support this expanded role by including independent practice in the scope of the nursing role in addition to addressing the issues of accountability, accreditation, and reimbursement. Other professional organizations, such as the Canadian Nurses Association and the Self-employed Nurses Association of Alberta, could act as resources for nurses who pursue the role of entrepreneurs (B. Gourlay, personal communication, October 2, 1991).

CLINICAL NURSING PRACTICE

The findings from this study indicate that the current management of infertility is focused on the physiological, medical, and technological aspects of human reproduction. These foci have numerous implications for nurse practitioners in terms of supporting clients who pursue pregnancy through medical intervention. These implications will be presented in two sections including the provision of social support and the mobilization of social support.

Providing Social Support

In their clinical practice, nurses can provide emotional support by developing and maintaining a therapeutic relationship with their clients. Nurses can personalize client care by being courteous to clients addition to maintaining the continuity of nursing care through the avenues of primary nursing and staffing of full-time nurses rather than part-time and/or casual nurses. Having an acknowledged counselling role for nurses would also foster the nurse-client relationship.

Nurses can also provide emotional support to their clients by actively listening to their feelings and concerns surrounding infertility during client appointments and having a telephone counselling service available to clients. Nurses could provide additional support by doing follow-up telephone calls during times that are known to be distressing, such as the suspected onset of menstruation.

As the participants underwent the various procedures, they were required to physically expose their bodies to various health-care professionals. This bodily exposure created feelings of discomfort, especially with a young, male physician. Nurses and other health-care professionals can show a caring attitude to their clients by providing a safe environment under which these procedures are performed. For example, it is recommended that a third party (staff member, client's husband) be present at any examination and that all health-care professionals employ appropriate draping practices which reflect a respect for the client's privacy. In addition, nurses and physicians can respect the privacy in the client's personal life by not routinely advising the client to document the occurrence of sexual activity on the BBT chart; it can be "assumed" that clients will have engaged in sexual activity during the appropriate times of their menstrual cycles, especially since infertile clients are highly motivated to participate in any activity that will help them achieve pregnancy. Rather, it is recommended that clients are advised to keep "private" records of their sexual activity; in special circumstances surrounding the infertility management, clients may be asked to share this information with the various health-care professionals.

When fulfilling the obligation of scheduled sex, many of the participants experienced a variety of unpleasant effects associated with this activity. Nurses may provide support to their clients in several ways, such as giving their clients permission to let the obligation go unfulfilled in times of low sexual desire and providing strategies that will counteract the unpleasant effects.

The findings from this study indicated that some of the participants coped with their infertility by normalizing themselves as infertile women. When a client expresses feelings and/or concerns that are common to other infertile persons, the nurse can provide a sense of normality (appraisal support) by explicitly stating to the client that those particular feelings and/or concerns are often felt by others who are also experiencing infertility.

Since clients are often more willing to speak frankly to a nurse rather than to a physician or other health-care professionals (Oke & Wood, 1987), it is important for nurses to assume a role of liaison between their clients and the various health-care professionals. This may imply that nurses "translate" information that clients have received from their physicians.

Nurses can help their clients make decisions surrounding the management of their infertility by providing them with clear, accurate, and complete information. It is important for nurses to provide information in a language that is understood by their clients. For example, clients may understand the HSG in terms of the "dye test" or the "x-ray test."

One area in which several of the clients expressed a further need for information related to the BBT charting, for example, when to take their temperature when working irregular shifts. Based on the physiological principle underlying the BBT, nurses are recommended to advise their clients to take their temperatures following a period of rest; to assist in the interpretation, clients should record the occurrence of shiftwork on the chart. In addition to this, several of the participants expressed difficulty in the interpretation of their BBT charts because their temperature patterns appeared different to those illustrated in the written literature. It is recommended that when nurses review the charting with their clients, they acknowledge the possible discrepancies between the "ideal" BBT pattern versus the "real" patterns of clients.

Several of the participants found it stressful to undergo procedures, such as the laparoscopy, because they were unfamiliar with surgical procedures. To help their clients cope with the "unknown" surrounding the various procedures, nurses can provide anticipatory guidance by discussing details of the procedure prior to it being performed. Nurses may also provide anticipatory guidance in other situations, such as when infertile persons feel "left out" when interacting with their fertile peers.

About half of the participants in this study had not achieved pregnancy at the time of the last data-collecting interview. When pregnancy is not achieved, nurses can provide support to such clients by giving them permission to take a break from medical intervention or by helping them to make the decision to terminate medical care in the absence of pregnancy, by helping them to identify the positive consequences of experiencing infertility, or by redefining the definition of "success" in terms other than the achievement of pregnancy.

Mobilizing Sources of Social Support

In addition to supporting their clients directly, as just discussed, nurses are in an excellent position to mobilize other sources of support for them. For example, nurses can attempt to mobilize the husband's support by actively involving him in the infertility care, by encouraging him to attend the infertility appointments with his wife. Nurses can help the partners understand each other's experiences of infertility by facilitating communication between them in addition to providing appraisal support in the presence of both partners.

Many of the participants in this study found it helpful to talk with kindred spirits, other infertile women. There were several participants who did not know a kindred spirit. Nurses can mobilize this particular source of support by employing several specific actions, such as introducing clients to one another with their permission, creating an environment (meeting room or coffee lounge) that would encourage clients to talk with one another while waiting to see their doctors, and referring their clients to a formal infertility peer support group. Nurses can also mobilize appraisal support by encouraging their clients to read the written accounts of other people's experiences of infertility. Based on the researcher's review of the literature, some excellent books include those written by Becker (1990), Harkness (1987), Menning (1988), and Salzer (1986). Nurses can also mobilize informational support by providing written literature, such as pamphlets and newsletters, that focus on various aspects of infertility care (ovulation induction). Nurses may find it useful to prepare an annotated bibliography of various infertility books, indicating where the books can be obtained, for example, the local bookstores and/or public library.

In this study, many of the participants were responsible for the financial cost of medications, such as Clomid and Lupron. Nurses can mobilize financial support by informing their clients of the health-care policies that provide partial or full financial coverage of the infertility treatments pursued.

Nurses specializing in infertility care may have roles outside the infertility clinic. For example, nurses may become involved with a formal infertility peer support group in various capacities (consultant, instructor on various aspects of infertility and its medical care; contributor to a newsletter). Nurses may also provide leadership in the preparation of materials (written literature, audio-visual aids) that are directed toward the educational needs of infertile persons. Nurses can also be involved with conducting infertility workshops for nurses and other professionals in health-related fields.

NURSING RESEARCH

Pregnology identifies one process that infertile women pass through as they undergo medical intervention for their inability to achieve pregnancy. This process was identified by a single researcher. By repeating this study, other researchers, having different backgrounds and theoretical perspectives, are likely to generate different theories; this would contribute to a more complete understanding of what women experience as they undergo medical intervention for infertility. In addition, it would be useful to validate the findings from this study in subsequent research studies.

In this study, infertility and its medical management as experienced by women living in a dominant Canadian culture was investigated. This suggests that further research is required to learn about the experiences of infertile women who have other cultural/ethnic backgrounds.

The women involved in this study volunteered their participation and they willingly told their infertility stories to the researcher. To gain a more complete understanding of the infertility experience, it is important for future studies to include women who are less willing to articulate their experiences of infertility.

This research project was limited to women only. To obtain a comprehensive understanding of the infertility experience, it is essential that nurses gain knowledge about what men go through as their partners undergo medical intervention for infertility, especially since the male partner is intricately involved in the care for infertility. In addition, many of the participants experienced infertility very differently compared to how they perceived their husbands to be experiencing the infertility. Investigating men's experiences of infertility could be approached by focusing on how men, as individuals, experience infertility and by focusing on how men and women, as couples, experience infertility.

As evidenced in the findings, people other than the participants and their partners were affected by the infertility experience, such as the participants' extended family members (potential grandparents, siblings), friends, and co-workers. To date, there have not been any research studies conducted on how these people experience interacting with infertile persons.

Infertility is often a chronic problem. For example, the participants in this study were under physician supervision for 1 to 96 months. The chronicity of the infertility experience could be investigated by using research methodology involving case studies.

At the time of the last data-collecting interview, 10 of the 17 participants in this study had not achieved pregnancy. With this lack of success in achieving pregnancy, it is important for nurses to have a knowledge and practical base to draw on as they help clients resolve their inability to achieve pregnancy. The "letting go" phase of Pregnology could be further investigated in future research studies. It is expected that such studies would acquire knowledge that would help nurses counsel clients regarding "when" it is appropriate to terminate medical intervention in the absence of pregnancy.

All of the participants experienced the paramount loss of infertility, that is, the loss of a child that was never conceived. Participants experienced other losses in addition to this. To manage these losses, participants need to grieve and mourn. Although there is much literature on the grieving process, it is most often discussed in relation to death and dying (Engel, 1964 as cited in Hess, 1980; Fulton, 1987; Lindemann, 1944; Kübler-Ross, 1969; McClowry et al., 1987). Although reproductive losses, such as stillbirth and miscarriage, are recognized and discussed in terms of the grief process (Friedman & Gradstein, 1982; Harris, 1984; Reed, 1984; Speck, 1978), the state of infertility has not, as yet, received much discussion in terms of being a distinct reproductive loss. Thus it is recommended that nurses conduct research studies which focus on the grieving process as experienced during infertility. In addition to this, it is important for nurses to identify interventions that they can employ that will help infertile persons to grieve their losses. When investigating this grief process, it is important to acknowledge that infertile women experience the loss of fertility on a monthly basis, as evidenced in their menstruation; following this loss, it is common to immediately attempt to achieve pregnancy in the woman's next menstrual cycle. Research studies could focus on the grieving process within the context of the woman's menstrual cycle.

Several of the participants in this study achieved pregnancy, however, they lost their pregnancies, either through ectopic pregnancy or miscarriage. Although the grief process has been related to these specific types of reproductive losses (Berezin, 1982, as cited in Bowers, 1985; Peppers & Knapp, 1980, as cited in Bowers, 1985), they have not been investigated when they have occurred during the infertility experience. To provide additional insight in the infertility experience, it would be useful to conduct a research study that investigates the concurrent losses of infertility and these other types of reproductive losses.

Intervention addressing the support and counselling needs of infertile persons may take several different forms, such as a formal peer support group (self-help group). Although authors (Bowers, 1985; Brashear, 1989b; Christianson, 1986; Menning, 1988; West, 1983) have identified various benefits of these groups, there has been little investigation into the usefulness of these groups. Thus it is recommended that the role of a formal peer support group in infertility care be investigated in terms of: (a) the purpose of the group is, (b) the characteristics of the group that are important in determining the utilization by infertile persons, (c) the benefits to infertile persons participating in the group, and (d) the effectiveness of the group.

Several of the participants made their exits from Pregnology by achieving pregnancy. There has been little research efforts directed towards investigating the pregnancy experiences of women who have been infertile. To aid obstetrical nursing care, especially in the areas of antenatal and intrapartal care, it would be useful to investigate these women's experiences of pregnancy. It would also be interesting to investigate the bonding process that infertile women go through as they bond with the fetus during their pregnancies in addition to bonding with their babies upon delivery. These research studies would be most interesting since pregnant women, who have a history of infertility, are often considered to be high-risk pregnancies ([illegible] 1985; Wier & Hendricks, 1969 as cited in Bernstein & Mattox, 1982). Such studies would expand on McGeary's (1991) work regarding the bonding process in high-risk pregnancies.

Although most of the participants perceived themselves as "healthy" rather than "sick" or "unhealthy" while experiencing infertility and its medical care, it was evident that many participants experienced much emotional anxiety and stress in response to their inability to achieve pregnancy. Although much of the infertility literature suggests that the mental health of infertile persons is challenged, even to the point of including suicide, there have been no research studies conducted investigating the concepts of health and illness within the state of infertility. Thus it is recommended that future research focus on the health/illness concepts as experienced in infertility. It is anticipated that by becoming more clear on the health/illness status of infertile persons, the various health-care professionals will develop insight into where infertility care fits within the health-care system.

Nursing practice has been defined as a "dynamic, caring, helping relationship in which the nurse assists the client to achieve and maintain optimal health" (Canadian Nurses Association, 1991, p. i). Embedded in this definition of nursing practice is one concern that has relevance for nursing research in the context of infertility. Specifically, some of the recommendations the researcher has suggested for clinical practice are being carried out by other professions in health-related fields other than nursing, such as social work. In her article, "Theory in Nursing: Borrowed and Unique," Dorothy Johnson (1968) asks the question, "What is nursing?" Noting that it is not improper or unnecessary to ask such a question, Johnson (1968) states, "In its answer, we will find our boundaries [in nursing] as a professional and a scientific discipline" (p. 208). As prompted by Johnson's article, the question is asked: "What are the boundaries of nursing within the management of infertility care?" Johnson (1968) has contended that the only way nursing can find its boundaries, as a profession, is through continued research. Thus it is vital that nurses investigate their roles within the context of giving care to infertile clients; to date, no such study has been conducted. Through such investigation, the cause of nursing and the needs of infertile clients will be served:

> The body of knowledge needed for nursing practice will be incomplete...until we learn to ask...nursing questions about events in nature of specific concern to us because we are committed to their management. (Johnson, 1968, p. 209)

STRENGTHS AND LIMITATIONS

Seventeen women, who had experiential knowledge of infertility and its medical management, were selected as study participants. Ten of these participants were experiencing infertility at the time of the study while the remaining seven participants had experienced infertility 13 to 45 months prior to the study. Thus the study was both retrospective and prospective in nature. There were advantages and disadvantages to this design.

The retrospective vantage point enabled the researcher to capture the entire process (the beginning of infertility to the resolution of infertility) of the participants' pursuit of pregnancy through medical intervention. There were, however, instances where the participants had difficulty remembering particular details of their experiences with medical intervention, which they acknowledged.

Collecting data from the prospective vantage point enabled the researcher to capture the participants' responses as they were currently experiencing infertility. This allowed the participants to describe their infertility experiences at a particular point in time without their memory recall being clouded by previous events in the infertility experience. Despite this, there were several instances where the participants could not express their feelings about the infertility experience. A comment made by one participant, who had previously gone through infertility, helped to explain this as she noted that it was only retrospectively that she become aware of what was happening to her during her infertility and its medical management.

When talking with participants, who were currently experiencing infertility, data were collected through their verbal accounts of the medical management of their infertility. Although collecting data in this fashion did provide a description of the medical intervention of the infertility, it did not capture the immediacy surrounding that medical intervention. The descriptions involving the participants' experiences of medical intervention, especially the phase of undergoing the medical intervention, could have been enhanced by participant observation (observing the participant as she was undergoing testing procedures such as the endometrial biopsy, the HSG or the laparoscopy).

All of the participants had experienced difficulty in conceiving a pregnancy. In addition to this, a number of participants had experienced difficulty in maintaining a conceived pregnancy. Although infertility may be defined as including one or both of these dimensions of reproductive difficulty (Menning, 1988), the focus of this study was on women's inability to conceive a pregnancy. Including women who had experienced pregnancy loss did complicate the generation of a theory explaining infertile women's pursuit of conceiving a pregnancy through medical intervention; for example, the researcher collected a considerable amount of data on the miscarriage experience in addition to data pertaining to the inability to achieve pregnancy. pregnancy. The inclusion of these women in the study brought to the researcher's awareness that many infertile women's pursuit of pregnancy may be further complicated by the additional phenomenon of not being able to maintain the pregnancy once it is conceived.

Collecting data from 17 study participants contributed to the theoretical saturation of the generated theory. These participants were somewhat different from each other in terms of their ages, ethnic and religious backgrounds, educational level, occupational background, category of family income, and cause(s) underlying the infertile state. These differences contributed to the richness of the generated theory.

While collecting data, the researcher noted that there were varying levels of reflection and articulation among the participants. The use of multiple interviews facilitated the development of a trusting relationship between the participant and the researcher which contributed to the participants' free expression of their infertility experiences.

Although theoretical generalizability was not a goal in this research study, the generated theory may be generalized to infertile women who are similar to the study participants. According to Glaser (1978), the findings from a research study have theoretical generalizability when (a) the categories of the generated theory are grounded in the collected data (fit), and (b) the generated theory is relevant and captures the attention of people who have experience with the phenomenon under study (grab).

The researcher conducted all the phases of this research study including data collection, transcription of the interview recordings, and data analysis. This contributed greatly to the researcher's familiarity with the research data. Such familiarity with the data facilitated the task of data analysis, thereby contributing to the "grounding" of the generated theory in the data.

Although the poster advertisement was not a particularly good avenue to recruit study participants, the notices placed in the newspapers were extremely effective. These newspaper notices attracted attention from numerous prospective participants in a very short time; for example, the researcher confirmed the eligibility of five prospective participants during one day. Due to the interest expressed by these women, the researcher believed that it was important to recruit them and interview them within a relatively short time of their inquiry (before they lost interest in the study). As a result, the theoretical pacing between data collection and data analysis was compromised: the researcher collected data at a faster pace than she was able to transcribe the interview recordings or analyze the collected data.

Modified theoretical pacing, as described above, resulted in the researcher breaking an underlying canon of grounded theory methodology: the phases of data collection and data analysis did not occur simultaneously. Thus data collection, through theoretical/purposeful sampling, was not guided by the evolving theory. Although the generated theory was "grounded" in the collected data, its generation was not rooted in data as guided by its evolution. This deviation from grounded theory methodology may have resulted in the researcher not having (a) saturated identified categories, (b) identified concepts/categories relevant to infertile women's pursuit of pregnancy through medical intervention, and/or (c) recognized linkages or relationships between the identified concepts/categories. The researcher acknowledges that, perhaps, the evolution and ongoing validation of the generated theory would have been enhanced if the canon involving the simultaneous occurrence of data collection and data analysis had been strictly followed.

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APPENDIX A

Advertising Poster

Are You Having
Trouble Getting Pregnant Now?

or

Have You Had Trouble
Getting Pregnant in the Past?

Women! Here is your chance to talk to a nurse researcher about your infertility experience

For information, call
430-5314

A study carried out by a graduate nurse
University of Alberta

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APPENDIX B

Notice in Newspapers

Are You Having Trouble Getting Pregnant Now? or **Have You Had Trouble Getting Pregnant in the Past?** Women! Here is your chance to talk to a nurse researcher about your infertility experience (U of A Graduate Nurse Study). For more information, **call 430-5314.**

APPENDIX C

Message Left on Answering Machine

Hi! My name is Rhonda. Thank-you for calling about the study on infertility. I am unable to talk to you now. However, if you leave your first name and a telephone number where I can reach you, after the bell tone, I will phone you as soon as I can.

APPENDIX D

Screening Form for Prospective Participants

Date:__________________

Time:__________________

Caller's First Name:________________________

Reason for Calling About the Study

Request for information about the study only ______
Interested in being a participant in the study ______

How did you learn about this study?

Poster ______
Newspaper ______
Newsletter ______
Friend ______
Other ________

Self-Defined as Being Infertile?

Yes ______ Present ______ Past ______
No ______

Inclusion/Exclusion Sampling Criteria

*Eligibility answer printed in bold

Yes/No	Speaks fluent English
Yes/No	In a heterosexual (i.e., marriage, common-law) relationship when infertility was being experienced
Yes/No	Can meet with the researcher for face-to-face interviews within Edmonton, Alberta

Caller Eligible as a Study Participant?

Yes ______ No ______

Status of Decision: Seeking medical assistance for Infertility

Yes ______ No ______ Undecided ______

Initial Meeting Arrangements

Date: ______________________

Time: ______________________

Location: ____________________________________

Telephone number(s) where prospective participant may be contacted, if necessary, regarding meeting arrangements:

_____________________ _____________________

APPENDIX E

Information Collection Sheet

Date:____________________
ID Number:_______________
Telephone #: _____________

General Information

Age at last birthday (years): ________

Current Marital Status:
Single____ Common-law____ Married____ Separated____ Divorced____

Duration of Co-habitation (months): ________

Ethnic Background: _________________ not specified ____

Religious Background: _______________ not specified ____

Highest education obtained:

elementary school ______	university ______
junior high school ______	highest degree ______
high school ______	not specified ______
post-secondary education ______	

Occupation: ______________________

Employment Status:

full-time ____	home-maker ____
part-time ____	self-employed ____
casual ____	other ____

Category of family income:

less than $5000 ______	$20,000-$50,000 ______
$5000-$10,000 ______	more than $50,000 ______
$10,000-20,000 ______	not specified ______

Infertility/Fertility Information

Length of time attempting pregnancy before seeking medical help (months): ______

Length of time under medical supervision (months):
family doctor ______
obstetrician/gynecologist ______
infertility specialist ______
general practitioner ______
urologist ______.

Fertility tests completed:
semen analysis ______
vasogram ______
testicular biopsy ______
post-coital test (PCT) ______
hormonal assays ______
laparoscopy ______
hysterosalpingogram (HSG) ______
endometrial biopsy ______
B.B.T. charting ______
other ______________

Cause(s) of infertility known? Yes ______ No ______

abnormal semen analysis ______
luteal phase defect ______
ovulation problems ______
tubal disease ______
endometriosis ______
cervical mucus problems ______
other ______________

Past or current treatment(s):
drug therapy ______________________
surgery ______________________
other ______________________

Options considered:
child-free living ______
adoption public ______ private ______
artificial insemination using partner's sperm ______
artificial insemination using donor sperm ______
in vitro fertilization (IVF) ______
gamete intrafallopian transfer (GIFT) ______
other ____________

Previous pregnancy:
Yes ______ Same partner ______ Different Partner ______
No ______

APPENDIX F

Consent Form for Interviews

Project Title: Women's Experiences of Infertility

Researcher: Rhonda E. Harris R.N. B.Sc.N.
Candidate for the Master of Nursing Degree
Faculty of Nursing, University of Alberta
Telephone: 438-8286 (home) 430-5314 (office)

Faculty Supervisors:

Dr. Peggy Anne Field	Dr. Patricia Valentine
Faculty of Nursing,	Faculty of Nursing
University of Alberta	University of Alberta
Telephone: 492-6248	Telephone: 492-6465

The purpose of this study is to help nurses understand how women feel when they cannot get pregnant. In this study, you will be asked questions about your troubles with getting pregnant. Information that you give the researcher will not be told to your partner. Also, information you give will be used for this study only.

Your participation in this study will involve the following:

.The researcher will interview you one to three times.
.There will be at least one month between each interview.
.The first interview will be done in person. Other interviews may be done by telephone.
.Interviews done in person will take place either in your home or at any other place located in Edmonton. The place of the interview will be agreeable to both you and the researcher.
.Each interview will last about one to two hours. Your total time in the study will be under six hours.

All interviews will be tape-recorded. Only the researcher will listen to the interview recordings. Each interview will be written out by the researcher. Your first initial will appear in the transcripts. Only the researcher and the faculty supervisors may read the transcripts. The researcher will erase the interview recordings when the study is done. The transcripts will be kept by the researcher.

Your participation in this study is your choice:

.You may refuse to answer any question during an interview.
.You may stop the interview at any point.
.You can withdraw from the study at any time by telling the researcher, either by saying so or in writing. The information you have given before your withdrawal will be used only with your permission. If you decline permission, the researcher will destroy all interview recordings and transcripts when the study is done.

The researcher may use quotes from the interview(s) in descriptions of the study. Your name or initials will not be used in these descriptions. Rather, the researcher will give you a make-believe name. This make-believe name will be used in all descriptions of the study. When the study is done, the researcher will write a summary of the information received from the women. Upon request, this summary will be given to you when the study is done. The make-believe name assigned to you will be used in this summary.

You will be given a chance to ask Rhonda E. Harris any questions about the study. Your questions will be answered by her to your satisfaction. You may have future questions or concerns about the study. You can talk about these things to Rhonda E. Harris by telephoning her. You may also talk to the faculty supervisors about your questions or concerns. You can talk to each supervisor by telephoning them.

There are no risks known to women participating in this study. You may not benefit from this study. However, you may find it helpful talking to the researcher about your troubles with getting pregnant. By participating in this study, you may help other people who cannot get pregnant. If you would like to talk to a support person, the researcher will give you a referral.

I, ______________________________, agree to participate as a volunteer in this
(Print Name)
study.

I have a copy of this form to keep.

________________________ ________________________
(Woman's Signature) (Date)

____
(Researcher's Signature)

APPENDIX G

Consent Form for Usage of Written Information

Project Title: Women's Experiences of Infertility

Researcher: Rhonda E. Harris R.N. B.Sc.N.
Candidate for the Master of Nursing Degree
Faculty of Nursing, University of Alberta
Telephone: 438-8286 (home) 430-5314 (office)

Faculty Supervisors:

Dr. Peggy Anne Field
Faculty of Nursing,
University of Alberta
Telephone: 492-6248

Dr. Patricia Valentine
Faculty of Nursing
University of Alberta
Telephone: 492-6465

The purpose of this study is to help nurses understand how women feel when they cannot get pregnant. You have offered to show the researcher some private written information about your infertility. This consent form is used to explain what will happen with your private written information.

1. No one but the researcher will read your original private information.

2. The researcher will type or write down the information that you have offered, making sure that:
   - any names given in your material are replaced by initials
   - your name is not connected with the information, instead you are given a make-believe name
   - only the research team reads the copied information

3. Your original information will be returned to you. The researcher will keep the copied information.

4. Talks will be given and reports will be written about the study. Quotes of the copied information may be used in the talks and reports. Make-believe names will be used for you and anyone mentioned in your private information.

I, ______________________________, give Rhonda E. Harris permission to use any
(Print Name)
written data that I agree to give her.

I have a copy of this form to keep.

________________________ ________________________
(Woman's Signature) (Date)

____
(Researcher's Signature)

APPENDIX H

Participant Request Form

As a participant in the research study carried out by Rhonda E. Harris entitled, " Women's Experiences of Infertility" I, ______________________________,
(Print Name)
would like to receive a summary of the information obtained from the women who were involved in this study. Rhonda E. Harris may send me this summary by mail service at the following address:

____

____

____

I understand that this summary will be sent to me when the research study is finished.

______________________ ________________
(Woman's Signature) (Date)

____
(Researcher's Signature)

APPENDIX I

Cover Sheet for Interview Transcripts

Participant ID Code: ________
Interview Number: __________

Date of Interview: __________________________

Time of Interview: __________________________

Location of Interview: _______________________

Current Status of Seeking Medical Assistance:

Decided to Seek Medical Assistance?
Yes ______
No ______
Still Deciding ______

Undergoing fertility testing?
Yes ______
No ______

Undergoing treatment for infertility?
Yes ______
No ______

Current Fertility Status:

Not Pregnant: ______ Pregnant: ______ Postpartum: ______