

A PHENOMENOLOGICAL STUDY INTO INFERTILITY AND THE ASSISTED
REPRODUCTIVE TECHNOLOGIES: U.S.A AND JAMAICA COMPARED

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ABSTRACT

A Phenomenological Study into Infertility and the Assisted Technologies:

USA and Jamaica Compared

Infertility affects approximately 10-15% of all couples. This study explores the lived-experience of infertility and assisted reproductive technologies in Jamaica and the United States based on a phenomenological qualitative analysis of in-depth interviews conducted with 15 couples experiencing infertility in Jamaica and 15 couples in the United States. As with many small scale studies that explore issues of an extremely sensitive nature, the participants were recruited from the community through a combination of convenience and snowball sampling. The biopsychosocial model and postmodernism constituted the conceptual frameworks that guided this study.

The factors contributing to infertility; the biopsychosocial consequences of infertility and medical treatment of infertility are described. Fertility, infertility and the assisted reproductive technologies (ARTs) are examined from ethical, legal, religious, and feminist perspectives. Empirical research derived from in-depth personal narratives of participants are used to explore the ways infertility impacts life's goals, self-esteem, faith, marriage, social relationships, and religious and cultural experiences. The results of the study yielded a list of thirteen themes that show the similarities and differences between Jamaica and the United States in relation to the topic under investigation. The study concludes with recommendations for public policies to address infertility as a public health concern and for social work with individuals, couples and extended families affected by the experience of infertility.

OVERVIEW OF CHAPTERS

Chapter One provides background information about infertility and assisted reproductive technologies. It explicates the purpose of the study, the research objectives, the value of the study, the major concepts used, and the theoretical frameworks that guide the study. The chapter concludes with the implications of the knowledge generated by this study for the practice of social work.

Chapter Two begins with reflections on the researcher's personal and professional encounters with infertility. Following are a description of the research design, the sampling procedure used, the methods of data collection and data analysis, ethical considerations involved in executing the study, and the research design.

Chapter Three presents a review of the relevant literature on the biopsychosocial aspects of infertility and assisted reproductive technologies. The review focuses on the interaction of the biological, psychological, and social phenomena of infertility. The discussion includes empirical literature on infertility, the effects of infertility, and ART on people's well being and relationship satisfaction, gender responses to infertility, and the cultural and social context of infertility. The social context includes a portrait of responses to infertility, past and present, within African, Jamaican and American cultures.

Chapter Four provides an exposition of the religious, legal and ethical aspects of assisted reproductive technologies. Judaism, Islam, and Christianity represent the religious community views. The legal discussion focuses on concepts such as justice, procreative rights and autonomy, and issues surrounding surrogacy. The final section is an explication of the ethical arguments for and against reproductive freedom, procreative rights, gamete transfer, commercialization and commodification of reproduction, surrogacy, and arguments that support regulating assisted

reproductive technologies. The chapter ends with a conclusion that highlights some of the dilemmas of infertility.

Chapter Five presents characterizations of the various forms of feminism and a discussion on the factors that gave birth to feminism, including patriarchal society and male dominance. Also contained in this chapter are feminist's worldviews as they relate specifically to infertility and assisted reproductive technologies. The chapter ends with discussion on the implications of feminism for social work practice with families.

Chapter Six contains the analysis and discussion of the data and findings of the investigation. Included in this chapter is a presentation of the profiles of some of the research participants and the context of the study, participants' experiences of medical personnel, an examination of the differing reactions of males and females that reflect gender stereotypes, the impact of infertility on participants' marital and sexual relations, the effects of participants' religion on choice regarding assisted reproductive technologies. The presentation of the results and discussion reflect the interactions of the biomedical, psychological, and socio-cultural aspects of infertility. The chapter concludes with a discussion on the implications of androcentric thinking, especially with regard to infertility and fertility and the impact of a male investigator on male research participants.

Chapter Seven has been subdivided into two main sections: 1) The major conclusions of the study based on the findings, which were analyzed and discussed in Chapter Six; 2) Implications and recommendations based on the results of the study. Recommendations with regard to social work practice, development of reproductive health policy and other areas for further study are proposed.

*"If we do not manage to meet them,
it may well be because they are of a special kind
of problem without a solution,
namely, dead end."*

---Emmanuel Kant

CHAPTER 1 INTRODUCTION

The very word "childless" implies that one is lacking something. *The Webster's New Universal Unabridged Dictionary* (1983) defines "family" as "a father, mother, and their children," or "those who descend from one common progenitor" (p. 661). According to this definition, parenthood is an expectation of a married couple. Parenthood, especially for married couples, is seen as a moral obligation rooted in both religious beliefs and cultural norms. Society, community, churches, and family often pressure women to marry and bear children. "Not only are couples expected to have children, but also they are expected to have children 'on time', usually about 2 to 3 years after marriage" (Daly, 1999, p.3).

Among the married population are three types of childless couples: the childless by choice, the childless by happenstance, and the childless by chance. Couples opting out of parenthood often decide to do so based on lifestyle preferences. Some couples may choose to remain childless as they believe that they would not make good parents while others might be overly committed to their careers or to their hobbies and cannot spare time to raise a family. Others may yet feel that having children would intrude into their marital relationship; they might enjoy the freedom to travel, to make spur-of-the-moment plans and do not want their lifestyles changed. Some choose not to have children to avoid contributing to the problem of overpopulation (Zastrow & Kirst-

Ashman, 2001). Still others are afraid of having a child until they have sufficiently healed themselves from the wounds of childhood traumas (Wickles, 1991).

Couples who are childless by happenstance comprise segments of the population who are not necessarily infertile but who are involuntarily childless. Some singles and gay and lesbian couples who desire children may not be infertile, but their circumstances do not allow them to accomplish their desire to have biological children. Spouses in reconstituted families after divorce or death of a spouse may not be infertile, but one member of the couple may be involuntarily childless because the other spouse is opposed to another child.

Couples who are childless by chance may be infertile as a result of common causes like endometriosis, hormone imbalances, pelvic infections, impotence, and low sperm quality. Prior to a diagnosis of infertility, the majority of couples believe that pregnancy would occur whenever they desired children (Cooper-Hilbert, 1998). From a global perspective, infertility is perhaps best defined as a complex social problem. Inhorn and van Balen (2002) refer to infertility as a slippery entity, with little consensus on what the word means, let alone why it is a problem. By definition, infertility is a major health problem for the World Health Organization. As Daar and Merali (2001) explain, "Few health conditions could more profoundly or pervasively affect a person's well-being in many developing countries than infertility" (p. 5). From a purely medical perspective, infertility is defined as the inability to conceive a child after a year or more of regular unprotected intercourse or the inability to carry a pregnancy to live birth (Charlesworth, 2004; Meniru, 2001; Seibel, 1997; Speroff, Glass, & Kase, 1994; Wiscot & Meldrum, 2004). There are three categories of infertility (Boerma & Mgalla, 2001; Seibel, 1997). Primary infertility refers to no history of pregnancy. Secondary infertility is the inability to conceive or carry a child to term following a successful birth in the past (Robinson & Stewart, 1997, Turkington & Alper, 2001). Recurrent

pregnancy loss refers to two or more miscarriages within the first trimester (Jacobs, 2006). Approximately 30% of American couples account for those couples with primary infertility and 70% of American couples who already have at least one biological child in the home experience secondary infertility (Greil, 1991; Hirsch & Mosher, 1987). Reportedly, the overall incidence of infertility has remained unchanged since the 1960s, but over the last four decades, there has been an increase among women between the ages of 20 and 44. Researchers have identified several factors behind the increased numbers of infertile persons in Jamaica and the United States.

First, there is an increased incidence of sexually transmitted diseases such as gonorrhea, chlamydia, and syphilis. These venereal diseases, which damage the reproductive system, are on the rise. One factor contributing to this is the increased availability of effective birth control measures, reflecting a more open approach toward sexual activity (Goodwin, 2001; Sher, Davis, & Stoess, 1998). While contraception guards against unwanted and mistimed pregnancies, with the exception of some kind of condoms, contraceptive methods do not protect against sexually transmitted diseases.

Second, there is the postponement of parenthood past the age of peak reproductive capability. The longer a woman delays reproduction the lower her chance for conception becomes (Stovall, Toma, Hammond, & Talbert, 1991). Older women take longer than younger women because some disorders that produce infertility show up in the second half of the woman's life span. These disorders include hormonal problems, endometriosis, and development of benign fibroid tumors. Women, aged 40 years or older have a 50% fertility rate and they risk the danger of spontaneous abortion two to three times more than younger women (Check, Lukie, Peymer, Katsoff, & Long, 2000; Evers & Lancet, 2002; Toner & Flood, 1993). In addition, the ability to ovulate healthy eggs and concurrently generate a hormonal environment that can adequately

support a pregnancy becomes increasingly compromised as a woman becomes older (Goodwin, 2001; Sher et al., 1998). Until recently, popular belief held that men could father children as easily at 78 as they could at 18, but according to Osolin & Greensfelder (2006) and Heubeck (2005), male sperm deteriorates as they age. Similarly, Sinclair & Pressinger (1998) point out that a man's chance of fathering a child decreases with each passing year. In their study, the odds of a successful pregnancy fell by 11% every year and the chances for obtaining a successful live birth declined even further. As sure as men age, so too do their sperm.

Thirdly, there is an increased use of medications and "recreational drugs." Alcohol, nicotine, marijuana, and other psychotropic drugs were observed to significantly reduce both male and female fertility by altering the genetic material of eggs and sperm. Cocaine use has been found to affect male fertility. Large amounts of cocaine interfere with luteinizing hormone release, which, in turn, directly affects testosterone levels. Testosterone is necessary for manufacturing sperm, and decreased testosterone levels may lead to decreased sperm production. Cocaine use is responsible for the constriction of arteries. Reduced blood flow to the testes may contribute to the inhibition of sperm production (Zastrow & Kirst-Ashman, 2001).

HISTORICAL PERSPECTIVE

The reasons for couples desiring biological children range from religious ideology to economic necessity and cultural expectations. In agricultural and pre-industrial societies, interest in children was primarily economic, as opposed to modern Western views of children's psycho-social contribute to families. To parents, their children's labor was important in planting and harvesting crops and in tending domestic animals. Parents wanted large families specifically to help with the work on the farm, which reduced the need for paid labor. When parents became elderly, children

tended to provide much of the care. Procreation was so important that infertility constituted grounds for divorce (Jellal & Wolff, 2002; Razin & Sadka, 1995; Willekens, 2003).

The current “Western view” that childhood represents a distinct developmental stage has developed gradually, largely in industrial societies. Whereas women had been able to legitimately forgo marriage and parenthood by devoting themselves to God’s service in convents, the Protestant Church argued that the majority of women were divinely destined to marry and have children, as part of God’s will (Ozment, 1983, as cited in Hird & Abshoff, 2000). Significant shifts in the religious, moral, and social organization of western societies were joined by the massive economic and political changes which industrialization brought during the eighteenth and nineteenth centuries. The idea of “motherhood” as a social vocation emerged only through a complex process of economic, political, and religious transformations. To the extent that children and adolescents are no longer an economic necessity, other reasons have had to be developed for having children (Hird & Abshoff, 2000). Even in acknowledging the dominant social constructions of parenthood, especially motherhood, Sewpaul (2005) accedes that there are deep psychological and even biological imperatives at work in the impulse to give birth.

A review of the literature reveals the following impulses for couples to give birth: Children are an extension of the self or a source of personal fulfillment and satisfaction; children enhance their identity; they look forward to the companionship that youngsters will bring; they want to nurture, motivate, and help children become happy and mature; they want to give their children what they themselves never had; they want children because society expects it of them (Turner & Rubinson, 1993). Parenthood makes them “normal” and enables them to fit in with their peers who get married, have children, and, in due time, have grandchildren as well (Horst, 2000). As Wheeler (1993) explains: “A child holds multiple meanings for a parent: a connection with the

past; investment in the future; and an extension of the self” (p. 261). According to Zastrow & Kirst-Ashman (2001), motherhood is invested with a unique emotional aura. Long after making the choice not to have children, an older woman may have any number of feelings, including contentment, pride, regret, curiosity, or relief about her choices and how they have affected her life (Wickles, 1991).

However, 1 in 8 couples or 7.3 million people of childbearing age in America are battling infertility (RESOLVE, 2005). According to Adler & Boxley (1985), the inability to conceive, bear and rear a biological child can be a nightmare. The effects of infertility mentioned most frequently in the descriptive literature are emotional reactions, feelings of loss of control, effects on self-esteem, identity, beliefs, and effects on social relationships (cited in Dunkel-Schetter, 1991). Increasingly, complex and sophisticated treatment options for infertility patients have resulted in renewed hope that successful outcomes are possible. The new treatment modalities have also resulted in increased disappointment and confusion when they do not work. Infertile couples are also taxed physically, financially, and emotionally (Cooper-Hilbert, 1998) as they grapple with what it means for them to be parents and the rigors of treatment - ultrasounds, daily injections, and blood tests that must be carefully timed.

The late 20th century finds the genetics and in vitro institutions at an interesting and controversial confluence of social and medical trends, beginning with the birth of Louise Brown in July 1978, the first baby conceived by means of in-vitro fertilization (IVF) in England. Subsequently, Norfolk General Hospital in Virginia, obtained state government approval to make the technique available at home. Elizabeth Carr, the first baby in the United States to be conceived with the help of IVF was born on December 28, 1981 (Chang & DeCherney, 2003; Merrick & Blank, 2003). Over the last 28 years, new birth technologies have emerged, which include, but are

not limited to, intracytoplasmic sperm injection (ICSI), intrauterine insemination (IUI), gamete intra-fallopian transfer (GIFT), zygote intra-fallopian transfer (ZIFT), cryopreservation of gamete and embryos, and surrogacy.

PURPOSE OF THE STUDY

The purpose of this study was to explore the “lived experience” of infertility and assisted reproductive technologies from a cross-cultural perspective. The study was limited to married couples with some personal experience of medical assessment or treatment for infertility. From an inter-disciplinary standpoint, the findings of this study will help social work clinicians and other family-serving professionals to understand infertile couples’ situation and to respond with appropriate care. To this end, the way these professionals theorize infertility and design intervention programs will be challenged. Secondly, this study might serve as a primary resource material for couples struggling with infertility. Thirdly, largely because of the overwhelming evidence for a lack of insurance coverage for infertility treatments, it is hoped that the findings of this study will receive a strong appeal for some social welfare policy changes in Jamaica and the United States.

OBJECTIVES OF THE STUDY

Through a qualitative research process, the study aimed to:

- Investigate the lived experience of infertile individuals and couples
- Explore participants’ experience with the medical community
- Understand what is valued and valuable about children by the couples
- Explore whether or not men and women respond differently to infertility
- Explore the factors that influence couples’ decisions regarding the use of assisted reproductive technology

- Determine whether or not there are differences between individuals/couples experiencing infertility across the USA and Jamaica

RESEARCH QUESTIONS

In view of a qualitative phenomenological methodology, no hypotheses were made about the thematic content of the interview prior to the collection of the interview data. The interview themes were generated from the qualitative analysis of the questions directed at infertility and assisted reproductive technology (ART). The following research questions provided the focus of inquiry for the study:

1. What are your experiences of infertility and your views of what it means to be infertile?
2. What has your experience been like with the medical community?
3. What is the importance of becoming a biological parent?
4. How is your reaction to infertility different from that of your spouse?
5. What are the factors that influence your decision regarding the use of assisted reproductive technology?

SIGNIFICANCE OF THE STUDY

Although volumes of studies have been conducted on infertility in America, they offer very little cross-cultural information and most do not include men as participants. Jamaica was chosen for comparative purposes because I am familiar with the social-political context, having lived there for most of my life. Secondly, Jamaica has had a relatively short history of ART, and no religious, legal and ethical controversy have been made public, but it is not prudent to wait until these problems develop before theologians, ethicists, and attorneys become concerned. It is my hope that the findings of this study will spark interesting public debates on ART in Jamaica. The significance of this study lies in it being cross-cultural and inclusive of genders and social classes represented in the Jamaican and American societies. It elucidates the cultural and economic

contexts for reproductive decisions and throws light on the dynamics of human reproduction by exploring the intricate ways couples manage their infertility.

Secondly, within the Jamaican context which is dominated by discourses on population control, this study gives visibility to the issue of infertility, which is primarily perceived to be a personal and private issue. For this reason, this study makes infertility a public health issue. Jamaica has the largest population in the English-speaking Caribbean, and it shares with the rest of the world the incidence of 10-15% infertility. The first known use of assisted reproductive technology in Jamaica was in June 2000 (Frederick, et al., 2001). Now that there is history of practice of ART among Jamaicans, attention needs to be given to psychological/emotional factors. Based on all the evidence from prior studies, long-term infertility has detrimental effects on the psychosocial functioning of individuals (Seibel, 1997).

There is a small but growing body of research on infertility and assisted reproductive technologies in Jamaica, but I was unable to locate any published material that takes infertility beyond the biomedical domain. From the standpoint that this study explored the psychosocial aspects of infertility and assisted reproductive technology, from a Jamaican perspective, this is a groundbreaking study.

DEFINITION OF CONCEPTS

ASSISTED REPRODUCTIVE TECHNOLOGIES

Assisted reproductive technologies (ART) according to World Health Organization (WHO) definition refers to infertility treatments where both eggs (oocytes) and sperm are handled to achieve a live birth (Dyer, Griffiths, Eckermann and Lord, 2006).

CULTURE

In the context of this study, culture is defined as the social, political, religious, and economic practices of a people. A more expansive definition of culture entails a people's world-

view, way-of-life, values, philosophy of life, psychology that governs behavior, their sociology and social arrangements. Culture has become a site of struggle for persons or couples who have experienced infertility (Pui-Lan, 2001).

CRYOPRESERVATION

Cryobanks for human semen were first proposed in 1866, but it was not until 1953 that a successful and practical cryopreservation (freezing) technique was introduced (The Tyler Medical Clinic, 2001). The establishment of the first semen bank in the United States was based primarily on the expectation that millions of men would elect to store their semen prior to undergoing vasectomies for fertility insurance, an expectation largely unrealized to date. Current cryobanking includes timed multiple inseminations for AIH and AID, storage pooling, concentration of sperm for AIH, retention of fertilizing capacity in absence, death, or hazard exposure of the husband. Cryobanking may also be used to freeze the semen of patients with specific forms of cancer, such as Hodgkin's disease, before they undergo necessary cytotoxic chemotherapy or radiation therapy (Fitoussi et al., 2004; Wisot & Meldrum, 2004). Embryo freezing is offered as a service to IVF patients as part of their in vitro fertilization treatment cycle and is offered for three reasons:

1. To reduce the expense, time, and physical discomfort associated with repeated IVF treatment cycles. Embryos from a treatment cycle, which were not transferred, can be frozen for later use. Should the woman not become pregnant with the first embryos, a frozen embryo transfer can then be performed in later cycles, and many of the steps involved in IVF can be eliminated (e.g., repeat ultrasound-guided egg recovery) from the frozen embryo cycle.
2. To reduce the risk of multiple pregnancies by transferring a limited number of embryos at a woman's first in vitro fertilization transfer (ET) and freezing the remaining embryos.

3. To take full advantage of all eggs available during the woman's first egg recovery by attempting to fertilize all available eggs (Frankel, 1990; Strong Fertility and Reproductive Science Center, 2005).

CYCLES

Because ART consists of several steps over an interval of approximately 2 weeks, an ART procedure is more appropriately considered a cycle of treatments rather than a procedure at a single point in time. The start of an ART cycle is considered to be when a woman begins taking drugs to stimulate egg production or starts ovarian monitoring with the intent of having embryos transferred (Centers for Disease Control and prevention, 2007).

DONOR INSEMINATION (DI)

Donor insemination is the oldest, simplest, and most widely used type of reproductive-assisted technology (Blyth, Crawshaw, Haase, & Speirs, 2001; Speroff, 2005). It is used as a means to overcome oligospermia, asthenospermia, low ejaculate volumes, antisperm antibodies, several cervical factors (Speroff; Meniru et al., 2001) or when a genetic disorder exists that the male does not want to pass on to a child (Wisot & Meldrum, 2004). Donor insemination is relatively painless and is performed without anesthetic. It is developed along two tracks. One involves the treatment of female infertility in married women through the placement of her husband's sperm into her cervix near the time of ovulation -a procedure called artificial insemination by homologous or AIH. The other track uses donated sperm for the treatment of male infertility, otherwise called artificial insemination by donor (AID) (Meniru). A major point of contention from an ethical perspective is whether the practice of donor insemination should be called gamete "transfer" rather than "donation." Donation suggests that a gift is being made and in the U.S. people rarely transfer gamete without receiving money for them (Shanley, 2002).

GAMETE INTRAFALLOPIAN TRANSFER (GIFT)

Dr. Ricardo Asch and his associates at the University of Texas Health Center in San Antonio developed GIFT in 1984 (Wisot & Meldrum, 2004). The procedure is most often recommended for couples with unexplained infertility with the female partner having at least one open fallopian tube. It may also be recommended for patients whose infertility is due to cervical or immunological factors, mild endometriosis, or selected cases of male infertility. GIFT is considered a variation of in vitro fertilization (IVF), with one significant difference. With the GIFT procedure, fertilization is intended to occur naturally within the woman's body instead of in a laboratory. For this reason, GIFT is sometimes described as an alternative for patients whose religious beliefs prohibit conception outside the body.

GIFT involves three steps. The first step is ovarian stimulation and monitoring. Medications are used to stimulate the woman to produce more than one follicle and ovum and to aid in stimulating the follicles to release the ova. During this time, the woman's response to the medication and the development of her ova are watched and assessed. The second stage begins with a laparoscopy performed under general anesthesia to retrieve the ova. The ova are then examined under a microscope to determine maturity. Semen is obtained and processed in a centrifuge, where it is washed and then placed in a test tube so that the active sperm can swim to the top. The third step consists in transfer of the ova and sperm into the woman's body. Ova and sperm are placed in a catheter, and the catheter is inserted directly into the woman's fallopian tube through a surgical procedure using a laparoscope. The ova and sperm are then injected into the fallopian tube with the intent of fertilization occurring in its normal environment within the woman's body. If fertilization does occur, the developing embryo(s) will remain in the fallopian tube and then move to the uterus for implantation (American Pregnancy Association, 2006; Wisot & Meldrum, 2004).

INTRA-CYTOPLASM SPERM INJECTION (ICSI)

A modification of IVF (the “test-tube baby” technique) was originally performed in Belgium in 1992. ICSI involves the injection of a single sperm into the cytoplasm of an egg to achieve fertilization. This procedure is used in couples with male factor infertility and those with poor fertilization in previous IVF cycles (Dyer et al., 2006; Antigua Sun, 2005; Cooper-Hilbert, 1999).

INTRAUTERINE INSEMINATION (IUI)

Some men have low sperm counts but are potentially fertile if more sperm could reach their spouses’ fallopian tubes. A laboratory procedure known as intrauterine insemination takes all the sperm in an ejaculated specimen, washes out the semen, and concentrates all the sperm in a very small volume of fluid. This fluid is then injected into the uterine cavity of the woman at the time of ovulation. In addition to overcoming some of the sub-fertility associated with low sperm counts, IUI is also used in cases of cervical mucus problem and antisperm antibodies and for nonspecifically enhancing fertility (Cooper-Hilbert, 1998; Meniru, 2001; Wisot & Meldrum, 2004).

IN VITRO FERTILIZATION (IVF)

In vitro fertilization (IVF) is a laboratory technique by which human embryos are conceived in a petri dish, which contains a culture medium. It is the first of the new reproductive technologies that offered women with blocked, severely damaged, or absent fallopian tubes a chance to become pregnant (American Society for Reproductive Medicine, 1998; Cooper-Hilbert, 1999). IVF is also used for infertility caused by endometriosis or male factor infertility. It is sometimes used to treat couples with long-term unexplained infertility who are unable to conceive with other infertility treatments. The woman is given hormones, which stimulate her ovaries up to 30 or more oocyte (ova). These are retrieved by inserting a needle into the ovaries via the vagina with ultrasound guidance. These oocytes are mixed with sperm. The sperm is obtained by

masturbation and is usually donated by the husband. If the husband is infertile, however, the sperm may be obtained from another man. If the woman is infertile, similarly, the oocyte may be obtained from another woman whose ovaries have been similarly stimulated. The embryos thus conceived are usually allowed to grow up to the four-to-eight stage over 3 to 4 days, at which time some of the embryos are implanted in the woman's uterus (Shea, 2003).

PHENOMENOLOGY

Phenomenology in the narrow sense of the word began in 1900 with the publication of the first volume of *Husserl's Logical Investigations and of Pfander's Phenomenology of Writing* (Smith, 2003). From the myriad types of phenomenological philosophies in the literature, this study adopts that existential phenomenology of Heidegger and Merleau-Ponty that focuses on the appearances of things, things as they appear in our experience, the way we experience things, and the meanings things have in our experience (Manen, 2002; Moran, 200; Mohanty, 1989; Sokolowski, 2000). The basic themes of existential phenomenology are "lived experience," "modes of being," "ontology," and "life world" (Manen, 2002). In this study, existential phenomenology examines the conscious experience of infertility and assisted reproductive technologies as seen from the subjective or first person point of view. Otherwise stated, phenomenology describes the essential features or themes that characterize the human experience of infertility and assisted reproductive technology.

POSTHUMOUS PROCREATION

Posthumous conception has been defined as the beginning of human gestational process after the death of one or both biological parents. In particular, cryopreservation is a popular technique of posthumous conception, whereby human semen, ova, and embryos may be frozen and preserved at very low temperatures for future use. The choice of posthumous conception might rest on: a member of a couple being unable to have children by traditional methods of

reproduction; the impending death of a partner that does not allow for conception and birth during the life-span; a bereaved family member attempting to cope with the tragic death of a loved one (Landau, 2004; Banks, 1999; Shah, 1996).

SURROGACY

A surrogate mother is a woman who carries a child for someone else, usually an infertile couple. There are two different types of surrogacy, which are traditional and gestational surrogacy. In traditional surrogacy, the surrogate mother is artificially inseminated with the sperm of the intended father or sperm donor. The surrogate's own egg will be used, thus she will be the genetic mother of the resulting child. In a gestational surrogacy, the surrogate mother is not genetically related to the child. Eggs are extracted from the intended mother or egg donor and mixed with sperm from the intended father or sperm donor in vitro. The embryos are then transferred into the surrogate's uterus (American Society for Reproductive Medicine, 2003; Jenn, 1999).

CONCEPTUAL FRAMEWORKS GUIDING THE STUDY

I have critically appraised the biopsychosocial model and postmodernism to provide an overarching framework for this study. Both models emphasize cultural context, self-awareness, holism, plurality, and diversity of values and beliefs, the relational and participation. These two models reflect a paradigmatic shift in society's way of thinking about truth, reality, and knowledge. From these perspectives, people are viewed as active agents in the change processes and structures, and an empowerment-based practice is recommended.

THE BIOPSYCHOSOCIAL MODEL

The biopsychosocial model is both a philosophy of clinical care and a practical clinical guide (Borrell-Carrio, Suchman, & Epstein, 2004). First developed as a model of medicine by psychiatrist George Engel in 1977, it treats the biological, psychological, and social issues as systems of the body. As well as the biological signs and symptoms, a doctor must find out about

the “patient’s”¹ psychological state, his/her feelings and beliefs about his/her illness, social forces such as his/her relationship with families and the larger community (Lakhan, 2006), and spiritual beliefs and practices. For this reason, the person is seen to be in need of biological, psychological, and social support. This model appreciates that disease and illness do not manifest themselves only in terms of pathophysiology, but also may simultaneously affect many different levels of functioning (Frankel, Quill, & McDaniel, 2003).

It this study, the biopsychosocial model focuses on the inter-relationships between biological (genetics and the human aging process), psychological (perception, cognition, emotion), and social (life-style, culture, politics, race and ethnicity, class, gender) factors and the challenges that infertility provides (Farmer, 1999; Moniz & Gorin, 2007). According to Daniels (2005) when gamete and embryo donation, along with surrogacy are utilized to assist human reproduction, the traditional notion that a family is built around and based on blood or genetic ties is challenged. The biopsychosocial model, he argues provides a conceptual model for understanding the biological, psychological and social components of their experience and also an understanding for reframing of family building in which genetics and social ties are equally valued.

In contrast with the medical model, the biopsychosocial model is a shift from a reductionist perspective, which reflects a paradigmatic change in our way of thinking about health and illness. “The paradigmatic shift occurs with the recognition of the intimate and important involvement of the biological, psychological, and social components, especially how they impact each other and evolve as a result” (Farmer, 1999, p.7). According to Cook (1987), the infertility crisis is indeed biopsychosocial.

¹ The concept is in inverted commas to reflect its problematic nature; “patient”, like the concept “client” implies a medical model with its hierarchical, dependent “patient/client-practitioner” relationship, with the assumption that the practitioner is the expert who always knows best (see Sewpaul & Jones, 2004). This issue is discussed in more detail later in this chapter.

Secondly, the biopsychosocial model provides a methodology for understanding the range of social systems in which individuals live and have social interaction, including families, groups, organizations, institutions, and communities (Ashford, Lecroy, & Lortie 2001; Farmer, 1999; Zoldbold, 1993). Equally important is the range of care providers and organizations that provide for infertile couples. This model underscores the value of a multidisciplinary team (family, medical doctor, social worker/mental health professional, and clergy) and providing culturally congruent care for the infertile population. According to Saleebey (2001), the biopsychosocial model focuses on the multidisciplinary of professional disciplines, the multiplicity of methods of inquiry, and the diverse perspectives that guide one's understanding of infertility.

In this study, at the practical level, the biopsychosocial model is a way of understanding the patient's subjective experience as an essential contributor to accurate diagnosis, health outcomes, and humane care. One primary goal of the biopsychosocial framework is to contribute to capacity building of each person by providing psychological and social support. Social activism is presented in the various forms of feminism, which have advocated for changes in social welfare policies, constitutional equality between men and women, women's access to contraceptive and infertility treatments, women's rejection of all forms of assisted reproductive technologies, and a more participatory "doctor-person" relationship.

POSTMODERNISM

Postmodernism in all its various forms - constructivism, deconstruction, poststructuralism, and social construction, while confusing to many, does capture an important social or cultural transition. Moules (2000) argues that postmodernism is an era, a cultural movement, a social condition, a belief system, and a way of being in and understanding the world. According to Jencks (1992), postmodernism is the end of a belief in one single worldview; it is "a resistance to

single explanations, a respect for difference and a celebration of the regional, local, and particular” (p. 11). According to Moules,

... At the heart of postmodernism is pluralism: a belief in multiverses and multiplicity, implying that there are many ways to understand and experience the world as there are people who experience it. Postmodernists argue that all human experience is particular, local, and culturally constituted. (p. 203)

In a postmodern society, the interactions between agents and the mechanisms of the social systems are extremely rich and diverse. Social relationships are non-linear and asymmetrical with respect to power. It is within these asymmetrical power relationships that people operate as teachers, students, doctors, consumers, and citizens. Individuals interact on local levels. Although interactions on one level affect those on another, there is no “metalevel controlling the flow of information” (Cilliers (1998) as cited in Abraham, 2000, p. 4). In his elaboration of the idea of the “local” in postmodernism, Kleinman (1988) observes:

Given the marked pluralism of North American life styles; ethnic and religious backgrounds; and educational, occupational, and economic statuses, we must distinguish between popular cultural meanings that are shared and those that are restricted to particular subgroups. As a result, it is more sensible to speak of local systems of knowledge and relationships that inform how we regard symptoms; these may differ substantially from each other’s. Within these local systems shared meanings will be negotiated among individuals of unequal power who attempt to persuade others of the intensity of their distress and of the need for access to more resources. Members of such local systems may seek to deny the

implications of an obvious abnormality or they may try to enlist significant others in the quest for care. (pp. 14-15)

Postmodernism has been viewed both negatively and positively. From a negative perspective, there has been considerable confusion as to just what is postmodernism. Williams and Sewpaul (2004) assert that the many faces of postmodernism have been seen as evidence of controversies existing amongst postmodernists themselves. According to Delanty (1997), postmodernism, despite being an important movement in the development of western society theory, is ultimately self-defeating as it over-emphasizes the idea of difference (between possible meanings) to the point of extreme relativism and subjectivism. Such a position has implications for any discipline that seeks to intervene in society, because it raises questions about the very basis for such interventions. On account of postmodernism emphasis on deconstruction, Hugman (2003) argues that postmodernism may be negative because it rejects the certainty of knowledge about contested areas of social life.

Proponents of postmodernity identify some of its major themes as praxis (serious concern for the practical ethical aspects of human life), emphasis on the use of narratives, and an understanding that the context of the individuals involved is inseparable for the problem described (Morley, 1994). Hugman (2003), who earlier alluded to a negative characteristic of postmodernism, believes that it is possible to see postmodern approaches as positive, because they stress attention to diverse locations of power, the authority of the service user, the provisional nature of professional knowledge, plurality of perspectives about the good life, and the fluid process of an intervention. According to Howe (1994), the diversification of knowledge and skills is a signal of the postmodern character of the profession. Others are attracted to postmodernism because it helps them develop a new range of critical interpretive skills for constructively engaging

persons involved in the giving and receiving of infertility treatments. As expressed by Moules (2000) and Meinert et al., (1999), while not uncritically adopting postmodern principles, they are adopted as a means to providing more helpful and relevant services in the practice of social work practice. According to Laird (1995), from a social work perspective, working with the infertile population the effort is not to search out “truth” according to the directions contained in a set of prior theories or bodies of knowledge but to find out how individuals have made sense of their experiences and what effects those interpretations have had on their lives. In this study, postmodernism is used as an analytical framework for examining “what is conventionally recognized within anthropology as a key site in the production of beliefs about personhood and parenthood” (Franklin, 1995, p. 11). Hence the constructivist and deconstructivist tendencies of postmodernism are used to show what medical or therapeutic treatment would look like if it were influenced by these ideas.

Constructivism is divided into individual and social constructivism. Firstly, individual constructivism maintains that people cannot be disengaged from the world, which forms the context for all his/her behavior and beliefs (Tarnas, 1991). Learning results from a personal interpretation of knowledge; it is an active process in which meaning is developed on the basis of experience (Jonassen, 2001) and people are active shapers of their reality. Nichols and Schwartz (2006) argue that constructivism became intriguing to family therapists in the 1980s when studies of brain function showed that we can never know the world as it exists “out there”; all we can know is our subjective experience of it. The processes of human knowing, as Weick (1993) phrases it, “are deeply rooted in and shaped by one’s culture, conditions, and psyches. The knower always intimately influences what is known and how it is known” (p. 9). Postmodern therapists

place emphasis on exploring and reevaluating the perspectives that people have about their problems; hence 'meaning' itself becomes the primary target.

The traditional belief that medical doctors or mental health practitioners know what is best for people without listening to their subjective experience of their problem is being challenged by postmodernism. Constructivism upholds the view that personal experience reflects the flow of thoughts and meanings persons bring to their immediate situations (Denzin & Lincoln, 1998 (a)) and that the treatment of infertility may be shaped by the person's viewpoint as well as social and cultural trends. According to Larivaara, Kiuttu, & Taanila (2001), a person's subjective story of illness is not some kind of appendix to the medical conception of the disease process; rather, it is intrinsic to and inseparable from the latter. Professional caregivers are therefore urged to adopt a position of "not knowing," in order to forge an alliance with the recipient of care to maximize the positive result of diagnosis and treatment. According to Anderson (1993), the "not knowing" stance leads to genuine conversations between the care provider and the recipient of care in which their expertise are engaged to dissolve the problem. The controversial "not-knowing" stance does not imply that physicians and mental health practitioners lack important knowledge, but rather describes how their knowledge and understanding are used in the relationship (Laird, 1995). In my experience I have seen people have different/shifting definitions and explanations of their infertility and any attempt to fix the problem without hearing how that physical impairment makes sense in the context of their lives risks missing essential aspects of their experience. Brody (1987) advocates for this active cooperation between physicians and persons in approaching illness and calls it a relational ethic, as opposed to the decisional ethic of traditional bioethics.

Secondly, social constructivists maintain that learning is collaborative with meaning negotiated from multiple perspectives (Jonassen, 2001). Freedman and Combs (1996) suggest that

the social constructivist worldview envisions knowledge as that which is created and negotiated within communities of knowers. Reality as we know it is socially constituted through language, and organized and maintained through narrative (Gergen, 1985; Hoffman, 1990). In a postmodern paradigm, values are screened in, not out, as it is neither neutral nor value-free. Social constructivism, practiced in therapy, attends to the politics of power, political action, and social responsibility. Issues of race, gender, social class, oppression, marginalization, and power differentials implicit in hierarchies and patriarchies are challenged by constructionist clinicians (Allen, 1993; Moules, 2000; Rhodes, 1986; Waldegrave, 1990). The social constructivist clinician questions concepts like motherhood and fatherhood, negative references to infertility in scriptures that lead to self-blame, and self-defeating constructions and medical language like “incompetent” cervix, which indicates “failure” on the part of the woman.

Thirdly, therapy becomes a process of deconstruction - of freeing people from the tyranny of entrenched negative beliefs about infertility and/or themselves (Nichols & Schwartz, 2006). Jacques Derrida, a French philosopher, coined the term deconstruction in the 1960s. Since then there have been many deconstructions. The Free Online Dictionary defines deconstruction as a “philosophical movement and theory of literary criticism that questions traditional assumptions about certainty, identity, and truth...” (p. 1). According to Nichols and Schwartz (2004), deconstruction means questioning assumptions, for example, about life, personhood, parenthood. Resulting from cultural values, a physical “disorder” like infertility often creates a crisis and serious emotional consequences. Such persons see themselves negatively - with descriptions like hopeless, meaningless, deserving of punishment, out of control - a story that is supported by a selection of “facts” from their lives and often by others. As social workers, we help people to “deconstruct unproductive stories in order to reconstruct new and productive ones” (Nichols et al.

p. 336). For example, social workers aid infertile couples in developing prospects and options for a future without a biological child, help them develop a new “sense of self” or autobiographies that are positive and reaffirming of their competencies and strengths.

Since the conceptual frameworks of this study (the biopsychosocial model and postmodernism) encourage peoples’ active participation in their health care, the fashioning of their own lives, their relationships, and their identities, the use of concepts like “patient” and “client” could be misleading. *The British Journal of Medicine*, as cited in Sterling (2006), argues that the words patient and client conjure thoughts and images of quiet suffering, passivity, and an inclination to listen and to obey and not question or take part in thinking or decision making. According to Neuberger and Tallis (1999), the words “patient” and “client” indicate the unequal nature of the relationship, for example, the professional knows what to do, and the patient/client does as instructed. In seeing it as such, the therapeutic process may be construed as an abuse of power. Instead of power abuse, people should be asked what type of support they were looking for when they seek to enter treatment. Based on the aforementioned reasons, I have used words like persons, individuals, and couples as substitutes for patients and clients. Likewise, gender-neutral or gender-inclusive language is utilized.

RESEARCH LIMITATIONS

The most significant limitation of this study is its sample. Despite spending considerable time and energy beforehand to establish relationships with the Fertility Clinics at Strong Memorial Hospital and Parkridge Hospital in Rochester, New York and the University of the West Indies in Jamaica, it was extremely difficult to recruit the desired couples from a diverse racial and ethnic background. The sample therefore is comprised of Caucasians and African Americans in the U.S. and, in Jamaica, they are Blacks and Indians. This limitation may also reflect the bias of the convenience and snowball sampling I utilized, which was heavily dependent on the willingness of

people to participate. Though the “typical” couples in treatment were the desired participants, the entire sample comprised only 30 such couples. The small sample size also means that the study findings cannot be generalized. Qualitative research, however, is more concerned with depth and with analyzing data in context rather than with generalizing from a defined piece of research.

Another limitation of this study was that the study was limited to married couples with some personal experience of medical assessment or treatment for infertility. Many involuntarily childless women who were either single or lesbian contacted me regarding the possibility of participating but I denied them an interview. In this manner, the study may have excluded individuals who have very important stories to tell.

A consistent area of difficulty for a qualitative study with limited budget being conducted in two countries has to do with data collection. What is the most efficient and effective way to collect data? Researchers for a long while have used face-to-face interviews, but telephone interviewing has also become a popular technique. Since traveling to various parts of the United States and Jamaica was cost prohibitive, several telephone interviews were done. Because the interviews are first and foremost about eliciting honest stories, face-to-face interviews are integral to the process of data collection. They allowed for more depth and participants could be observed at the same time. On the other hand telephone interviews at a people’s offices or homes often involved distractions like colleagues stopping by, calls on other lines, and background noise. However, they were the only feasible way of collecting data from a geographically dispersed sample.

IMPLICATIONS FOR SOCIAL WORK INTERVENTION

According to Sewpaul (1999), historically social work with infertile couples began with adoption. The child was seen as the client, and the counseling focused on the couple’s ability to parent. Little recognition was given to the infertile couple’s need for psychological support. Menning (1975) observed times when large gaps existed between the gynecologist’s office and the

social worker. Today, there is a greater recognition by the medical professional of the psychosocial needs of people going through infertility treatment as well as of the importance of having a social worker or other mental health professional as part of the treatment team. Couples at the beginning, middle, and end of infertility treatment and beyond need more than cutting-edge-technology: They need an arsenal of psychological support and guidance to cope with a problem that has the potential to be emotionally, financially, socially, and sexually devastating. Couples' needs through this long process are vast:

They must learn about complicated and expensive treatments that may have only slim chances of success; about stress management to help them through the treatments and financial management to pay for them; about staying together as a couple and supporting each other through the always challenging and sometimes humiliating process; how to maintain self-esteem when they feel inadequate; how to keep a relationship loving when sex becomes goal-oriented, and above all, how to grieve and process loss. (Jackson, 2005, p.1)

The multiple roles that may be assumed by social workers are enabler, mediator, educator, broker, analyst, and advocate. Social workers can play a key role in helping couples evaluate medical information and options and help them make difficult decisions. The reality is that given the many options that couples have to sieve through, it is difficult for them to know how far to go and when to stop. In an interview with Jeanette Harder, Ph.D. an assistant professor of Social Work and a recipient of infertility treatment, she observes that “there are so many choices and what’s challenging for the couple is not knowing when to call it quits and when to consider other lifestyles, whether that’s living without a child or adopting” (Harder, as cited in Jackson, 2005, pp.1- 2). Covington, LCSW, director of psychological support at a Fertility Reproductive Science

Center and co-interviewee with Harder, observes that clients often seek help when they have a dilemma making decisions about moving into assisted reproductive technology, pursuing gestational surrogacy or adoption, or remaining a family of two. In some cases, social workers can assume the mediator role to help them get beyond an impasse and reach the decisions that will be best for them for a lifetime (Covington, as cited in Jackson; Zastrow & Kirst-Ashman, 2001).

Another role for social workers is to empower couples to talk to their medical providers with knowledge and assertiveness. To achieve this end, social workers may collaborate with pressure groups to encourage more public education. It is hard for a couple, especially the women, to make informed decisions about reproductive technologies when they do not have the information. Unlike abortion issues, which are fairly crystallized and articulated, the issues and institutional values concerning infertility and reproductive technologies are only now being discovered and defined (Zastrow & Kirst-Ashman, 2001). Harder observes that social workers “bring a unique view to the issue of infertility because they have a holistic view of all the systems that impact their clients and so can bring a fresh perspective” (Jackson, 2005, p. 2). She maintains that social workers are attuned to the wider issues-social, financial, and emotional, as well as medical and especially social support, which is generally the couple’s greatest need. Supporting this claim, Zastrow & Kirst-Ashman (2001), note that the social worker as educator can inform clients about options and procedures with specific and accurate data.

Social workers also by virtue of their training can provide grief counseling and psychosocial support. Grief will be an issue for the infertile couple regardless of the outcome of treatment and whether or not the couple has a child by any means. Unresolved grief can complicate the decision-making process. Harder asserts that social workers need to know the level of grief that is involved, the huge amount of anger, and the roller coaster of emotions that a woman experiences each month

when she thinks she has conceived and finds that she hasn't. Perhaps most important, she suggests, is that social workers be attuned and attentive to the overwhelming isolation that often accompanies infertility. Generally, people (including a spouse) are very uncomfortable with conversation about infertility, because they can't grapple with the intense anger, the disappointment, and all the emotions involved. She also underscores the deep loneliness between couples at the times when they already feel isolated (Jackson, 2005). According to Cooper-Hilbert (1998), studies suggest that adaptation to involuntary biological childlessness is a slow and painful process of pursuing solutions, considering options, grieving losses, and redefining the self, family, and future. As the couples move toward resolution, they need direction, support, and clarification from a therapist who understands their experience.

Social workers may address and challenge barriers, inequities, and injustices that exist in society; work with and mobilize individuals, families, groups, organizations, and communities to enhance their well-being and their problem-solving capabilities; advocate for, and/or with people, for changes in those policies and structural conditions that maintain people in marginalized, dispossessed, and vulnerable positions; and encourage people to engage in advocacy with regard to pertinent local, national, regional, and/or international concerns (Sewpaul & Jones, 2004). As such, by striving to empower marginalized groups of infertile people, advocacy has a direct relationship to anti-discriminatory practice and the caring ethic in social work practice.

As is evident in deconstruction, postmodernism is attentive to the contexts in which knowledge is constructed and communicated. As such, the postmodern practitioner must be particularly attuned to the voices, meanings, and ways in which people heal themselves and whether their agency and community hear and respond to their perspectives (Sands, 2001, p. 22-23). Social workers need to be knowledgeable about local contexts - the situation of each person

with whom they work, the functions of other professions with whom they work, the norms and culture of their agency, and the organizational culture of their managed care entities so that its benefits for service users may be realized to the fullest extent possible.

CONCLUSION

This chapter describes the lived experience of infertility, people's intrinsic motivations for having biological children, and the many unprecedented and rapid advances that have revolutionized reproductive medicine. Situating infertility and assisted reproductive technologies within the global and local political economy of health provides an overarching framework for examining the biological, psychological, and social aspects of infertility, as well as the ethical and legal aspects of ART, which will be reflected in the literature review. The following chapter describes the research methodology of this study.

*“Until we learn to ask the right questions,
We will never discover the right answers,
And until we have the right answers,
We will never know the right actions required of us.”*
---Judge Janice Wellington

CHAPTER 2

RESEARCH METHODOLOGY

The purpose of this study was to investigate the lived experience of infertility among Americans and Jamaicans. The research methods used to accomplish the objectives of this study are presented in this chapter. Because qualitative and phenomenological procedures are employed by a variety of social scientists, there is a brief discussion on their characteristics and why a particular form was chosen for this study. Self-reflexivity, the population and the sample description, and the research procedure are provided.

PERSONAL INTEREST AND THE RESEARCH QUESTION

This study employs the methods of participant interviews, phenomenology and reflexivity to enter into the lived experience of infertility. According to Morgan and Drury (2003):

Such methods assist in generating data that is rich in the subjectivity of actions, interactions, emotions, culture, symbols and rituals. Interaction between researcher and participant is recognized as a key component of data generation and valued as such, because it is a means of getting close to the experience of participants so that phenomena can be viewed from their own perspective. (p. 4)

The struggle for me was to maintain a dual status as a researcher and the researched as I have had personal and professional experience with infertility. Mies and Vandana (1997) refer to this as “conscious partiality,” which brings the researcher closer to the actual reality of phenomena (p. 34). Although my (our) own circumstance did change and we had biological children, my

relationship to the research material goes far beyond that of identifying with the researched intellectually in that I found striking parallels between my own experiences and that of many of the research participants. Williams (2005) defined “parallel” as that which occurs when the researcher also experiences the feelings experienced by the participants. On the other hand, I also had several colleagues and clients who were infertile. They frequently grieved for the baby that wasn’t and for all the babies they would never have. The women in particular often expressed feeling powerless, sad, intensely angry, hateful, and envious of couples with children. One woman in a prior study summed it up this way: “I find myself hating pregnant women I see at school, in the grocery store, and even in church. I have never had such intense negative feelings toward others, and I despise myself for having them” (Mahlstedt, 1985, p. 339).

I am now better informed personally and professionally about infertility than before this research and my attitude toward infertility and assisted reproductive technologies has become considerably more liberal. Ploughing through volumes of qualitative research and feminist literatures, I observed that social constructionism forms the basis for people’s values and beliefs about children. People’s reality and the meaning they derive from their experiences are constructed by their individual consciousness in interaction with their environment. As such, the constructionist perspective adds an important dimension to the clinician’s professional understanding of person-in-environment (Kondrat, 2002). It is therefore not accidental that as a result of the study I have a greater ability to empathize with couples that are voluntarily childless and those who are traumatized by their inability to have a biological child.

Largely because this study was driven by my personal experience of infertility, I was worried about my own lack of objectivity, but also equally determined that personal bias would not be allowed to jeopardize the quality of the study. This was affirmed by my discovery of feminism

and Alex Plow (1998) who gave permission to engage myself in a process of being an individual and a researcher all at the same time. Winter (2000) observes that while quantitative researchers attempt to disassociate themselves as much as possible from the research process, qualitative researchers have come to embrace their involvement and immersion into the research. Plow (1998), quoting Roseneil, validates the feminist arguments supporting subjective approaches to research:

Greenham was so important to me personally that without this space opened up by feminist writers, legitimizing, and indeed demanding the discussion of the researcher's subjectivity, for me to have attempted to research Greenham would have been impossible...My subjectivity, my feelings, and my experiences, public and private, could not be wrenched from it [the research] because they provide both the motivation and much of the material for it. (Roseneil, 1993, p.93)

According to Klein (1999), the postulate of value-free research, of neutrality and of indifference towards the research objects, has to be replaced by conscious partiality. Seale, Gobo, Gubrium, & Silverman (2004) point out that much of the more contemporary literature argues for an engaged, active or collaborative format of interviewing. Collins (1998) for example, reflecting on his own practice, argues:

As the interviewer I am not, I cannot be, merely a passive observer in all of this, even though it is primarily the interviewee's life which is under scrutiny....As I take less seriously the manuals' advice to maintain a lofty silence, I am increasingly moved to contribute my own stories, to hold them up for contrast or comparison with those of the interviewee (p. 7).

Further confirmation came from Miles and Heberman (1994) who argued that the researcher must try to provide neutrality and reasonable freedom from unacknowledged researcher biases – at minimum, explicitness about the inevitable biases that exist. Krathwohl (1998) succinctly summarized his support for the inclusion of researcher subjectivity in his/her research when he said: “The qualitative researcher does not pretend to be neutral, but seeks to understand the directions of bias and take them into account” (pp. 340-41). My response then was to become objective and disciplined enough to adopt a valid qualitative phenomenological research approach, without necessarily having to maintain a detached, neutral stance as endorsed by logical positivist research.

RESEARCH DESIGN

QUALITATIVE PHENOMENOLOGICAL METHODOLOGY

A qualitative phenomenological paradigm was chosen for this study because it has the character to uncover and describe the nature of infertility in such a manner that a person who hasn't had the experience might understand the phenomenon. Munhall (2001) postulates that the objective of qualitative research is to “disclose subjectivity” through exploring and collecting data that describe the experience being researched (p. 73). According to Morgan and Drury (2003), “The utilization of qualitative research methods provides access to the lived reality of individuals, facilitating the exploration of people's internal construction of their personal worldview” (p. 4). This research method was extended by postmodern principles to explore social criteria such as gender, class, and culture, and their influences on the experience of infertile couples.

Secondly, this research method studies things in their natural settings, makes sense of, or interprets, phenomena in terms of the meanings people bring to them (Denzin, 2005) and allows the participant to describe what is meaningful or important to him/her using his/her own words rather than being restricted to predetermined categories, therefore making the participant feel more

relaxed and candid. Qualitative research methods are suited to enriching the understanding of how participants construct the world around them. Participants' stories are accepted at face value as their phenomenological reality (Glesne & Peshkin, 1992). The suitability of qualitative research in all of its forms for a study that seeks to understand the meaning that people bring to a phenomenon is well documented (Darsney, 1996; Greil, 1991; Greil, Leitko, & Porter, 1988; Osbourne, 1994).

Thirdly, I chose this methodology because I believe it is best suited to help me learn about individuals/couples experience of infertility and ART by listening to their description of what their subjective world is like for them. The methodology also helped me in my attempts to understand this in their own terms as fully as possible, free of preconceptions and interferences. It also helped me to examine what is distinct in each participant's experience and what is common to the experience of groups of people who have shared the same events or circumstances.

Interviews are a preferred way to conduct qualitative research (Britten, 1995). A total of 30 couples were interviewed in this study. At the most basic level, interviews are conversations with a purpose (Kvale, 1996). Kvale defines qualitative research interviews as "attempts to understand the world from the subjects' point of view, to unfold the meaning of people's experience, to uncover their lived world prior to scientific explanations" (p. 29). When used judiciously, qualitative interviewing can be therapeutic and empowering for participants (Oleson, 1994; Scanlon, 1993). As in the case of this study, there was always a high level of reciprocity in the exchange between husbands and wives who reportedly never had prior discussion about certain issues relating to their infertility. A significant number of men talked about their infertility for the first time with someone who was neither their spouse nor doctor. The interviews conducted for this study were informed by Patton (1987, 1990), who suggests that good questions in qualitative interviews should be open-ended, neutral, sensitive, and clear to the interviewee. He also advised

that an interview should start with questions that the interviewee can best answer easily and then proceed to more difficult or sensitive topics.

RECRUITMENT OF PARTICIPANTS

The minimal criteria for participation were that the participants were married, had experienced infertility, and were capable of articulating their responses. Participants were between 22 and 58 years of age. Fifteen infertile couples from America and fifteen couples from Jamaica constituted the sample for this study. It has been suggested that the ideal range of participants for a qualitative study is between 8 to 15 participants, as saturation would usually occur (Juntunen, Barraclough, Broneck, Seibel, Gennea, Winrow et al., 2001; Kvale, 1996).

All couples involved in this study tried to have a biological child for at least one year, which is the established medical definition of infertility. Attempts to have biological children spread over a period of one to fifteen years. At the time of the study, a total of 10 couples continued to receive infertility treatment. Among the American participants, 50% were associated with the Infertility Clinics at Strong Hospital and Park Ridge Hospital; 25% were associated with Roberts Wesleyan College; and the remaining twenty five percent were recruited from the community through a combination of convenience and snowball sampling. By definition, a convenience sample is obtained when the researcher selects whatever sampling units are conveniently available (Frankfort-Nichmias & Nachmias, 1992). Snowball sampling (also called chain referral and referential sampling) is used to find members of a group not otherwise visibly identified (Krauthwohl, 1998). In the case of the Infertility Clinics at Strong Memorial and Parkridge Hospitals, I was authorized to place fliers describing this study in patients' waiting rooms. I subsequently received emails and telephone calls from patients indicating agreement to participate. With respect to Roberts Wesleyan College, a proposal of my study went through a formal ethical review process. After its approval, an invitation via email was sent to staff and

faculty soliciting appropriate volunteers for the study. Subsequently, I received phone calls and emails indicating agreement to participate.

The situation was much different in Jamaica. Initially, I tried to get referrals through two major hospitals with infertility clinics and I was unsuccessful. Next, I contacted several gynecologists and family practitioners in private practice. I explained the study to them, requested their help with appropriate referrals, and ascertained their commitment to help accordingly. Subsequent contacts for the referrals produced no participants. I then turned to convenience and snowball sampling, which gained me 15 couples. All couples were infertile and had received conventional treatments for their infertility, but only 3 couples were treated with new reproductive technologies. With no exceptions, couples desired treatment that would give them a good chance to have a biological child, but the cost for services was the primary obstacle.

During my initial contact with participants in both Jamaica and the United States, they were informed of the nature and purpose of the study and provided with explanatory statements, processes for complaint and withdrawal, and 'informed' consent forms which were signed to indicate both their understanding and willingness to participate. I also informed them that the interviews would be audio-taped and assured them of their anonymity and confidentiality. Following, I answered related questions and determined with them a convenient date, time, and place for the interview.

DATA COLLECTION

The questions utilized in the interview protocol were listed on two separate instruments called *The Demographic Questionnaire* and *the Biopsychosocial Impact Interview Guide*.

The Demographic Questionnaire asked participants to provide information regarding their sex, age, race, religious affiliation, occupation, education, income, length of marriage, length of time experiencing infertility, and initiation of infertility treatment. The *Biopsychosocial Impact*

Interview Guide questions were open-ended and explored the areas of couples' lives impacted by infertility, such as biomedical diagnoses, emotional reactions to infertility, experiences with the medical community, ethical dilemmas, coping mechanisms, the effect of infertility on the participants' lives, and any changes in the view of the self as a result of infertility. Prior to the interviews, I reminded participants of their rights and welfare. Respect for their rights and welfare was demonstrated in several ways, the most important being an acknowledgement that they were in a good mental and emotional state to discuss issues relating to their infertility. All participants were treated with respect and they reciprocated the same to me.

THE INTERVIEWS

In-depth interviews, with an interview guide, were used for all interviews, as that is deemed best suited for the task of comprehending participant subjectivity (Barlow & Coleman, 2003). The final research sample consisted of 30 couples. I conducted 29 conjoint face-to-face or telephone interviews and 1 face-to-face individual interview. In the latter case, the female participant and her husband were separated 18 months prior to the interview. In the United States, I conducted 6 face-to-face interviews in my office, 5 face-to-face interviews in the participants' homes, and 4 interviews on the telephone. In Jamaica, I conducted 5 face-to-interviews and 10 telephone interviews. The interviews ranged from 45 minutes to 90 minutes. For qualitative study, Lincoln and Guba (1985) consider the interview a superior research instrument because "it would be virtually impossible to devise a priori a non-human instrument with sufficient adaptability to encompass and adjust to the variety of realities that will be encountered" (cited in Barlow & Coleman, 2003, p. 189).

I personally found the face-to-face and telephone interviews to be very special forums to probe and gather the "lived" experience of the participants. I conducted telephone interviews only when a face-to-face interview was not possible owing to geographical spread or scheduling

conflicts. While it was easy for me to establish trust in either forum, unlike face-to-face interviews, I felt emotionally drained and tired following each telephone interview. I always believed that there was the potential for harm or unpleasantness to participants with unresolved infertility issues. With face-to-face interviews, I was able to maintain eye contact between me and the participants, but with telephone interviews there were no visual cues to help me know when a particular line of questioning was causing a participant discomfort. In an effort to avoid or minimize harm to participants, I reminded them throughout the interviews that they had the right to decline an answer to any question being asked and they could discontinue the interview at any moment. Prior researchers that have utilized telephone interviewing have identified advantages of the method, including: the opportunity to collect data from geographically diverse samples (Wilson and Edwards, 2003; Fenig, Levav, Kohn and Yelin, 1993); increased cost and time effectiveness compared with face-to-face interviewing (Wilson et al., 1998; Baker 1994; Fenig et al., 1993); elimination of travel costs (NurseResearcher, 2005); greater acceptability to interviewees because they generally take less time to undertake (Ross et al., 2001); the partial anonymity granted by the telephone may increase the validity of responses by reducing the embarrassment involved in responding to emotionally or socially loaded questions in face-to-face situations (Fenig et al., 1993); increased response rates compared with postal surveys (Thomas and Purdon, 1994); and the opportunity to ensure that all questions are answered and clarified, unlike with self-administered questionnaires (NureResearcher, 2005). The telephone, however, is not free from shortcomings. Bias may arise from the exclusion of potential respondents whose telephone numbers are either not listed in the telephone directories or those who have no telephone (Fenig et al., 1993).

With respect to the fit of conjoint interviews to this study, there are those who would argue that information that is collected jointly may be less reliable than does data that are collected by

individual interviews (Halford, 2001). I do concur that often people feel intimidated by their partner or become reluctant to share honest feelings and thoughts in the presence of their partner. However, I conducted conjoint interviews for the very reasons for which Halford thought they were productive. Firstly, conjoint interviews allowed me to build a shared understanding of how infertility is experienced as a couple. Secondly, conjoint interviews allowed me to explore positive aspects of the couple's relationship that distressed partners often overlook. Thirdly, conjoint interviews allowed me to observe the couple's interaction, which happened to be something that many couples longed for (Halford).

The timing of the interviews was always the choice of participants. Especially with telephone interviews, it was often awkward to call at the participants' convenience, but I made it my priority to work with their availability. Participants were encouraged to fully describe their experience with infertility. My interview tasks, underscored by a commitment to empathic understanding, included clarifying, reflecting, paraphrasing and using open questions (Barlow & Coleman, 2003). Home visits were much more convenient for me as they were arranged for after-work hours and weekends. Participants were always accommodating and the interviews proceeded with manageable psychological discomfort. The exception was when I visited a couple that received a negative result about their fourth IVF treatment, just a week prior to the interview. They both expressed much grief and a sense of loss. They talked about faith issues and found some consolation in a prayer, which they asked me to pray. There were also participants who were grief-stricken by their inability to afford a particular assisted reproductive technique. There were challenges for me as well as the participants. Many had difficulty at times expressing thoughts or emotions they feared could upset their spouses. I also recognized that some couples could benefit from counseling, but it was out of my jurisdiction to provide it. Generally, participants

communicated that they appreciated my insights and observations, viewing me as being sensitive to their needs and well-being. Many reported that the interview process had relieved them of a “heavy load.” Some wives were particularly gratified that the interview provided a safe place for their husbands to share thoughts and emotions that they never before expressed.

DATA ANALYSIS

Using the qualitative research method, verbatim data derived from tape-recorded sessions of each interview provided the written texts for analysis. Data were transcribed, coded, arranged, and analyzed for categories and emergent themes according to a revised version of Colaizzi’s (1973; 1978) phenomenological method. This method consists of the following seven steps: participants’ descriptions of their experiences are read in order to acquire a sense of the whole; significant statements are extracted; meanings are formulated from the significant statements; formulated meanings are organized into themes; themes are integrated into an exhaustive description; the essential structure of the phenomenon is formulated; for validation, the informants evaluate the result of the analysis to determine whether it means the same as their originally expressed experiences (Colaizzi, 1973; Colaizzi, 1978).

The revision mentioned above is in reference to Step Seven. Whereas in step seven, upon completion of the initial data analysis, Colaizzi’s method requires that participants be invited to comment on the accuracy of the facts, interpretation of the data, and themes extracted, the initial draft was given to two college professors, Drs. Jennifer Aube and Debra Heath-Thornton to conduct that process instead. The substitution was done because it was deemed too time-consuming and costly to have participation from participants living across three American states and in Jamaica. Drs. Jennifer Aube and Debra Heath-Thornton conducted a cross-comparison between the interview guide and the transcripts to determine corroboration between the themes

extracted and the interview statements. Feedback following their assessment was then analyzed and incorporated into the final draft.

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Dr. Debra Heath-Thornton is associate professor and Chair of the Department of Criminal Justice at Messiah College, Grantham, Pennsylvania. Previously, she served as associate professor and Chair of the Division of Criminal Justice at Roberts Wesleyan College, 1996-2004. Among her many publications, Dr. Heath-Thornton has contributed sections in several Instructor's Manuals and Test Banks for teachers of sociology. She received an Ed.D from the University of Rochester, New York, an M.S. in Education from State University of New York, Buffalo, an M.S. in Criminal Justice from State University of New York, Buffalo, and a B.S. from Rochester Institute of Technology, New York.

CONCLUSION

In this chapter, I explored how I formulated experiential boundaries to help inform my decisions regarding the research design of the study, the process of selecting participants, the interview process, data analysis technique, and ethical guidelines for conducting research. This chapter particularly challenged me to sieve through the contradictions among styles and types of qualitative research and to arrive at a qualitative research design that truly uncovers and describes the nature of infertility in such a manner that a person who hasn't had the experience might understand the phenomenon. Chapters 3, 4, and 5 to follow comprise the literature review. At the core of this literature review is a consideration not only of the differences between genders and

differences among people and cultures, but of the ideas humans construct about parenthood, motherhood, fatherhood, and family, and the impact of the dominant cultural perspective on infertile individuals/couples.

*Facts are stubborn things; and whatever may be our wishes,
our inclinations, or the dictates of our passions, they cannot
alter the state of facts and evidence.*
---John Quincy Adams

CHAPTER 3

THE BIOPSYCHOSOCIAL ASPECTS OF INFERTILITY

INTRODUCTION

In this chapter the theoretical framework of the biopsychosocial model that underpins this study provides an overview of the literature with specific reference to the interactions of the biological, psychological, and socio-cultural aspects of infertility. The three aspects are separately addressed but their interrelatedness sometimes made it difficult to clearly delineate between the psychological and the social aspects of infertility. Consequently, the distinction was often arbitrarily made for the purpose of discussion. Included in this chapter also are case examples of the “lived experience” of infertility drawn from the literature. Since context is an important aspect of qualitative research from a postmodern perspective (Morely, 1993), I have explored briefly the African, American, and Jamaican cultures with a view to determine from the findings in Chapter 6 the extent to which those macro cultures did influence the responses of the study sample.

A. BIOLOGICAL PERSPECTIVE

Infertility is a paradigmatic case of the complexities in defining a problem which is biological, psychological and social in nature. One definition, that is favored by the medicalization of infertility and the commercial interests of service providers, presents infertility as a failure to conceive within 12 months of regular sexual activity without the use of contraceptive (Doherty & Clark, 2002; McDonald-Evens, 2004; Wisot & Meldrum, 2004). Others based upon their social context define infertility as failure to conceive after regular unprotected sexual intercourse, for two years in the absence of known reproductive pathology (Royal College of Obstetricians and

Gyneacologists, 2004). The former appears to be the most frequently used medical definition in the literature (Doherty and Clark, 2002; Evens, 2002; Spar, 2006; Dyer et al., 2006). However, people have the liberty to use whatever definition that is considered most suitable to their culture and personal needs. Unlike most medical problems, infertility is an issue requiring the careful evaluation of the couple's physiological and anatomical conditions as well as their interactions with each other (Rowland & Norris, 2005). Studies show that infertility affects males and females with almost equal frequency (Daar & Merali, 2001; McDonald-Evens, 2004). The following four sets of estimates appear most frequently in the literature: 1) 35-40% due to female factors, 35-40% due to male factors, 15-20% due to combined factors, and a residual of 15-20% for which no explanation could be determined (Cooper & Glazer, 1994; Cooper-Hilbert & Hilbert, 1993; Mahlstedt, 1987; Speroff et al., 1989); 2). One-third of cases of infertility are due to male factors, one third to female factors, and the remaining third to a combination of both male and female factors (American Society for Reproductive Medicine, 2004); 3) 40% of the time infertility is due to a problem with males, about 40 % of the time it is due to females, and about 20% of the time, there are fertility problems with both males and females (Longe, 2005; Rowland & Norris, 2005; Seibel, 1997; Youngkin & Davis, 2004; Zastrow & Kirst-Ashman, 2001); and 4) 35% of the time the problem is male factor infertility, 35% is due to female factor infertility, and 25% of infertile couples have more than one factor that contributes to their infertility (Turkington & Alper, 2001).

FEMALE FACTOR INFERTILITY

Medically speaking, infertility is a condition of the reproductive system that may be defined as the inability to conceive a child after a year of unprotected intercourse. Primary infertility is the inability to conceive any children at all. Secondary infertility refers to infertility in someone who has at least one child (Minkin & Wright, 2003; Turkington & Alper, 2001). "Surveys taken by the National Center for Health Statistics in 1995 suggest that 10.2 percent of American women of

childbearing age (15-44 years) have impaired fertility. Of these women, 2.5 million have never had children and 3.5 have had at least one” (Minkin & Wright, 2003, pp. 298-299). The factors contributing to female infertility include age, ovarian factors, tubal factors, cervical factors, and immune system problems (Doherty & Clark, 2002; Hollen, 2004; Northrup, 1998).

According to most studies there is a strong association between advancing age and reduction in fecundity (Cooper & Glazer, 1994; Monkin, 2003; Spandorfer, 2003; Wisot & Meldrum, 2004). As women age, their fertility is affected by the quantity and quality of their eggs. In reality, the number of eggs available in the ovary gradually declines. As menopause approaches, an increasing number of cycles are not ovulatory, and therefore unable to result in conception. Moreover, an older woman’s eggs are most susceptible to chromosomal changes that may produce abnormal embryos (Cooper & Glazer, 1994; Monkin, 2003). One study (National Center for Health Statistics, 1993) shows a marked decrease in fecundity among women with increasing age: a) 4.1% of women between 15-24 years old experience infertility; b) 13.1% between 25-34 years experience infertility; and c) 21.4% between 35-44 years experience infertility. Another study (Chatelaine Magazine, 1993) shows that miscarriage is likely to increase with increasing age among women: a) 20-29 years old –10% risk of miscarriage; and b) 45 years or older – 50% risk of miscarriage. More recent research data are comparable to the aforementioned (Speroff et al., 1999).

Failure to ovulate is the most common cause of female infertility. To conceive a child, a woman must ovulate while simultaneously releasing a mature egg from one of her ovaries to be penetrated by her partner’s sperm as it travels to her uterus. Failure to ovulate is most commonly caused by hormone imbalances, premature ovarian failure or ovulation disorders characterized by the presence of many minute cysts in the ovaries (Doherty & Clark, 2002). It may also result from

problems with the central nervous system or pituitary gland, and abnormalities within the follicle or ovaries (Turkington & Alper, 2001, p. 13). An assessment of ovulation may include the use of luteinizing hormone kits, computerized axial tomography (CAT scan), magnetic resonance imaging (MRI) of the pituitary, and possibly Hysterosalpingograms (Doherty & Clark, 2002; Minkin & Wright, 2003; Wisot & Meldrum, 2004).

Tubal factors, including damaged or blocked fallopian tubes, diethylstilbestrol exposure (DES), and endometriosis constitute another leading cause of infertility (McDonald, 1998). Blocked fallopian tubes may result from chlamydia and gonorrhea (Downey, 1993; Garner, 1995; Seibel, 1977). These problems reduce the possibility of pregnancy by interfering with the ability of the sperm to reach the egg following ovulation (American Society for Reproductive Medicine, 1998). Evaluation procedures include hysterosalpingogram of the uterine cavity and of the fallopian tubes. The HSG involves an x-ray that reveals the shape of the inside of the uterus and whether the fallopian tubes are open (Doherty & Clark, 2002). Blocked fallopian tubes may also result from endometriosis - a disease that is characterized by growth of endometrial or menstrual tissue outside of the uterus. These growths often appear on the woman's ovaries, in the fallopian tubes, and in the abdominal cavity. Endometriosis is sometimes called the "career woman's disease" because it is most prevalent in women age 30 and over, many of whom have postponed childbirth. Symptoms of endometriosis include severe menstrual cramps, heavy menstrual bleeding, painful intercourse, pelvic cysts, recurring bladder infections, bloating, diarrhea, back pain, and difficulty conceiving (Doherty & Clark, 2002; American Society for Reproductive Medicine, 1998). There are many arguments to support the hypothesis that there is a causal relationship between the presence of endometriosis and subfertility. Among the findings, the data show: (1) an increased prevalence of endometriosis in subfertile women when compared with

women of proven fertility; (2) a trend toward a reduced monthly fecundity rate (MFR) in infertile women with minimal to mild endometriosis compared with women with unexplained infertility; and (3) an increased monthly fecundity rate and cumulative pregnancy rate after surgical removal of minimal to mild endometriosis (D'Hooghe, Debrocks, & Meuleman, 2003). The evaluation of endometriosis most often involves surgical procedures such as laparoscopy and hysteroscopy (Garner, 1995; Seibel, 1997). An endometrial biopsy (a small shred of uterine lining) is usually done to see if the monthly changes in the lining are normal (Tamar, 1997). Medical and surgical treatment is used to prevent and treat pain associated with endometriosis. In vitro fertilization was developed as a non-surgical option for tubal-factors infertility (Garner, 1995; McDonald, 2004).

Cervical factors constitute an infrequent cause of infertility. Cervical factors are due to abnormal development of a woman's cervix that may result from her mother's exposure to diethylstilbestrol (DES) during her pregnancy. Cancer of the cervix, as well as injury or scarring of the cervix after surgery or infection, which can result in a smaller than normal cervical opening, making it difficult for sperm to enter are other factors. Injury or infection can also decrease the number of glands in the cervix, leading to a smaller amount of cervical mucus, which helps to transport the sperm into the uterus (The DES Cancer Network, 2006; Schragger & Potter, 2004).

Uterine factors are also an infrequent cause of infertility. Uterine factors include polyps (benign growths of endometrium lining the uterus), scarring from prior infection or surgery, fibroids (muscle tumors), DES exposure, pelvic irradiation or abnormal uterine cavity shape (Youngkin & Davis, 2004). Some women are born with abnormalities of the uterus that make it difficult for the egg to implant itself to the uterine lining and/or carry a baby to term. A surgical option to remove the fibroids is dependent on their size and location on the uterine wall (Doherty & Clark, 2002)

Immune system factors constitute another cause of infertility. Under normal circumstances, antibodies are proteins made by a person's immune system to fight substances recognized as foreign by the body. Not surprisingly, among women with recurrent pregnancy losses, antiphospholipid antibodies have been reported to be present in 11% and 22% of cases (Turkington & Alper, 2001). Some women make antibodies against the sperm of some men but not others. Likewise, they can make antibodies against the fertilized egg that is created with some partners but not with others (Northrup, 1998).

A diagnosis of unexplained infertility is arrived at when the standard investigation of both the female and male partner has ruled out other diagnoses. It is generally believed to comprise 10-15% of all female infertility cases (Speroff et al., 1999). Unexplained infertility does not mean that there is no reason for the infertility, but rather that the reason for the infertility cannot be identified with the available technology. Possible problems could be that the egg is not released at the optimum time for fertilization; that it may not enter the fallopian tube; that sperm may not be able to reach the egg; that fertilization may fail to occur; that transport of the zygote may be disturbed; or that implantation fails (American Society for Reproductive Medicine, 1998).

MALE FACTOR INFERTILITY

Like the female, there are a number of factors that contribute to male infertility. The common ones are related to sperm production and maturation and obstruction in the tubes that carry sperm. Problems arise when the male produces no sperm (azoospermia) and when the production of sperm is low (oligospermia) (Turkington & Alper, 2001). In many cases, there are no identified reasons for sperm abnormality (Doherty & Clark., 2002; Wisot & Clark, 2004). However, according to Hollen (2004), "there may be genetic explanations for azoospermia and oligospermia. It is for this reason that many fertility clinics conduct genetic screening in such men to determine if there are mutations that could be passed on via fertilization" (p. 155).

When varicoceles impair the circulation of blood to the testicles they contribute to male factor infertility. Blood flows from the testicles through an artery and flows out through a network of tiny veins that drain into a long vein that goes up through the abdomen. When this system fails, the reverse flow of blood stretches and entangles the tiny veins around the testicles to cause a varicoce. It is believed that infertility occurs when the varicocele causes an elevated scrotal temperature around the testes, making them unable to produce sperm normally. However, varicocele is usually treatable and reversible with surgery (Doherty & Clark, 2002; Strong & DeVault, 1994; Wisot & Meldrum, 2004).

A weak or damaged prostate gland is another common cause of male factor infertility. One of the prostate's jobs is to deliver sperm by aiding in the manufacture of seminal fluid or semen. Whenever the male ejaculates sperm and semen, it mixes together in the prostate before leaving the body. If the prostate is weak or damaged, then it may not function correctly and some of the sperm may flow into the bladder instead of entering the woman through her vagina (Wisot & Meldrum, 2004; Strong & DeVault, 1994).

Other contributing factors to male infertility include genetic and congenital disorders such as un-descended or underdeveloped testes; Klinefelter syndrome; Sertoli cell only syndrome; environmental contaminants; exposure to diethylstilbestrol (DES) taken by the mother during pregnancy; STDs; other diseases; immunological problems; and impotence (Hollen, 2004). In many cases, a primary physician will first examine a man who is experiencing infertility. That physician will usually order a semen analysis to determine whether a problem exists with sperm production and if the analysis shows an abnormality, he/she will often make referral to an urologist (Doherty & Clark, 2002).

INFERTILITY TESTS

Specific causes of infertility can be determined only by an extensive workup, which typically includes many physical examinations, frequent review of basal body temperature, intercourse records, laboratory tests, radiologic tests, surgery, and trials of medical treatment (Eunpa, 1995). In general, there are six phases or areas of assessment for the infertile couple (Downey, 1993; Garner, 1995; Seibel, 1997). They include problems related to ovulation, male factors, sperm-mucus interaction, tubal and uterine anatomy, endometrial sufficiency, and pelvic factors. These areas correspond with the physiological and anatomical conditions necessary for successful conception (McDonald, 1998). For a pregnancy to occur naturally, there must be production of healthy sperm by the man; production of healthy eggs by the woman; unblocked fallopian tubes that allow the sperm to reach the egg; the sperm's ability to fertilize the egg; the ability of fertilized egg to become implanted in the uterus; and adequate embryo quality (American Society for Reproductive Medicine, 1998; Tamar, 1997).

The typical laboratory examinations for male factor infertility include an x-ray to determine whether there has been damage to one or both of the vas deferens (the ducts in the male that transport the sperm to the penis), mucus penetrance test to determine if the man's sperm will be able to swim through a drop of the woman's fertile vaginal mucus on a slide, and a hamster-egg penetrance assay to test if the man's sperm will penetrate hamster egg cells with the outer cells removed, which somewhat indicate their ability to fertilize human eggs (The ARC Fertility Program, 1998). Treatment options for male factor infertility may include artificial insemination, which minimizes semen loss and maximizes motility; therapeutic donor insemination; medication inducement of follicle-stimulating hormone (FSH) and luteinizing hormone (LH) production; and surgery. The use of therapeutic donor insemination has many ethical, religious, legal and medical

facets which warrant careful counseling of the couple (Hahn, 1991; Kilner, Cunningham, & Hager, 2000; McDonald, 1998; Sewpaul, 1995).

THE MEDICALIZATION OF INFERTILITY

A fascination with the beginnings of life has involved generations of researchers in the obtaining of access to embryonic and fetal materials, which until very recently has been limited by public policy regulations, except on rare occasions of abortion and still-births (Lee, 1995). According to Modell (1989) "The old research goals live on in the new technologies with an advancing level of technological sophistication and finesse. The medical construction of infertility as a disease has provided ... new technological innovations and has created.... babies" (cited in Lee, 1995, p. 56).

Medicalization therefore refers to "an intricate social process involving the dominance of biomedical paradigms and authoritarian models of health in which illness experiences are understood as biological and individualistic" (Thomas-MacLean, as cited in Parry, 2004, p. 1). According to Burns and Covington (2006), the medicalization of infertility is the phenomenon in which healthy, yet childless individuals undergo an array of medical treatment to become pregnant. Medicalization of infertility takes place at three levels: the conceptual, the institutional; and the doctor-person interaction (Waitzkin, 1983). The conceptual framework began with a medical interest in embryonic research, which brought about a need for the processes and procedures to be described in medical language. As infertility is medicalized and dealt with in a medical domain, medical institutions and the medical world in general supply the major context for shaping the experience of infertile people (Griel, 1991). Midwives lost out to doctors as social birth was replaced by medical birth and home birth was replaced by hospital birth. Pregnancy, contraception, abortion, and menopause have all become defined as medical questions, subject to medical understanding and physicians' control (Lorber, 1997). According to Burgess (1993) such

“medicalization confers legitimation of the problem, social resources for research into causes and treatment, and offers a different configuration of responsibility” (pp. 270-71). People affected by infertility are therefore treated in a medical institution and are regarded as patients (Griel, 1991). Public policy constitutes the regulation of ART or a rationalization of what is perceived to be a “health problem” (Parry, 2005). At the third level, there is the doctor-person interaction which happens daily in health care facilities throughout the world.

According to Langdridge and Blyth (2001) “ostensibly, assisted conception services have been developed as a means of relieving fertility difficulties and helping ‘infertile’ adults achieve parenthood” (p. 46). Users of assisted reproductive technologies may include a woman with tubal disease which has not been or cannot be overcome by surgery; a man who has a problem which has not been or cannot be treated by conventional measures; a couple that has a problem or problems which have not responded to conservative treatment; a couple that has no apparent cause for their inability to achieve a pregnancy and adequate time has been spent in conventional therapies; and a couple who is being evaluated and an ART procedure is being done in conjunction with that evaluation (Doherty & Clark, 2002; Langdridge & Blyth, 2001; Wisot & Meldrum, 2004). Assisted reproductive technology may also be used to treat the following conditions or circumstances other than infertility: a single person may employ AI or IVF and a surrogate; a lesbian couple could use donated sperm and IVF to implant the fertilized eggs or zygotes of one partner in the other; a widow may be impregnated with the frozen sperm of her deceased husband; a widower could have the frozen embryo he and his wife had produced earlier implanted in a surrogate; or young women may freeze their eggs to use at a later date, lowering the risk of chromosomal abnormalities (Waters, 2001). “As such, assisted conception services have been

promoted, often in the face of skepticism and hostility, as a case of medicine or, more properly, technology giving nature a helping hand” (Langdridge & Blyth, 2001, p. 46).

The most common ART is in vitro fertilization – a technique that has proven particularly successful for women with blocked or damaged fallopian tubes, men with sperm abnormalities, and for couples with unexplained infertility” (Doherty & Clark, 2002, p. 61). Expansion of early IVF technology led to the development of other infertility treatment, including GIFT (Gamete IntraFallopian Transfer), ZIFT (Zygote IntraFallopian Transfer, ICSI (IntraCytoplasmic Sperm Injection), AH (Assisted Hatching), FET (Frozen Embryo Transfer), and PGD (Preimplantation Genetic Diagnosis). Like IVF, both GIFT and ZIFT involve major surgery for the woman (McDonald, 2004; Turkington & Alper, 2001). Research data show the virtual disappearance of GIFT as a contemporary procedure and the rapid expansion of ICSI and increasing use of ICSI in the absence of identified male factor fertility problem. Jones, Cohen, Cooke, and Kempers (2007) cite the percentages of egg retrievals in the U.S. that resulted in live-births in 2005, by type of ART procedures as follows: IVF without ICSI as 32.7%; IVF with ICSI as 31.0%; GIFT as 15.7%; ZIFT as 24.2%, and Combination as 31.4%. According to Andersen, Goossens, Gianaroli, Felberbaum, Mouzen and Nygren (2007) within Europe, the proportion of ICSI versus standard IVF procedures increased from 40% in 2001 to 52% in 2002 and to 55% in 2003; ICSI is clearly being increasingly used.

As more women are seeking advanced reproductive techniques, such as egg donation, to assist in achieving a pregnancy, the ceiling of reproduction has been lifted such that any healthy women in her forties and fifties can become pregnant (Andersen et al., 2007; CDC, 2007). Women 40 years old and older have encouraging pregnancy rates, making egg donation a viable option for younger women who have diseased or absent ovaries or are experiencing early menopause

(Doherty & Clark, 2002; Turkington & Alper, 2001). Success rates are also high with donor-sperm because this sperm has been screened for sperm count, motility (motion), and morphology (shape) (Doherty & Clark., 2002). While no precise figures exist, experts believe that more than three million babies have been born worldwide using assisted reproductive technologies since Louise Brown was born in the United Kingdom 28 years ago. In a U.S. nationwide report, in 2004, a total of 127,977 ART procedures were reported to the Centers for Disease Control and Prevention. These procedures resulted in 36, 760 live-birth deliveries and 49, 458 infants (including multiple births). Nationwide, 73% of ART procedures used freshly fertilized embryos from the women's own eggs, 15% used thawed embryos from the women's own eggs, 8% used freshly fertilized embryos from donor, and 45 used thawed embryos from donor eggs. Overall, 42% of ART transfer procedures resulted in a pregnancy, and 34% resulted in a live-birth delivery (delivery of one or more live born infants). The highest live-birth rates were observed among ART procedures that used freshly fertilized embryos from donor eggs. Although the average live-birth rate for ART-transfer procedures performed among women who used their own freshly fertilized eggs was 34%, live-birth rates ranged from 43% among women younger than 35 years of age to 6% among women aged 42 and older (Wright, Chang, Jeng, Chen, and Macaluso, 2004). An European report, which reviewed data from 28 countries, from 1997 to 2003, show that in women below 40 years of age, 15, 039 treatments resulted in 2514 pregnancies given a pregnancy rate per insemination of 16.7%. In women at 40 years and older, the corresponding rate per insemination was 6.3% (Andersen et al., 2007).

These data underscore the point that a woman's age is the key factor that determines whether she will get pregnant through in vitro fertilization. A careful analysis of the aforementioned data indicates that in vitro fertilization may be creating the very uncertainty that it

is believed to resolve when its average success-rate is only about 20% (Franklin, 1997; McDonald, 2004). According to Throsby (2002), contrary to popular representation of IVF successful pregnancies, the dominant experience of treatment is of failure, since 80% of couples who are engaged with IVF will not succeed in becoming biological parents.

In vitro fertilization takes a physical toll on couples, especially women. Those going through the procedure may experience soreness at the site of injection, bloating and abdominal tenderness. Fertility drugs often taken to prepare for the procedure have side effects such as hot flushes, abdominal discomfort and ovarian enlargement (Doherty & Clark, 2002). In the case of ovarian enlargement, "The ovaries enlarge and produce more follicles, resulting in a buildup of fluid in the abdominal cavity.... Severe cases of ovarian enlargement require hospitalization to correct fluid and electrolyte imbalance" (pp. 50-51). Egg donors as well are affected by multiple injections of gonadotropins, which are used to stimulate egg-containing follicles in the ovaries. Although no conclusive research to date shows that fertility drugs cause cancer, some critics fear that repeated treatment with gonadotropins may lead to an increased risk of ovarian cancer (Cooper & Glazer, 1994; Turkington & Elper, 2001).

Women who receive multiple embryo replacement are also likely to have multiple-gestation pregnancies. Several complications of pregnancy are associated with multiple-gestation. Spontaneous abortion is more than twice as common in multiple-gestation pregnancies and the risk of other complications such as diabetes and gestational hypertension is also high. Additionally, there is also the risk of maternal death associated with multiple-gestation (Campbell & MacGillivray, 1999; Youngkin & Davis, 2004). According to Doherty & Clark, (2002):

Some couples dread the possibility of having multiples, while others invite the opportunity in hopes that they will have more than one child and won't have to

repeat fertility treatment. Regardless of one's view, it is important to remember that multiple-gestation pregnancies increase the risk of injury to mother and babies; such pregnancies are also considered the greatest hazard of medically assisted reproduction (p. 109).

Multiples are more likely to be premature and low-birth-weight, both factors associated with greater infant mortality. The babies are subject to more risks and require more medical intervention than babies spontaneously conceived. They usually have extensive stays in the neonatal intensive care unit (NICU), which increases the cost of health care for managed care entities and families. Although it is possible to avoid complications of a multiple pregnancy by fetal reduction - selectively aborting one or more of the fetuses - this option may be religiously objectionable and cause great emotional stress to an individual or couple who have waited so long for the pregnancy (Kilner et al., 2000).

Assisted reproductive technology can raise unrealistic hopes that end in painful disappointment for couples once they have entered the world of reproductive medicine. Concomitantly, infertile couples find it difficult to ignore the claims of ever-increasing technological intervention producing babies (Brinkmann, 2001). The willingness of a person or of couples to undergo the grueling emotional, financial, and psychological stress of the novel means for noncoital gestation can only be understood against the despair that childlessness can inflict (Herz, 1989).

B. PSYCHOLOGICAL PERSPECTIVE

For approximately seventy five percent of the couples of reproductive age in the United States and Jamaica, meticulously planned families proceed without difficulty or delay. However, for the remaining twenty five percent "infertility is marked by the passing of a year attempting to conceive without success...In most cases, it is the possibility rather than the reality of infertility

that is an issue, because there is some ambiguity about the outcome” (Dunkel-Schetter & Lobel, 1991, p. 29). The descriptive literature presents infertility as an unanticipated change in life progress that is often experienced as development gone awry (Butler & Koraleski, 1990; McQuillan, Griel, White, & Jacob, 2003), a disruption of the marital relationship and roles (Forrest & Gilbert, 1992), a crisis of self-esteem, sexuality and values (Cook, 1987), a personal failure (Matthews & Matthews, 1986), and an experience of tremendous losses (Burns, 1987; Conway & Valentine, 1988). As Morely (1994) stated, “It is important to note that infertility is not a single event, but a series of experiences over time involving different emotional responses and coping mechanisms” (p. 46).

During investigation and treatment among infertile couples, the recurrent themes expressed are grief and depression, anger, guilt, shock or denial, and anxiety (Dunkel-Schetter, 1991). Several studies describe the psychological impact of infertility on a couple as a crisis (Butler & Koraleski, 1990; Cook, 1987; Daly, 1999; Eunpu, 1995; Mahlstedt, 1987; Menning, 1988; Sewpaul, 1995). As a life crisis, infertility takes a toll on the relationship and on people’s self esteem, as well as on their ability to function, to communicate and to feel normal (van Manen, 1990). Common in any state of crisis are: 1) a stressful event posing a threat that is insoluble in the immediate future; 2) a problem that overtaxes the existing resources of the person/couple involved because it is beyond traditional problem-solving techniques; 3) a perception that the problem is a threat to important life goals of the person/couple involved; and 4) a reawakening of some unsolved key problems from both near and distant past (Airman, 1984, p. 18).

The obvious and primary loss from infertility is that of a biological child. As with any loss, infertility leads to many other associated losses, including the lack of a pregnancy experience; loss of genetic continuity; loss of one’s self-image as a fertile person; loss of the opportunity to move to

the next stage of feminine development; loss of relationships; and loss of the gratification of becoming grandparents (Conway et al., 1988; Herz, 1984; Menning, 1980). Daniluk (2001) points out that medical treatment often creates psychological burdens for infertile couples. For example, many hormone treatments create emotional responses such as depression, moodiness, or irritability (Sandelowski, 1986). Some couples feel that medical personnel exploit them for the purpose of testing new procedures. Others feel rushed or discouraged from asking questions of their doctors (Atwood & Dobkin, 1992; Buttler & Koraleski, 1990; Cooper-Hilbert, 2001). There is a general feeling of stress related to frequent hospital visits, keeping the necessary appointments, finding the time to complete all the medical examinations, deciding how much money to invest in the treatments, and determining how long to battle insurance companies for reimbursement for the related medical procedures (Callan & Hennessey, 1989; Forrest & Gilbert, 1992; Klempner, 1992).

Whereas the challenges and disappointments of infertility are experienced, interpreted and managed differently by each individual in the couple relationship (Cooper-Hilbert, 1998) there appear to be sharp distinctions between the way most men and most women react to the crisis (Lasker & Borg, 1994). Although some of the variability can be a result of differences in personality, life experiences, or even one's role and experience in the family of origin, gender is a major factor accounting for the differences among members of the couple in their reaction to infertility (Cooper-Hilbert, 1998, p. 64). According to Zoldbrod (1998), "Because motherhood is more salient to the women's role than fatherhood is to the male role, and because women talk about their feelings more than men do, most of what we know about people's reactions to infertility is from the female perspective" (p. 2).

FEMALE RESPONSE TO INFERTILITY

Research shows that having a child is especially important for woman (Hays, 1996). In Western countries, despite the influence of feminism and the enlightenment of the mid-twentieth

century, the cultural beliefs that women's primary role is childbearing has not changed. Therefore, women continue to appear desperate when they receive a diagnosis of infertility (Bergum, 1997; DeBoer, 2001; Sewpaul, 2001). From early childhood, girls are taught that motherhood is the ultimate expression of femininity. Motherhood is seen as a desirable social status and an essential stage of development of adult identity. For women, motherhood denotes the pinnacle of feminine development. To have children ties one to the larger society through basic life processes. It should not be surprising that involuntarily childless women feel stigmatized by their inability to produce a child and experience a sense of failure when their efforts to fulfill their purported "biological destiny" are frustrated (Wright et al., 1991).

Jackson (2005) argues that women experience a roller coaster of emotions when they think they have conceived and find out later that they were not pregnant. "With each ...menstrual cycle, there is a sense of hope that it 'would work' this time. Without the definitive diagnosis that said they couldn't get pregnant, couples had to deal with seemingly endless strings of maybe" (Daley, 1999, p.12). Cooper-Hilbert (1998) observed that for infertile women the medical process is far more invasive and stressful than the occurrence of infertility itself. Often it is the way in which women are treated during the process, rather than the occurrence of infertility itself, that leads to the disparity of reactions between a man and a woman. It is the woman who most frequently is the primary focus of these medical investigation and treatment efforts (Griel, 1991; Salzer, 1991), a fact that has significant implications for both the experience and the expression of distress (Daniluk, 1997). Women seem to blame themselves no matter what the cause of the infertility (Berg et al., 1991; McEwan et al., 1987; Newton & Houle, 1993) and are more likely to assume personal responsibility even after a male factor diagnosis has been made (Sewpaul, 1995). Consequently, women, as opposed to men, experience greater psychosocial distress, more somatic

difficulties, lower self-esteem, higher levels of depression and greater interpersonal sensitivity related to their infertility (Elliott, 1998).

Sharing her own experience, Rehner (1989) argues that whenever a woman is faced with infertility, irrespective of her intelligence, independence or however unconventional she may be, she must reexamine what it means to be a woman, not in an impersonal or theoretical way, but in terms which strike at the very heart of her self-image. Because the ability to generate life is widely viewed as a “flowering” of sexual capacity, infertility cuts at core assumptions about one’s adult sexuality and is therefore perceived as an assault on self-concept for those to whom fertility has become important. This sense of failure “spills over” into other aspects of life (Ryan, 1993).

According to Cooper-Hilbert (1998), women’s experience being the focus of treatment sets up dynamics that label the women as patients. Therefore, issues around self-concept and self-deprecation often arise as a result of an infertility work-up. An excerpt from an interview illustrates this reality:

When I discovered I was infertile, I felt damaged. Why couldn’t I accomplish something as “natural” as conceiving a baby? Suddenly my sense of self-worth was shaken. I felt defective and very much a failure. Infertility was more than a medical problem. It was an attack on my self-esteem. (Mahlstedt, 1985, p. 338)

For some women, involuntary childlessness makes them feel as if their human value has been reduced, and that their whole being, body and soul, have become infertile. Infertility is no longer a medical condition but a definition of self (Devereaux & Hammerman, 1998). The following excerpt reveals an infertile woman’s innermost feelings about herself:

My infertility is a blow to my self-esteem, a violation of my privacy, an assault on my sexuality, a final exam on my ability to cope, an affront to my sense of justice,

a painful reminder that nothing can be taken for granted. My infertility is a break in the continuity of life. It is, above all, a wound to my body, to my psyche, to my soul. (Mahlstedt, 1985, as cited in Eunpu, 1995, p. 1)

As infertility becomes more undeniable, women may feel a great sense of isolation from others during conversations on infertility. An infertile woman shares the social stress of comments from people at her workplace:

Coffee breaks at work are the worst times; everyone brings out their pictures of their kids and discusses their latest parental trials and tribulations. When one of the women complains about having problems with something like a child, I just want to shout at her and tell her how lucky she is to have a problem. (Crooks & Baur, 2002, p. 332)

One of the most common complaints of the infertile is that the general public is insensitive to their situation. Greil's (1991) study found that people's actions and their comments seemed to reflect a total unawareness of the existence of infertility or the pain it causes. In the article, the researcher argued that insensitivity exacerbates the alienation and isolation that infertile people report to be a significant part of their suffering. Infertile women often experience alienation from themselves and others, feelings of failure, and above all a loss of hopes and dreams. In addition, the feelings of anger and grief may lead to isolation and despair (Brinkmann, 2001). The infertile woman may also feel alone and as if she does not have anyone to talk to who understands her experience.

A review of the available research on psychological reactions to infertility shows that, when compared, gender differences are polarized. For example, Mc Ewan et al., (1987) studied the differential adjustment of men and women to infertility with the results showing that women experience greater distress in comparison to their husbands. The women studied also tended to blame themselves for the infertility more than their partners (whether or not they were biologically

responsible for the infertility), and their level of distress was unrelated to the length of time that they had been trying to conceive (Darsey, 1996). When considering gender styles of communication, men are labeled as distancers while women are seen as pursuers (Brennen, 1999; Mirkin & Geib, 1995; Nichols & Schwartz, 2006). More men than women have a need to keep secret about infertility, whether or not the problem is theirs (Myers, 1990). Fifty percent of women viewed infertility as the worst experience in their lives, as compared to 15 % of the men (Freeman et al., 1985, cited in Zoldbrod, 1993, p. 2); Men need help to articulate their loss, while women need reassurance that their partner cares (William, Bischoff, & Ludes, 1992). Females experience infertility as a cataclysmic role failure, whereas males view infertility as a disconcerting event, but not a tragedy (Griel, Leitko, & Porter, 1988). Some women feel that infertility diminishes their femininity, but it is more common among men to equate their infertility with lack of masculinity (Minkin & Wright, 2003). "All women are expected to become mothers, but not all men are expected to become fathers" (Callan & Hennessey, 1989, p.349). A man's role is that of worker and provider and fatherhood is considered to be of much lesser importance (Chodorow, 1978); It is the assumption that infertility should not present men with the same dilemma that it does women (Darsney, 1996). In a longitudinal study of grief in couples, using the subscales of active grief, difficulty coping, and despair with a variety of reproductive losses (miscarriages, ectopic pregnancy, fetal death and neonatal death), women initially scored higher than men on overall grief. In the follow up-study, approximately one and two years later, significant gender differences were still present, with women scoring higher on the active grief subscale, demonstrating that these gender differences in grief reactions were consistent over time (Golbach, cited in Goodwin 2001, p. 21).

MALE RESPONSE TO INFERTILITY

As previously noted, infertility affects both males and females with almost equal frequency, yet Nasserri (2001) observes that while historically men have not been included in infertility research, there is a current trend to view men as being psychologically affected by the problem. Nasserri asserts that the man is more likely to experience emotional distress when he is the cause of the infertility (Nasserri, as cited in Crooks & Baur, 2001, p. 332). According to Zoldbrod, (1998), Men, like most women, at the first hint of infertility feel tremendous anxiety and grief at the possibility of not having a child. They experience envy when looking at pregnant women, are obsessed with the infertility, and, like women, feel like their lives are out of control. They are devastated, but they keep their emotions secret. Such secretiveness is part of many men's primary coping style, which involves avoidance and denial (Abbey et al., 1991; Merari et al., 1997). Men with male-factor infertility and men with other pre-existing wounds to their sexual self-image feel the most negative affects. They are overcome with feelings of defectiveness or a potential assault on their manhood (Zoldbrod, 1998; Devereaux & Hammerman, 1998). To compensate for the harm done to their self-image, these men adopt alternative solutions, such as over-involvement in work-related activities (Kentenich, 1989), while they grapple with feelings of inadequacy, lower self esteem, and stolen masculinity (Serono Laboratories, 1996). Within the American and Jamaican cultures, masculinity is associated with virility, potency, and strength. Infertility is conversely associated with impotency, weakness and being effeminate. These cultural standards of what it means to be male and masculine are an intrinsic part of the male child's socialization. Consequently, when a man is infertile, his self-esteem is deeply affected (Devereaux & Hammerman., 1998).

According to Minkin & Wright (2003), men struggle to maintain a positive sense of self-identity throughout their infertility experience. The reality is that though the effects on men may be

subtler, men are as vulnerable as women. The following excerpt illustrates that men also include having a baby a part of the larger life-plan for their marriage:

One of the reasons I married my wife was because I knew she'd be a good mother and I'd be a good father. So now, if we're married and she's not going to be a mother and I'm not going to be a father, what is the sense of being married?
(Daniluk, 2001, p. 5).

When men are faced with bodies that betray them or natural forces that refuse to cooperate, they often experience a sense of powerlessness for which they have not been prepared (Ryan, 1993). In the example below, a husband questions the purpose of his marriage and he and his wife's identity as a couple:

Being a parent and having a family was always a part of the picture for us. We are going to be parents. That's part of how I understood my wife and myself. And now, it may not happen. I'm a husband but I'm not a father. So who am I now, and who is my wife, and are we really a family, can we be, without kids?
(Daniluk, 2001, p. 5)

Despite the evidence of gender difference reflected in descriptive, anecdotal and empirical research, it would be an overstatement to say that all is known about how men feel about infertility. Persons interested in learning about how women feel and respond to their infertility have a wealth of material from which to choose. However, with regard to men, this is not the case as more women than men are involved with infertility studies and infertile men are often uncooperative with researchers. There seems to be missing information, for example, regarding the distinctions between men who have been diagnosed as the infertile partners and men whose wives

have the medical problem. Likewise, absent is information regarding how men respond to infertility from the perspective of class differences (Zoldbold, 1993).

MARITAL EFFECTS OF INFERTILITY

As stated in Chapter One, the focus of this study is on the lived experiences of infertile couples and individuals. According to Peterson, Newton, & Rosen (2003), individuals are best understood within the social systems in which they have interaction and community. They assert that because the experience of infertility is a shared problem between couples, it might be best understood from a system's perspective. Most married couples make a commitment to one another with the implicit or explicit understanding that they will have children and raise a family. Having a baby is part of a larger life plan to bring a child into their lives, create a family, carry on bloodline or strengthen a relationship. For most, this life plan happens relatively routinely and they do not have to question or examine their relationship as it relates to their capacity to bear a child and raise a family (Aiman, 1984; Dunkel, 1991).

For others, infertility thwarts a step in their adulthood development. Their failure to have a child has repercussions for other family members as well. Invariably, members of the extended family, including expectant grandparents (Cooper-Hilbert, 2001; Forrest & Gilbert, 1992), aunts, and uncles may feel disappointed by the couple's inability to have a child. The couple may feel that they have failed in their role as adults (Atwood & Dobkin, 1992; Ulbrich, Coyle, & Llabre, 1990) and that they have failed at having a successful marriage. They may also feel as if their lives are 'on hold' as they wait to become pregnant (Daniluk, 2001; Forrest & Gilbert, 1992). With each failed treatment, the couple has to go through the cycle and stigma of being "failures" again and decide once more what to do next (Atwood et al., 1992; Butler & Koraleski, 1990; Forrest & Gilbert, 1992).

Infertility also presents stressors in the financial domain. A couple may incur tremendous financial expenses in an attempt to stop at nothing until a pregnancy or a live birth is achieved. In the United States one series of in vitro fertilization can cost upwards of \$12,000 and a month of fertility drug treatments (pergonal), combined with required blood tests and ultrasound scans can cost more than \$2000. It is not unusual for couples who aggressively pursue a successful pregnancy to pay out \$30, 000 or more within a few years for IVF treatment (Ryan, 2001). On the other hand, the cost of assisted reproductive technology is prohibitive to a significant number of poor couples. Poor women have a higher prevalence of infertility than middle-class women (Merrick & Blank, 2003; Morely, 1993). Lack of access to an assisted reproduction program due to inadequate medical coverage is arguably a justice issue. Such persons are not just inconvenienced; they are denied the means to realize a basic and highly valued human good (Ryan, 2001). This is a factor that could lower the frustration tolerance of people who already feel like the out-group, deprived and marginalized by society. Such feelings often lead to increased anger, hostility, or resentment toward one's spouse and/or society.

In one of the earliest studies that examined psychological problems among infertile patients, Bell (1981) studied ten couples presenting at an infertility clinic for the first time and ten couples who were already undergoing treatment. Seven of the 20 couples reported deterioration in the marital relationship, leading the author to conclude that there is likely to be a large incidence of marital dissatisfaction in this population and noting the need for continued longitudinal research (Bell, as cited in Goodwin, 2001, p. 34-35). Mahlstedt (1985), in a later study, examined the impact of infertility on relationships from the perspective of coping styles. The researcher argued that each member of the couple might be impacted differently. While the intensity of the despair may not be different, the individuals simply may have different coping strategies. For example,

men often cope with their pain by keeping it to themselves while focusing on their wives. Women often cope by talking continually about their pain with their husbands, who, feeling powerless to take away the pain, sometimes stop listening. The wife escalates her complaints while the husband withdraws further, and the cycle of resentment and depression keeps going. The end result is that they are not just coping dysfunctionally with their infertility, but the closeness in their relationship is being jeopardized. A spouse may begin to feel resentment and rage toward his or her partner (Atwood & Dobkins, 1992) or fear that the partner is the one responsible for the infertility (Cooper-Hilbert, 2001). If one partner places the blame of infertility on him/herself, there is an increase in distress for that partner (McEwan et al., 1987). Women often take on the responsibility for the infertility in order to protect their husbands from having to acknowledge a deficit in their masculinity (Vieyra, Tennen, Affleck, Allen, & McCann, 1990).

While the wives want to talk, their husbands withdraw. Wives want to express their emotions and their husbands want to problem-solve (Lasker & Toedter, 1991; Devereaux & Hammerman, 1998). The tendency for men to be less emotionally expressive in comparison to women may also serve to heighten marital problems, in that the wives may assume that their husbands are not appropriately concerned about the infertility (Abbey et al, 1991). These problems may further complicate an already deteriorating relationship.

Prior studies show that infertility also has profound negative effects on a couple's relationship and sexual functioning (Cooper-Hilbert, 1998; Eunpu, 1995; Menning, 1988; Shapiro, 1988; Sewpaul, 1995). Because couples dealing with infertility must have intercourse on demand, sex necessarily loses its spontaneity and often its pleasurable qualities (Minkin & Wright., 2003). Intercourse itself may evoke uncomfortable feelings and become emotionally painful, and the couple may also experience anxiety about failing to conceive (Cooper-Hilbert, 1999).

Understandably, the anxiety builds through the month and if at the end of the month the wife has her period, she is disappointed and distressed (Minkin & Wright, 2003). She feels inadequate about her femininity and her husband may likewise feel inadequate about his masculinity due to the problems with conceiving. Each may feel anger and guilt, and wonder, "why me?" Both may feel grief over life experiences they can never have, such as pregnancy, birth and rearing their own biological children.

Sometimes the most distraught couples are those who have one child and are unable to conceive a second or carry another pregnancy to term. The inability to control their reproductive efforts as they did previously breeds frustration, anger and grief. Probably most difficult for the couple to bear is pressure from the single child for a brother or sister. Often the child is too young to understand the nature of reproduction or understand that his/her parents are unable to have another baby. The parents of a single child often express great fear that harm may befall their child and they may not be able to have another. For those couples with adequate resources (in the absence of a state/insurance funded program) and motivation, there has never been a greater choice of alternatives for family building. The alternatives may also include international or local adoptions. International adoptions are very expensive and adoption of local healthy infants of one's own race may be a very lengthy process (Airman, 1984). As Morely (1993) asserted, "The cost of adoption has skyrocketed as well, putting it beyond the reach of many infertile couples who have already spent their savings on infertility treatments" (p. 40).

While assisted reproductive technology offers couples an opportunity to achieve a pregnancy when natural reproductive mechanisms fail, infertility workups can be intrusive and emotionally draining. During infertility treatment, some procedures, such as post coital testing, can increase feelings of anxiety. Stress also seems to have a worsening effect on the quality of

collected semen (Tarbusi, Mattea, Valpe, & Facchinetti, 2000). One common observation made by infertile couples was that assisted reproductive technology takes away a couple's privacy and sense of control. One couple writing about their experience remarked:

First came a simple blood test that measured hormone levels at certain points in my cycle. The next test gauges compatibility - a post coital test to look at how my husband's sperm survived in my cervical mucus. The test was timed during ovulation and within two hours of intercourse. I remember my husband's embarrassment when he learned how much I shared with my doctor. (Doll, 2004)

According to Burns (1995), with the increase technology in infertility treatment, infertile couples are starting to feel more like technicians, their bodies being instruments. Intercourse scheduled around ovulation, sperm specimens being collected for evaluation, and postcoital exams can darken a bedroom, diminish pleasure and playfulness, and even alter the meaning of sexuality and lovemaking. A programmed sexual activity as part of the treatment prescribed by the doctor is prompted by the time of the cycle rather than feelings of desire. Not infrequently, men experience impotence when asked to perform on schedule, which in turn, provokes feelings of anger or rejection in the woman (Sewpaul, 1995; Robinson & Stewart, 1997 (1995)).

In one study of the personal and marital adjustment of mothers and of voluntary and involuntary childless wives, Callan (1987) compared 53 infertile women with 60 mothers and 36 voluntarily childless women. The results demonstrated that infertile women were more satisfied with their husbands and their marriages and reported more affectionate marriages than the mothers and voluntarily childless women studied. One reason posited for the positive results of this study was that over a five-year period these infertile women might have shared with their partners their frustrations about their inability to have a child. In addition, these infertile women were a select

group in that they were motivated enough in wanting a child to pursue new fertility treatments such as IVF, which, by their very nature, demanded from their partners high levels of emotional support (Goodwin, 2001).

Research information on how couples fare through treatment is also instructive in determining the nature of marital relations among this population. Daniluk (1988) conducted a longitudinal study of 43 primary couples to determine if changes occurred in the marital relationship, sexual satisfaction and levels of psychological distress of their infertility. The results indicated that couples experienced significant distress during the initial medical interview and at the time of diagnosis. The quality of the relationship did not appear to deteriorate as a result of the medical investigation. However, it did appear as if the medical investigation increased the participants' level of trust, intimacy and communication within their relationships. According to the results of this study, the sheer involvement as a couple to find a solution to their childlessness may have been perceived as a positive influence on the relationship of these couples who have been trying unsuccessfully to have a child. Another study (Daniluk, 2001) concurs that in some couples, the mutual stress causes increased closeness, support and love. There are also studies that fail to find clinically noteworthy long-term effects on couples sexual desire or frequency and satisfaction with sexual activity (Daniluk, 1988; Lieblum, 1997). Supporting the aforementioned claim, one couple remarked that it was difficult for them to imagine what they have been through. Over the years they found out just how much they needed each other and they coped as a team and it made their marriage strong (Lasker & Borg, 1987).

C. SOCIAL PERSPECTIVE

The United States Occupational Safety and Health Act of 1970 (OSH Act) mandates that, in addition to compliance with hazard-specific standards, all employers have a general duty to provide their employees with a work-place free from recognized hazards likely to cause death or

serious physical harm (U.S. Department of Labor). Notwithstanding, studies show that there are more than 50 chemicals found in the workplace and environment that are known to affect male and female infertility (Evens, 2004; Family Health International, 2003; Zastrow, et al., 2001; Fidler, 1999).

ENVIRONMENTAL CAUSES OF FEMALE INFERTILITY

The earliest evidence of a linkage between job occupation and reproductive problems came out in 1860 when a French scientist noted that wives of lead workers were less likely to become pregnant, and if they did, they were more prone to miscarrying (Harvard Health Letter, 1992, as cited in Sinclair & Pressinger, 1998). The evidence has increased dramatically over the years demonstrating how a wide range of chemical exposures present in the home, job, diet, and environment frequently cause infertility and miscarriage (Schettler 2003; Sinclair & Pressinger, 1998).

Studies among women also show that those who worked in the dry-cleaning business were at risk with the use of perchlorethylene and trichloroethylene. Women employed in the manufacturing or sale of paint were at risk of being affected by paint thinners, paint strippers, and glycol ethers (found in paint). Women who worked in rubber, plastic, or synthetics industries had a high chance of stillbirth (Schettler, 2003; Turkington & Alper, 2001). According to Huel, Mergler, & Bowler (1990), women who were employed as microelectronics assembly workers were found to be subjected to a number of chemical solvents used in cleaning electronic components including xylene, acetone, trichlorethylene, petroleum distillates, and others, as well as solder vapors. Among this population of women, spontaneous abortions increased over four-fold (cited in Sinclair and Pressinger, p. 7).

Chemicals found in PVC plastics, some pesticides, and food additives like butylene hydroxyanisole (BHA) have been found to be environmental estrogens. While a proper balance of

natural estrogen in the body is essential for reproductive success, reports suggest that environmental estrogens (chemicals which “mimic” the woman’s natural estrogens) create infertility problems by confusing the body’s estrogen receptors (Schettler, 2003; Jobling, Reynolds, Malcolm, Parker, & Sumpter, 1995).

ENVIRONMENTAL CAUSES OF MALE INFERTILITY

Men who were employed in agricultural/pesticide related jobs were found to experience infertility 10 times more often than men not experiencing infertility (Strokum, 1983, as cited in Sinclair & Pressinger, 1998, p.5). In a study of 2096 mothers and 3170 fathers, stillbirth, preterm delivery, and small birth weight were higher in certain jobs with chemical exposures. For example, fathers who worked in the textile industry (chemical dyes, plastics, formaldehyde, etc.) resulted in their wives having a 90% greater risk of stillbirth. Exposure of the father to chemicals like polyvinyl alcohol and benzene (found in gasoline, cleaning solvents, adhesives and oil based paints) was associated with a 50% increase in preterm delivery (Satitz, Whelan, & Kleckner, 1989, as cited in Sinclair & Pressinger, 1998; Youngkin et al., 2004).

Increased infertility in men is also associated with the excessive use of prescribed drugs such as anabolic steroids (Jones, 1993, as cited in Sinclair and Pressinger, p. 2), or recreational drugs, including caffeine, marijuana, cocaine, alcohol, and cigarettes (Medical Reporter, 2006; Sokol et al., 2006; Zastrow & Kirst-Ashman, 2001). Also damaging to a man’s fertility are very tight underwear, pants, swimsuits, certain lubricants or douches that his partner uses, and excessive heat to the genital area (as in hot tubs), which can affect the quality and function of the sperm (Hollen, 2005; Vine, Hulka, Mangolin, Truong, Hu, & Schramm, et al. 1994; Zastrow & Kirst-Ashman., 2001).

THE INTERSECTION BETWEEN PERSON AND SOCIETY

Since the 1950's, the tendency to delay childbearing until the late reproductive years has increased. First-time mothers aged thirty five years and older are associated with increased breast cancer rates as well as negative outcomes, including non-normative birth timing, not being able to have a child at all, and negative effects on children's health, which include obstetric complications, fetal and perinatal problems, and genetic problems (Tarin, Brines, & Cano, 1998). Seibel (1990) summarizes the sociological reasons for delayed childbearing in America:

Factors such as available contraception, particularly the birth control pill; increasing numbers of working women; changing sexual mores; and the social acceptability of delayed marrying all contributed to this phenomenon. The end result is that many couples are faced with a relatively shorter period of time in which to conceive (p. 6).

According to Daar and Merali (2001), "An individual suffering from unwanted childlessness suffers from an ailing body, an unfulfilled human dignity and disrupted relationships with direct social, political and economic impact" (as cited in McDonald-Evens, 2004, p. 23). Throsby (2002) asserts "For some couples, the very existence of technology as a possible route to biological parenthood generates an imperative to pursue treatments since the failure to leave any stone unturned could be the cause of a distressing 'if only' in later life" (p. 2). Conversely, some couples experience prolonged or untreated infertility owing to social and political factors which may include the nature of accessible medical technology in a given society, the value of children, general theories about causes and cures of health problems, and societal beliefs about the nature of moral action and the causes of suffering (Greil, 1991).

In many cultures the inability to conceive bears a stigma. In closed social groups, a degree of rejection (or a couple's sense of being rejected) may cause considerable anxiety and

disappointment. One study (Miall, 1986), identified three major societal attitudes which women felt supported the idea that society views infertility as a discreditable attribute: 1) the belief that infertility stems from psychological conflicts; 2) the association of infertility with sexual incompetence; and 3) the assumption that if a couple is infertile, it is the woman's fault (as cited in Greil, 1991, p. 126). According to Greil, infertile women feel stigmatized as a result of self-labeling. She defines self-labeling as "the perception of stigma by hidden or secret deviants" (p. 279), and notes that this results from the realization that others will view a given attribute as discreditable if they learn of it.

Sociologically, infertility may be linked to unachieved social expectations and isolation. Infertility often forces the fertile partner to reevaluate his or her affiliation with his or her partner and family. The person with the reproductive problem often takes the blame and feels guilty for not fulfilling his or her reproductive role (Gerrity, 2001). Couples also report feeling marginalized, pressured by the expectation of parents/grandparents to carry on the family line, and socially isolated (Gerrity, 1999). In an effort to explain the factors that contribute to the socially isolating conditions experienced by infertile couples, McCubbin, Thompson, Thompson, & Futrell (1999) argue:

It is a hidden, ambiguous problem that is poorly understood, and, as a result is open to insensitive responses. The problem itself is not always clearly defined medically, making it difficult to communicate to others. Because infertility deals with sensitive, private matters of sexuality and reproduction, it is not easy to talk about it with others. Matters of sexuality and childbearing are often considered inappropriate to discuss publicly. Finally, infertility is not openly disclosed or

discussed because of the feelings of shame and failure that it typically engenders.

(p. 20)

D. CULTURAL CONTEXT OF INFERTILITY

The historical, social, and cultural aspects of infertility are all important to situating infertility within its contemporary context. The experience of infertility, while an intensely private and personal problem, is significantly shaped and created by cultural norms and beliefs and social factors (Fernandez & Fogli, 2005; Morely, 1993). According to Morely (1993), “Cultural beliefs, social attitudes and expectations about gender roles, children and childbearing, and related social responses to individuals experiencing reproductive problems have an impact on the individuals with infertility” (p. 34). Since the experience of infertility is significantly shaped and created by cultural and social factors, it appears prudent to explore the cultures of the United States and Jamaica, since the intent of this study is to compare the two. To a lesser extent, Africa is included because the United States and Jamaica share and ethno-cultural characteristics rooted in or attributed to the historical experience of African slaves.

From the mid -15th century to the late 19th century, an estimated six percent of Africans were taken to the British territory that became the United States. Seventeen percent were sent to Spanish territories and South America, 40% to European-held islands in the Caribbean (including Jamaica), and 37% to the English speaking territories in South America. Most of the Africans, who were enslaved and brought to the New World, came to the American colonies after a period of seasoning in the Caribbean islands. Various historical and sociological reports (Black, 1997; Morrish, 1982) suggest that most of the Africans taken to Jamaica were from the West Coast of Africa and later from Angola and the Congo. Mining, metallurgy, agriculture, language, cuisine, music, witchcraft, and a strong visual arts tradition are all testaments to the permeating African influence in America and Jamaica. Today, 90.4% of Jamaicans and 17% of Americans are of African descent.

According to Miller (2002), the residue of slavery on family structure, views on procreation, and sexual behavior still exist in contemporary Jamaica and USA.

AFRICAN CULTURE

Although it is often controversial or misleading to make generalizations about the continent of Africa, two of the safest and least controversial generalizations are that: infertility is a major reproductive health problem (Dyer, Abraham, Hoffman, & van der Spuy, 2002); and that human procreation is highly valued. Children are so highly valued in Africa that procreation is considered the main purpose of marriage and the main cause of, if not justification for, polygamy and other forms of marriage, which may be considered more or less strange from the perspective of other cultures (van Balen & Gerrits, 2001; Hill, 2000; Sunby, 1997). “The idea of ‘illegitimate child’ or ‘bastard’ is one that could make no sense and had no application in traditional Africa because of the very high value placed on children” (Tangwa, 2001, p. 55). Consequently, childlessness remains the main cause of divorce, as a childless marriage is considered to be equivalent to no marriage at all (Hill, 2000).

Although much of the infertility has been attributed to infectious scarring of female reproductive tracts (due to female circumcision), male factors remain an under-appreciated but significant cause of infertility in Africa (Irvine, 1998; World Health Organization, 1987), contributing to more than half of all cases of infertility globally. Infection, which is the most common cause of infertility, affects the physical health of both men and women (Dyer et al., 2002). Women in particular, suffer from severe negative social consequences such as stigmatization, abuse, and economic deprivation (Amemnji & Thomas, 1997; Gerrits, 1997; Sundby, 1997). Accordingly, in many different regions like Egypt, Nigeria, Mozambique, the Gambia, Zanzibar, Laos, and Bangladesh, infertile women are excluded from societal events and ceremonies and/or despised and perceived as evil beings (van Balen & Gerrits, 2001).

The importance placed on fertility and childbearing among African women, as opposed to Indian, White, and Colored women, has led to more extreme negative effects on African involuntary childless women (Sewpaul, 1999). African childless women report domestic violence and disrespectful treatment by husbands and families-in-law; others are abandoned by their husbands or end up as second wife in a polygamous marriage” (van Balen, et al., 2001). According to Preston-Whyte and Zondi, 1992, “the bearing of children” is seen as an essential part of being a woman and achieving success (as cited in Sewpaul, 1999, p. 743). Tangwa (2001) points out that within the African culture attitudes and practices of the people make infertility and childlessness in general a highly undesirable condition and, more or less, a metaphysical curse. The social importance attached to fertility cults, to birth, naming, and initiation rituals as well as to marriage, death and burial ceremonies, flows from logic of, and accords well only with generalized fecundity and procreativity. Any assistance towards fertility is therefore highly valued and sought. Sewpaul, elaborating on the value of a child within the African culture observes:

In the African worldview the emphasis is on interconnectedness...Within this ideology, a marriage is not a marriage between two individuals but between two clans. Children, therefore, are not referred to simply as children but generations. Thus, one does not produce just a child but a generation that ensures the propagation of the species...An infertile person does not only experience a personal deprivation but lets down the whole clan (Sewpaul, 1999; p. 744).

Lucier, Childs, Parks, and Yemba (as cited in Sewpaul, 1999) argue that the dowry is not only a symbol of agreement between two families, but also a transaction in which a family exchanges material goods for the rights to children. Thus the husband may demand the return of the bride-wealth (compensation to the bride’s family) if his wife proves to be infertile. According

to Ziehl and Preston-Whyte (as cited in Sewpaul, 1995), customary measures exist within the African culture to accommodate infertility within African groups, including the family of origin providing another woman (the surrogate), usually the youngest sister of the woman, to bear children on her behalf.

Dyer et al., (2002) observes that infertile women within the African culture generally have three dispositions towards infertility clinics: the hope to conceive; the hope to receive information; and uncertainty (i.e., not knowing what to expect). Help is sought from various sources, including home treatment, the formal medical system (public and private; general practitioner and specialists), herbal and spiritual healers, traditional reproductive health specialists, diviners, and priests (van Balen et al., 2001). However, in traditional as well as modern Africa, there is perhaps no category of persons that the healer counsels more frequently than infertile women and impotent men (Tangwa, 2001).

According to Sewpaul (1999), the impact of religion in South Africa on the handling of infertility reflects similarities across different religions. Infertility was identified as a form of retribution for wrongdoing, a destiny that prepared one for a higher purpose in life, an opportunity to re-evaluate one's life, values, and relationship with God, and was seen as something that one could not really attribute to God, since it was a reflection of a biological error. The most pervasive view across the religious faiths she studied (Hindu and Christian) was that infertility was a punishment for wrongdoing. In sum, the individual's level of involvement with religion, personal conception of God, and sense of self in relation to God appeared to be important factors in the experience of infertility (Sewpaul, 1999; 1995).

“AMERICAN CULTURE”

The concept is placed in inverted commas to acknowledge that there no homogenous “American culture”. America is a land of many diversities, and views of infertility may vary along

lines of nationality, class, race, gender, religion, language, education and so on. However, given the focus of this study with a comparison across America and Jamaica, this section traces literature pertaining to the American context from both an historical and contemporary perspective. The early 1900s in America gave birth to the eugenics movement. This school of thought endorsed procreation among the White Anglo-Saxon Protestant middle and upper classes, while simultaneously promoting sterilization among the poor and minority groups. According to May (1995), white middle and upper class women who were childless were chastised for having shirked their patriotic responsibility, and were seen as having caused their own infertility.

Marsh and Ronner (1996) report that in colonial America the social norms regarding marriage assumed that a husband and wife would have six or more children - the blame for not meeting this norm was consistently placed on the woman. At this time, the physiological causes of infertility were not understood and doctors believed infertility was the woman's fault. Marsh and Ronner (1996) recount that this focus of blame (overt and covert) toward the woman would last until the mid-20th century when medicine began to unravel the mysteries associated with infertility.

During the Civil War era, the causes and treatments for infertility began to be understood but the hope these breakthroughs offered came at considerable cost. Believing that a defective cervix caused infertility, doctors surgically adjusted the shape and size of the cervix to the position they believed would result in pregnancy. Previously, many of these procedures were practiced upon slave women because they seemed to endure the unanaesthetized pain better than their white counterparts. Some women desperate for children endured this reconstructive surgery two or three times (Marsh & Ronner, 1996).

During the early 1900s, involuntary childless couples longing for children found new hope as researchers discovered that gonorrhoea had the ability to lie dormant with no signs of infection.

By discovering this, doctors learned that infected men could be transmitting the disease to their wife or mistress and unknowingly causing sterility. This discovery also suggested to doctors that perhaps men could be infertile as well as women. A new surgery called ovariectomy emerged at this time. The surgery involved the transplantation of a healthy woman's ovaries into barren woman's abdomen. Although not always successful, the repetition of the surgery provided doctors with a better understanding of the woman's anatomy, as well as possible sources of pathology. This was the first real sight of progress for infertile couples (Marsh & Ronner).

In 1944 John Rock, an obstetrician/gynecologist and Mariam Menkin, a Harvard Scientist, fertilized the first human eggs in a test tube. Although the procedure would not be a viable option until 1978, the notion that human gametes can be combined outside sexual relations between a man and woman propelled many researchers into the field to discover all the ramifications of this discovery. Surgeries performed prior to this time made it possible for doctors to discover physiological conditions such as collapsed fallopian tubes or blocked sperm ducts that made conception a physical impossibility. Also available during the early 1900s were diagnostic tests to ascertain who in the couple was sterile and who was not, and couples did receive infertility treatment (Marsh & Ronner, 1996; Today in Science History, 2004).

World War II dramatically changed the social climate in the United States. The force of industrialization and the demands of the war drew women from the home to the factory. Following the war and the return of veterans, federal and civilian policies replaced women workers with men, but many women chose to remain in the work place. This led to a marked trend towards lower fertility and higher female labor force participation. Being a major concern for society, procreation was phrased in terms of a patriotic duty and childlessness became a mark of social maladjustment. Infertility became associated with female neurosis and psychological theories served as popular

explanations for childlessness. However, the push for procreation was equally directed toward men and women. The result of the campaign led to a post-war conception frenzy, known as the baby boom (Doepke, Hazan, & Moaz, 2005, May, 1995).

During the sixties and seventies, when the children of the post-war conception frenzy reached their twenties and thirties, there were far less couples having children. According to Doepke et al., (2005), “The total fertility rate which was 2.4 in 1940, increased to more than 3.7 by 1957, and subsequently returned to its prewar level by 1970” (p. 3). The idea of career goals and leisure became strong values within the American context and as individuals enjoyed the possibilities of leisure, they now tended to wait longer to get married and once married, to wait longer to have children than any of their predecessors. Because voluntary childlessness became a phenomenon among women, society felt obligated to assist those who wanted to become pregnant to do so since the number of willing women was on the decline. To address the concern of declining birthrates, the federal government provided funds to foster research for the treatment of infertility (Marsh & Ronner).

American culture is not devoid of myths about infertility. Concomitantly, the prevalence of myths about infertility is a part of the American experience. In the 1940s infertility was linked to the woman’s unconscious fear of sexual feelings and neuroses. In the 1950s and 1960s infertility was blamed on a woman’s psychological impairment and her ambivalence toward becoming a mother (Klempner, 1992). More recent myths surround the misinformation and inaccurate biblical understanding (Atwood & Dobkin, 1992). These beliefs are not dissimilar to that of traditional or contemporary African beliefs. Some Americans believe that assisted reproductive techniques are unnatural and that they remove the spiritual or divine nature of creation from conception. For this reason, they may seek spiritual rather than medical assistance when trying to conceive. This belief

may be true of all socio-economic groups since the issue of spirituality is central to this culture (fertilityjourney.com).

Biological children are highly prized in the American context. The dominant culture is pronatalist and defines the achievement of biological parenthood as an integral part of transition to adulthood. Various ethnic and religious groups have declared parenthood as a moral and social obligation, which has led to major psychosocial problems for infertile couples. It is against this backdrop that infertility services proliferated in the late 1970s, 1980s and 1990s. Currently, we have cutting-edge reproductive technology, including IVF, GIFT, ZIFT, sperm manipulation and immunological therapy. Historians have observed that the aforementioned changing attitudes towards family, marriage, sexuality, sex roles and gender, the social and private dimension of reproduction, emotional life and religion all contributed to how couples perceived and responded to the nature and causes of their own infertility (Borg & Lasker, 1987; Griel, 1991; Marsh & Ronner, 1996; Woliver, 1989).

“JAMAICAN CULTURE”

As with America, there is no homogenous Jamaican identity or culture. The country of Jamaica is a West Indian Island located near the center of the Caribbean Sea. It is among the group of islands that comprise the Greater Antilles (the other are Cuba, Haiti, Dominican Republic, and Puerto Rico) and is the largest of the English-speaking islands in the region. The population of Jamaica is comprised primarily of African or African-European origin, descended from African slaves brought to the island between the 17th and 19th centuries. According to Morgan (2006) Jamaican slaves had problems reproducing naturally in the late eighteenth and early nineteenth centuries because of “dietary inadequacies and the harsh working routines of sugar cultivation, which compounded epidemiological and whatever social, cultural and political factors [that] may have motivated slave women concerning their own reproductive capabilities” (p. 1). Consequently,

children of slaves were inadequate to supplement the local workforce and a continuous supply of imported slaves was needed.

The roots of Afro-Jamaican family structures are embedded in the historical experience of slavery. Deschesnay (1986) argues that the residue of slavery on family structure and sexual behavior is still visible in contemporary Jamaica. Although most Jamaican adults marry or plan to get married, cohabitation is prevalent and non-marital childbearing and childrearing is constantly rising. The majority of marriages and remarriages over the years began as cohabitating relationships. According to Miller (2002) cohabitation among Jamaicans may be related to the historical precedence set by the obstruction and prohibition by slaveholders of stable unions through marriage. During slavery, marriage and households with both parents were characteristics of the European planters while slaves cohabited and were often separated from mates and children.

In 1970 Jamaica was the first country in the world to receive a World Bank loan for family planning. The loan was to assist the Jamaican government in implementing a national family planning program to help slow down the growth of its population ("First Loan,"2006). The National Family Planning Board (NFPB) was created as the principal agency of Government to design, promote and implement family planning and population awareness. The goals of NFPB were four-fold: ensuring the maintenance of a reduced population growth rate; promoting family planning, coordinating, and implementing services to contribute to everyone's reproductive health; ensuring ready availability of contraceptive and information about family planning; and providing training and support to other family planning non-governmental organizations (Fountaine & Peternel, 2000).

Twenty-two years later, the primary goal of the Jamaican government's National Population Policy was to improve the satisfaction of basic needs and the quality of life of the Jamaican people

in areas such as housing, health and nutrition, education, transportation and environmental conditions. The realization of this goal was contingent on many factors, including population growth and size. The projection was that by the year 2000, the population would not exceed 2.7 million or 3.0 million by the year 2020. The growth rate was projected to have a downward trend (The Jamaica National Population Policy, 1992).

Despite the fact that fertility rates in Jamaica have declined sharply over the last two decades and the use of contraception has been raised substantially, the current population is 2.7 million with another 2.0 million living abroad. The adolescent pregnancy rate has been among the highest in the Caribbean with 112 per 1000 women ages 15 to 19 becoming pregnant (Friedman, 1997; Singh, 1997). According to a 1989 study, an alarming 55% of women said their pregnancy was mistimed or unwanted (International Family Perspectives, 1991).

In a contrast of cultures, McDonald-Evens (2004) points out that in the West having children are widely viewed as a choice to be weighed carefully with other life goals, whereas, in developing countries, “personal happiness is no less important, but not having children is seldom viewed as an option. Adherence to social norms, desire and need for security, power and perpetuity are oft-cited reasons for having a family” (p. 11). According to Beckwith (1969) “Childbirth among most Jamaicans is not associated with an aristocracy based on family; each child is merely a fresh link in the chain woven of economic necessity which binds together the family, and a folk interest in terms of relationship” (p. 54). Consequently, it is not surprising that birth control is controversial among a significant part of the male population in Jamaica. Notwithstanding, given the Jamaican government’s limited resources there must be answers to the following questions: If population growth is unchecked, how will they be housed? How will this growth affect national resources and the quality of the environment? How will such large number of people be educated

and employed? Hamberger's and Janson's (1997) assertion is illustrative of this reality among third world governments:

Politically, there has been a huge interest in reducing the number of births in developing countries. In reproductive health matters, strong emphasis has been on family planning programs, in order to bring about a decrease in fertility. However, these programs have not originated from planning for the family, following the family's own perceptions, but rather from a political 'top-down' perspective. (pp. 149-158)

For a number of Jamaicans, it is a rich-versus-poor debate, because "overpopulation" is a conception of rich people who comprise government and the status quo, who like to manipulate by developing schemes that deny poor people their right to children. Whether or not it is ethical for government to implement population control programs and encourage especially the fertile poor who can't afford all of the children they have or desire to have only 2 children, should population control policy exclude the provision of infertility treatments? Daar and Merali (2001) maintain that given the prevalence of infertility and its impact on people's quality of life a denial of assisted reproductive technological treatment is simply an ill-considered population control policy.

The Jamaican government has yet to show, from a health policy perspective, an interest in providing or participating in infertility clinics. It was only as recently as the year 2000 that a Fertility Clinic was established in Jamaica with its location at the University of the West Indies. The clinic was a joint venture between the Fertility Management Unit, Department of Obstetrics, Gynecology and Child Health at the University of the West Indies, and Midland Fertility Services located in Aldridge, Birmingham, England. The first cohort of people pursuing assisted

reproductive technology comprised 28 infertile couples who were treated with in vitro fertilization and embryo transfer. Among the sample, female infertility was due to tubal disease, endometriosis, polycystic ovarian syndrome, and unexplained infertility. Male-factor infertility was caused by oligoasthenospermia and azoospermia. The IVF pregnancy rate among the sample was 20.8%. IVF pregnancy rate in continuing cohorts is 12.5% (Frederick, Wynter, DaCosta, Aldis, Birch, Wynter et al., 2001).

To date, the Fertility Management Unit at the University of the West Indies (UWI) in Kingston, remains the country's only Fertility Clinic. Treatments offered at this clinic are Intra Uterine Insemination (IUI), In Vitro Fertilization (IVF), Intra Cytoplasmic Sperm Injection (ICSI), Embryo Freezing, Sperm Freezing, Frozen Embryo Transfer (FET), Surgical Sperm Retrieval (SSR), and Assisted Hatching (AHA). The cost per treatment is approximately one half of what someone would pay in the United States. The clinic receives no governmental assistance or supervision. Also there is no insurance reimbursement for the aforementioned reproductive technologies as they are not regarded as primary medical treatments (Fertility Management Unit Booklet, 2004). Consequently, for most average Jamaicans needing such services, the cost is prohibitive.

CONCLUSION

In this chapter I provided an overview of the biomedical aspects of infertility and assisted reproductive technologies. Included is a brief presentation of epidemiology and treatment of infertility. Following, I explored the psychological aspects of infertility and presented an overview of the feelings, thoughts and emotions as experienced by a men and women. Finally, I discussed the socio-cultural aspects of infertility and showed that the meaning and the extent to which infertility affects people is determined by social status, meaning and expectation of marriage. The chapter reflects the 'lived experience' of infertility as a crisis of the self as experienced within

interpersonal relationships. The next chapter deals with the religious, legal and ethical aspects of assisted reproductive technologies.

*“Some people see things as they are and ask, why?
Some people dream of things that never were and ask, Why not...”*
--- George Carlin

CHAPTER 4

RELIGIOUS, LEGAL AND ETHICAL ASPECTS OF ASSISTED REPRODUCTIVE TECHNOLOGY

INTRODUCTION

Science has revolutionized human reproduction and history, causing an accessible aegis within which infertile couples readily continue their efforts to overcome what for years was an unsurmountable physiological barrier trying to have a biological child. Likewise, it is becoming increasingly difficult for people to keep pace with the rapidly increasing array of new reproductive techniques. These developments are the subject of much debate given their recent arrival within social reality. The birthing of these new reproductive technologies and their visibility precisely because they have not been absorbed into the invisibility of enculturation, means that the debate cannot be expected to diminish any time soon as ever-radical possibilities continue to open up before us (Purdy, 1996), often without clear answers. Given that culture is for the mass of society assumed, and thus often not contemplated upon, this chapter provides an overview of some of the controversial elaborations around the religious, legal and ethical aspects of assisted reproductive technologies. Given that the issues raised are social elaborations which serve as rationales for or against ARTs, these three aspects of assisted reproductive technologies are not mutually exclusive; rather they are often intricately interconnected in their impact on each other (Sewpaul, 1999; 2005). In the real world religion, law and ethics are enmeshed in varying and normative degrees. For example often moral issues and policy issues are accompanied by legal issues. As the legal system struggles to define rights and ownership, medical and research personnel struggle over the

social and moral decisions regarding disposition of donated eggs and cryopreserved embryos (Cooper-Hilbert, p. 158). Religion may inform law and law may inform religion. The foundation for ethical practices is certainly based in religion and law. Each of these categories is best understood as having a unitary relationship based on culture as the common denominator. Thus religion has to do with ultimate or transcendent perspectives which form the basis for epistemology and cosmology. But these two areas are rooted in cultural practices of interrelatedness and connection between people managed by laws and ethics. Laws and ethics establish social prohibitions and proscriptions which most often are in synergistic relationship with the laws and practices of Western culture. Even as religion, law and ethics shape culture they are also shaped by culture. As a means of furthering the critical analysis of this part of the study religious, legal and ethical aspects of assisted reproductive technology will be viewed as distinct conceptual categories. By definition, religion is that which gives meaning to life by indicating transcendent canons of truth or patterns of truth and definitions and values of life. Law protects the interactions regarding life and procreation of life. Ethics inculcates sensibilities within people about right and wrong and guides them in terms of religion and law. The Webster's New Unabridged Dictionary (1983) describes ethics as conforming to moral standards.

RELIGIOUS WORLDVIEWS

This literature review focuses on Jewish, Christian and Muslim teaching on infertility and assisted reproductive technologies. Three reasons support the inclusion of the aforementioned religions. First, while the respondents in this study may not necessarily represent all three religions, one of the stated purposes of this study is to educate the readers about the multi-faceted dimensions of infertility. Secondly, the debate over U.S. and Jamaican politics is becoming increasingly spiritual, and the aforementioned religions do express strong views regarding family planning, procreation and assisted reproductive technologies. According to Sewpaul (1995) "at the

heart of most religions lie the procreative capacity of humankind, with conception and birth being regarded as one of God's greatest gifts" (p. 122), with Hinduism being a large focus of her study as she included in her sample South Africans of Indian descent and of Hindu faith (1995). Thirdly, religion provides followers with both constructive and compensatory energy in the face of life's mysteries, the disruptions of life, tragedies, and misfortunes (Malony, 1998).

The presentation of the literature reflects Jewish pluralistic perspectives that span the spectrum of ultra-orthodox (adhering strictly to an ancient legal code) to the reformed, liberal and even secularist (from individual decision making regarding the observance of Jewish Law to the non-adherence to Jewish Law). Islamic religious worldviews reflect both conservative and liberal views because the juridical-ethical opinions in matters of the religious law of Muslims tend to result in plurality based on independent research and interpretation of legal scholars in the community (Sachedina, 2000). According to Daar and Khitamy (2001), in Islam bioethical decision-making is carried out within a framework of values derived from revelation and tradition. It is intimately linked to the broad ethical teachings of the Quran and the tradition of the Prophet Muhammad and thus to the interpretation of Islamic law. In this way, Islam has the flexibility to respond to new biomedical technologies. The views expressed within Christianity represent a diversity of denominations. Roman Catholicism is the most conservative in the issues related to human reproduction and stresses the point that all forms of life should be respected from the time of fertilization (Schenker, 2005). The basis of the Church's moral determination is the dignity of the human person, marriage and the marital act (Lund-Molfese & Kelly, 2003). The central institution of the pope or the Vatican gives the Catholic Church a unified stance on the issues.

FERTILITY v. BARRENESS

Among the Israelites a woman's inability to have children was considered a grievous trial or a direct chastisement from God (I Samuel 1: 3-11). The desire for a large number of children,

especially sons to perpetuate the name and fortune of the family, was a characteristic of Israelite society and was given expression in every type of its tradition (Hayes, 1975).

Sons are a heritage from Yahweh, the fruit of the womb a reward. Like arrows in the hand of a warrior are the sons of one's youth. Happy is the man who has his quiver full of them! (Psalm 127:3-5a.)

Within the American and Jamaican societies there are pervasive pronatalistic views. According to Schmutzer (2005) the Creation mandate is God's functional blessing, most clearly seen in Genesis 1:28. Through the Creator's blessing, relationship and status are activated for both propagation (1:28a, enablement) and governance (1:28b, commission). Westermann (1978) argues that blessing is primarily the power of fertility, which gives special meaning to Genesis 1:22, 28. Repeatedly, God promised Abraham to multiply his descendants "as the stars of heaven" (Gen. 15:5; 37:9). According to Psalm 127:3-5a, the real meaning of blessing is having many descendants. Blessing is identical with the survival of the family while barrenness is contrasted with pregnancy (Darsey, 1996). Barren women in the Old Testament include Sarah, Rebekah, Rachel, Manoah's wife, Hannah and the Shunammite woman. In the New Testament, there was Elizabeth. Within a pervasive pronatalistic culture, barrenness often symbolizes a state of spiritual emptiness, unworthiness or punishment by God. By the same token, God's gift of a child to the barren wife of a patriarch (Gen.16; Gen. 29& 30: Gen.30) was a symbol of renewal (Callaway, 1986). In a postmodern world there has been a focus on changing the meanings of reproduction and reproduction's intersection with the concepts of gender, sexuality and motherhood/fatherhood. It is difficult to apply the word "barren" to any childless woman because many are "voluntarily childless." On the other hand, assisted reproductive technologies (ART) may be a blessing to those

who would make great parents, but are unable to have babies through the natural biological process.

ASSISTED REPRODUCTION

According to Schenker (1997) there are three basic principles in the Jewish religion that, with certain restrictions favor the permissibility of fertility treatment. The first is the commandment: 'Be fruitful and multiply' (Genesis 1:28). Second is the mitzvah of loving-kindness and third is family integrity. Schenker further contends that in Halakhic literature, the fulfillment of the aforementioned commandment is considered to be of greatest importance because the accomplishment of all the other commandments rests upon it. Rosner (2001) argues that there is near unanimity of opinion among rabbis that the commandment to populate the world is so important that assisted reproductive techniques such as artificial insemination (AIH), IVF and surrogate motherhood, within certain limited circumstances may be permitted by Jewish law, provided the couple is unable to have a child in the normal manner and after standard medical or surgical interventions have failed. According to the rabbinic authorities, where natural reproduction does not succeed, it gives a tacit approval for assisted reproduction (Wahraman, 2004) when the husband's sperm and the wife's eggs are used. The main religious issues in the Jewish perspective relate "to the use of donor eggs or donor sperm for in vitro fertilization and the use of a surrogate mother as a womb donor" (Rosner, 2001, p. 219). In the event of husband/wife IVF, within the Jewish pronatalistic framework of theistic blessing and fruitfulness, the following four problems must be addressed in order to safeguard compliance to Jewish law protocol (Wahrman, 2004):

First, there is some controversy regarding how semen may be procured for the procedure. Since there is a biblical admonition regarding the 'spilling of seed', some rabbis insist that since

the intention of the procedure is specifically to enhance procreation and the semen is not being wasted, ejaculation to produce the semen is permissible.

Second, is that a multiple pregnancy may result when more than one fertilized egg is implanted into the woman. When there are three or more fetuses growing in the womb, this results in a high-risk pregnancy, and fetal reduction, or selectively eliminating one or more of the fetuses, may be recommended. Ending the life of a fetus is not considered murder by Jewish law definition, but it is not permissible except in cases where the doctor determined that some fetuses must be eliminated or they will all die. Even then, the decision is a very sensitive one and must be made by the doctor. The Reformed Jews have long championed reproductive freedom, including women's right to abortion and assisted reproductive technologies. Choices regarding one's health, and in the particular case reproductive health, are intensely personal. According to Thibault and Chaiken (2007) "the Reformed Movement vigorously opposes any attempts to impose the religious beliefs of a select few onto our society as a whole or to suggest that women are incapable of private moral judgments" (p. 2).

Third, when IVF is performed the woman is stimulated by hormone treatment so her ovaries can produce up to 20 eggs per cycle. The eggs are then harvested and fertilized, but only three or four can be used in that cycle. Rabbinic authorities are concerned about the fate of the extra embryos and consequently affirmed: a) use of them by the original couple to establish future pregnancies, and b) destruction of the extra embryos if this is done passively by letting them thaw out and die on their own. The use of the embryos for research is unacceptable to Orthodox rabbis because this is an active process that results in their destruction. Orthodox rabbis also disapprove of donation of the embryos because the 'adopted' child may inadvertently marry his/her genetic sibling, resulting in incest.

Fourth, there is concern that despite the meticulous job done by most reputable IVF labs in keeping track of the sperm, eggs and embryos of each couple, some mistakes can be made. Rabbinic authorities are also concerned about cases of deliberate tampering with sperm, eggs and embryos that have been discovered in unscrupulous fertility labs. Since parentage is of vital concern, some Orthodox rabbis recommend that trained supervisors be present during IVF of Jewish couples. The expectation is that supervisors be present during the entire procedure to ensure that Jewish law protocol is observed and that meticulous attention to the accuracy in the process is maintained. According to Rosner (2001) the resulting offspring of IVF are legitimate and the parents thereby fulfill their obligation to have children.

Rosner (2001) goes on to comment that since Judaism considers infertility an illness, assisted reproductive technologies may be used to “heal” that illness. While Judaism allows some forms of assisted reproductive technologies within certain guidelines, it does not mandate these techniques for a couple to fulfill their procreative responsibility. Only conventional sexual activity within the context of a marital relationship is required to fulfill the commandment ‘be fruitful and multiply’. The expansion of religious directives over the postmodern phenomenon of birth technology allows little in the way of religious protocols, except the original starting place of being “fruitful and multiplying.”

According to Kahn (2000) many orthodox rabbis have issued lenient rulings allowing for the use of new reproductive technologies. Their leniency rests on three basic principles: 1) These technologies aid in the fulfillment of the commandment that to be fruitful and multiply (Genesis 1:28) is considered an obligation of central importance in Judaism; 2) The childless couple is suffering, and because of the mitzvah to practice loving kindness, rabbis have argued that they are obliged to do everything they can to alleviate that suffering, and ART offer a means to that end; 3)

The principle of family integrity is extremely important in Jewish law, and to prevent the kind of serious marital problems that can be experienced by involuntarily infertile couple ARTs are acceptable.

For Muslims, the main concern is whether the new reproductive technologies interfere with the ways of God (IOMS, 1999). Artificial reproduction is not mentioned in the primary sources of Sharia; however, these sources affirm the importance of marriage, family formation and procreation (Shenker, 2005). Infertility in Islam is viewed as a disease, which Muslims are urged to treat based on the teachings of the prophet but only within the limits of the Quran and the Sunnah (IOM, 1983 as cited in Al-Qasem, 2003, p. 79). Couples' attempts to cure infertility are not only permissible, but also a duty (Serour, 1993).

To Allah belongs the dominion of the heavens and earth. He creates what He wills and plans. He bestows children male and female according to His will and plan. Or He bestows both males and females, and He leaves barren whom He will: for He is full of knowledge and power. (Sural-al-shura (42): 49-50, as cited in Zawawi, 2003, p. 1)

However, with suffering Allah has provided a cure as He promised: "For every disease there is a treatment" (Hadith of the Holy Prophet Muhammad, as cited in Zawawi, 2003, p. 1). The duty of the physician is to help a barren couple achieve successful fertilization, conception and delivery of a baby. The procedure of IVF-embryo transfer is acceptable (Serour, 1993), but it may be performed only if it involves the husband and wife. The protection of the genetic linkage of the child is the crucial reason Islamic ethics reject certain types of IVF (Al-Qasem, 2003).

However, Muslims by all means are required to reject third party donation when the husband and wife do not provide the sperm and the egg. In the event of a divorce or death of the

husband, artificial reproduction cannot be performed on the woman even using the sperm cells of her former husband. Islam law strictly condemns the practice of AID because it is believed to be adulterous. Islam also teaches that a man's infertility should be accepted if it is beyond cure (Shenker, 2005).

The Roman Catholic Church has based much of their teaching on "natural law" which is "law based on careful observation and reflection on creation as opposed to revealed law, seen in scripture" (Cranston, 2002, p. 3). According to Thomas Aquinas, an influential natural law thinker, "every individual marital sexual act must be open to the idea of creating new life" (Cranston, p. 3). The Catholic Church maintains that from a moral point of view a truly responsible procreation vis-à-vis the unborn child must be the fruit of marriage and that the unitive and procreative aspects of marriage are in the act of sexual intercourse. Consequently, in 1987 the Vatican formally denounced in vitro fertilization as immoral (Biggers, 1990). The Catholic Church further asserts that a human comes into existence at the moment of fertilization of the oocyte (ovum) by a sperm. A human being must be respected as a person from the very first instance of his existence as a human being. Therefore from that same moment, his/her existence as a person must be recognized as the inviolable will of God and blessing for every innocent life.

According to the Church's official teaching stated in the *Donum Vitae*: "The fidelity of the spouses in the unity of marriage involves reciprocal recognition that they become a father and a mother only through each other" (Congregation for the Doctrine of the Faith, "Instruction," p. 518).

Historically, Protestant churches have had little to say about assisted reproductive technologies. It admitted however, that in pluralistic societies the churches would have a divergence of attitudes from within. According to Dunstan (1986) the Protestant churches, for the

most part, have given approval of IVF with the spouse's gametes and no embryo wastages. The use of donor eggs or donor sperm maybe somewhat controversial for some conservative Protestants (Cranston, 2000). With respect to the unitive and procreative aspects of a marriage, they share sharp disagreements with the Roman Catholic and sided with the Church of England's position - that marriages are held together more by loving relationships than by the act of sexual intercourse per se. They also maintain that both contraception and IVF are something that could enrich rather than destroy marriages (Personal Origins 1996, p. 50, as cited in Stoye, 2003). The only Protestant denomination to oppose IVF is the Christian Science church on the basis of the drugs and surgical procedures used. However, it poses no objection to artificial insemination homologous (AIH).

GAMATE DONATION

Within Jewish communities, assisted reproduction involving sperm donation raise some major concerns for rabbinic authorities who have been concerned that the child who results might eventually marry a close genetic relative (forbidden to him by Jewish laws against incest) and have suggested that the use of donor sperm is 'quasi-adulterous'. Some Jewish Rabbinic authorities maintain that a child born without a relationship to or knowledge of his genetic parents is innately objectionable. Others worry that the product of a donated gamete will affect the child's sense of identity and that asymmetry in the child-parent relationship will affect that relationship and strain the marriage. For these reasons most Orthodox authorities forbid the use of donor gametes (American Jewish Congress Bioethics Task Force, 2001). On the other hand, Reformed Jews respond to change in various ways according to the reform principles of the autonomy of individuals and are therefore open to any position thoughtfully and conscientiously advocated in the spirit of Reform Jewish beliefs (Grotta, 1976).

Among Muslims there is also variability of beliefs with respect to gamete donation. The major problem seems to lie with surrogacy arrangements. They are also concerned as to whether gamete donation may be psychologically or medically harmful to a person who has little or no information regarding his/her genetic makeup. Respect for persons must logically include the offspring that results from gamete provision. Muslims raise questions about whether a person's autonomy, in this case, the right not to tell one's offspring the truth, should take precedence over the possible harm done to a person if he or she were to go through life being deceived about his/her identity and conveying a false medical history (Al-Qasem, 2003).

On the other hand, Islam must be seen as a religion that is very accommodating of science and biomedicine. "There are certain mandates in religion that say, seek a solution to your suffering. Seek and I'll help you" (Keller, 2004, p. 3). According to Inhorn, "In terms of infertility treatment, from the richest to the poorest, people will say, as a good Muslim, I'm encouraged to try" (Inhorn as cited in Keller, p. 3). Donor oocytes may be used in some conditions where the female cannot provide her own eggs due to advanced maternal age or where premature ovarian failure is diagnosed. To this end, donation of embryos may be accepted from couples that have had IVF treatments, completed their families and have spare embryos in storage (Al-Qasem, 2003).

The Roman Catholic Church is against gamete transfer or donation and they point out that "the wrong is compounded in gamete donation as the introduction of 'a third party' violates the unity of marriage" (Steinbock, 2004, p. 256). The Church teaches that human procreation has specific characteristics by virtue of the personal dignity of the parents and of the children. The procreation of a new person, whereby the man and woman collaborate with the power of the creator must be the fruit and sign of the mutual self-giving of the spouses, of love and their fidelity. Recourses to the gametes of a third person in order to have sperm or ovum available

constitute a violation of the reciprocal commitment of the spouses and a grave lack of regard to the essential property of marriage, which is its unity (Congregation for the Doctrine of the Faith, "Instruction").

Because of a strong pronatalist worldviews of Judaism and Islam, they apparently feel a sense of need to compromise on some assisted reproductive technologies in order to support adherents in accomplishing their reproductive desires. To the contrary, the Catholic Church rejects the notion that all couples have a procreative right to a child and maintains that a child is not something owed to a couple, but a gift... "Only the child possesses genuine rights: the right 'to be the fruit of the specific act of conjugal love of his parents', and the right to be respected as a person from the moment of conception" (CDF, *Donum vitae*, II, 8). "Children are a gift, seemingly distributed without regard for readiness, deservingness, or fitness" (Ryan, 2001, p. 156).

The Church maintains that the desire for a child is natural: it expresses the vocation to fatherhood and motherhood inscribed in conjugal love and the desire can be stronger if the couple is affected by infertility. Nevertheless, marriage does not confer upon the spouses the right to have children, only the right to perform those natural acts, which are ordered to procreation. A true and proper right to a child would be contrary to the child's dignity and nature (CDF, *Donum Vitae*). The Church also maintains that the right to have a child is something the state may recognize but it is not their prerogative to give.

The frustration experienced by many infertile couples in the religious communities stems from the feeling that they are receiving a double message between the culture they live in and their religious practice. For a number of Protestant denominations, there is no official prohibition on assisted reproductive technologies. Physicians and infertile couples are allowed to weigh the merits of a procedure for which gamete donation is sought against the moral values that apply in the case

of other acceptable or forbidden methods and make their own conscientious decisions in good faith (American Catholic.org).

SURROGACY

Surrogate motherhood is perhaps the most controversial form of assisted reproductive reproduction. The first examples of surrogacy are found in the Bible. In the first reference, Sarah used her slave girl to bear her husband a son. According to Genesis 16: 1, 2 & 15 (The Living Bible): *But Sarai and Abram had no children. So Sarai took her maid, an Egyptian girl named Hagar, and gave her to Abram to be his second wife. "Since the Lord has given me no children," Sarai said, "you may sleep with my servant girl, and her children shall be mine." So Hagar gave Abram a son, and Abram named him Ishmael.*

Second, Rachel used her slave girl Bilhah to bear her husband two sons. *Rachel, realizing that she was barren, became envious of her sister. 'Give me children or I'll die,' she exclaimed to Jacob. Jacob flew into a rage. 'Am I God?' he flared. 'He is the one who is responsible for your barrenness.' Then Rachel told him, "Sleep with my servant-girl Bilhah, and her children will be mine." So she gave Bilhah to be his wife, and he slept with her, and she became pregnant and presented him with a son...Then Bilhah...became pregnant again and gave Jacob a second son... (Genesis 30: 1-7).*

Third, Leah who already gave Jacob four sons used Zilpah to produce two additional sons for her husband. *"Meanwhile, when Leah realized that she wasn't getting pregnant anymore, she gave her servant-girl Zilpah to Jacob, to be his wife, and soon Zilpah presented him with a son...Then Zilpah produced a second son..." (Gen. 30: 9-12).* According to Schenker (2005) this type of surrogacy was likely practiced for centuries by people in different civilizations.

"Since 1976, there have been about 25,000 surrogate births in the USA, says Shirley Zager of the Organization of Parents Through Surrogacy, a non-profit national support group" (Keen,

USA Today, 2007). The first gestational surrogacy reported in 1985, however, the “Baby M” case was the first to bring issues of commercial surrogacy into the public spotlight. The case raised questions as to “when do we cross the line, from ‘reasonable compensation’ to ‘baby selling,’ from gamete donation,’ to the exchange of ‘a reproductive product’? (Ryan, 2001, p. 49).

Jewish authorities make a distinction between partial and full surrogacy. Partial surrogacy involves insemination of the surrogate mother with spermatozoa of the ‘commissioning’ or intended father. In contrast, ‘full’ or ‘gestational’ surrogacy requires medical intervention and entails IVF using the egg and spermatozoon of the ‘commissioning couple’ or intended parents. Full surrogacy is permitted only when both parties of the commissioning couple provide the gametes. Sperm donation is not allowed. The surrogate mother must be single or divorced; otherwise the child is illegitimate, according to Jewish religion. Since the mother in Judaism determines a child’s religion, the surrogate mother must be a Jew (Schenker, 2005).

The Roman Catholic Church is critical of surrogacy, especially commercial surrogacy, describing it as being comparable to ‘baby selling’ which violates Catholic teaching regarding the value of children. Every child is to be reared under circumstances incorporating a clear delineation of parentage. Neither should children be subjected to an ambiguous parental relationship or uncertain lineage (Waters, 2001).

The Baby M case, for example, in 1987 was a landmark case that considered whether or not a woman bearing an artificially-inseminated infant for money violates New Jersey’s public policies and adoption laws against baby-selling. The father, William Stern, had contracted with the mother, Mary Beth Whitehead, to bear him a child through artificial insemination. The contract, in part provided that she would receive a fee of \$10,000 upon terminating her parental rights and giving up the child to him. A lower court held that the contract was enforceable and that

the custody of the child, known as Baby M, should be awarded to Mr. Stern on the basis of the child's best interests. Mrs. Whitehead appealed, asking the Court to determine "surrogacy contracts" unenforceable and void, to reinstate her parental rights and to grant her custody of "Baby M" (Adkins, 2006; Hanley, 1987). Supreme Court Judge, Harvey Sorkow ruled that he would deal with only two issues in the case: custody of the baby and the validity of the agreement under which Mrs. Whitehead conceived and bore Baby M for Mr. Stern. In his ruling, Judge Sorkok treated the case as a custody dispute between Mrs. Whitehead and Mr. Stern and awarded primary custody to the father based on the stability his family could provide (Shapo, 2006).

Following the Baby M trial, the New Jersey Roman Catholic bishops filed an amicus brief, which stipulated that surrogacy "traffics for profit in human lives" (Sullivan, 1987 as cited in Patterson, 1998). They argued that Judge Sorkow did not consider the best interest of the child and noted that the Court failed to assess the psychological damage to the child which would accrue from procreation resulting "not of a loving relationship, but from a cold, usually financial relationship" (Sullivan, as cited in Patterson, 1988, p. 53).

Surrogate arrangements are also prohibited by Islam and as summed up by Zawawi (2003) "surrogacy arrangements would not only have upheaved the very notion of family relations, but it could also cause chaos to the determination of rights and responsibilities under Islamic laws" (p. 16). As Rahman (1981) aptly puts it "Islam allows neither unrestricted freedom to damage the interest of the community or the individual, nor does it recommend totalitarian regimentation ... to destroy the personality of the individual, which is the central figure and source of strength of its system" (p.159).

ADOPTION

The Jewish community believes that adoption is a highly commendable and good deed; however, it has no formal standing in Jewish law and likewise no Jewish ritual for adoption

(Artson, 2001). Likewise the Quran forbids legal adoption and all Muslims are expected to forever abide by this rule (Al-Qasem, 2003). The notion of lineage is so strong that an adopted child is really like a stranger in a Muslim family. They can love the child and treat the child very well and the Quran encourages this, but the scriptures do not allow legal adoption. In Muslim states, the adopted child keeps its given name and does not inherit anything from the adopted family.

The Roman Catholic Church takes a pro-adoption stance. The *Donum vitae*, promulgated by the Congregation for the Doctrine of the Faith call upon those who are infertile to understand their suffering in terms of the Christian symbol of the cross. In this way suffering can become a transforming experience, which reconnects the one who suffers to his or her social community and motivates compassionate action (Brinkmann, 2001), for example, adoption, various forms of educational work and assistance to other families and to poor or handicap children (United States Conference for Catholic Bishops). For these reasons Emmanuel Levinas, a Jewish philosopher writing in the aftermath of the Holocaust, insists that an authentic response to suffering is possible only when we refuse to avoid suffering's inherent negativity and meaninglessness: this refusal, he believes, can open us to the suffering of the other and call us to respond with compassion (Levinas, as cited in Brinkmann, 2001, p.13). The Catholic Church not only supports adoption in principle, but also has created social services and has collaborated with public institutions, other religious communities and citizens of good will to enhance adoption services for neglected and abandoned children.

POSTHUMOUS REPRODUCTION

With the advent of in vitro fertilization and cryopreservation, physicians and scientists at the request of survivors can harvest gametes or embryos from 'deceased loved ones' for posthumous reproduction. One medical study conducted by Rosoff and Katsur (2003) shows that wives, girlfriends and parents are requesting post-mortem procurement of sperm from deceased

individuals. From a Jewish perspective, posthumous reproduction is supported by Jewish Law and receives it precedence from the Old Testament (Deuteronomy 5:25). Three thousand years ago, this was the most feasible way to have a genetic heir. In a case where a married man died without having children, his brother or nearest relative had an obligation to marry the widow and the oldest son was named after the deceased. If the brother-in-law refused to marry the woman, he was obliged to go through a humiliating and public ceremony because of his unwillingness to establish his brother's heirs. According to Ruth 4: 7-10, King David, who was the grandson of Ovad and the son of Ruth was born according to this law (Schenker, 2005).

With the advent of cryopreservation, the use of frozen embryos after the death of one of the couple presents more complication in the case of the death of the woman, as it would involve a surrogate mother. As mentioned earlier, since the mother in Judaism determines the child's religion, the surrogate mother should be a Jew. Schenker (2005) observes that Israeli law allows transfer of embryos to the wife following one year of her husband's death even in the absence of consent. However, in cases of the wife's death, husbands cannot use the frozen embryos. Notwithstanding, the permissibility to use oocytes from cadaver, although technically possible, is limited to places where it is legal (Schenker).

According to the law of Islam a divorcee or a widow has no right to insert the fertilized ovum in her womb after the end of the marital term since this is a joint right during the marital term. Islam's law legislates a period of waiting in which the widow must remain unmarried, which is called *al-Shar'a as al-idda* (Shenker, 2005). "It is the duty in accordance with Islamic law to find out whether a woman is pregnant after divorce or widowhood through the period known in *al-Shar'a as al-idda*, to ensure the sanctity of man and the receipt of rights by the legally rightful owners" (Shenker, p. 317).

For traditional Catholicism, any form of reproductive manipulation is considered morally wrong. Since marriage does not confer upon the spouse the right to have a child, the Church would have problem reconciling the motive of the surviving spouse and the circumstances under which the children will be born (Bahadur, 2002).

LEGAL ASPECTS OF ASSISTED REPRODUCTIVE TECHNOLOGIES

According to Lantos (1990) at the beginning of the decades of the 1990s, there were 24 ways to have a baby and another 10 methods were projected to be used in the future. Today, with the rapid increase in new technologies in infertility treatment the options for infertile couples are continually being extended. Their very existence generates an imperative for infertile persons/couples to pursue treatment. Along with this benefit, however, ART raises several difficult legal issues involving parentage, parental responsibilities, and jurisdictional conflicts (Shapo, 2006). According to Charo (cited in Rosner 2001) “the legal and regulatory issues surrounding reproductive technologies concern the ability of government to ban or restrict noncoital reproduction because these technologies may harm embryos, children, consumers or public morals...” (p. 2).

From a global perspective, ART policies and practices vary among different countries reflecting differences in socio-cultural values and health service resources. Many countries have restrictions to ART funding according to the age of the woman or prior number of failed cycles, and the maximum number of embryos transferred at one time. In the United Kingdom and Germany, women must be under 40 years of age to receive reimbursement. In the United Kingdom, women must be clinically assessed as having a reasonable chance of responding to treatment (i.e. not approaching menopause). In France, women must be under 43 years of age to receive government reimbursement. In the Netherlands, reimbursement is available for only up to three IVF/ICSI cycles while Belgium restricts reimbursement to six IVF/ICSI cycles in a lifetime.

In Germany public funding is available for up to four cycles, two GIFT and six cycles of AI. (Dyer, Griffiths, Eckermann and Lord, 2006, p. 22).

While a number of countries provide some support (in several cases approaching 100% of the costs), coverage is generally limited and often applies only to public services that set strict criteria for selection and require waits in long queues (Blank 1997). In France, IVF is reimbursed 100 percent. In the Netherlands, there is a state subsidy for IVF services and private insurance will generally pay for most of the rest (Gunning & English, 1993, p.160). Spain offers free infertility treatments at public hospitals. Sweden partially subsidizes infertility services through University departments (Sweden, 1988). Denmark provides free IVF in public hospitals, but IVF is not reimbursed in private clinics. In Norway, the state pays 90 percent of the cost in the public hospital programs, but these programs accept only infertile married women less than 38 years of age (Blank, 1997). New Zealand provides free IVF services in public hospitals, but couples are generally offered a maximum of three treatment cycles. Patients who use private services are reimbursed only for some of the clinical procedures associated with IVF (Gillett, Peek, & Lilford, 1995:35ff). Italy pays some of the costs incurred by fertility treatment. Australia Medicare pays for some of the clinical procedures, but the proportion of costs reimbursed varies significantly by state (Gillett et al., p. 28). In Canada, only Ontario province covers the cost of IVF and this coverage appears tenuous (Gunning & English, 1993. p. 150). In England the costs of infertility treatments are covered, but only under strictly defined conditions and in accordance with carefully specified guidelines. The private provision of fertility services – the fertility market is sharply constrained. The Human Fertilization and Embryology Authority (HFEA) legislates which persons may receive ART treatment, use of donor gametes, and the number of embryos transferred (HFEA, 2001, as cited in Stern, Cramer Green, Garrod, & DeVries, 2003). The Warnock report states

categorically, “We believe that as a general rule it is better for children to be born into two-parent family, with both father and mother, although we recognize it is impossible to predict with any certainty how long such a relationship will be (Warnock Inquiry, 1985, par. 2.11). The demands of single mothers and same sex couples for equal access to ARTs were addressed and framed as being most understandable and in many ways incontestable (Gillard, 2004; Warnock Inquiry, par. 2.9-11). In short, the government actively supports, sponsors, licenses and restricts quite considerably access to fertility treatment. Gillard maintains that even with the advent of ART the existing law seeks to uphold the primacy of the nuclear family, which was done to protect the welfare of children born through this technique. The HFEA ‘welfare of the child’ clause states that a woman should not be provided with infertility services unless account has been taken of the welfare of any child who may be born as a result of the treatment, or any other child affected as a result of this birth (Blyth, 1998; Tizzard, Pfeffer, & Shaw, 1997). HFEA appoints doctors as the gatekeepers and therefore puts the responsibility on them to decide who are the suitable persons or couple for treatment (Tizzard, 1997). The unusual cases that present exceptions to established guidelines could be reviewed individually by HFEA before they are treated (Stern, et al., 2003).

The first and only Fertility Clinic in Jamaica was established as a joint venture seven years ago between the Fertility Management Unit, Department of Obstetrics, Gynecology and Child Health, University of the West Indies and Midland Fertility Services located in Alridge, Birmingham, England. However, the government of Jamaica has not yet established legal regulations for ART. The focus of government since the 1930s has been population management through private voluntary efforts and a 1970 National Family Planning Act. This Act states “that sexual and reproductive health rests on the basic rights of all couples and individuals to decide

freely and responsibly the number, spacing and timing of their children and to have the information and means to do so" (Bunning, 1994). In Jamaica there is no reimbursement for ART.

Because the United States has not established federal legal regulations for ART, this field is totally dependent for regulation on state laws and independent regulations established and adopted by associations of medical specialists (National Institute for Research Advancement [NIRA], 2001, p.1). According to Spar (2006) the United States regulatory and legislative authorities have largely ignored the market for reproductive technology. The Society for Assisted Reproductive Technology (SART) and the American Society for Reproductive Medicine (ASRM) share the responsibility to produce guidelines dealing with specific ART practice issues, such as the number of embryos to be transferred in ART cycles (CDC, 2007; Dyer, Griffiths, Eckermann and Lord, 2006). These guidelines recommended that no more than two embryos be transferred in women under 35. For women 35 to 37 years of age with a favorable prognosis, no more than two embryos should be transferred and no more than three embryos in other women in this age group. For women within age ranges 38 to 40 years and over 40 it is suggested that the maximum number of embryos transferred is increased by one for each year. For women with two or more previous failed IVF cycles and those with a less favorable prognosis additional embryo may be transferred according to individual circumstances (Dyer, et al., 2006).

According to the ASRM (2004) the limited availability of insurance coverage for ART accounts for the high national rate of multiple births in the United States. The high cost of the procedure is suggested to serve as an incentive for the transfer of a higher number of embryos to maximize pregnancy rates (Reynolds et al., 2003). In 2002, 35.4 percent of live births from ART in the United States were multiple, with 3.8 percent rate of triplets or higher order births (Centers for Disease Control and Prevention, CDC, et al., 2004).

In 1992, the United States Congress passed the Fertility Clinic Success Rate and Certification Act. This law requires the Centers for Disease Control and Prevention to publish success rates for ART in fertility clinics in the U.S. Since 1995, CDC has worked in consultation with SART and ASRM to report success rates. Unfortunately, not all Fertility Clinics, known to be in operation report their success rate data to CDC, as required by law (Dyer, et al., 2006).

Overtime, the Federal Trade Commission has issued cease-and-desist orders to several IVF Clinics whose advertisements misrepresented clinic success rates. The Food and Drug Administration (FDA) has established rules requiring sperm banks and infertility clinics to screen sperm, egg, and embryo donors to prevent transmission of communicable diseases. Some states have laws or regulations addressing donor screening, record keeping, information disclosure, and parental rights (Dresser, 2000). Also a few states have mandatory certification and licensing requirements covering different aspects of ART (Daar, 1997). The weakness within the system is that in most cases compliance is voluntary.

The President's Council on Bioethics most recent report acknowledges and explains the complexity in the context of the United States legal landscape. In doing so, it concludes that the U.S. regulatory framework lacks coherence. Because much of it is unenforceable, more needs to be done to protect consumers, particularly women, who receive ART as well as children born with its help (Thomas, 2004).

REPRODUCTIVE RIGHTS

A number of observers reject the concept of reproductive rights as the framework for policy making in human reproduction. King and Meyer (1997) assert that the United States fertility policy is implicit rather than explicit. The policy is a de facto policy, emerging as much in wake of inaction as action. As the American federal government has yet to enact an all-encompassing legislation in this area, the reproductive liberty in America is uncertain.

Washenfelter (2004) infers that while the most basic instinct of all creatures is to survive and propagate, reproductive liberty is controversial at least. Reproductive liberty is most often described as a negative right, which is a guaranteed right to be free from state interference in procreative choice. As a positive right, it would involve the right to have a baby with access to assisted reproductive technologies at all cost. Washenfelter (2004) observes that the freedom to control one's fertility has become a widely held human right, but infers that this right by implication does not extend to the right to access the services necessary to procreate.

A right in the context of reproduction is at best ambiguous. Rights imply that something ought to be the case - that one ought to have access to something where it is not actually the case. The problem with right to reproduce is that it implies that someone has a corresponding duty to provide for that right. But upon whom is it incumbent to ensure that that right is realized? If one is denied it, who is to be blamed? Where is one's protection and whom does one have recourse to? If one does not manage to produce through infertility treatment, can one blame his/her doctor for failing to meet his/her right to reproduce (Blank, 1997)?

In general, reproductive rights may include 1) a right not to have children; 2) a right to have children; and 3) a right to have children of a particular quality and quantity (Blank, 1997). In turn, each of these major categories has many manifestations and variations that require clarification and, to some degree, setting of boundaries. Overall (1987) argues that "if there is a right to reproduce, then such a right is necessarily limited, if not for no other reason than to protect innocent people" (p.168). She further argues that "if the right to reproduce exists, such right is an entitlement allowing women to be given all necessary assistance to reproduce, using any technique of reproduction, and as such leads to the commodification of children and to the misappropriation of women's reproductive capacities" (p. 170). Blank (1997) contends that although a woman

cannot legitimately be required to procreate, the right not to procreate, however, neither implies a right to reproduce nor follows from a right to reproduce. He further states that assisted reproductive technologies actually give rise to the logical extension of reproductive autonomy as a positive right - a claim upon society to guarantee through whatever means possible. If the right to procreation is interpreted as a positive one, then an infertile couple has a claim for access to these technologies. Under such circumstances, individuals who are unable to afford those treatments necessary to achieve reproductive capacity could expect society to guarantee access. According to Robertson (1994), "all the problems of the new reproductive technologies arise from... procreative choice. Any restriction, regulation, or imposition of these technologies necessarily interferes with or limits procreative freedom" (p.16).

Ryan (2001) contends that while the procreative liberty is constitutional (inferred from the Courts' protection for privacy in coital reproduction), "the Court has yet to deal explicitly with the right to procreate, in particular with the claims of infertile persons to a right to noninterference in assistance or collaboration reproduction, in other words, reproduction involving contracts with gamete donors or surrogate" (p. 94). Coleman (2002) concurs and writes:

The Supreme Court has never explicitly recognized a constitutional right to procreate, even through sexual intercourse, although a number of decisions have strongly suggested that such a right exists. For example, in *Skinner v. Oklahoma*, the Court observed in dicta that the right to reproduce is "one of the basic civil rights of man [sic]" and in *Eisenstadt v. Baird*, in which the Court stated that, "if the right of privacy means anything, it is the right of the individual, married or single, to be free from unwarranted governmental intrusion into matters so

fundamentally affecting a person as the decision whether to bear or beget a child”
(p. 61).

In the absence of directly applicable Supreme Court precedent, there are a number of approaches to interpreting the scope of constitutionally protected procreative liberty being advanced by several commentators. Holmes (1992) rejects the claim of citizens’ reproductive rights on the ground that “when everyone claims rights for one or another entity, a nonproductive competition between rights arises” (p.11). Robertson (1994) observes that the principle of procreative liberty broadly protects the freedom to have a biologically-related baby and if having or parenting children is protected as part of personal liberty, then it should not matter seriously if the child is conceived coitally or noncoitally. “The couple’s interest in reproducing is the same, no matter how conception occurs....” (p. 37). In proposing a narrower interpretation of the scope of constitutional protection, Massie (1995) argues that the constitutional right to procreate is based on the importance of sexual intimacy within marriage. Massie justifies this approach by arguing that while ARTs may enable infertile couples to have children, they do not directly implicate the values – bodily integrity, marital intimacy or integrity of the family unit, which are central to the privacy cases. Reflecting a similar view, Roa (1998) argues that procreative liberty extends to procreative activities carried out exclusively between persons in close personal relationships. Within such relationships, the right would extend to both coital and noncoital means of reproduction. However, she argues that the constitutional protection does not extend to the use of gamete donation or surrogacy, because these procedures involve individuals from outside the relationship.

In principle, modern societies need to find adequate and compassionate responses to infertility and a public policy that creates the appropriate social conditions for responsible human reproduction. An expansive definition of procreative liberty may be necessary in the case of the

United States to promote the core values of due process within the ambit of the constitution. Just to make it fair, society needs to ensure that all persons seeking to use ARTs have equal opportunity to pursue their interests effectively in the political process.

GAMETE DONATION

According to Steinbock (2004), the Human Fertilization and Embryology Authority (HFEA) in the United Kingdom cited the physical and psychological well-being of children born from egg donation as a reason to ban all payments, ranging from large ones to egg donors. Unlike the U.K., the United States has no such prohibition. Gamete transfer receives little attention from Courts and legislators and its sale is allowed in an unregulated, market-driven system. A review of the documented transactions over the last two decades shows that compensation has been increasing rapidly over the years (Lopez, 1998).

It is believed that a ban on buying and selling of egg, sperm and embryos in America would probably violate the constitutional right to privacy (Bonnicksen, 1996). Meanwhile, the U.S. Courts continue to deal on occasion with what to do with frozen embryos of married couples when they divorce or when they are deceased (Shanley, 2004). The tension in American political theory and law between the individualistic and rational aspects of each person permeated the ways people talked about gamete transfer. When doctors developed the practice of sperm transfer, the anonymity that prevailed suggested that there was no intrinsic or essential relationship between provider and sperm or between the person to be created and his or her genetic progenitor (Shanley, 2004).

The law was not clear as to whether or not the gamete donors had any parental rights or responsibilities to the children born to donor recipients. Some religious authorities contended that sperm transfer might constitute an act of adultery (Shanley, 2002). She concluded that the current policies and practices governing gamete transfer are designed to serve the interests of adults rather

than that of children in that the practice of secrecy and anonymity fails to recognize that children may have interests in knowing the identity of their genetic forebears. Shanner and Nisker (2001) note that donor anonymity not only protects the privacy of donors and recipients but it undermines the interests of offspring regarding their genetic medical history and ancestral heritage. Ryan (2001) aptly summarizes the charges made against the reproductive rights movement:

Indeed, one of the persistent criticisms of assisted reproduction (and our legal response to assisted reproduction) has been a tendency to define reproductive interests as though the wishes of procreators and the well being of offspring could be isolated. As Daniel Callahan argued: "[I]t has been one of the enduring failures of the reproductive rights movement that it has, in the pursuit of parental discretion and the relief of infertility, constantly dissociated the needs of children and the desires of would-be parents." (p.25)

ARTIFICIAL INSEMINATION (AID)

The Uniform Parentage Act (UPA), Section 5, was first adopted by the National Conference of Commissioners on Uniform State Laws and amended in 2000 and 2002 by Articles 7 and 8 (Article 8 concerned gestational agreements.) was adopted in 18 states to deal with artificial insemination of a married woman with donor sperm (AID). "Its purpose was to ensure that the woman's husband was treated in law as the natural father of the AID child and required the husband's written consent to the insemination as well as supervision of the insemination by a licensed physician" (UNIF Parentage Act, 1973, as cited in Shapo, 2006, p. 466). In addition, Section 5 shielded the sperm donor from the consequences of paternity or being treated in law as the natural father (California Family Code, 1994 as cited in Shapo, 2006, p. 267).

SURROGATE MOTHERHOOD

As aforementioned, the first gestational surrogacy procedure was reported in the United States in 1985. The woman's uterus had been removed but the ovaries remained in place. The couple was able to produce egg and sperm that formed an embryo through IVF techniques. The embryo was then transferred into a host uterus of a third party for gestation and delivery. In this particular instance, the surrogate did not have a genetic investment in the pregnancy (Sweet, 2006, p. 2). This was the dawn of a moral and legal challenge to the traditional view of the family and laws of the American society, which today, is far from being contained.

The laws are more specific about the various rights and responsibilities of all parties involved in ART and surrogacy in Western countries like the United Kingdom, Canada, Australia, the Netherlands, and Denmark, among others. This tends to reduce the range of Court contests that ultimately have psychological impact on the participants (Schwartz, 2003). Because of the U.S. federal government's noninterference with assisted reproduction, the issues surrounding surrogacy, in particular, have become a legal patchwork. Schwartz contends that surrogate motherhood raises numerous legal questions, including the applicability of contract law in event that the surrogate mother wishes to keep the baby she has carried or to have partial custody of the child, as was seen in the baby M and Johnson v. Calvert cases. According to Ciccarelli and Ciccarelli (2005), in the event that a surrogate case goes before the Court:

The initial inquiry is almost always directed at the type of surrogacy that is involved. Specifically, was the child conceived through AI or IVF? This distinction has several legal ramifications. If the child is born as a result of AI, then the Court is often able to render a decision that is in the best interest of the child (Matter of Baby M, 1988). Conversely, in the case of IVF, it is likely (depending on the jurisdiction) that the Court will examine the situation in a

matter more closely aligned with the contract principle. Under such an analysis, the Court does not inquire into the best interest of the child [as in the case of] *Johnson v. Calvert*, 1993. (p. 129)

New and novel legal issues arise in cases when there is a surrogate arrangement between legal parents and they decide to divorce. The question is then raised as to whether the biological parent has more right to being the primary or sole caretaker of the child than the non-biological parent. A good case example arose in *McDonald v. McDonald* in New York State, where the husband's sperm had been mixed with a female donor's egg, but implanted in the wife's uterus for the pregnancy. Following the birth of twin girls, the husband sued for divorce and sought to retain sole custody on the grounds that he was the only genetic legal parent. The Court ruled that a woman who carries a fetus resulting from an egg donation with the intention of raising the resulting child as her own is the child's mother (Weltman, 2004).

In 1986 four states and the District of Columbia proposed legislation concerning surrogacy. Following, in 1987, twenty-seven state legislatures examined seventy-three bills pertaining to surrogacy. Louisiana banned surrogate arrangements as unenforceable contracts in violation of public policy. The Arkansas Legislature approved a surrogacy bill, but [the then] Governor Bill Clinton, vetoed the bill because it did not provide judicial approval of its contracts (Hanley, 1988 as cited in Patterson, 1998, p. 55). With respect to the remaining proposed bills, twenty-six recommended proposals to regulate surrogacy, while twenty-five would outlaw it. In 1988, Nebraska and Kentucky passed legislation to ban the practice of surrogate motherhood.

Questions continue to be raised as to who is being exploited, whether in reference to use of donor ova, donor sperm, or in surrogacy. What may be done to help society's law keep pace with the dramatically increasing new technologies that impact on traditional concepts of parentage,

family, the right to procreate, and other individual rights? According to Wilkinson (2003), there are numerous legislative options available to policymakers, which include the following, in order of restrictiveness: 1) criminalizing all forms of surrogacy (paid and unpaid) – i.e. making it an offence to procure and/or to act as an intermediary; 2) criminalizing commercial surrogacy – by making it an offence, but only if done for money, to procure, and/or to supply, and/or to act as an intermediary; 3) not criminalizing commercial surrogacy, but making its contract unenforceable; 4) allowing surrogacy contracts to be enforceable, but only within a regulatory framework; and 5) a more laissez-faire approach under which surrogacy contracts are governed only by the general principles of contract law (and other relevant general provisions). “Absent of a national ban on surrogacy, it seems that this method of reproduction is here to stay” (Ciccarelli et al., 2005, p. 135).

Typical surrogate agreements cover a wide range of topics. The most basic agreements cover issues such as establishing the intent of the parties as to parental right, identifying the parties’ financial responsibility, establishing the procedures by which the parental right of the couples will be finalized, ensuring that all parties are informed of the ramifications of their conduct; requiring social disease testing on all parties, ensuring that the surrogate/donor be medically examined and declared suitable, and discussing the current status of the law and the attendant risks (Wisot & Meldrum, 2004).

ETHICAL ASPECTS OF ASSISTED REPRODUCTIVE TECHNOLOGIES

Despite the fact that assisted reproductive technologies have helped thousands of infertile couples to deliver a child, there is a range of ethical concerns that have been raised about the inherent nature of specific techniques and the contexts in which many techniques are used. According to Ryan (2001), assisted reproductive technologies are ambiguous. Even when they are successful, they take a toll on couples’ lives- their emotional health, marriage, jobs, and their bank

account. For those who welcome the therapeutic possibilities of IVF, GIFT, and ZIFT, assisted reproduction raises serious and persistent ethical questions.

DISCLOSURE OF MEDICAL ERRORS

Medical errors are mistakes that have potentially negative consequences for individuals/couples as they can cause harm from what was done to them or from what was not done. Because some errors may be deemed inconsequential, practitioners may be uncertain whether or not there is a need for such disclosures (Pierce, Reitmeier, Jameton, Maclin, & DeJonge, 1995 as cited in ASRM, 2006, p. 513). In Addition to medical errors, there are instances of overt deception which must be disclosed, for example, Professor Zion Ben-Raphael, a gynecologist in Tel Aviv who harvested human eggs fraudulently and sold them to other women (Harel, 2005). There is also the case of Ricardo Asch, Jose Balmaceda and Sergio Stone at the University of California, Irvine (UCI) Center for Reproductive Health who were accused of illegally transferring egg or embryo from at least 60 women (Kelleher, Christensen, Parrish and Nicolosi, 1996). Persons using medical services must be treated as autonomous individuals and must be dealt with honestly and openly with information that helps them to understand their diagnosis, the course of treatment, the risks, and the benefits, and subsequently make an informed decision. Such information includes what errors/or mistakes were made by the physician(s) that may or may not affect their goal of having a baby (ASRM, 2006). Informed consent also requires full disclosure and fair representation of all potential medical, social, and emotional outcomes and risks (Shanner, 1995). Disclosures build trust and failure to disclose medical errors potentially involves deception and suggests preservation of narrow interests over the well being of persons (Andrews & Tiefel, 1985, as cited in ASRM, 2006).

GENDER ISSUES

Identifying and treating an infertile couple involves performing a variety of tests and treatment modalities. Sometimes, in their efforts to conform to social expectations of parenthood and the social importance of the biological family unit, infertile couples become complicit partners in a technology with poor success rates (Lee, 1995). The fact that these arbitrary procedures occasionally provide babies for some infertile couples, it becomes harder for the woman to end her pursuit of maternity. Feelings of being incomplete, the regularity of visits to the doctor and some aspects of treatment contribute to gender sensitive distress. For example, many women feel that repeated internal examinations are similar to sexual violence. Husbands undergoing fertility treatment occasionally report feeling humiliated at producing a sperm sample through masturbation (Shanner & Nisker, 2001).

The gender issues are merely introduced in this chapter, as the following chapter will focus primarily on women's issues from feminist perspectives. While feminists sometimes express opposing views on the same issue, they are all concerned about women's disempowerment, resulting from the medicalization of pregnancy by a male-dominated medical profession, the patriarchal desire to control the reproductive process, and the changing landscape of reproductive politics (Parry, 2003; Franklin, 1995).

ACCESS TO ART

According to King and Meyer (1997), infertility has only recently been defined as a health problem deserving of medical treatments. The distress caused by infertility clearly deserves a helpful and sympathetic response (Shanner & Nisker, 2001). If the state does not guarantee all women the right to the full range of reproductive treatments, regardless of social and economic status, the state may be implicitly endorsing a de facto fertility policy that encourages births among working and middle class women, and discourages births among the poor and welfare recipients.

This example of inequality of access masks social judgments about who is fit to reproduce (King et al. 1991).

Presently, the United States ranks first in the world in health care expenditures, but it remains sixteenth in the rate of infant mortality. In figures released in the fall of 2000, the United States Census Bureau estimated that as many as 43.6 million Americans were without health insurance at that time (U.S. Census Bureau, 2003). Under the U.S. Constitution, the state legislatures, not Congress, is responsible for framing health policy. Unless the federal government negates state law on constitutional grounds as it did with Texas' abortion law in *Roe v. Wade* (women's right to abortion), it is the state which traditionally makes laws most relevant to reproduction. To date, only a small fraction of the states have laws that enforce third party insurance coverage for IVF (Blank, 1990).

Wisot and Meldrum (2004) identify the high cost of ART procedures and the general lack of insurance reimbursement for infertility treatment as a major ethical issue. According to Neumann (1997) IVF in the U.S. is primarily a privately funded treatment. However, a small number of states have passed laws requiring that insurance companies provide either partial or complete coverage of IVF. As of November 2001 Illinois, Massachusetts, and Rhode Island had laws mandating complete coverage; Arkansas, Hawaii, Maryland, Ohio, and West Virginia had laws requiring partial coverage; Alaska, Idaho, Maine, Montana, and Wyoming did not have IVF services (Jain, Harlow, and Hornstein, 2002). "The remaining 37 states, plus the District of Columbia and Puerto Rico, had clinics that provided IVF services on a fee-for-service basis. On 1st January 2002 New Jersey became the fourth state to require complete insurance coverage for IVF" (Jain et al., 2002, P. 2). The aforementioned data on insurance coverage of IVF limit treatment to

the select group who live in certain states and have insurance or those who are financially well off (Morley, 1993).

There is moral ambivalence in that, while there is insufficient consensus to ban IVF, there is also insufficient consensus to fund it along with embryo research. IVF is linked to the destruction of human embryos, which first appeared in the public discourse in 1969, when Robert Edwards and Patrick Steptoe announced in the Journal, *Nature* that they had successfully fertilized the first human embryo in vitro. Their report that the embryo was destroyed was understood by many around and in the America society as killing a human being (Time line: Human Reproductive Research and In Vitro Fertilization, 2006; Edwards, Bavister and Steptoe, 1969). “With IVF, we created human embryo outside the body, which the Catholic Church calls an immoral use of human ingenuity in the arena of reproduction. It argues that human procreation has specific characteristics by virtue of the personal dignity of the parents and of the children” (Edwards, Bavister and Steptoe, p. 100). While IVF provides an alternative for infertile individuals and couples to build a family, the moral disagreement is whether to circumvent infertility with the use of IVF or whether to maintain ‘personal dignity’. The logic of the Catholic teaching is a strong force that influences many countries, including the U.S. to deny public funding for IVF. All of the absolutes and all our dilemmas, stem from the ‘personal dignity’ of procreation (Cohen, 2003, Congregation for Doctrine of the Faith, ‘Instruction”).

GAMETE DONATION

The use of donated gamete and embryos in assisted reproduction is medically accepted, but socially controversial. During the initial stages of gamete donation, the providers were largely medical school and university students, and recipients were private patients of doctors affiliated with teaching hospitals. It is probable that whites would have been the majority of those who took part in alternative insemination as either providers or recipients. Both early and more recent reports

of the incidence of donor insemination (DI) indicated that race matching was the norm; that is, recipients used sperm from providers with the same racial identity as their partners (Shanley, 2002). A 1977 survey by a researcher from the University of Wisconsin found that doctors tried to match hair color, skin color, eye color, height, religious or ethnic background, ABO blood type, and educational level (Curie-Cohen, Luttrell, and Shapiro 1979).

According to Shanley (2002), gamete transfer raises at least two ethical and policy questions. First, should the sale of eggs and sperm be prohibited, regulated or be left to the open market? She argues that anonymity and payment should be abolished in the practice of gamete transfer to reflect properly the collaborative nature of assisted procreation. Markets in human gametes and embryos raise widespread ethical alarm. Despite chronic and life-threatening shortages of blood and transplant organs, the sale of these tissues is widely rejected and is in most cases illegal. Normally, the only appropriate payment for tissue donations is reimbursement for direct expenses such as travel. However, this is not the case with reproductive tissues (Shanner & Nisker, 2001). The institutions of science and business currently have responsibility for problems of infertility. The science develops technology and a business marketing generated by commercialization makes it harder for some women to end their pursuit of fertility. According to Spar (2006) the reluctance of the U.S. federal government to impose any kind of law on the market for surrogacy, preferring to leave the dilemmas to local legislatures and courts, couples are crossing state boundaries in search of sympathetic courts, and relying on lawyers and brokers to have a surrogacy arrangement. Consequently, the market has grown exponentially and surrogacy has become one of the simplest means of solving infertility. The advantage of a market-driven industry is that it makes these techniques more widely available to women who want them and offers women choices that were until recently unthinkable. Just as commercialization easily leads

to commodification of children, it also leads to a value context where gametes, embryos, and women are viewed as commodities to be banked, bought, sold, and rented as a means to procreation (OTA, 1988:327). Other potential dangers in the privatization of these technologies include the intrusion of the profit motive into something as special and human as procreation, the potential exploitation of very vulnerable and often desperate consumers, and an emphasis upon medical remedies for infertility that diverts attention away from efforts to eliminate social causes of infertility. Rather than heightening a sense of social responsibility to reduce environmental pollution that causes infertility, the commercialization of reproductive technology promises a quick fix for those who can afford it (Blank, 1990).

Commentators have argued that while it is inherently difficult to build an altruistic system of gamete donation within a competitive environment, the alternative to commercial egg and sperm donation nonetheless has to be a carefully regulated commercial or altruistic donation. Altruistic agreements are often made between persons who are family or friends prior to the arrangement (Bradley, Silva, Rovazzi, & Swanson, 2004; Feyles, Daniels, Haase, Isacson, Newton, Parker, & Tekpetey, 2004; Steinbock, 2004). Steinbock argues that altruistic surrogacy is morally appropriate, as in the case of blood donation, which involves minimal time and risk. The greater the burdens and risks, the less appropriate is the expectation of altruistic donation. For some critics, it is the effects on the families and on society at large, rather than vulnerable donors, that lie at the heart of their objection to commercial egg donation.

Second, should persons created with third-party gametes be able to learn the identity of the donor(s)? Incidentally, “when doctors developed the practice of sperm transfer, the anonymity that prevailed suggested that there was no intrinsic or essential relationship between provider and sperm or between the person to be created and his or her genetic progenitor” (Shanley, 2002, p. 6).

Numerous studies found that parents rarely told their children that they were conceived with donated sperm (Blyth, 1998; Blyth, 2005; Broderick & Walker, 2001; Patterson, 1998; Shanner & Nisker, 2001). Cook, Golombok, Bish, and Murray (as cited in Blyth, 1998) identified the following reasons for mothers' unwillingness to disclose the identity of their donors:

- concerns for the child;
- exposing the father's infertility and possible implications for the family relationships;
- uncertainty about the timing and method of telling; and
- the lack of genetic information to give to the child

In the United States, married heterosexual couples who had a child using donor insemination (DI) maintained anonymity and secrecy for similar reasons. Many psychologists counseled parents to protect themselves and their children from the possibility of negative feeling about the circumstances surrounding the conception.

Blyth (2005), while not disregarding the fact that some heterosexual couples who have children using donor insemination may have reasonable reasons for their non-disclosure to their donor offspring the circumstances of their conception, contends that they do not tell because they have little or no information about their child's donor. Freeman and Combs (1996) cited the United Nation's Convention on the Rights of the Child (1989) as the signature international convention on human rights. He further cited Article Seven, the right to know one's parent, as a fundamental human right. Daniels (1995) and Freeman and Coombs (1996) concur that, in the debate about donor anonymity, the child's right to know the identity of his/her gamete donor was duly expressed at the aforementioned Convention. According to McHale and Fox (1997), whether or not the child is harmed by not knowing his/her biological origins, donor off-springs have a right to the truth about their conception and origin.

MORAL STATUS OF EMBRYOS

After the introduction of IVF-ET, several nations established committees to evaluate the ethical aspects of this technology. Edwards and Steptoe, the two most well known scientists who pioneered IVF technology in the United Kingdom, did not place a high moral value on the early embryos and consequently discarded 99.5 percent of fertilized ova produced in their laboratory (Lappe, 1978). Pivotal to its acceptability and all related embryo technologies (including transfer, storage, research, diagnosis, treatment, and cloning) is a conviction regarding the nature, worth, and moral status of the human embryo (Hui, 2002). Who or what is this embryo? Who determines what can be done to it? What use (if any) can one make of it? What protection should one provide for it (Hui, 2002)?

The term pre-embryo had been arrived at on a moral basis by the Warnock Committee in 1984 and the Ethics Advisory Board of the United States of Health Education and Welfare in 1979 respectively. The reason was to ensure that no human pre-embryo created through IVF should be maintained beyond fourteen days or used as a research subject beyond that point (Lee, 1995). The Warnock Committee determined that the human embryo has a special status and should be afforded some protection in law, although it does not have the status of a living child or an adult (Hui, 2002). The Ethics Advisory Board of the United States Health Education and Welfare followed with a report indicating that the human embryo is entitled to profound respect, although it does not possess the full legal and moral rights attributed to persons.

The Voluntary Licensing Authority for Human in vitro Fertilization and Embryology adopted the term pre-embryo simultaneously with the Ethical Committee of the American Fertility Society in 1986 (Biggers, 1990). Pre-embryo was a new term that refers to the fertilized egg during the in vitro fertilization process, prior to its transfer back to the woman who will gestate it (Lee, 1995). By its definition, it sets a moral benchmark for ensuing ethical debate on the use of

embryos. One theory used concerning the moral status of the embryo is that it is an entity that acquires a right to live at the moment that it becomes self-conscious. However, opponents of this view argue that an embryo would have no such right, because an organism possesses a serious right to life only if it possesses the concept of a self as continuing subject of experience and other mental states (Tooley, 1972 as cited in Kilner et al, 2000, p. 61). Singer (1994) further states that “life without consciousness is of no worth at all (p. 190). Sumner (1981), as cited in Kilner et al. (1981), posited that sentience should form the basis for a right to life. He defined sentience as the capacity for feeling or perceiving. He maintains that moral status and, hence, a right to life, necessarily accompanies the ability to perceive pain. Opponents argue that since sentience is acquired at some time during the second trimester (according to Sumner’s designation), the discussion is not about embryos, but about fetuses; therefore, embryos would not have a right to life (Kilner et al., 2000).

Advocates of embryo research believe that it is morally permissible to produce embryos solely and specifically for research (Hui, 2002), in which people’s experiences and values play a most important role in determining what is “right” and “true” for them. According to this justification, the autonomy of people must be respected as a principle. People’s beliefs and values are too diverse to adopt any particular set of them as normative for everyone (Kilner et al., 2000).

SURROGATE MOTHERHOOD

One undeniable fact about surrogacy is that it is controversial. According to Langdridge and Blyth (2001), “surrogacy...has variously been seen as both an affront to women and as a vehicle for their liberation; as both an assault on ‘motherhood’ and the family, while demonstrating evidence of the continuing strength of the nuclear family in western society” (p. 46). The problem with surrogacy is not just that it is an unnatural way of producing a child; it is because of the impact it leaves on the concept of mother and child relationship. Furthermore, the surrogate

mother's emotional response to conception, birth and surrendering of the child to the commissioning or intended parents is unpredictable. The following are arguments from those who believe that surrogacy should be permitted:

Because surrogacy questions cherished cultural beliefs and ideals regarding mother-infant relationship, it inevitably stimulates intense anxiety and discomfort. However, contrary to popular belief, surrogate mothers are not all poor women being exploited for their fertility. They comprise middle-class women, women who are done having children of their own, and women who want more children in the future. They all have in common a desire to help make families (Aigen, 1996).

According to Patterson (1998), "the contract signed prior to conception is non-coercive and affords the surrogate sufficient time to back out of the arrangement.... surrogacy is a mutually beneficial practice which warrants the sanction of the state manifested in court enforcement of surrogacy contracts" (p.54). People should be allowed to make personal arrangements with surrogates as long as this arrangement does not hurt others. Furthermore, they contend that the difficulties associated with adoption in contemporary society and the fact that surrogacy may be the only available option for a couple who wish to have a child that is genetically related to at least one of them, surrogacy should be permitted. For these and other reasons "the personal is political" slogan was used to unite believers into social action. The phrase "the personal is political" became popular in the 1960s and 1970s as a way to convey to women who were suffering in silence that their individual experiences were, in fact, instances of widespread sexism (Williams, 2001). The feminists of the time concluded that the experiences, feelings, and possibilities of their personal lives were not just a matter of personal preferences and choices, but were limited, molded, and defined by the broader political and social setting (Z Magazine, 1997). Consequently, their

personal problems were really political problems and there were no personal solutions. In 1986, a group of surrogates formed the National Association of Surrogate Mothers. Feeling threatened by the “Baby M Case,” they sought to legalize surrogacy, and lobbied for legislation to protect that right. Aware of the importance of shaping public opinion on the surrogacy issue, these interest groups have emphasized the language of freedom and of the right to procreate (Patterson, 1988, p. 16).

Opponents of surrogacy raise objections on many fronts. First, they argue that surrogacy leads to the exploitation of poor women by more affluent couples. Sullivan (1987) argues that surrogacy has become a kind of reproductive technology laboratory where women are dehumanized and reduced to a mere ‘commodity’ in the reproductive marketplace. According to Patterson (1988), surrogates create a new form of slavery in violation of the Thirteenth Amendment. Andrews (1988) describes surrogate motherhood as “reproductive slavery, the factory method of childbearing, and cutting up women into genitalia” (p. 74). Most surrogate mothers in the United States are paid for their services at least \$15,000.00 upon relinquishment of the child. Critics feel that planning to bear a child for a couple (or single person) in exchange for a large sum of money is baby selling and should be banned (Encyclopedia of Adoption, 2006).

In an effort to counter the aforementioned biblical support for surrogacy, opponents argue that in the reference to Genesis 16:2, where Sarai offered her servant to Abraham as surrogate, supporters of surrogacy failed to mention that Hagar was a slave and the social context was different from present day society. According to Patterson (1988), within an institutional context of enslavement, surrogacy by definition precludes any meaningful consent, using one woman’s womb to satisfy the desires of another woman. In the absence of the coercive context of slavery, opponents argue that a woman should have the right to change her mind about releasing the baby

after his/her birth. They claim that the birth mother should have the same right to choose to parent the child as she would if she were a mother contemplating placing her child for adoption (Encyclopedia for Adoption, 2006).

The destruction of the natural biological and psychological bond between a woman and her fetus is claimed to be another ground for rejecting surrogate motherhood. Surrogacy may satisfy the needs and interests of the contracting parties. However, it does so “at least at the cost of denying the significance of the important dimensions of the relationships they create. While adults may use such arrangement to bring to fruition their own hopes, they create a birth situation in which the child’s natural relation of offspring is impaired” (Cahill, as cited in Ryan, 2001, p. 98).

RIGHT TO SAFE AND EFFECTIVE MEDICAL SERVICES

ARTs can be very helpful for certain infertile persons. However, ethical questions have been raised both about the inherent nature of certain techniques and the specific contexts in which these techniques are practiced. Countries in which reproductive technologies are employed to a significant degree have developed regulations governing their use, many of which are as a result of recommendations made by inter-disciplinary commissions that solicited public input. However, policy makers in the United States have been reluctant to regulate reproductive technologies because their use is politically controversial (Cohen, 1997).

According to Shanner and Nisker, (2001), “research on the efficacy, long-term safety and psychological implications of most ARTs remains incomplete...” (p. 4). Twenty-eight years after IVF was first offered in Britain, the procedures for most infertility diagnoses lack reliable evidence to show that the procedures are effective, that the treatment is more likely to result in a live birth than no treatment (McDonald, 2004; Thosby, 2001; Franklin, 1997). Explicit clarification must be made among procedures that are experimental, innovative, common but not yet validated, and truly validated, with special attention to possible risks (Shanner & Nisker, 2001). Wisot and Meldrum

(2004) identify the following as factors that jeopardize high standards of medical practice: limited professional or governmental oversight of IVF clinics and laboratories, the lack of mandatory standards for physicians performing these procedures, the failure of some programs to report their statistics in an approved format to SART/CDC to be included in the SART/CDC Registry, and the large number of high-level multiple pregnancies resulting from excessive numbers of embryos being transferred.

The pressure to have a child at all cost sometimes forces doctors to transfer excessive numbers of pre-embryos into their patient's uterus. Is it the patient or the doctor who must take responsibility for the resulting multiple pregnancies? Virtually no laws control the practice of infertility treatment and practitioners are not held accountable for the multiple pregnancies produced by assisted reproduction therapies. The Ethics Committee of the American Fertility Society asserts that it condemns the practice of transferring excessive numbers of pre-embryos with the intention of using selective reduction in the event of multiple pregnancies (Wenger & DeCherney, 2000). However, such practice appears standard in fertility clinics across the U.S. In Jamaica, despite the absence of governmental regulation or supervision of assisted reproduction, the policy is to transfer a maximum of 3 embryos in any treatment cycle and women under 35 years of age have no more than 2 embryos transferred in an IVF cycle. They maintain that multiple pregnancies can be a bitter-sweet situation for infertile couples because risk to mothers includes high blood pressure, diabetes, hemorrhage, and brain handicap, including brain damage for babies born prematurely (Fertility Management Unit Booklet, 2004).

Selectively aborting one or more of the fetuses in a multiple pregnancy may be religiously objectionable and cause great emotional stress to an individual or couple who have waited so long for pregnancy. An additional risk is the loss of all fetuses. "Unfettered use of reproductive

technologies can create such harms as lack of informed consent, providing procedures not medically indicated for financial gain, practice by unqualified personnel, injury to patients and donors, failure to screen donated gametes, and inadequate medical record keeping” (Cohen, 1997, p. 1).

CONCLUSION

It is essential that medical and mental health professionals keep abreast with the religious, legal and ethical aspects of assisted reproductive technologies. In this chapter I provided an overview of the some of the controversial elaborations around the religious, legal and ethical aspects of ART. Given that the issues raised are social elaborations which serve as rationales for or against ARTs, these three aspects of ART are not mutually exclusive; rather they are often intricately interconnected in their impact on each other. I showed that assisted reproductive technologies challenge some of our most entrenched moral and cultural traditions and have presented major dilemmas for society. The irony is that, on one hand reproductive technologies offer hope where previously none existed, while on the other hand they introduce a series of complex, expensive, and often morally troubling treatment modalities. The range of ethical dilemmas that has been raised, in particular about in-vitro fertilization, surrogacy and embryo transfer, are shown by the following classifications: dilemmas associated with conflicts of interest among participants in the reproductive process; dilemmas pertaining to the moral status of the embryo/fetus; dilemmas stemming from moral concern about the nature of humankind and whether we should interfere with natural reproductive processes. The next Chapter discusses feminist responses to infertility and assisted reproductive technologies.

"I don't long for a baby anymore. I long to be free of the longing."

____Anonymous, in private communication: In M.A. Ryan (Ed.), Ethics and Economics of Assisted Reproduction: The Cost of Longing.

CHAPTER 5

FEMINIST RESPONSE TO INFERTILITY AND ART

INTRODUCTION

The purpose of this chapter is to present feminism which reflects women lived-experience of social barriers and inequities. Feminism is the organized movement which promotes equality for men and women in political, economic and social spheres (www.colostate.edu). According to feminist Marilyn French (1986), feminism is the only serious coherent and universal philosophy that offers an alternative to patriarchal thinking and structures. Incidentally, feminism is not monolithic. Feminists are sharply divided on a great deal of issues, which may be found in moral and political theories and theological treatises (Franklin, 1995). Since one of the goals of this research is educational, this writer believes that especially, infertile women of the 21st century should read about feminist activism and their use of scholarship to challenge patriarchy, the dominant construction of family, and cultural expectations of women. By no means is it my intent to offer feminism to women as the solution to their problems. What is important is that the various forms of feminism present cultural beliefs and values associated with childbearing which touch all aspects of social life in any give country (Callister, 1995). Also, the presentation of a phenomenological approach in this study by means of exploring the "lived-experience" of individuals and couples allows women the freedom to express themselves apart from what feminist may say as to how 'women' should think, feel and react. While some women in this study may be able to identify with feminists' points of view and statements, others could be alienated or find that

there is no congruence between feminist views and their lived-experience. The forms of feminism presented in this chapter are liberal, radical, socialist/ Marxist, psychoanalytic, and postmodern.

Liberal Feminism

“Liberal feminism is the oldest identifiable feminism. Mary Wollstonecraft’s *A Vindication of the Rights of Women* in 1792 and John Stuart Mill’s *The Subjection of Women* in 1869 have been among the most influential texts, with their emphasis on traditional liberal conceptions and self-fulfillment of the individual” (www.calvertonschool.org, p. 1). Liberal feminist adamantly blamed men for all the restrictions of women’s role; they argued that the relationship between the sexes was one-sided, controlling, and oppressive, and; they challenged the laws that restricted women (Bergmann, 2002; Breines, 2002; Bartky, 1990; McElroy, 1991). The catch phrase ‘the personal is political’ was first suggested by liberal feminists; that what happened in the bedroom had everything to do with what happened in the boardroom-and that the same sex was in control in both places. The National Organization for Women (NOW) - a late 20th century liberal feminist organization used methods such as education, legislation and litigation to champion equal rights, equal access, and equal pay for women, and economic and social fairness (www.calvertonschool.org). Beginning with the 1960s, the feminist movement as a whole embraced reproductive technology, particularly the birth control pill (Behuniak-Long, 1990, as cited in Parry, 2005, p. 192). The birth control pills and later assisted reproductive technologies were viewed as giving women control and choice with respect to reproduction and enabling women to avoid unwanted pregnancies (Behuniak-Long, 1990, p. 192).

Liberal feminist’s support for a woman’s right to access assisted reproductive technologies was based on the United States Constitutional protection of autonomy in decisions to bear or rear one’s children (Andrews, 1985). It supports the rights of women’s access to legal abortion and safe

contraceptive as well as access to fertility treatment: both heterologous IVF and ET and homologous IVF and ET; procreative rights and autonomy; the extension of reproductive choices for individuals through the technical ability to separate the components of reproduction (Alpern, 1992). On the basis of 'reproductive freedom', liberal feminism supports women participating in the exchange of reproductive services (e.g., surrogate motherhood) in the market, just as men have been able to donate sperm (Andrews, 1990). They hold that there is a right to reproductive autonomy that encompasses access to whatever means that are required, provided that all parties freely consent. In short, liberals believed that if women were willing to endure new reproductive technologies to end their suffering, they should have the right (Behuniak-Long, 1990).

Andrews (1985) suggests that the growth of the infertility industry is a predictable result of the gains won by the feminist movement. Effective contraception has made it possible for women to delay pregnancy while they are pursuing educational and career goals. This means that such delay often leads to age related infertility. As aforementioned in this study, the effects of advancing age on clinical infertility are manifested not only in the pattern of ovarian response to superovulation, but also in reduced implantation efficiency and increased spontaneous abortion rate (Spandorfer, 2003). Therefore, feminist's empowerment of women enables women to come forward as surrogates.

During the 'Baby M' trial, the New Jersey chapter of the National Organization of Women (NOW) met and could not reach a consensus on the issue of surrogacy. In an interview with the New York Times (1989), feminist Linda Bower remarked: "We did not feel it should be made illegal, because we don't want to turn women into criminals. But other than that, what you may feel about 'Baby M' case may not be what you feel about another" (Bower, as cited in Alpern, 1992, p. 205). Bower continued, "We do believe that women ought to control their own bodies,

and we don't want to play big brothers and big sisters and tell them what to do. But on the other hand, we don't want to see the day when women are turned into breeding machines" (Bower, as cited in Alpern, p. 205).

Liberals like Macklin and Charo labeled commercial surrogacy as reproductive prostitution and exploitation of poor and vulnerable women and recommended a ban on it. However, they did not object to such arrangements as long as "no money changes hands, beyond the scope of actual expenses" (Charo, 1998, p. 109). Andrews argues that doing so on the basis of potential harm to the gestational mother is a form of the sexist assumption that women are unable to make good decisions for themselves (Andrews, 1988). She goes on to argue that "... if contracted motherhood is not inherently exploitative but it becomes so only when women are economically coerced into it, therefore our focus should not be on banning payment, but on making sure the surrogates get paid more" (Andrews, as cited in Alpern, 1992, p. 284). She further contends that since there is the possibility for coercion, the best solution is to ensure that women have equal access to the labor market and provide adequate social services to meet the needs of poor women and their children.

With an increased proportion of infertile couples seeking treatment due to an increased awareness of the availability and success of assisted reproductive technologies, quality control became an issue to ensure that the services rendered were necessary, appropriate, and of a high quality. Andrews (1985) was particularly concerned about possible abuses in the way medical researchers, care providers, and others may exercise their relative power over patients' bodies. Giving people "the autonomy to treat their own parts as property, particularly their regenerative parts," Andrews suggests, "provides a framework for handling evolving issues regarding the control of extracorporeal biological materials" (Andrews, as cited in Brinkmann, 2001, p. 44).

According to Ryan (1993) “feminists have always recognized that the choice that is most private and individual (i.e., the disposition of the self in the event of reproduction) is always what most intimately unites all women” (p. 28). However, differences emerged within the ranks of feminists around the proposal for women’s liberation. Critics of liberal feminism believe that its unwavering support for assisted reproduction was not in the best interest of women. For example, Corea (1985) observes:

The dominant (i.e., liberal) discussions of reproduction technologies focus only on the “foreground,” or surface, reality of these technologies. In this foreground, medicine is described as a “healing art,” infertile persons are “patients” with a “disease” and reproductive technologies are spoken of in terms of “treatment” and “therapeutic modalities.” The background reality, however, is that medicine has been used as “a method of social control or political rule” particularly by privileged men over women and others who are socially and economically disadvantaged. Against this background reproductive technologies are seen as something created in the interest of the patriarchy, reducing women to matter.

(p.2)

According to Imeson and McMurray (1996) feminists who support women having access to reproductive technology often work professionally with women who struggle with infertility, such as nurses. These feminists understand the biological, psychological and social components of infertility and appreciate it as an agonizing existence for certain women and not just a reality that is constructed socially or prescribed culturally (cited in Parry, 2005, p. 195). In short, the feminist position that supports women’s access to and use of reproductive technology is one that focuses on the experience of infertility (Sandelowski, 1990).

The 1970s were very eventful for feminism. Accomplishments included the legalization of abortion in 1973, the extension of the right to birth control to unmarried people, and the increased support of the Courts for women's reproductive rights (Woliver, 1989). In 1978 Louise Brown, the first IVF baby was born in England. Incidentally, during this period some feminists began to raise various issues about the use of reproductive technology. They particularly questioned whether the medicalization of infertility reinforced male domination of women's health and whether the new technologies were safe for women. In short, the medicalization of women's health was a concern to many feminists who earlier supported self-determination with regard to reproduction (Kirkley, 2000). In the 1980s, according to Behuniak-Long (1990) "Feminist theory could no longer rely on liberalism's individualistic emphasis as sufficiently perceptive of exploitive circumstance" (cited in Parry, 2005, p. 193). Radical feminism accused liberals of accommodating women into existing oppressive structures and not going far enough to dismantle them. They preferred a theory that adequately focused on the social context of the issues and efforts that would abolish, address, or regulate the advancements in assisted reproductive technologies for the sake of protecting women as a class (Parry, 2005).

RADICAL FEMINISM

Radical feminism is a movement that arose in the late 1960s (peaking between 1967 and 1971), motivated by failure of civil rights and New Left activities to address the oppression of women as a class. Groups include The Feminists, New York Radicals Women, and New York Radical Feminists, Redstockings. Individuals included Alice Echols, Anne Koedt, Shulamith Firestone, Ellen Willis, and Ti-Grace Atkinson (www.calvertonschool.org). Behuniak-Long (1990) observes that during the 1980s liberal feminists put their efforts into legislative and regulatory laws that emphasized individual reproductive choice and radical feminists focused on the social causes

of infertility and pledged to work toward preventive measures, while urging women to resist the use of reproductive technology.

As a strategy for seeking change in the public sphere, radical feminists popularized the expression 'the personal is political,' "by which they meant that marriage, domestic labor, childrearing, heterosexuality etc., were not private activities but patriarchal institutions and additional targets of political activism." (www.calvertonschool.org, p. 1). Being influenced by what Firestone refers to as "the dialectic of sex" not class, as the prototype of oppression of women, radical feminism focused on the structural inequity between women and men in society and adopted as its primary goal the removal of impediments to women's exercise of the full range of political rights (Tong, 1989), and the elimination of false dichotomies between male and female (Zastrow & Kirst-Ashman, 2001). Andrews (1990) contends that the equal treatment of the sexes requires that decisions about men and women be made on grounds other than biological grounds.

They assert that motherhood, fatherhood, and the suffering of the infertile are socially constructed. Feminists associated with FINRRAGE (Feminist International Network of Resistance to Reproduce and Genetic Engineering) are critical of the social context within which reproductive technologies are developed and used, and subsequently reject almost all forms of assisted reproductive technologies as morally unacceptable (Brinkmann, 2001). Donchin (1996) as cited in Patterson (1998) refers to FINRRAGE as "radical-interventionist." The more prominent radical feminists in the literature are Gena Corea, Jalna Hanmer, Renate Klein, Rita Arditti, Maria Mies, and Robyn Rowland, who in 1984 formed FINRRAGE (Sewpaul, 1999). Donchin writes:

The FINRRAGE program calls for suppressing the development and application of fertility technologies despite claims of many women that they provide the only means available to them to fulfill their procreative desires. The dissemination of

these technologies they insist only reinforces women's oppression, giving scientific and therapeutic support to the patriarchal presumption that reproduction is a woman's prime commodity. (p.31)

According to Petersen (2003), the radical feminist's argument runs roughly as follows: "We should prevent women from using new reproductive technologies because women who want to use the technology have been socially coerced into desiring children and indeed have been harmed by the patriarchal society in which they live" (p. 130). They attribute the suffering caused by infertility to a lack of women's free agency within patriarchal social structures, and therefore best alleviated through social reform (Brinkmann, 2001).

Corea (1985) views reproductive technologies as tools developed by men to strengthen their control over procreation. She compares the development and use of artificial insemination and in vitro fertilization on women with the prior development and use of these technologies on cows and other farm animals. She argues that these same technologies will be used in humans to ensure 'desirable' offspring just as cows have been used as breeding machines. According to McElroy (1991), "the enslavement by technology is inevitable, because technology is directly opposed to what is natural... to what is female" (p.1). In references to gamete donation, Corea (1987) writes:

Just as the patriarchal state now finds it acceptable to market parts of a woman's body (breast, vagina, buttocks) for sexual purposes in prostitution and the larger sex industry, so it will soon find it reasonable to market other parts of a woman (womb, ovaries, egg) for reproductive purposes. (p. 3)

Most radical feminists argue that there is a significant degree of misogyny at work in the medical profession toward women and women's bodies, and that underlying the energy to develop these procedures is a long-standing male interest (Ryan, 1993). Arditti, Klein, and Minden (1984)

observed that the continuing medicalization of childbearing and motherhood and male appropriation of reproductive power over women was furthering female subordination. Perhaps the most dramatic expression of radical feminists' contempt for individual choice is their passionate rejection of surrogate motherhood. Their objections against surrogacy contracts rest on two basic points, which are commonly used to oppose all forms of reproductive technology. The first is that the woman is selling herself into a form of slavery and the second is that the woman cannot give informed consent in this case, because she does not know how she will feel later toward the child she is bearing (McElroy, 1991). The radical feminist case against surrogacy contracts has been spelled out by Phillis Chesler in her essay, "Mothers on Trial: Custody and the 'Baby M' Case".

Some feminists said 'We must have a right to make contracts. It's very important if a woman can change her mind about this contract - if it isn't enforced - we'll lose that right!'...They didn't consider that a contract that is both immoral and illegal isn't and shouldn't be enforceable. They didn't consider that businessmen make and break contracts every second...Only a woman who, like all women, is seen as nothing but a surrogate uterus, is supposed to live up to—or be held down for—the most punitive, most dehumanizing of contracts. No one else. Certainly no man. (McElroy, 1991, p.2)

In testifying before the House Judiciary Committee of Michigan, USA, in October, 1987, Janice Raymond declared of surrogacy contracts, "[they] should be made unenforceable as a matter of public policy...they reinforce the subordination of women by making them into reproductive objects and reproductive commodities" (McElroy, 1991, p. 1).

Radical feminism contends that pronatalism should be eradicated in order to allow women to make autonomous choices about reproduction (Petersen, 2004). Conversely, a woman needs to

be encouraged to identify and express her feelings, even when they hurt; come to accept her situation; and eventually make decisions about how she, not her husband or medical professionals, wants to proceed. She should be given specific information about the options available to her, the risks, the amount of effort required to pursue treatment, and help in evaluating which alternative is to her individual best advantage (Bricker-Jenkins & Lockett, 1995). Shulamith Firestone (1970) argues a more radical position: "The first demand for any alternative system must be...the freeing of women from the tyranny of their reproductive biology by every means available (Jenkins & Lockett, p. 2533).

Radical feminism has been cited for presenting a number of problems for the women it seeks to represent. First, women who desire biological children are more likely to side with the vision of liberal feminism that wants to free maternity from male domination, rather than with radical feminists like Firestone who wants to free women from biological maternity. Second, radical feminists who call for a ban on all forms of assisted reproductive technologies may contribute to the alienation and possible marginalization of infertile women who want to have biological children (Sewpaul, 1999). According to Sandelowski (1990), despite feminist commentators' acknowledgement of the suffering of infertile women, their discourses suggest little or no empathy with infertile women. She goes on to argue that "there is little understanding that, for these women, infertility is a painful fact of their existence and not just a socially constructed or culturally prescribed reality" (p. 5). Sewpaul (1999) observes, "Such an uncompromising and unsympathetic stance may diminish the important contributions that these feminists have made confronting issues that discriminate against women in their social, economic, political and cultural situations" (p. 3). Third, radical feminism reportedly belittles women simply by allowing them no volition and no agency at all. It also denies the existence of a maternal instinct or innate drive to

reproduce; therefore an infertile woman's will to reproduce is believed to be nothing more than a patriarchal mandate that she reproduces. Petersen (2004) argues that one could deduce from the aforementioned conclusion that all women who desire biological children, whether or not by ART, have been socially coerced into having their desire for children - therefore no woman should have children. Although this is the position of Firestone and others, "there is no known culture in the world where childbearing is treated with indifference.

SOCIALIST /MARXIST FEMINISM

Socialist feminism is also known as Marxist feminism.). Socialist feminism, according to Echols (1989) is a marriage between Marxism and radical feminism, with Marxism being the dominant partner. From a Marxist perspective, gender inequality is historical. Its underlying theory assumes equality between individuals in terms of financial independence. People are only equal if they earn independently to support themselves. The structural determinants of gender inequality under capitalism are located in the specifically capitalist articulation between production and reproduction, which make the latter dependent on the former (Gimenez, 1991). Therefore they insist that the only way to end the oppression of women is to overthrow the capitalist system (Moore, 2008). Targeting the interrelated exploitation of capitalism and patriarchy, issues of reproduction, production, women as mothers as well as wage laborers, feminism elaborated on the concept of women's "invisible labor" like unpaid work such as cooking, cleaning, and childcare (www.calvertonschool.org).

Socialist feminism maintains that all issues are political, are based on the dynamic of power, and that our actions have political implications (Park, 1972). Patriarchy is a target for reform (Gimenez 1998; Ryan 1993). According to Booth, Creamer, Davis, Dobbin, Kaufman, and Klass (1997), the two ideological poles currently representing tendencies within socialist feminism are personal liberation and growth and structural analysis. Personal liberation and growth emphasizes

improvement of relationship of women to women—socially, psychologically, and economically. Personal problems are seen as social problems, and the solutions must be social ones (Parks, 1972). Consciousness raising (development of a positive self-image, individual change, and growth) is one major step in the direction of women's liberation. In this fight, women must bond with women and realize that they have to rely on each other. The strength of the personal liberation and growth emphasis is evident in its reaffirmation of human values, taking care of people, being sensitive to people's needs, and developing one's potential (Park, 1972).

The second ideological pole of socialist feminism is structural analysis of society and its economic base. The analysis focuses on the ways in which productive relations oppress women. Booth et al., (1997) argued for a strategy which in their view should accomplish the following three things: 1) win reforms that will objectively improve women's lives; 2) give women a sense of their power, both potentially and in reality; and 3) alter existing relations of power. According to Booth et al. (1997), "We share the socialist vision of a humanist world made possible through a redistribution of wealth and end to the distinction between the ruling class and those who are ruled" (p. 5). According to Jagger (1983), the way to end oppression of women is to put an end to class and gender, and to focus on the context of social relations in the community, which includes aspects of race, ethnicity, and other differences.

According to Park (1972), the following would be among the things envisioned by socialist feminism:

- free, humane, competent medical care with an emphasis on preventive medicine, under the service of community organization;
- women's control over their own bodies - i.e., access to safe, free birth control, abortion, sterilization, free from coercion or social stigma;

- democratic councils through which all people control the decisions which most directly affect their lives on the job, in the home, and community;
- political and civil liberties which would encourage the participation of all people in the political life of the country;
- freedom to define social and sexual relationships; and
- a popular culture which enhances rather than degrades one's self respect for others.

Marxist theory is largely vague or silent on female reproductive issues. However, there is the notion among Marxist feminists that analysis of the new reproductive technologies has to go beyond what is empirically observable, such as relationships between women and their babies, between donors or sellers of the elements of the reproductive process and recipients or buyers. This must be done with the understanding that incidence of sterility and subfecundity among the wealthy are at best minimal, because they have access to the best food, health care, and living and working conditions (Gimenez, 1991). In her critique of Marxist feminism, Firestone (1972) observes that the oppression of women cannot be explained in strictly economic term. While the class analysis was correct in a linear sense, it lacked depth. She maintains that there is a level of reality that does not stem directly from economics.

Like socialist feminism, in the absence of either strong support or clear prohibition of procreative technologies, it leaves room for me to conjecture that, insofar as the drive to produce and employ these technologies does not reflect the promotion of the interests of affluent persons at the expense of the well-being of poor women, Marxist feminism may approve donor conception or surrogacy.

According to Ryan (1993), socialist feminism's responses to procreative technologies are most ambiguous. They maintain that insofar as assisted reproduction allows greater flexibility or

permit women's greater control of the means of production, it may be permitted "To the extent, however, that reproductive technology reinforces the sexual division of labor and serves the profit motive (e.g., as a new form of exploiting women's reproductive labor), it would be a serious mistake to embrace it" (p. 34). They also contend that it would be ill-advised to embrace reproductive technology if it is used in any way that reinforces the ideologies of racism and imperialism or those who produce it are primarily motivated by its commodification and commercialization at the expense of the poor (Ryan, 1993). Christine Overall and Michelle Stanworth contend that it is extremely difficult to know how these interventions will be utilized and it is hard to predict with any precision whether they will be liberating or enslaving (Overall, 1989). According to Ryan (1993), socialist feminism is at best reserved about commercial donated gamete and surrogacy, but yields a qualified acceptance of procreative technologies in the absence of oppression or coercion in any form.

PSYCHOANALYTIC FEMINISM

Chodorow (1989) defines psychoanalysis as "the method and theory directed towards the investigation and understanding of how we develop and experience unconscious fantasies (that form psyche, self, identity) and how we construct and reconstruct our felt past in the present" (p. 5). Psychoanalytic feminism is a theoretical formulation that maintains that gender is not biological but is based on psychosexual development. It explores the manner in which experiential and cultural influences shape women's gender identity and behavior, therefore looking ultimately to the unconscious for the structures of oppression (Tong, 1986, p. 155). Inherent in this form of feminism is the raising of women's consciousness: the development of critical awareness of the cultural factors that shape identity, personal and social realities, relationships and one's position and opinions with respect to these issues (Bricker-Jenkins & Lockett, 1995). According to Paulo Freire (1985), because of the long history of gender subordination, the development of moral

autonomy in women has required some engenderment in a process of conscientization (Freire, as cited in Ryan, 1993, p. 38). Conscientization involves developing the ability to see the ways in which one has internalized the socially constructed definitions of one's nature, capacities, and obligations (Ryan, 1993).

In the view of psychoanalytic feminists, psychoanalysis is useful to feminism only as an account of internalized oppression, an account of how oppressive social relations enter into the psyche. This account is useful because it means the cause(s) of women's oppression can be pinpointed in certain social relations which can be acted on, for example exploitation of capitalism and patriarchy, male dominated assisted reproduction, childrearing practices, violence against women and racial and gender prejudice (Elliot, 1995). Like Marxist feminism, Psychoanalytic feminism is rather silent on female reproductive issues. In view of the fact that all feminist groups have in common 'the welfare' of the woman, the argument can be made that that psychoanalytic feminism would support assisted reproduction, but only when the infertile woman's need for a child is not influenced by her unconscious fantasies. For example: 1) a woman is free to deconstruct the dominant construction of family and reconstruct one that meets her need; 2) on the basis of reproductive freedom, a woman is free to access whatever ART she feels is safe for her; 3) when a woman recognizes that to have a baby is a personal choice; 4) and when a woman recognizes the contradictions between what society tells her about motherhood and her personal convictions about bearing and raising children.

According to Russell (1974), "coming to see the contradictions between... one's experience of reality and one's inner convictions and... the socially-provided definitions of reality, is a critical stage in the formation of an authentic self and thus a precondition for the exercise of autonomy

(Russell, as cited in Ryan, 1993, p. 38). Hope resides in the capacity of each woman for transcendence, for shaping her own existence (Tong, 1986).

POSTMODERN FEMINISM

Postmodern feminism shares beliefs with other forms of feminism. It maintains that there is no single cause for women's subordination and no single approach towards dealing with the issues. Frug (1992) observes that one of the themes of postmodernism is that power is exercised not only through direct coercion, but also through the way in which language shapes and restricts our reality. In his explanation, Hurd (1998) asserted: "The languages of our culture (the verbal and visual signs we use to represent the world to ourselves) literally "construct" what we think of as "real" in our everyday existence" (p.3). Adherents of this theory oppose binary categories or dichotomous pairs such as male and female and black and white, in which one category is privileged and the other is devalued or considered peripheral. From among the postmodern ammunition, deconstruction is used to derail these binary categories, which reveal underlying biases (Sands, 2001).

Since at the heart of postmodernism lies pluralism, social construction, deconstruction, and a belief that all human experience is particular, local and culturally constituted, there is an implied notion that postmodern feminism supports whatever assisted reproductive technologies a woman may desire for herself. On the other hand, since people are active shapers of their reality an infertile individual or couple is free to refuse assisted reproduction. The decision people make is based on their lived-experience with infertility. From a postmodern feminist perspective, there is no correct or absolute way to build one's family.

A UNIFYING FRAMEWORK FOR ACTION: MISSED OPPORTUNITY

Despite great accomplishments by splintered pockets of feminist groups, their impact could be greater and there could have been more sustained accomplishments had there been a unifying

framework for action. Sandelowski (1990) appeals for a feminist framework that embodies an appreciation for individual experiences, yet creates social change:

We must have a unifying framework for action that is neither insulating to nor open to misinterpretations by any particular group of women, an ethical framework that allows that choice and informed consent can and do take place but one that is nuanced to the concrete situations and the differing moral universe of individual women (p. 38).

In sum, the feminist movement was challenged by ideologies (a set of social, political, moral values, attitudes, and outlook) that were often irreconcilable. By the end of the 1990s, there was no unified feminist theory that could fulfill a much-needed leadership in the role of women's reproductive health (Parry, 2005). In her reflections on feminism in the 1990s, Vanessa Baird (1992) remarked that some people may believe that "we are living in a 'post-feminist' age in which women enjoy full rights" (p. 1). She went on to say that it is not difficult to see why these claims are made when feminism has made some spectacular advances in the past 20 years. She notes that anti-discrimination laws have opened a whole new range of jobs to women (especially among the middle-class and educated) who were given far greater economic independence. The number of girls going to school has dramatically increased worldwide; sex has become better as women have exerted their wishes to men and society; and pornography and sexism in language have been challenged with varying degrees of success. She observes, however, that despite these achievements, the world is still ruled by men—and that is bad news for women. She also noted that despite the seeming loss of momentum among feminist in some parts of the world, feminism was still an active force in Bombay, London, Tel Aviv and the United States, though not so much on the issues of the 1980s. Epstein (2002) argues that part of the answer to the apparent silence of

feminist groups in the 1990s is that feminism has become more an idea than a movement; it lacks the impetus that it once had. There is a greater intellectual legacy of feminism available to us than an activist one.

"Of course it's hard and uncomfortable to be silent when someone is telling you about their pain, but no one shares painful feelings expecting the listener to solve the problem or hand out a secret answer."

---Rachel W. Dole, 2004

CHAPTER 6

RESULTS

The purpose of this study was to examine the lived experience of infertility and assisted reproductive technologies from a cross-cultural perspective. The analysis of the data derived from a revised version of Colaizzi's phenomenological method (Colaizzi, 1973 & Colaizzi, 1978) revealed that the experience of infertility, though intensely private and hidden, is created and shaped by cultural and social factors. The data supported prior research findings that cultural beliefs, social attitudes, and expectations about gender roles, children and childbearing, and the related social responses to individuals experiencing infertility have major impact on couples with infertility (Cooper-Hilbert & Hilbert, 1993; Eunpu, 1995; Griel, 1991; Morely, 1994; Sewpaul, 1995).

Shaw, Havtitz, and Delamere (2003) argue that the notion of family as a social construction suggests that the meaning of family is dynamic rather than static, and that there is no "correct" or absolute definition of family. The experience and meaning of family varies cross-culturally (Ishwaran, 1992; Samuel, 1996). The concept of social constructivism takes the historical – cultural argument further to reason that multiple meanings of family co-exist within American and Jamaican societies at any one time, and that these meanings are constantly being negotiated and re-negotiated (Berger & Luckman, 1966; Guba, 1990). One very important finding of this study was how little recognition was given to alternative forms of family. The social construction of family in

the narratives of participants reflects the dominant or hegemonic notion of family, based on marriage and procreation (or adoption) of children. This construction of family is traditional, with a familist or patriarchal ideology. Under patriarchy, men are the arbiters of identity for both males and females, and they determine the roles and expectations of women. Gender stratification operates in a framework of patriarchy that can be clearly defined as a system or society that reflects values underpinning the cultural construction of womanhood and manhood. According to Hope (2002), "The patriarchy is not only male dominance in its strictest sense, but also a persistent ideology of male super-ordination that both men and women maintain consciously and unconsciously" (p. 2). This patriarchal ideology suggests that the traditional family-mother, father, and children is not only appropriate but also natural (Eichler, 1988; Lewis, 2001) and God-ordained.

Participants' discourse about infertility, as revealed in the interview data, implied that the patriarchal construction of motherhood, fatherhood, and family presented major challenges to infertile couples to live up to the expectations to procreate. Television commercials, conversations at work, and comments by friends and family members were often very insensitive and caused infertile couples major suffering. As Franklin (1990) notes, "The typical description of the infertile is one that emphasizes their "desperation," "anguish," and "suffering," and refers to them as the "victims of childlessness," or "unwittingly childless," or as the "victims of infertility" (p. 218).

According to the dominant social construction of femininity, a woman can become educated, work, and be in public life, as long as she fulfills her motherhood mandate. As Payne (1978, cited in Eunpu, p. 115) observes, "The cultural expectation is so strong that couples are almost always asked 'how many' and 'when,' rather than 'whether' they will have children." In

this study the data show that more women than men wanted children because the women believed that motherhood was essential to female identity. The dominant social constructions of fertility and infertility across the U.S. and Jamaica, as revealed in the interview data, were: a) having and raising children was a prized human experience; b) the highest calling of womanhood was motherhood; c) children bring happiness and help to stabilize the marriage; d) child-bearing was a normal expectation of a married couple; e) infertility was a disruption of a major developmental milestone; f) infertility threatens a major life goal; and, g) infertility may be a sign of a curse. Since patriarchy played a major role in the construction of fatherhood, motherhood, fertility, and infertility, men to a lesser degree are affected by their infertility. Callan and Hennessey (1989) point out that “All women are expected to become mothers, but not all men are expected to become fathers” (p. 349). According to Chodorow (1978), a man’s role is that of worker and provider, and fatherhood is considered to be of much less importance. Thorsby (2001) observed that such beliefs were a reflection of social construction, which has given men and women both the vocabulary and confidence to voice their views [of motherhood, fatherhood, and family].

INTERVIEW OBSERVATIONS

The interviews were divided between face-to-face and telephone interviews. As supported by prior research (Chapman, 1995; Eunpu, 1995; Sewpaul, 1995; Williams et al. 1992), women were more willing to participate than their husbands. Some couples approached the interviews in a formal manner and some just chatted to me as if I were a family member. They all asked several questions about the study, including if I could relate to their problems. According to Morley (1994), this is an aspect of the ingroup/outgroup experience described by most participants in her study. Most of the women felt that people who haven’t had their experience would not understand their feelings or story. Telling my story was intentional and purposeful and it was very important that the participants knew that I was a part of the

population being studied. I also meant to empower participants to express private thoughts and observations and recall and reflect on memories. For many, retrieving and reconstructing the stories that were somewhat muted or silenced, was liberating. Most of the participants requested a copy of the findings of the study.

During the interviews, some participants recalled painful experiences especially that of being “stigmatized,” “called derogatory names,” and “being part of a population that suffers in silence.” Others talked about experiencing disenfranchised grief (i.e., where their grief was minimized and ignored by others). As a very engaged interviewer, it was difficult not to become affected by teary eyes. I remained tuned in to each participant and showed respect and emphatic understanding. On the other hand, there were many couples with whom the interview felt more collegial and my role was to elucidate their stories related to my research questions.

PARTICIPANT DEMOGRAPHICS

Fifteen couples in the United States and Jamaica respectively constituted the sample for this study. The total sample was 30 couples, with 29 conjoint face-to-face or telephone interviews. The exception was a case where I interviewed a woman who was recently separated from her husband. All the couples in the sample tried to have a biological child for at least one year, which is the established medical definition of infertility. The overall period attempted to have biological children spread between one and fifteen years. At the time of the interviews four couples in the United States and six in Jamaica continued to receive fertility treatment. There were eleven American couples in the study sample that received assisted reproductive treatments compared to three in Jamaica. The old adage “Time heals all wounds’ did not necessarily apply to all the study participants. Among the 20 couples that were not receiving fertility treatment at the time of the interviews, less than 50% had been able to resolve infertility and the effects it had on them. They often expressed shock, anger, and a deep sense of failure. In contrast, those who “resolved” their

involuntary childlessness reported improved sexual intimacy, liberation from the bondage of infertility, and overall improved inner peace.

The collective participants ranged in age from 22 to 58 and they comprised residents of metropolitan areas, small town, villages and rural communities, representing upper, middle, and lower socio-economic classes. In the United States the majority of the participants had bachelor level degrees, three had post high school training and four had PhDs. In Jamaica the majority of participants had high school Diplomas, two had a master's degree in Social Work, and five had bachelor level degrees. In the United States the types of employment represented by the participants included accountants, secretaries, teachers, college professors, nurses, pastors, social workers, civil engineer, electrician, dressmaker, policemen, and homemakers. In Jamaica they included accountants, secretaries, policemen, social workers, carpenters, farmers, dressmakers, pastors, and teachers. Participants represented a range of denominational groups including African Methodist Episcopalian, Anglican (Episcopalian) Baptists, Free Methodist, Methodist, Pentecostal, Presbyterian, Roman Catholic and Wesleyan Holiness. Some common factors between female participants in both study samples were: caregivers, nurturers, the duty fulfillers—a determination to have a baby to meet society's expectations, career oriented, and they delayed marriage and childbearing in order to pursue career and/or other personal interests.

It is significant to recognize how women have been socialized into caregivers and nurturers and how the roles of women have changed with evolving social constructions of womanhood. According Rhodes (1988) during the colonial era women served vital economic roles and pregnancy and fertility were considered primarily a burden and responsibility. With changing technology and economics women were less needed in the workforce and womanhood was more recognized for its child-bearing functions. The concept of the “true woman” was developed during

the Victorian era, which meant that a woman's destiny was shaped by her biology. Motherhood became her key role and her participation in the larger world was limited. According to Rhodes (cited in Morley, 1994, p. 32) "This view expanded until the qualities of parenthood became exclusively linked with women whose newly found "maternal instincts" made them uniquely suited for nurturing and caretaking." In the years following World War II, we had a larger percentage of women than ever before become mothers. In 1973 the current U.S. fertility rate was 10 to 20 % above the level of replacement and there was much discussion on how to devise antinatalist public policy to achieve a no-growth population (Giele, 1978). Suggestions that the government should encourage completely free and open access to the knowledge, supplies, and services requisite to contraception, abortion and sterilization created cultural tension with especially the pronatalist Roman Catholic Church. In today's society pronatalism is as strong as it was then. It becomes evident from participants' stories that the issue of infertility was not separate from the complex web of women's experience, understanding and feelings about mothering children. Women may pursue career goals and/or personal interests, and as a consequence marriage may be delayed, but they are socialized to believe that they must meet society's expectation - biological motherhood.

The types of diagnoses among American female participants included anovulation, endometriosis, ovulation disorders, unexplained miscarriages, ectopic pregnancies, uterine problems, fibroids, blocked fallopian tubes, cervical dysfunctions, and early menopause. Treatment modalities included ovulation induction, surgeries, artificial insemination by donor (AID) and in vitro fertilization (IVF). In Jamaica the female diagnoses were ovulation disorder, endometriosis, tubal pathology, unexplained infertility, unexplained miscarriages, cervical dysfunctions, and fibroids. The treatment modalities included surgeries, ovulation induction, artificial insemination

by husband (AIH) and in vitro fertilization (IVF). Men in both study samples were diagnosed with low sperm count (oligospermia), no sperm (azoospermia), and sperm that is normal in number but shows poor motility (asthenozoospermia). Treatment modalities included surgery, testicular sperm extraction (TESE), AID and IVF. Among the American participants ten couples had primary infertility and five had secondary infertility, while among Jamaican participants the number was twelve and three respectively.

INTRODUCING THE AMERICAN PARTICIPANTS

Pseudonyms instead of real names are used below to protect the anonymity and confidentiality of the American and Jamaican participants.

Beverly and Milton

Beverly and Milton was a Caucasian couple, married for a period of nine years, who had been subject to infertility assessment and treatment for seven years. They were leaders in a local Baptist church. At the time of the interview Milton was 43 and Beverly was 36 years old. Milton was a law enforcement officer while Beverly was a homemaker; both were previously married. Milton had three children from his prior marriage. Beverly, on the other hand, was never interested in having children until her marriage to Milton. Within the third year of their marriage, Beverly was diagnosed with anovulation and early menopause. Her treatment included ovulation induction and two IVF protocols. With no history of pregnancy, Beverly talked about disappointment, anxiety, guilt, and sadness, during which time Milton seemed withdrawn and unaffected by her emotions. Beverly believed that Milton would have shown more emotions had it not been for his children from his first marriage.

Paula and Henry

Paula was 37 years old; her husband Henry was 49. They were an involuntary childless Caucasian professional couple that had been married for a period of eleven years. Paula had a problem with obesity but received no diagnosis of female-factor infertility. Henry, on the other hand, was also obese and was diagnosed with low sperm count and poor sperm motility. Over a three year period, Henry had drug therapy and two testicular sperm extractions (TESEs) that did not result in a pregnancy. After much prodding, Paula got Henry to accept artificial insemination by donor (AID) as their best chance of becoming pregnant. On the second cycle of AID, Paula became pregnant with a boy. Paula told her relatives about the procedure but Henry did not, although the fact that the child bears no resemblance to him caused him to suspect that his family already knew. Paula wanted another child but Henry was ambivalent regarding another AID child. He was concerned that his mother and siblings would not approve and he was reluctant to initiate a dialogue with them, as he felt uncomfortable discussing personal issues of infertility.

Sarah and Vincent

Vincent and Sarah, 44 and 38 years old respectively, were a Caucasian couple married for fourteen years. They were both members of a non-denominational church and college educated. Vincent was a homemaker and Sarah was a professional. Sarah and Vincent had a child with no complications two years after they were married. One year later, efforts to become pregnant failed. Sarah's doctors first diagnosed her with unexplained infertility. She was later treated with fertility drug therapy, minor surgeries, ovulation induction, and multiple laparoscopies for ovulation disorders and blocked fallopian tubes. She wondered how she could have succeeded in everything she did, except getting pregnant. During the ten years of treatment, Sarah became pregnant with a

boy on the second cycle of IVF. They have subsequently tried to have a third child without success. At the time of the interview they were not receiving treatment.

Charmaine and Charles

Charles and Charmaine, aged 49 and 37 respectively, was an African-American couple married for a period of twelve years. They were members of a Pentecostal church. Charmaine had a college education and Charles had a General Education Diploma. The couple has no history of pregnancies. Charmaine was diagnosed with ovulation disorders and received fertility drug therapy and ovulation induction for at least six years. Much of their frustration lies in the fact that they were from families with no history of infertility, which led them to believe they would have no problems having children when they were ready. Now that several years have passed and they are still childless, Charmaine wanted to try IVF but her husband disapproved. The couple shared the need for a child but the process by which this child may be conceived was a source of contention.

Muriel and Kingsley

“Infertility has put our marriage through the roughest of times,” said 49 year old Muriel. She and Kingsley, age 50, was an African-American couple married for the past thirteen years. Muriel initially had three unexplained miscarriages and was then diagnosed with ovulation difficulties. She received fertility drug therapy and two cycles of IVF, that did not result in a pregnancy. At 49 years of age, Muriel had given up hope of having a biological child, but the scars of infertility remained. Kingsley had two adult children from a previous marriage and appeared somewhat insensitive to the negative effects of infertility on Muriel.

Ronda and Christopher

Ronda was a 33-year-old African American who worked as a medical secretary. Her 39-year-old Caucasian husband Christopher was a carpenter. Ronda and Christopher were not religious

people. Ronda had an ectopic pregnancy and was subsequently diagnosed with unexplained infertility. She received fertility drug therapy, surgery, and one cycle of IVF, which did not result in a pregnancy. Ronda and Christopher borrowed money from relatives to fund their first IVF and were saddened and frustrated by their inability to finance another IVF. At the time of the interview Ronda was researching grants for fertility treatments on the Internet. Subsequent to the interview, two contacts were made with this couple and no changes in their status were reported.

Nellie and Robert

Nellie was a 28-year-old graduate student; her husband was a 32-year-old electrician. Nellie and Robert were raised in Roman Catholic families with many children. Prior to their marriage they cohabitated for two years and frequently talked about having children. A year following their marriage their efforts to become pregnant were unsuccessful. Fertility tests pursued by the couple showed that Robert had low sperm count. This was followed up with an unsuccessful testicular sperm extraction (TESE). Being Catholics, Nellie and Robert realized that they might have to make choices that were against the teaching of their Church. After three years of treatment, Nellie became pregnant with twin girls on the second cycle of artificial insemination by a donor (AID). Initially, Robert was excited about the pregnancy, but he later experienced negative emotions about not being their biological father. According to Robert, “I feel bad that I am the reason we can’t have children of our own. I feel insignificant; at best I feel like a failure—I can’t help create a baby. I feel neutered.” Nellie on the other hand said that she was very thrilled to be the mother of two beautiful girls. This brief message says so much about dominant social constructions about biological parenthood – the “blood knot” – the child, born of his wife and being raised by him is seen as not “our own”. The inability to produce a child is constructed as him being “insignificant”; “a failure”; “neutered” –the corollary argument is that the ability to

become a parent is seen as “successful”; “significant”; “manly”; and “masculine”. Subsequent to the interview two contacts were made with couple. On the first contact I was informed that they were in counseling. On the second, I was informed that they concluded counseling but the problems were unresolved and they were contemplating divorce proceedings.

Zelma and Lloyd

Zelma and Lloyd, aged 26 and 28 respectively, was a Free Methodist couple, married for a period of six years. They were both professional people. During the second year of their marriage Zelma was diagnosed with ovulation difficulties. After pursuing conventional medical treatments unsuccessfully, the couple opted for IVF treatments. Zelma became pregnant with a girl on the second cycle of IVF. She considers herself blessed with a husband like Lloyd who was supportive in every way possible. At the time of the interview they were trying to have a second child.

Lorraine and Dave

Lorraine and Dave, aged 32 and 39 respectively, was a Catholic couple, married for a period of seven years. Both were Catholics who did not rigidly subscribe to the Church’s teaching on IVF. Lorraine was diagnosed with uterine problems and fibroids and Dave had low sperm count and poor motility. Their treatment included fertility drug treatments, acupuncture, surgery, and two cycles of AID and IVF respectively that did not result in a pregnancy. At the time of the interview, they were considering adoption, but it was seen as “last or second” best option. Lorraine’s and Dave’s view of adoption is reflective of the complexities involved in infertility and the dilemmas in adoption decisions. According to the dominant social construction of femininity, the opportunity to become pregnant was an important developmental milestone for married couples. For Lorraine and Dave, when this opportunity is challenged through reproductive failure, adoption is not always a viable solution. The social construction of family also highlights one of the paradoxes of religion,

in that while there are children who are in need of a home, love, and care, even though caring for the “other” is seen as noble, the ability to produce one’s “own” child is constructed to be nobler and a success – a reward as claimed in religious text for being faithful and good.

Hillary and Bob

Robert and Hillary were married when they were 36 and 38 years old respectively. At the time of the interview, they both had college degrees, were financially secure, and involuntarily childless. They were members of a non-denominational charismatic church. They were both raised in large families and thought that they could have children whenever they were ready. During the recent past Hillary suspected she had endometriosis, but was devastated when her gynecologist confirmed the diagnosis and explained its implications for pregnancy. Her initial treatment included multiple laparoscopies, ovulating medications, and intrauterine insemination (IUI’s). Following the first three years of childlessness, Hillary experienced major depression for which she received medical treatment and psychotherapy. She also received support from the National Fertility Association (RESOLVE), a non-profit organization providing support, advocacy and information to infertile people. They became pregnant with a boy on their second cycle of IVF. Following the birth of their baby, Hillary assumed the role of an advocate for infertile women.

Ashley and James

James and Ashley, aged 32 and 29 years respectively, was a Free Methodist couple married for a period of six years with no history of a pregnancy. Ashley was diagnosed with ovarian cysts and ovulation disorder. She also had a history of congenital heart disease (CHD). A pregnancy-related complication could have adverse consequences for her and her fetus. These circumstances have caused her mother and siblings to prefer that she and James consider adoption or remain childless. Nonetheless, James and Ashley have had ovulation induction and one cycle of IFV, but have not

been able to achieve a pregnancy. At the time of the interview they were in the preparatory stages for the second cycle of IVF. They hope to pursue adoption should the upcoming IVF fail to produce a viable pregnancy. Their apparent obsessive attempts to become biological parents seemed to over-ride the risks posed should Ashley become pregnant. She can have complications which include heart failure, arrhythmias, stroke, with the possibility of her and the baby dying (Earing, 2007). Though an adoption would be convenient and offer no health risks, because of the premium the dominant social construction has placed on “biological parenthood,” James and Ashley were willing to take the risk and should they not succeed in becoming pregnant, they said that infertility would become a major loss and grief issue for them. They strongly believed that their inability to have a biological child would reinforce what some relatives had already thought of them. Moreover, involuntary childlessness would send the message that they are somehow incomplete adults and incomplete sexual beings.

Liz and Jim

Jim was a schoolteacher and Liz was a nurse. They were both in their mid thirties and had their first child just around the time of their first anniversary. They tried to have a second child but they could not achieve a pregnancy. Liz was diagnosed with blocked fallopian tubes, which was a crushing blow to their plans for having three children. They were Catholics, but at this point were unwilling to conform to the official stance of their church on IVF, which they finally tried. They became pregnant on their first cycle of IVF but Liz later miscarriage due to the failure of IVF. Liz questioned her inability to have another baby. Although she was scared to go through another IVF because of concerns about repeated miscarriage, reinforcing the dominant social construction of femininity, Liz at 34 years old believed that womanhood was defined by motherhood and she could not accept adoption as a viable alternative. She wanted another biological child. Jim

supported whatever decision she made and reassured her that their marriage could be strong without another biological child.

Peggy and Matt

Peggy and Matt, aged 35 and 37 years old respectively, was a Presbyterian couple who had been married for a period of ten years with no history of pregnancy. Both their professions entailed working with children, which presented some difficulties for an involuntarily childless couple. Peggy was diagnosed with ovulation disorder and Matt was diagnosed with low sperm count and poor motility. Their treatment included multiple laparoscopies, IUI's, ovulating medications, TESE, and IVF. The interview with the couple occurred a week following their third unsuccessful cycle of IVF. Peggy lamented the physiological and psychological challenges and inconveniences of IVF treatment. Another cycle of IVF was put on hold while the couple contemplated adoption as an option. Peggy planned to resign from her job and pursue a Day Care business at her home. This will give her a chance to care for children. Matt planned to devote more time to Peggy and do whatever it takes to defocus from their infertility.

Rosalind and Larry

Rosalind was a 31-year-old African-American woman who recently separated from her husband Larry. The couple was married for a period of nine years, within which time Rosalind had six unexplained miscarriages and one ectopic pregnancy. The latter resulted in major damage to her fallopian tubes. Following her divorce, Rosalind's desire to experience biological motherhood propelled her to pursue IVF treatment with a donor's sperm. She completed most of the preparatory treatments, but discontinued the process due to financial difficulties. At the time of the interview, she had future plans to accomplish motherhood through adoption and the pursuit of IVF by donor sperm.

Julie and Jack

Jack and Julie, aged 48 and 35 respectively, were members of a non-denominational church, married for a period of twelve years. Jack was a law enforcement officer and Julie was a homemaker. Both were in previous marriages. Julie got married very young and because, as a couple, they were not interested in having children, she stayed on birth control throughout the duration of that marriage. Jack, on the other hand, had two adult children from his prior marriage. Despite her desire to have a child with Jack, Julie was diagnosed with ovulation disorder and early menopause. She received treatment which included fertility drug therapy, ovulation induction, and fertility herb (over-the-counter), which did not result in a pregnancy. After a short break, the couple planned to resume treatment for a while. The break was taken in order to spend some quality time with their newly adopted two-month-old son. Julie stated that her gynecologist prescribed medications that allowed her to breastfeed the baby. According to Julie, breastfeeding gave her a sense of true motherhood and she promised to breastfeed until the baby was a year old.

PICTORIAL PRESENTATION OF DATA

Tables 1 and 2 provide a pictorial display of the participants' diagnoses, treatment modality, and religion, which comprise a significant part of their story. The tables are also included for easy reference to the data as provided by the participants.

TABLE 1
SUMMARY OF DATA AMONG AMERICAN PARTICIPANTS

CASE NO.	NAMES OF COUPLES	DIAGNOSES	TREATMENT MODALITY	RELIGION
1	Beverly/Milton	Anovulation; early menopause	Conventional treatment; IVF (unsuccessful)	Baptist
2	Paula/Henry	Low sperm count; poor motility	TESE; AID (successful)	Free Methodist
3	Sarah/Vincent	Unexplained infertility; ovulation disorder; blocked fallopian tubes	Conventional treatment (unsuccessful); IVF (successful)	Non-Denominational
4	Charmaine/Charles	Ovulation disorder	Conventional medicine	Pentecostal
5	Muriel/Kingsley	Unexplained miscarriages; ovulation disorder	IVF (unsuccessful)	Baptist
6	Ronda/Christopher	Ectopic pregnancy; unexplained infertility	IVF (unsuccessful)	Non-religious
7	Nellie/Robert	Low sperm count	TESE; AIH (unsuccessful); AID (successful)	Roman Catholic
8	Zelma/Lloyd	Ovulation disorder	IUI (unsuccessful); IVF (successful)	Free Methodist
9	Lorraine/Dave	Uterine problems; fibroids; low sperm count; poor motility	AID; IVF (unsuccessful)	Roman Catholic
10	Hillary/Bob	Endometriosis	IVF (successful)	Non-Denominational
11	Ashley/James	Ovulation disorder	IVF (unsuccessful)	Free Methodist
12	Liz/Jim	Blocked fallopian tubes; cervical dysfunctions	IVF (unsuccessful)	Roman Catholic
13	Peggy/Matt	Ovulation disorder; low sperm count; poor motility	TESE; IUI; IVF (unsuccessful)	Presbyterian
14	Rosalind/Larry	Unexplained miscarriages; ectopic pregnancy; damaged fallopian tubes	Conventional medicine	African Methodist Episcopalian
15	Julie/Jack	Ovulation disorder; early menopause	Conventional medicine	Non-Denominational

INTRODUCING THE JAMAICAN PARTICIPANTS

Peggy and Larry

Peggy and Larry, aged 37 and 39 years old respectively, have been married for a period of nineteen years with no history of pregnancy. Peggy worked as a secretary and Larry was a college student. The couple's situation was complicated because Peggy was diagnosed with unexplained infertility but Larry was not tested for male factor infertility. They were never certain which of the two was infertile. For the first five years of their marriage, Larry ignored all suggestions that he may have male factor infertility or may be contributing to their infertility; hence he should go for testing. In the meanwhile, Peggy had multiple laparoscopies, a surgery, and fertility drugs. After ten years and no successful pregnancy, Peggy only saw her doctor for routine gynecological examinations as she was dissatisfied that Larry was not interested in getting tested; he no longer accompanied her to the doctor; and, overall he appeared too disconnected from all that she was doing to have a baby. Larry claimed that Jamaican men have a phobia when it came to seeing the doctor to discuss fertility problems. In other words, Jamaican men live with a dilemma. On one hand, we would like to know about our infertility and, on the other, we prefer not to know. Peggy said she knew very little about assisted reproductive technologies, but from what she heard, she was interested. However, their financial circumstances made it unaffordable. Notwithstanding, adoption was not an option for the couple. Larry's resistance to medical test for male factor infertility is evidence of a strongly held cultural belief and practice of males in the Jamaican sample. Like many other cultures, most Jamaicans tend to see infertility as a woman's issue.

Grace and Paul

Grace and Paul, aged 51 and 54 years old respectively, were married for a period of 18 years. She was a secretary and Paul worked as a laborer in a manufacturing industry. They both had children from prior common-law unions. However, their union suffered two miscarriages during the early

years of their marriage and Grace subsequently was unable to conceive. They pursued conventional medical protocols for a number of years, during which time assisted reproductive technologies were not available in Jamaica. The couple has somewhat adapted to their involuntary childlessness and was devoting much of their energies and resources to their five grandchildren who visited on a regular basis. Grace believed that despite the pain and grief associated with their infertility, it might have been the will of God.

Yvonne and Byron

Yvonne and Byron, aged 36 and 43 years old respectively, have been married for a period of six years. They were both non-professional workers. Before they got married, they agreed to have two children. Being unable to conceive, Yvonne's family doctor told her that she might have endometriosis but that she needed further tests to confirm or rule out the diagnosis. However, their financial circumstances rendered those tests unaffordable. Also, Byron was not interested in Yvonne's spending their limited financial resources in the pursuit of fertility treatment since he already had two children from a former common-law union. Although Yvonne wanted to confront Byron, she disliked the altercations that usually followed a discussion on infertility. Being a woman of faith, she prayed that Byron would partner with her in their quest for a biological child. Adoption was not an option for this couple. Yvonne's and Byron's marriage brings to the fore issues with reconstituted families and adoption. The problem had to do with the fact that Byron had two children from a prior relationship while Yvonne was involuntarily childless, and he was not willing to do whatever it took to partner with her in the pursuit of a biological child. Secondly, despite unsuccessful medical treatments, or in the case of Yvonne and Byron, the inability to afford treatment, with very few exceptions, couples are hesitant to consider adoption as an alternative to a biological child.

Lucy and Ken

Lucy and Ken, aged 45 and 54 years old, have been married for a period of twenty-one years. They were a Christian professional couple that had vivid memories of the impact of infertility on their physical, psychological, and social life. Lucy was diagnosed with endometriosis and pursued conventional medical treatments unsuccessfully. She recalled having had many frustrating, sad and angry days. Her deliverance came when she finally concluded that God knows best and that her infertility was not of her choosing. Ken, on the other hand, was not interested in getting tested for male infertility and frequently retreated when Lucy raised the issue. The couple, now passed childbearing age, was content to talk about the many nephews, nieces and godchildren that they have parented.

Jennifer and James

Jennifer and James, 34 and 42 years old respectively, was a Baptist couple married for a period of eight years. This couple dated for several years and delayed marriage in pursuit of educational and professional goals. Jennifer worked as an assistant bursar and her husband was a law enforcement officer. Jennifer was diagnosed first with unexplained miscarriages and then with ovulation disorder. The experience of infertility punctuated her life with emotions of anger, frustration, and grief. She compared herself with her sisters who had no problems having children. James was never tested for male factor infertility and constantly evaded the subject and kept his thoughts and feelings to himself. The couple was aware of assisted reproductive services, but Jennifer wanted to give conventional medical protocols another chance to work.

Pauline and Thomas

Pauline was a 36-year-old professional woman, who has been married for a period of thirteen years with a history of infertility. She was diagnosed with blocked fallopian tubes. Her husband was not

examined for male factor infertility, but there were no reasons to suspect his fertility as they had conceived through AIH. The couple belonged to the Roman Catholic Church and they did not consider AIH protocols a violation of the Church's official stance on ARTs because they are both biological parents of the child conceived. To the contrary, the Catholic Church officially does not condone AIH, but couples like Pauline and Thomas rationalize their use of the procedure. In her study, Sewpaul (1995) found that different theologians within the Catholic faith support couple's use of ARTs of different forms but many couples do not know this.

Elaine and Ben

Elaine and Ben were both 32 years old. Ben was a Baptist Pastor and Elaine was a professional woman in the community. They were married for a period of nine years with a history of infertility. Elaine had three miscarriages and was diagnosed with cervical dysfunctions. Ben strongly believed that God would bless them with a biological child. In the meanwhile, the couple foster parented a three year old niece. Culturally, this is what couples do to defocus from an urgent need to have a baby. Elaine planned to resign her job, or, if necessary, do a voluntary hospitalization whenever she becomes pregnant again.

Janet and Shane

Janet and Shane, aged 26 and 28 years old respectively, were a Presbyterian couple, married for the past seven years. They had their first child nine years ago when they were in college. They got married soon after they graduated from college. For two years they were unable to become pregnant. While Shane refused to go for testing, Janet had numerous tests and was diagnosed with unexplained infertility. They subsequently pursued a period of failed conventional medical protocols, which caused them much anxiety, disappointment, and grief. At the time of the interview, they were saving money to pursue IVF treatment.

Simone and Derrick

Simone and Derrick, aged 38 and 39 years old respectively, have been married for a period of twelve years with a history of infertility. They had a total of seven unexplained miscarriages, despite complete bed rest and intermittent hospitalizations. After the first two miscarriages Simone was diagnosed with cervical dysfunctions, fibroids, and adhesions, but on her doctor's advice she kept trying to have a baby. On three occasions her gynecologists prescribed deprovera and other forms of birth control to slow the rate of her pregnancies. Simone contemplated surrogate motherhood but her husband disapproved. She described her marriage as a "living hell," with multiple surgeries, her husband's multiple affairs, and the continuous psychological pain of infertility, which all led to severe emotional trauma for which she received medical treatment and psychotherapy. She believed that if only she could give her husband a child he would be faithful to their marriage. After fifteen years of failed medical protocols, Simone's gynecologists advised her to discontinue pursuit of biological motherhood, owing to deteriorating reproductive organs and age. Given the social pressure for women to become mothers, the nature of the treatment experience, and the lack of valuable options for women other than motherhood, it is not surprising to meet women like Simone for whom infertility is a crisis. Like most women, Simone gave high importance to security and stability in marriage and believed the myth that a child would improve marital satisfaction and eliminate her husband's extramarital affairs. The reality is that the allurements of extramarital affairs has nothing to do with the infertility of a spouse. In Jamaica, marital infidelity is primarily a legacy of slavery, and as such a part of the cultural heritage. It is almost normative for married men to sire children outside their marriage. In Jamaica and the Caribbean, the common adage is "a man got to do what a man got to do." According to classical literature, "Husbands are expected to be unfaithful to some extent, and wives are expected to be

faithful and modest (Clarke, 1957, p. 90; Otterbein, 1966, p. 68). However, Clark made an exception, “that middle class Jamaican husbands are expected to remain faithful” (Bastien, 1964, p.498; Horowitz, 1967, p. 56; Smith, 1956, p. 114, 180). According to Patterson (cited in Mehegan and Staff, 1999), we are only a few generations removed from slavery. Slavery and the slave master decimated the roles of father and husband and indeed all other significant male roles. Afro-Americans and Afro-Caribbean are still living with the devastating consequences of this male attitude.

Monica and Charles

Winsome was a 29-year-old professional woman, married for a period of nine years. Her husband Charles was a 35-year-old preacher of a Baptist church. Winsome was diagnosed with cervical dysfunctions and fibroids and had five miscarriages. Charles was very supportive and was hopeful that God was going to bless them with a child. Following some surgeries and a long period of conventional fertility treatments, Winsome became pregnant for the sixth time. This time, with Charles’ support, she resigned her job and went on complete bed rest, most of which was spent in the hospital. At the time of the interview, their son was an active two year old. Charles recalled the difficulties surrounding Winsome’s hospitalization and the cessation of the sexual relationship throughout the duration of the pregnancy.

Arlene and Jeffrey

Arlene and Jeffrey were both 25 years old when they got married and they had been married for the past five years. They were college-trained professionals who did not profess a religious faith. For several years, Arlene was diagnosed with fibroids. They successfully became pregnant soon after it was planned, but two months into the pregnancy an ultrasound indicated that the fibroids absorbed the fetus. She had a Dilation and Curettage (D& C) to remove the miscarried fetus and a

myomectomy to remove the fibroids. They reported that they sensed a great deal of loss and mystery all at the same time as they wondered if what occurred with their baby was some kind of sign from God. With the help of traditional medical protocol, they tried again to get pregnant but they were unsuccessful. Subsequently, a 2-cycle AIH protocol was undertaken. After completion of the second, Arlene became pregnant with a boy. At the time of the interview, their son was a year old.

Patrice and Evan

Patrice and Evan, aged 52 and 55 years old, were a non-professional couple with a history of infertility. At the time of the interview, they were married for a period of twenty-seven years. Two years into the marriage Patrice was diagnosed with blocked fallopian tubes and Evan was diagnosed with low sperm count and poor motility. Patrice received conventional fertility treatments while Evan refused treatment because he was not interested in having children. For this couple, infertility was the source of many altercations and threats of divorce. The couple reported that despite the many years that have elapsed since they last tried to become pregnant, adjustment and adaptation to involuntary childlessness has not been easy. They believe that their combined knowledge and personal experience with infertility allow them to provide guidance, encouragement, and answers to common questions of individuals or couples with infertility. Interestingly, infertility support groups are non-existent in Jamaica, simply because it is difficult to get people with the problem to attend meetings.

Marlene and Barry

Marlene and Barry, aged 41 and 43 years old respectively, were a Anglican professional couple married for a period of eighteen years. They postponed childbearing in pursuit of career goals until their mid thirties. Marlene had two occasions when she felt pregnant but the tests were negative.

She was first diagnosed with anovulation and then with premature menopause. They pursued conventional medical treatments and one cycle of IVF, with no history of pregnancy. Although they felt like they were adjusting to involuntary childlessness, they had problems volunteering in the Nursery at church on Sundays. For the last ten months they informally adopted two nieces of middle school age and they were enjoying parenthood in that context.

Winsome and Paul

Winsome was a professional 56 year old woman, married to Paul, her high school sweetheart, for a period of thirty-six years. Paul was a 58-year-old college professor who studied both in Jamaica and the United States. Their union produced no children. Winsome was diagnosed with ovulation disorder and Paul with low sperm count and poor motility. Since they were both busy with their professions, becoming parents was not one of their priorities until they were in their late thirties. Even then, the couple enjoyed talking about everything except infertility. There was this unwritten rule “not to talk about it,” said Winsome. For many years the couple provided room and boarding for a number of high school and college students, which afforded them the opportunity to do some parenting. Winsome regretted not having either a biological or adopted child to inherit their estate. For the last two years, Winsome had been struggling with uterine cancer. Subsequent to the interview, Winsome passed away and Paul was having difficulties coping with her loss.

Millicent and Henry

Millicent was married at age 22 to Henry, her high school sweetheart. At the time of the interview, they had been married for a period of ten years with no history of pregnancy. Millicent was diagnosed with ovulation disorder and Henry with low sperm count and poor motility. She said that, with limited financial resources, she had gone beyond the call of duty to get pregnant while Henry continued to refuse treatment. She theorized that Henry was experiencing a two-fold crisis.

He was equally afraid to face his diagnosis of male infertility and was affected by the super-virile male stereotypes in the culture.

Table Two**SUMMARY OF DATA AMONG JAMAICAN PARTICIPANTS**

CASE NO	NAMES OF PARTICIPANTS	DIAGNOSES	TREATMENT MODALITY	RELIGION
1	Peggy/Larry	Unexplained infertility	Conventional medical (unsuccessful)	Baptist
2	Grace/Paul	Miscarriages	Conventional medical (unsuccessful)	Baptist
3	Yvonne/Byron	Endometriosis	Conventional medical (unsuccessful)	Presbyterian
4	Lucy/Ken	Endometriosis	Conventional medical (unsuccessful)	Methodist
5	Jennifer/James	Unexplained miscarriages; ovulation disorder	Conventional medical (unsuccessful)	Baptist
6	Pauline/Thomas	Blocked fallopian tubes	Conventional medical (unsuccessful); AIH (successful)	Roman Catholic
7	Elaine/Ben	Miscarriages; cervical dysfunctions	Conventional medical (unsuccessful)	Wesleyan Holiness
8	Janet/Shane	Unexplained infertility	Conventional medical (unsuccessful)	Presbyterian
9	Simone/Derrick	Unexplained miscarriages; cervical dysfunctions; fibroids; adhesions	Conventional medical (unsuccessful)	Baptist
10	Monica/Charles	Cervical dysfunctions; fibroids; miscarriages	Conventional medical (successful)	Baptist
11	Arlene/Jeffrey	Fibroids	Conventional medical (unsuccessful); AIH (successful)	Non-Religious
12	Patrice/Evan	Blocked fallopian tubes; low sperm count; poor motility	Conventional medical (unsuccessful)	Non-Religious
13	Marlene/Barry	Anovulation; premature menopause	Conventional medical (unsuccessful); IVF (unsuccessful)	Anglican
14	Winsome/Paul	Ovulation disorder; low sperm count; poor motility	Conventional medical (unsuccessful)	Baptist
15	Millicent/Henry	Ovulation disorder; low sperm count; poor motility	Conventional medical (unsuccessful)	Baptist

MAIN FINDINGS OF THE STUDY

After the interviews were coded for different categories, the researcher grouped categories into themes. Thirteen different themes emerged and instead of presenting them in the order in which the participants described them, I presented them from a biopsychosocial framework that underpins this study (i.e., biomedical, psychological, and socio-cultural experience with infertility). Related themes were found in several categories and while such repetitions were significantly minimized, quotations used in one theme may actually indicate applicability for another theme. These quotes are used liberally to focus on circular and inter-relationships among factors rather than static and linear presentation of data with “thick” description of data to truly lend voice to the participants’ thoughts, feelings, and experiences.

BIOMEDICAL EXPERIENCE

Diagnoses Received by Participants

Participants received a wide range of infertility diagnoses, which are underscored by those in the literature (Doherty, et al., 2001; Turkington, et al., 2001; Speroff, et al., 1999; Garner, 1995). Among the American and Jamaican participants, the most commonly cited cases of female-factor infertility were ovulation disorder, endometriosis, tubal pathology, and unexplained infertility. For men it was oligospermia, azoospermia, and asthenozoospermia. American male participants had at least one fertility test and those tests were coordinated with the evaluation of their partners. Among the Jamaican male participants, eight had wives who had unsuccessful pregnancies and their doctors did not require them to test for male factor infertility; three were tested positive for male infertility but refused treatment; and four refused to be tested. According to Larry:

To be honest with you, I don't think anything is wrong with me. In fact, I know that I am fine. Many years ago, in high school, I got a girl pregnant but she had to

abort it. I am from a family that has a lot of children. Why should I be singled out for infertility testing? Which man you see going to the doctors to do the kind of testing that they require when they know that the problem lies with their wife? I could guarantee you that if I got involved with another woman who is fertile she would become pregnant.

As previously mentioned, Jamaican male resistance to fertility test and treatment was evidence of a strongly held view that infertility is a woman's issue. Despite studies showing that infertility affects males and females with almost equal frequency, doctors appear reluctant to require that their husbands come in for male factor infertility testing. Some women lamented the inequities in their relationships, in that whereas the infertile husband often distanced himself from treatment, they have made themselves available for invasive treatment processes just to ensure that they did not have a problem conceiving. According to Sewpaul (1995), "The subtlety of the abuse and victimization of women within... medical structures often go unnoticed. Most of the literature, for example, regarding infertility diagnosis [for women] simply computes the statistical information without considering the process involved in arriving at such diagnoses."

For centuries, women enjoyed an exclusive medical specialty of obstetrics and gynecology. Historically, Jamaican women have learned to discuss with their doctor intimate details about their body functions. In general, Jamaican men do not like going to the doctor and they are more inclined to conceal their illness. Only recently the medical profession has devoted its energies and expertise to developing a practice in men's reproductive health. Within the Jamaican culture, this is a new phenomenon. Not only is news of a diagnosis of male-factor infertility damaging to men's patriarchal script, it causes Jamaican men to become self-conscious, stigmatized, emasculated, and shameful. The cultural standards of what it means to be male and masculine are an intrinsic part of

the male child's socialization, and when a man is infertile his self-esteem is deeply affected (Devereaux & Hammerman, 1998). For these reasons, the men in this study found it difficult to get tested and seek medical treatment. For the three men diagnosed with male-factor infertility, for cultural reasons it was extremely difficult for them to expose their vulnerability to a male physician, or worse, to a female physician. An interesting discovery was that the men who went for testing said they were influenced more by their male counterparts than their wives to do it. The Jamaican women being raised with patriarchal scripts protected their husband from embarrassment by not sharing information about their infertility despite their refusal to be tested or seek treatment for male factor infertility. As Millicent says:

There are so many people who said to me that Henry may be the reason why we don't have children, but I neither confirm nor deny anything. Although I get really angry sometime with Henry I can't find it within me to scandalize him. But if I was the only one with a problem, I believe he would share it with his close friends or family members just to protect his image.

There are some conclusions that may be drawn that explain why American male participants all had at least one fertility test coinciding with the evaluation of their partners. First, the United States has a long history of health care professionals who take an increased interest in sexuality and disability (e.g., American Association of Physical Medicine and Rehabilitation; American Association of Sexuality Educators, Counselors and Therapists; Society for the Scientific Study of Sexuality; Center for Disease Control (CDC); and American Society of Reproductive Medicine). The services they offer and the journals and educational literature they produce bring the issue of infertility to the public and, to a great extent, helped to normalize male and female infertility. Probably to a greater extent the proliferation of assisted reproductive

technologies into American society publicized by media commercials has given American men the courage to access male factor infertility testing and treatment more readily than their Jamaican counterparts. Secondly, in 2005 there were 422 fertility clinics in operation in the United States (CDC Reproductive Health, 2006) as compared to one fertility clinic in Jamaica, located in Metropolitan Kingston. While Jamaicans living in some major cities and town may have access to local gynecologists, some rural parts have limited access. In contrast, people in the US have access to a much larger pool of fertility clinics and more males are being tested and treated for male factor infertility. However, many American men refuse to be tested for male factor infertility and those who live in rural parts might not be well served.

With respect to the frequency of infertility between males and females, such data were not available among Jamaican couples because most of the husbands did not receive a medical diagnosis. However, among the American study sample, male-factor infertility was approximately 12%, female-factor infertility was approximately 76%, and combined male and female infertility was approximately 12%. This particular finding was not consistent with prior studies, which show that infertility affects males and females with almost equal frequency (Longe, 2005; Rowland, et al., 2005; Zastrow, et al., 2005; Evens, 2004; Youngkin, et al., 2004; Daar et al., 2001; Cooper, et al., 1994; Cooper-Hilbert, et al., 1993) and may reflect the bias of the convenience and snowball sampling I utilized, which was heavily dependent on the willingness of people to participate. The following story is reflective of how I got Jamaicans to participate, but more so, Muriel's testimony of how she got others to join her. She reported:

A couple with whom we shared many conversations at the fertility clinic wanted to share their story with you, but they were somewhat ambivalent. They asked us to join them and that is essentially why we are doing this interview today. Dave

and I have always declined talking about our infertility problem in public, but this time around I felt like I wanted to talk about our experience. I am a little nervous for the two husbands, because I do not know if they will stay for the entire interview. Anyhow, I believe this interview will bring positive results. They may say something about how they feel which they have never shared with us before.

Doctor-Patient Relationships

While participants from both study samples expressed satisfaction with their medical treatment, the majority found their medical care to be occasionally impersonal, dehumanizing, withholding of accurate information, disillusioning, and inadequate. This group also found their infertility diagnosis and treatments to involve extended arduous clinical intervention that were often traumatizing. They said that they would have preferred their doctor's office to be a safer place, and doctors and nurses more emphatic. According to Berson (1984), couples seeking medical help usually have different expectations, which the doctors often do not recognize. Doctors, she argues, must look for differences among first-time and those who are continuing treatment, couples in the first stages of their treatment and couples who have already attained a viable pregnancy. Sometimes couples' self-esteem is badly damaged by their infertility and they are so depressed and discouraged that they bring few positive feelings to the encounter. Stockdale (2004) argues that infertile individuals/couples are vulnerable when they see their doctor and they are in no state of mind to confront the doctor about his/her attitude - if only because they are more concerned about getting treatment than addressing poor bedside manners. Jennifer, Marlene, and Simone (Jamaicans), Milton, Hillary, and Muriel (Americans) are representative of the cross-cultural sample who reported doctors as poor listeners, poor communicators, and unable to

acknowledge people's emotions or recognize that somebody under their care may be anxious and need reassurance. Jennifer remarked:

That was my way of looking at things. I was looking at how long ago I started treatment and the many years of failure. I don't know how much longer I can bother with pain, inconvenience, and violation of my privacy... I wish my doctor had some better answers for me. Most of the time it seems as if he did not want to answer my questions. Of all my doctors, I just thought that I would feel safer with him, but I wasn't. He wants me to consider IVF but I read about Clomid—a hormone used to superovulate women and it can produce multiple eggs. I am not sure but I heard that Clomid could cause ovarian cancer. Those are potential risks that I am not yet willing to take—not when I am not sure I get honest answers from my doctor.

Marlene noted how her doctor did not prepare her adequately for a painful medical procedure. Neither did her doctor's behavior indicate that he was aware or mindful of her pain.

The doctor introduced me to in vitro fertilization and all those things. The problem was that I just had surgery and he told me about so many things that I need to be doing when I return home in the recovery room following my surgery. What can I reasonably be expected to remember? I was so weak and in pain—I could not listen to him. This was my first hospitalization and I felt like everybody is rushing to get me discharged before the end of the day. I was in so much pain and I felt like I needed to spend another day. That was all about what my insurance was willing to pay for hospitalization. I really want to have a baby but I am getting scared. I am really looking forward to finding a doctor with whom I

feel comfortable—one who listens to me and I can have all my questions adequately answered.

Simone, who had six prior unexplained miscarriages, was pregnant for the seventh time. Because her pregnancies were termed “at risk,” she visited her doctor as needed. During the third month of this pregnancy, she had three emergency visits. She remembered feelings of despair as the doctor sent her off to the hospital in a rather cold and uncaring tone. She observed that he had no words of comfort for her and neither were the doctors and nurses at the hospital sensitive to the magnitude of her loss.

I felt like my world was crumbling. My baby and I needed medical help but no one was able to save my baby. I never knew that medicine was so limited and doctors could be so nonchalant to tell me that my pregnancy had no hope of survival. God knows how many times I felt suicidal in that hospital. My husband who was with me told me that they had me on a stretcher in the hallway and when my modesty was not being preserved, he encountered problems with the medical staff when he made efforts to have me decently covered with a sheet. At the end of that so-called nightmare, I lost my baby. This was number seven! Where is hope in all of this? (Simone, age 37)

For many couples, their doctors showed a lack of understanding of what goes on in the life of an infertile person (i.e., the physiological and psychological effects of fertility treatments). Doctors reportedly either minimized their suffering or did not have the capacity to show empathy and care. Hillary describes this well:

I am thankful to God for our IVF baby girl, but I did have a very rough time throughout the treatment process. Had it not been for RESOLVE, I would have

been a mess. I was often too depressed to comply with all the physical and psychological demands of IVF protocols. I wanted a child but not multiple pregnancies. From all that I know, multiples come with too much problems. I got soreness at the site of my injections and abdominal discomforts and the inconvenience of going back and forth to the doctor's office after every sexual intercourse drove me crazy. He either did not know or care that sometime I had no energy to do anything, much less to visit his office so often. Under his treatment I had no private life and that frightened me. After I went through all of that and my period came the following month I was devastated. My doctor's words were always "look on the brighter side." Clearly he had no idea of what I was experiencing because there was never enough time for him to listen to what I had to say; it was always his agenda. I often felt like a number on his caseload. Neither did he appear to be engaged with me. I do not expect my doctor to be a therapist; I just wanted my doctor to listen and talk with me during my appointments. For all I care he was just there to move me from one step to another for a significant sum of money. Did he really care about my feelings? I don't think so!

The above case examples support much in the literature, confirming that physicians are often insensitive, lacked social skills, and lacked compassion for humiliation involved in some diagnostic procedures. According to Berson (1984), doctors are often unaware of the power their diagnosis wields, or the meaning of a first hospitalization and the first surgery. Stockdale (2004) argues that healthcare may have come a long way, but it remains a system based on authority. Some specializations of healthcare require that decision, precision, speed, and a clear line of

command take precedence over sensitivity to human issues. As long as a doctor is medically competent, the general public usually tolerates his/her poor bedside manners.

In her study, Morley (1994) refers to “enough is enough” as an expression used in the infertility support movement. In her presentation, the term is defined as “reaching a point when enough resources and effort have been expended and it is finally time to stop treatment, is representative of couples who had to make a decision to end their fertility treatment” (p. 111). In this study, a significant number of couples claimed that it was difficult for them to end their quest for a child, but age, money, and effort expended were factored into determining when to stop. Most couples that encountered these circumstances reportedly believe that their doctors withheld vital information, which could have helped them to cease medical treatment earlier. Muriel described her experience:

I'm going to be motherless for the rest of my life and it is still difficult to accept that. I had a number of unexplained miscarriages. We tried all the traditional treatments and two cycles of IVF, which brought me no success. Had it been left to my doctor I would have had at least another IVF and it too might have failed to produce a viable pregnancy. Kingsley is not making a fuss out of this, but I really spent too much money chasing the wind and my doctors never told me one day to consider quitting. I now feel like my body was being used for studies of some sort. I was a laboratory and still I had to pay for it. The problem is that I cannot blame any specific doctor, because I was willing to do whatever they advised me. I don't think that anybody can actually understand what I am feeling until they went through it.

Wives reported that their spouses often went unnoticed or were not treated respectfully by their doctor. This practice was deemed unacceptable when the doctor should respect a spouse or chaperone and even more so, when doctors are expected to be non-judgmental, avoid stereotyping on appearance, cultural, or social background. According to Perkins (2006), medical focus on the female alone can leave their husbands feeling marginalized and inadequate throughout the process. Milton described what he experienced during a twelve-month period he accompanied his wife on her doctor's appointments:

I was very saddened by my experience with my wife's doctor. I accompanied my wife Beverly to her appointments at the Fertility Clinic for one year, and throughout that period, her male doctor referred to me as the male factor. He never cared to learn my name. He never had a decent conversation with me or invited me to listen to the litany of things that my wife should and should not do in order to get pregnant. How ironic was this? I was ignored and excluded, and by all accounts I was going to be an integral part of everything, sexually and otherwise.

The Health Care Delivery System

In both research samples, infertility was identified as a major health problem. However, for the American participants, infertility was identified as a public health problem, while for Jamaicans, it was perceived to be a personal health problem. There are several factors that contributed to this difference. Firstly, the medicalization of infertility has long been a reality in the United States (Griel, 1991; Parry, 2005; Waters, 2001), while in Jamaica that is not the case. As previously mentioned, assisted reproductive technologies were introduced to Jamaica approximately six years ago. Modern maternity service began in Jamaica with the establishment

of the Victoria Jubilee Hospital and Midwifery School in 1887. Community midwives were deployed in many parishes in the 1930s, and community antenatal care expanded in the 1950s. The social policies of the 1970s increased women's access to primary health, while those of the 1990s facilitated improved hospital delivery (McCaw-Binns, 2005). However, hospitals are not located in rural communities in Jamaica and most of the rural communities do not have ambulance services to transport pregnant women to the hospital that are located in major townships. Consequently, in many rural communities pregnant women received little or no prenatal care and babies are born at home with assistance from midwives, some of whom have received no formal training. Also in some rural communities infertility cases are not medically treated because medical treatment is inaccessible (Dressekie, 1988). It was only as recently as 2005 that the government of Jamaica passed an Amendment to the Nurses and Midwives Act in the House of Representatives intended to ensure basic standards of safe practice and accountability by midwives (Jamaica Information Service [JIS], 2005). Subsequently, all midwives must receive specified training before they are registered or recertified and penalties are instituted for breaches (JIS, 2005). Secondly, unlike the U.S., Jamaican society has not had a colorful history of advocacy groups with interest in infertility. Instead, advocacy groups, including feminists are primarily concerned about poverty, education, health care for at-risk groups, domestic violence, the welfare of women in the workplace, and the inclusion of women in government. Thirdly, the Jamaican governments since the 1970s have focused on reducing population growth (Jamaica National Family Planning Policy, 1992) and there has not been a public policy that focuses on preventable causes, primary prevention and cost-effective ways to combat involuntary childlessness.

America has over 6000 hospitals (American Hospital Directory, 2007) and 422 fertility clinics in operation in 2005 that performed 134,260 ART cycles resulting in 38, 910 live births

(deliveries of one or more living infants) and 52,041 infants (Center For Disease Control, 2007). Jamaica, on the other hand, has less than 30 hospitals and one fertility clinic, located in Kingston. One common experience of males and females in both samples was pain resulting from fertility treatment. Male participants reported experiencing pain and discomfort from testicular sperm extraction (TESE) and the women experienced major pain and soreness from diagnostic surgical procedures: nausea, constipation, drowsiness, breast tenderness, and depression from progesterone therapy, mood swings, headaches, and ovarian enlargement from clomid. Prior studies concur with these findings (Doherty & Clark, 2002; Minkin & Wright, 2003; Ryan, 2001; Verhaak, Smeenk, Evers, Minnen, Kremer, & Kraaimaat, 2005). Nearly 50% of the women in both study samples experienced vaginal dryness, painful intercourse, and loss of interest in sexual intercourse, while 35% of the men reported occasional or prolonged periods of impotence. Participants claimed that the physical stress of treatment was responsible for shifts in levels of satisfaction with sexual intercourse. Robert described how his infertility affected his sex life:

It is very difficult for me! We now have twin girls from AID and that was fine at the beginning. I wanted to give my wife the child we desired but I couldn't because of the low sperm count problem I have. In fact, my wife said the doctor told her that I really do not have any sperm. That's even more devastating. I really don't want to have sex at this time. I know what my wife really wants. Why should I have sex when I cannot get her pregnant? For a long time we had sex for the sake of getting pregnant; that's when her doctor said we should. Physically and psychologically, I have no more energy for sex, as for the last two years or so I feel like a neutered dog.

According to Downey (cited in Stewart & Stotland, 1993, p. 215) and Sewpaul (1995) couples experience pressure to perform sexually in order to comply with treatment requirements to the extent that they begin to develop sexual dysfunctions such as impotence, anorgasmia, or lack of sexual desire. It may be said that the possibility of successful medical intervention raises new hopes and simultaneously increases the problem of ambiguity for the discouraged but wishful parent to be (Morely, 1994). In vitro fertilization (IVF), which is held out to be the panacea for infertility, has failed participants in this study in that eight couples had unsuccessful cycles of IVF and only three couples had successful pregnancies resulting from IVF. According to Throsby (2001), the dominant experience of IVF treatment is one of failure rather than success; only 20% of IVF cycles are successful in producing a baby. Franklin (cited in Throsby, 2001, p. 3) notes "IVF can be seen to create the very uncertainty that it is believed to resolve." Given the plethora of negative associations and the paucity of positive role models for women living without children, whether by choice or by necessity (Campbell, 1999; Daniluk, 1996; Murell, 2000; Throsby, 2001), infertile women are unable to extricate themselves from IVF, despite its dismal failure to produce the desired child. Throsby caricaturizes women who are unable to extricate themselves from failing IVF cycles as "desperate infertile women" (p. 13). According to Harkness (1992) and Kosh (1992), the experiences of women confirm that, once they begin treatment, they continue to pin their hopes and expectations on the next cycle, and they make cessation of treatment very difficult (cited in Sewpaul, 1995, p. 246). Pressure brought to bear on women's natural desire to birth a child and pronatalistic institutions like the church may also reflect the popular choice of IVF. Sewpaul (1995) posits three factors that are responsible for the popularity of IVF: for most couples, IVF represents a last chance of biological parenthood; the media presents IVF as the

ultimate solution to all infertility; and, the seductive nature of the new reproductive technologies makes people believe that anything is possible.

Cost of Treatment

The data showed that in the United States three couples tried AID, one tried AIH, and nine tried IVF, as compared to two AIH and one IVF among Jamaica participants. For most Jamaican couples fertility treatment was confined to conventional medicine, due to cost, accessibility, and to a lesser degree, religious factors. Of the fifteen American couples in this study, nine had insurance to cover at least 2 cycles of IVF, while the three Jamaican participants who tried AIH and IVF paid out-of-pocket

In Jamaica the cost per cycle of AIH and AID can range from JA\$ 45,000-75,000. The more invasive therapies like IVF, GIFT, ZIFT, and ICSI can range from JA\$ 150, 000-\$200,000 per cycle (Patient Manual). In the United States some of the less invasive therapies such as hormone therapy can range from \$200- \$3, 000 per cycle. Tubal surgery can range fro \$10,000-\$15,000 (Resolve, 2003), and an IVF cycle, which comprises approximately five percent of all infertility treatments, costs \$12, 400 (ASRM, 2003). In most U.S. states infertility evaluation or treatment coverage is not required like other medical treatment related to childbearing or medical dysfunction (American Fertility Society, 1991). Treatment is therefore limited to select groups who live in certain states and have insurance or those who are fortunate to pay out-of-pocket. In contrast, in Jamaica one's insurance depends on the job one has. The jobs with medical insurance that cover assisted reproductive protocols are held by upper middle-class Jamaicans. Peggy, Yvonne, Jennifer, Janet, and Millicent wanted to try IVF but the cost was prohibitive because their insurance did not cover it. They concluded that ARTs were for "the privileged wealthy who can afford to pay out-of-pocket"; "people with the right kind of health insurance"; and, "the

persevering lower class couples who, with the help of family members, are willing to do whatever it takes to realize the money for the procedures.”

The following excerpts from Pauline, Arlene and Marlene’s interviews are illustrative of the difficulties experienced by Jamaicans desiring assisted reproductive technology treatments:

It had been a difficult road for us trying to come up with two hundred thousand dollars. My husband and I saved all we could. We put off buying a new car for quite a few years now just that we could save some money. It’s like a joke...our car was giving us lots of mechanical problems but we said we would not get a better one until we had our baby. We did take out a small loan on the house to come up with the money, and we still have money owed to the bank, but we should pay off that debt within this year. It’s a good thing that Thomas was not the kind a man to get despondent easily. With all these problems, we didn’t ask our church to pray for us because we consider this to be a very private and personal matter. Also, I am not sure our church supports what we are doing. The truth is that we never asked and the matter never came up in church. However, when it comes to these kinds of personal issues, you know, publicly they say one thing, but on a one-and-one level, everybody does what is best for them. (Pauline, 36 years old).

Most of our relatives and friends were saddened by our great loss and they knew our financial situation, so they decided that they would do whatever it needed to help us have a live pregnancy. It took us about six months to come up with all the money we needed. To be honest, we received a total of about \$60,000.00 from relatives and friends before we finally decided to go with the AIH route. Within a

fifteen-month period of receiving all the money we needed, we got pregnant (Arlene, 25 years old).

Barry and I had several long trips to Kingston, during which time we stayed with relatives. Our appointments at the fertility clinic used to be somewhere between 9:30 a.m. and 11:15 a.m. Financially and emotionally it was a roller coaster for us. We had some savings but we never imagined that we could have used up so much in a relatively short time. The IVF was very costly and to be honest it was difficult for us to come up with all the expenditure, for there were so many costs factored into each month's bill that sometimes we never anticipated. We had our chance and we are still childless in this house ... but you know, the bottom line is that Barry and I tried all that we could and Barry and I have a strong marriage. (Marlene, 41 years old)

The loss of control over the ability to become pregnant was expressed in terms of putting one's life "on hold." Long appointments to see a reproductive endocrinologist at the fertility clinic compounded anxieties about becoming pregnant and how fertility treatment or a pregnancy would interfere with other daily activities, like work, was reported by some of the women. Pauline described her experience pursuing AIH treatment this way:

It took us a long time to have our initial appointment with the fertility doctor at the clinic at the University Hospital. When we just started the process we were thinking, 'Oh we are going to be receiving treatment within in a month or so and then we got a two month's appointment—that's too long to wait. We became very anxious and wondered every day if it makes sense or wondered as to whether or not it's going to work for us. But once the process started we waited to see if it

happens. I wondered if I become pregnant, how sick would I be and how that will affect my ability to work.

From the experiences of American and Jamaican participants in this study, infertility was both an individual and a social condition. “Despite the large and growing share of the population that faces infertility problems, and despite the large financial costs of treatment, health care coverage of treatment is limited” (Schmidt, 2004, p. 3). The interview data show that, especially lower-income Jamaicans would benefit from a publicly-funded or insurance mandated ART. The reality is similar to both Americans and Jamaicans in that lower-income people who have no publicly-funded or private insurance coverage for ART will suffer more from their infertility than affluent ones (Spar, 2007). Third party payment for clinical ART is subject to significant variations from nation to nation and Jamaica is among a significant number of countries, including Hong Kong, Columbia, Ecuador, Vietnam, Romania, Venezuela, and Peru that have no third party reimbursement by national health plan or private insurance companies (Jones, Cohen, Cooke, and Kempers, 2007). With respect to the U.S, there is need for more health plans that provide infertility benefits. Interview data of this study show that for several couples the end of their infertility treatment had been externally imposed and unwelcome, primarily because of insurmountable financial limitations, and these endings were perceived to be provisional. Some participants reportedly lived through their child bearing years with no resolution, which exacerbated their psychological problems.

PSYCHOLOGICAL EXPERIENCE

Infertility’s Emotional Effects

Berg and Wilson (1991) summarized their review of the literature by observing that there are multiple psychological reactions to infertility, particularly tension, anxiety, depressive symptoms,

anger, guilt, frustration, and fatigue (cited in Morley, 1994). More succinctly summarized, both the condition of infertility and its treatment cause stress, and it is well documented that infertility can induce psychological disturbance (Laos, 1999; Moller & Fallstrom, 1991). Participants' discourse narratives showed that with the exception of the couples who had resolved their infertility problems, every couple experienced ongoing grief and specific transitional points which exacerbated their grief reactions (e.g. transition from unsuccessful conventional treatment to unsuccessful cycles of AID, AIH or IVF). According to McDonald (1998), "The themes related to grief overlapped a great deal with the emotional experiences that couples reported" (p. 38), a view that was fully supported by Sewpaul (1995) from her study into infertility in the South African context.

Personal Effects of Infertility and Reproductive Technologies

The inability to procreate created a crisis of the self for the majority of participants of this study. One of the objectives of this study was to explore whether or not men and women respond differently to infertility. A review of the literature indicated that this area of investigation contains discrepant results. Dunkel-Schetter and Lobel (1991), who reviewed most of the contemporary research findings, noted there are no real differences between fertile and infertile individuals with respect to psychological well-being. They argued that the findings may be over-reported in qualitative studies and under-reported in empirical studies. However, further scrutiny of the controlled studies reviewed by Dunkel-Schetter and Lobel revealed that the well-being assessment among individuals with infertility problems were carried out at the time the infertile individuals were consulting for diagnosis and treatment. Since the new reproductive technologies offered hope of a pregnancy to infertile people, new hopes may have been rekindled at the time they were consulting for diagnosis. Thus one could expect very little difference between the psychosocial or well-being assessment of fertile and infertile control groups in those studies (Oddens, Tonkelaar, &

Nieuwenhuys, 1999). More recent studies have corroborated findings that the infertile people tend to experience more distress than fertile people (Boivin & Takefman, 1996; Daniluk, 1997; Odden et al., 1999). The largest differences among the infertile study participants were seen as shock, embarrassment, wishing that it was not true, anger, the question 'why me?', and feeling hurt and depressed (Odden et al., 1999). The data of this study showed that the infertile member of a couple reported greater prevalence of shame, guilt, anger, isolation, and feeling inadequate. Because the greater number of infertile individuals were females, more females than males were reported to experience major psychological/emotional problems with infertility, a finding which was corroborated by prior studies (Elliott, 1988; Griel, Leitko, & Porter, 1988; McEwan, 1987; Zoldbrod, 1998}. Peggy described her experience in the following way:

Every time I received bad news during a doctor's visit I cried. My grief comes from failures upon failures and I am incredibly frustrated. I don't know how to live with all these disappointments. It angered me when people like my doctor say to me, "My dear just don't worry about it." On my last doctor's visit, my doctor gave me two prescriptions, a bag of drugs, and some materials to read, and my arms were literally full of stuff as I walked out of the door, and she is like "don't worry about it." How can I not, when I have to return to school next week. Every day at school I see kids who need care and love that I can offer in abundance. Why is life so unfair? How could this be my fate? (Crying). I constantly wonder what would my daughter or son be like, and it's carried emotions that overwhelm me (35 years old).

Some women reported that treatment sent their hormone levels shooting up and down, which created cycles of hope and despair, and triggered emotional roller-coasters. Jennifer describes her experience:

Going through treatment was like riding a roller coaster. There were moments of that ride that I liked and those I hated; there were moments that I wished I could have re-lived and those moments I wished I never experienced. Sometimes I wanted to see my doctor and other times I did not. Some months I was late and I thought I was pregnant, but then came my cycle. Some days I was happy and on others I was mad, sad, and depressed. Sometimes I wanted to talk about my problems with whoever would listen and understand my situation, and other times I wanted to stay away from everybody (34 years old).

Most of the women reported difficulty dealing with maternal reminders, such as television commercials with children, talking about children, and working with children. Charmaine reflected on the experience with maternal reminders:

Wherever I went it was just as if I saw every pregnant woman and television commercials with children which just drove me up the wall. My husband liked to watch a TV program, which is all about mothers giving birth or sick babies in the ICU. Because he knew I disliked it, he no longer watches it. While it was good therapy for him, it made me feel so useless and hopeless. Neither did I enjoy conversation at work or church about somebody being pregnant or babies in general. Birthday parties were just not for me. Grant it, I attended a few birthday parties of families, friends and co-workers, but I stayed away from the conversation, as some people are just too insensitive for me. (39 years old)

Some men reported that they experienced similar emotional reactions as women but to a lessened extent. One husband expressed his emotional reaction as follows:

I felt stressed because I was 33 and it was a year and a half since we have been trying to become pregnant. I heard the statistics about when you start having kids in your thirties; advance aging reduces both male and female chances. I felt that financially we could pursue aggressive treatments. I felt like it was going to be a rough time for us as a couple from now on. I had some very stressful close calls and I felt like I was getting my feet to the ground. Peggy and I wanted three children, but I was content to have just one. Emotionally, I have stayed a step behind my wife in terms of her desire (Matt, age 35).

Another husband who had refused to be tested for male-factor infertility gives his reaction to involuntary childlessness:

Both of us really wanted to be parents and for that reason our inability to have children caused us some stressful moments, which I did not share with anyone. Several times we thought we were pregnant but they were false alarms. These were the moments I wished I had the courage to get myself checked out. There were many pros and cons about going through what I heard happened to some men. The honest truth was that I wished I could have shared my feelings in a better way with Lucy. When I consider all of that, I did get depressed and frustrated. I prayed about it for a long time and hoped that some resolution would be found (Ken, age 54).

Three men described the monthly emotional roller-coaster as an experience of 'feeling you are a father' for two weeks and on the third week, following a pregnancy test, you learned that you

are 'not a father'. They reported that, depending on the frequency of these 'false alarms,' they have to live with a surly wife for many days. Bob spoke about questioning the future of their marriage:

Everyday I would see underage pregnant girls and incompetent parents and then I would ask myself. Infertility has challenged everything I believed about God, justice, marriage, and prayer. I remember recalling those boyhood days and the dreams I had of my family. I believe that our greatest accomplishment thus far as a couple is to live with the disappointments that life throws at us each month. For all these years, month after month I would go through the same emotional "roller coaster" again and again. (38 years old)

The data also showed that history of abortions was a contributory factor to personal grief. One male reported that during his young adulthood he and his girlfriend terminated two pregnancies, and he has concluded that God was punishing him for those abortions with his wife's unexplained miscarriages.

I do have concerns about being forgiven for some of my sins. I have never shared this with anyone before but let me say it now in the presence of Simone. I really believe that God is punishing me because of those abortions. (Derrick aged 39)

Despite only one male reporting personal grief regarding history of abortion, this is an important finding that necessitates the need for further study. Incidentally, several hundred studies on women have been conducted since the late 1970s and those studies found no empirical evidence of "post-abortion syndrome" but sensations of regret, sadness, guilt, or an overwhelming sensation of relief and happiness (National Abortion Federation, 2007). Owing to the notion that abortion is a woman's, and not a man's, issue, I was unable to locate any such study on men. The message is that women, and not men, are to be blamed for abortions. Women are expected to bear the brunt of

unplanned and unwanted pregnancies. According to the National Abortion Federation, some post-abortion difficulties may result from a lack of social support. This finding showed that men as well as women experience post-abortion difficulties when they have no support. Because Derrick was raised in a Christian home, he opted not to share this information or seek social support and it became a psychological stressor for him. The finding is also important in that the notion that abortion is only a woman's issue needs to be deconstructed to reflect the lived experience of both sexes.

Some women pointed out that their husbands appeared as if they were coping well but that is often not what they observed at home. They believed that, whereas some husbands do not necessarily have a desire or need to discuss their feelings with anyone, a significant number of them do not always demonstrate emotional strength or resilience. Husbands, like wives, often worry about the future of their marriage; they often hate to be their wives' sounding board, and they are truly scared of confronting their true feelings openly. Alluding to men's insecurity, Perkins (2006) argues that males worry about putting pressure on their partner, their partner's increasing desire for a child, and the prospect of what might happen in the future if they do not achieve their goal. So it can be a time of great insecurity for males as well. Through a series of in-depth interviews, Sewpaul (1995) concluded that: "It would appear that it was the diagnosis of male infertility, rather than infertility per se, that constituted a major threat for men" (p. 167).

Relational Aspects of Infertility and Reproductive Technologies

With respect to marital relationships, my questions were centered on interpersonal relationships, personal distress, social pressures, sexual relationships, the invasiveness of medical procedures, self-esteem issues, financial costs of treatment, and existential crises. With minor differences, the findings relating to the effects of infertility on marital relationships were similar

among the American and Jamaican participants. Women were more willing than men to discuss their thoughts and feelings about infertility and they were of the view that the problems of infertility were often exacerbated by men's reluctance to express their emotions.

Women reported feeling emotionally distant from their husbands. Brown (2004) believes that men share less emotion than women because they may be afraid of upsetting their wives even more or because talking may cause them more pain instead of helping as it does for women. Wirtberg (1999) points out that men are inclined to talk less because they believe that, "You don't get children by talking." Christopher explains:

My wife and I love one another and we have an open line of communication. We are really best friends despite the struggle we encountered to have a child of our own. However, men react differently to lots of things. I am probably not your typical male, but I don't want to be talking every day about us, our inability to get pregnant, because I am afraid of hurting her feelings even though unintended. My wife talks about childlessness much more than I can handle. Talking about it, she might not realize, only makes me feel more helpless. I wish I could do something to make her feel better about herself. I never raised that subject with her because I feel it may just be one of the adversities we have to face together. The women who I worked with, I learned a lot about them too. They talk endlessly about their infertility and I would find myself listening to them because I don't want to hurt their feelings. I know that's a fact of life from my wife at home. I learned more about the female anatomy than I thought I ever would. When I look back on all we went through... we went through it for a reason...it made our marriage stronger.

Most of the women reported being angry with their husbands for not reciprocating the same level of emotional distress that they were expressing. They also reported experiencing emotional distancing from their husbands, which was incredibly disappointing and painful. According to Gibson and Myers (2000), feelings of isolation are more significant for women than men, as a consequence of gender difference in relational processes. Marlene describes her experience with her husband:

During our infertility crisis, my support came from my friends and not my husband. I had somewhat of resentment towards him because he never appeared to understand what I was going through. He always tried to cheer me up by saying, "look on the bright side of it." He was genuine, but because he didn't do much research or have as much medical background as I did going into treatment, he actually retreated from every discussion about our problem. I literally felt rejected. So my friend, who was also a nurse, was more real to me about my pain and emotions.

Most couples that had either suspended or discontinued fertility treatment reported improved sexual relations. Peggy and Matt terminated fertility treatment and at the time of the interview they were in the process of adjusting to involuntary childlessness. On the question of their sexual relations, Peggy said:

Sex has become more spontaneous now. When we were doing IVF treatment, it used to be much regimented. It is not as exciting when you are under schedule. It is getting to be spontaneous and playful again. The honest truth is that after being so regimented for so long, it has become for us less fun. There were days when we weren't allowed to and days we had to. I remember when it was 11 p.m. and

my husband was not yet home from work or he would be sick and he was unable to do it and I needed him because I was ovulating. Today, our sex life is much improved and we are best friends.

Brown (2004) observes that many couples will experience a decrease in sexual relation satisfaction as they deal with infertility. The romance is lost as couples strive to have sex on a schedule and then share the details with a myriad of health professionals. Sometimes the pressure to perform at mid-cycle is so great that the man has trouble with erection or is unable to ejaculate. Sewpaul (1995) observed that couple's sexual relationships were most negatively impacted during periods of active pursuit of the ARTs much to the anger and frustration of couples who were paying a great deal in the hope of becoming pregnant within a given month. Menning (1977) suggests that the "connection of sexuality to childbearing and impregnating is so strong that it may take a great deal of effort to understand that the infertile person still possesses sexuality" (cited in Morley, 1994, p. 44).

About one third of the couples in both study samples reported that they had conflicts over fertility treatment options. For example, some husbands reported feeling uncomfortable with invasive medical procedures that negatively affect their sex life. Consistent with the findings of prior research, some husbands in the American sample reported anxiety about administering daily injections to their wives. They worry that they may make mistakes, which could cause further problems for their wives (Jordan & Revenson, 1999). The women on the other hand who felt pressured to conform to social norms appeared to have entertained the fantasy that even though a particular procedure had failed, if continued, it might result in a pregnancy. Some of the men referred to their wives as overreacting or obsessed, while some wives referred to their husbands as callous or controlling. Numerous studies show that for a number of women the decision to

discontinue treatment can be tortuous. According to Williams et al. (1992), women have greater physical and emotional involvement with infertility than men do; women carry most of the burden in terms of medical evaluation; and carry physical reminders, for example, a menstrual period.

Charmaine made the following observation:

Infertility has caused us lots of pain and much prayer has been made in earnest. Charles and I have the same desire to have a biological child. We differ however, as the route we shall take. Our lives are on hold as we struggle to find common ground as how to proceed. If I gave the impression that all is well with our marriage, then I would not be truthful. Our differences have made it difficult sometimes for us to rely on each other for support. The truth is that we are struggling with a big emotional rift between us and a roller-coaster sex life, which constitute a big elephant in our bedroom.

Another important finding in the literature is how infertility, in the absence of open and honest communication between couples, might contribute to divorce. This finding underscored prior research finding (Evens, 2004; Gage-Brandon, 2002; Sewpaul, 1995). The only woman in the study sample that was separated from her husband prior to my interview reported that her infertility caused stress on their marriage in the following ways: failed expectations of her spouse; costly medical treatments that imposed a great deal of financial burden; psychological distress that affected bonding of partners and sexual intercourse. Information received from a subsequent contact indicated that the couple was divorced. According to Gage-Brandon (2002), "The odds of divorce are significantly related to childlessness, confirming the observation that in Africa, marriage, whether traditional or modern, is unlikely to be stable if the union does not produce children" (p. 2).

While two of the couples in this study got divorced subsequent to my interview with them, the rest have remained intact despite their ongoing problems. Lorraine described the kind of partnership it took to sustain their marital relationship:

It's a burden that brings us much sorrow and pain, especially when we did everything humanly possible to conceive and it is not happening. We have not had a vacation in many years because we literally put our lives on hold in pursuit of a baby. The last couple of years we spent our lives trying to become pregnant. The redeeming thing about all of this is that my husband and I are going through all of this together. Thank God for such a sweet man.

Despite aforementioned problems, some couples in this study reported that the experience of infertility has brought them closer together and that they experienced mutual support. Mutual support and good communication were key factors to the maintenance of friendship and intimacy, according to these couples. There are numerous prior studies that show that while marital relationships might be temporarily disrupted, infertile couples do achieve closeness, mutual support, and satisfaction with sexual activity (Daniluk, 1988; Daniluk, 2001; Lasker & Borg, 1987; Leiblum, 1997; Schmidt, Holstein, Christensen, & Boivin, 2005; Sewpaul, 1995).

SOCIAL ASPECTS OF INFERTILITY AND REPRODUCTIVE TECHNOLOGIES

The data showed that participants had two sets of beliefs: a public belief system that involves the official teachings of their Church and a private belief system. When it came to major decisions, it was the personal values that dictated what happened. Nellie and Robert, Lorraine and Dave, Liz and Jim, and Pauline and Thomas, who were members of the Roman Catholic Church privately, did not accept the rigid anti-assisted reproductive technologies teaching of their Church. Being faced with infertility, they used IVF, AID, and AIH to become pregnant. The Church's authoritative document on assisted reproduction, the *Donum Vitae* calls those who are infertile to

understand their suffering in terms of the Christian symbol of the cross. Technologies such as in vitro fertilization are deemed unacceptable because they require the production of more embryos than will be implanted in a woman's uterus. Even if the spare embryos are not destroyed, *Donum Vitae* maintains that cryopreservation exposes them to unacceptable risks. It also maintains that any technological intervention involving the introduction of a third party into the procreative process, such as heterologous artificial insemination, donor gamete, surrogate arrangements, or homologous in vitro fertilization and artificial insemination violates the unity of marriage and are ruled morally illicit (Brinkmann, 2001). The discussion of Neilsen and Fultz (1995) on religious conflict or conflicting experiences in a religious context is instructive. They conceptualized conflict as cognitive dissonance, "which is marked by conflicting cognitions or goals" (p. 368). According to this definition, the decisions of the four couples in the sample to use artificial reproductive techniques constitute a cognitive dissonance. According to Liz, "I sometimes feel disloyal to my Church because I cannot entirely accept their teaching on assisted reproductive technologies." Such an admission suggests "a conflict between loyalty to one's Church and loyalty to oneself and one's own belief" (Nielson & Fultz. p.369). Sewpaul (1995) also had five Roman Catholics in the study sample who were not agreeable to the very rigid views held by their religion regarding ARTs. She concludes that "The drive to have children appeared to supersede the direct Instruction of the Roman Catholic Church. Participants emphasized the importance of individual choice and the importance of the church seeing things from their point of view" (p. 234). According to Nellie, "We wanted biological children and when that did not work we tried artificial insemination by donor and it worked for us. Adoption was our last resort." Whereas feminists are primarily troubled by the potential harms assisted reproductive technologies may inflict on women,

they criticized the Church for its emphasis on pronatalism, while denying personal freedom to its members to pursue a treatment modality that may help an infertile couple to have children.

Social stress of comments from co-workers, fellow church members and occasional sermons were other sub-themes that emerged in the data. Participants from both study samples admitted, however, that these comments were not intended to be negative, but were evidence of insensitivity and misconceptions about infertility. The following excerpts were pulled from the interviews:

People often make these seemingly innocent comments in an effort to be inclusive or just to make conversation. But the fear of hearing one of these comments has kept me home from church more than once. I have learned to live my life through a filter, keeping it tight to cover my responses so I don't say what I am really thinking and offend someone. I wish I could say that I have come up with a politically correct way to handle these comments, but I haven't. (Peggy, 35 years old)

I really didn't appreciate people telling me that infertility maybe God's will for my life or just put your trust in God and He will give you the desires of your heart. These kinds of comments are just so opposite of where I am at this point, because I don't think that having a baby is about how much you pray or how much you tithe or fast. Look at the vast number of women who kill their babies! I just get so annoyed and frustrated. Sometimes, instead of going to church we just stayed home, because some people say things that really hurt and I know that was not what they intended. (Millicent, 32 years old)

My wife and I at this point had one child and we were trying for another and it was failure after failure. During this time it was a regular thing for some couples to greet us in church and ask about our efforts to become pregnant with another child. When we shared our difficulties, they would respond to the effect, "Well I guess it's not God's plan that you have more children." I really never knew how to respond to these people, but if the truth must be told I found that it impacted me in a negative way every time. (Vincent, 44 years old)

At this point Charles had a child and we continue to be grateful. However, I feel the infertility has cheated us of the family we desired. So many people keep asking, "Why don't you have another child?" They just don't know how we have tried and the extent to which I want to stay away from everybody. I know this is not a praiseworthy thing to say, but I really do feel envious of couples when they become pregnant - it does not matter who it is. I went as far as to tell myself that we would be better off without children - not having to save up for their education, spending our money on ourselves, not dealing with fighting kids and having all the time in the world to ourselves, but I would come right back to the focus point of our life - that of having another baby. Even though we have a child, I am still trying to "get back my life." (Monica, age 29)

At my job, when someone was pregnant, or having had a baby, it was really difficult for me to socialize with them. Like the new girl at work, she has two

children and is pregnant again. Whenever I have to be in their company I talked about my dogs because they are like our kids, because we don't have any kids. Champion had eye surgery and Shadow had chemo a year ago. The newer co-workers of mine don't know we have no children and when they talk about theirs around me I felt angry and like saying, you don't know what I have been through. I don't really know how James feels but in these situations I am flat out bitter, jealous and hopeless. (Ashley, age 32)

The finding of this study concurs with the view of Shaw et al. (2002) that infertile couples are concerned about whether or not they constitute a "real family." A major part of the problem has to do with the assumption that all married couples must conform to dominant views and norms associated with the traditional family, a couple and children. By default this process of social construction of the dominant form of family in our society functions to obscure alternate forms of family, and make it difficult for non-conventional forms of family to gain recognition and acceptance (Shaw et al. 2002). Therapy for the involuntary childless couples then becomes a process of deconstruction of the notions that reproduce and reinforce traditional notions of family. Deconstruction then becomes the process of freeing people with infertility within their social context from the tyranny of entrenched socially constructed notions of motherhood, fatherhood, and family (Nichols & Schwartz, 2006).

COPING STRATEGIES

According to Morley (1994), coping is based first on the couple's understanding or appraisal of their situation (primary appraisal) and then deciding what the possible responses (secondary appraisal) are. Questions regarding coping strategies were based on problems reported by participants during the interviews (e.g., how they coped with expectations of family, friends, or society in general; social interactions involving feelings of jealousy, rivalry, resentment, and envy of people with children; the difficulties associated with fertility treatment, and; inconclusive

infertility diagnoses). From the data four primary forms of coping strategies were identified as individual counseling, group therapy and religion. For the purpose of convenience the first two coping strategies are combined.

1. Individual and Group Therapy

Among American couples, 75% of the women said they received individual counseling and another 25% said that they attended at least one support group or group therapy session. Among Jamaican couples, less than 25% of the women said they had individual counseling. None participated in either support groups or group therapy. Further, because of the belief that infertility was the couple's private problem, Jamaican participants did not seek individual or group therapy. Among the American female sample, as in Sewpaul's (1995) study, most participants felt the group did not really meet their emotional needs and was often experienced as a pressure group to continue pursuit of biological parenthood. This notion was endorsed by Napier (1989) who indicated that it was easy for support groups to turn into pressure groups (cited in Sewpaul, p. 211). None of the men in both study samples reported receiving either individual or group therapy. For them, help through individual counseling or group therapy was unacceptable. The traditional male sex role in Jamaica requires that men be independent, strong, self-reliant, competitive, achievement-oriented, powerful, adventurous, and emotionally restrained. It stands to reason that if men are socialized against experiencing and expressing weakness they may not have the vocabulary to talk about infertility, which several studies found to be emotionally disturbing for them (Berson, 1994; Darsney, 1996; Goodwin, 2001; McDonald, 1998; Robinson & Stewart, 1997). Instead, the men coped through avoidance and they focused on tangible issues rather than feelings. Brown (2004) refers to men's coping style as selective concealment, meaning that they will only disclose on the basis of whether or not they feel the other person will be sensitive and

accepting. In response to my question about his coping strategies with male and female factor infertility, Henry said:

I don't think that talking about it with anybody is going to help me. In fact, I could not see myself in a room with a counselor talking about this matter. I did talk to my brother about it a few times and my Pastor and I did talk about it after Mille asked him for special prayers. I go to work and when I come home there is a lot for me to do. All those assignments keep my mind off such problems. Sometimes, Millie would raise the subject of my treatment and I would talk a little about the problems, but I can't talk all day about it. If the truth is to be told, it's a very difficult problem to deal with.

2. Talking with Selected Relatives and Friends

Most women in both study samples reported that they cope better with infertility by talking with selected members of their family and by making friendships at the doctor's office. They said that family members, once they are included into the inner circle of knowing what was happening, would listen and be supportive. The women admitted that they received therapeutic mileage from these disclosures, which helped them with building their self-esteem, lessening their anxiety, and helping them gain perspective on their situation. Sarah, who shared a very cordial and open relationship with her family, described a typical visit with mom and her two sisters.

Whenever I felt like visiting with mother, I would call her two days prior and announce my visit. My mother would invite my two younger sisters to come over during the time of my visit. My sisters are married and have biological children,

no infertility problems. We would have girls' talk about work, politics, and church and then somebody would ask about my most current infertility treatment. I would tell them everything because they are very good listeners, empathetic and non-judgmental. I am indeed blessed with a loving and caring family.

3. Religion

In this study, views about infertility were greatly influenced by the Bible. Gender and gender roles were religiously defined constructs that determined for the participants what constituted family, motherhood, and fatherhood. Being infertile couples, religion was found to be a source of their stress and a coping mechanism at one and the same time. Approximately 50% of all participants who were protestant Christians said that they prayed and fasted on a regular basis. However, it was observed that more women than men found it easier to use prayer and meditation to find energy, strength and healing. More women than men reported that prayer and fasting have enriched their lives with peace and a deep understanding of God. James 4:3 was frequently cited as reasons why they needed to have the right approach to prayer: *"When you ask, you do not receive, because you asked with wrong motives that you may spend what you get on your own pleasure"* (James 4:3). One woman eloquently explained: "To ask with the right motives involves transformed passion. In prayer, one desires the things God desires, to love the things God loves, and to will the things God wills." Some said that their infertility is a period of "faith testing." A small number of female participants reported that their faith in God kept their marriage strong even in the worst of times. However, only about 25% of the total sample believed that more prayer and fasting would increase their chances of having a successful pregnancy. Male participants did not talk much about their faith, but whenever they did, it was obvious that their faith in God was being

tested by the experience of infertility. Matt professed to be a committed Christian but the lived-experience of infertility has been a real challenge to his faith:

I consider myself to be a strong believer in the Lord. My faith has been my source of comfort. I live daily with the expectation of God's power and that He is going to do something great for Peggy and me. I am not surprised or disappointed in God. I don't attribute our troubles to that. However, it's hard to communicate that. For the most part, it is internal. However, our bad experiences with infertility have been all but nightmares and my faith really has been dampened. I need to be rebuilding my faith. What has been happening to us really has made me question every aspect of being a believer. God is real, particularly days in the waiting room. I felt God fixing things or preventing things. He was there, but not really (started crying...).

While religious experiences are not a panacea for every infertile person or for every person, infertility therapists/counselors should acknowledge the practical relevance of religious values in therapy. According to Covington (2006), "the importance of faith either as a means of solving infertility or as a source of comfort cannot be minimized, and religious faith remains a powerful resource (or a painful burden) for many many infertile individuals around the world, even today" (p. 3).

Charmaine described her future in strictly spiritual terms. She described her husband as a man of God who was unwilling to go outside the conventional way to have a child. She reported having hope in God's promise to bless the womb of faithful infertile wives.

My faith in God has helped to heal the emotional pain I feel for a number of years. I would cry, and I would be sitting out there and I would just burst out into

tears. I was afraid to visit the doctor because I was afraid of bad news. I had to come to the place where I could admit that I was angry with God. I realize that I cannot live without Him and He is the one who guides my life. Having said that, it is still difficult to let go and let God in. I keep hoping in His promises through His word that no good thing will he withhold from me. And in saying all of that, I still recognize that He knows everything and if He chooses not to give me a child, I will just have to accept it.

Yvonne too had faith that God would provide her with the money to pursue an effective medical treatment and God would also bring her husband to be more supportive of her efforts to have a baby. She told of her confidence in God and how it has given her a well-needed perspective on the future: "I ceased daily crying. My faith is in God and it will be in His timing to grant the requests of my heart." However, Byron's problem was not that he did not believe in treatment. Instead, the unaffordability of the infertility tests and treatments hurt his pride and further contributed to other socio-emotional problems.

Not surprisingly, American and Jamaican medical schools are offering courses on health, religion and spirituality as there is a strong belief among people that faith and prayer benefit health and doctors should discuss the connection. For the participants who are strong believers, the hybridization of faith and science is not only necessary, but required.

Whereas I expected the data to show evidence of moral dilemmas among American Catholics in the sample who used IV, AIH, and AID, the data showed ambivalence, instead. They successfully deconstructed the *Donum Vitae* and reconstructed a response to the suffering of infertility that involves freedom to pursue reproductive technologies. With respect to Jamaican participants, the data showed some ambivalence among a Catholic couple and a small number of Protestant couples.

The explanation is that unlike the situation with the Roman Catholic Church, most Protestant churches are not part of a hierarchical network in which bioethical issues receive a structural reflection and a normative content (Boer & Schronton, 1993). Also, it appears that most Protestant churches lack the intellectual habit or the theological ambition for such a reflection. When not in conflict with the Catholic Church on the issue of masturbation, they partly rely on statements issued by the Catholic Church, and this explains why official internal or external church documents on bioethical issues are exceptional (Boer & Schronton). Since the Roman Catholic Church is usually the first and sometime the only religious community with the necessary resources to take on matters of high ethical concern and they have not yet made an issue of assisted reproductive technology in Jamaica, no other religious communities appear to be interested. In a recent conversation with a Jamaican Catholic priest, I was told that the 'Jamaican Catholicism' is 'Catholicism' with a Protestant base. Since Jamaica is predominantly protestant, it is believed that the Church needs to accommodate itself to the culture of Jamaica. In the meanwhile, infertile couples are left to make their own judgment with respect to the use of available reproductive technologies. From a South African perspective, Sewpaul argues that most of the representatives of the religious faiths (Rema Church, Methodist, Full Gospel, Roman Catholic, Zionist, Hinduism, and African Traditional Religion) whom she interviewed adopted predominantly teleological views. She continues, "Upholding predominant pronatalistic views, most of the religious representatives were in favour of the new reproductive technologies" (p. 259). Brinkmann (2001) alludes to dissident clergy within the Catholic Church who are pro-new reproductive technology. Sewpaul reports that she had conversation with the leader of the Catholic Church who admitted that there are theologians within the Church who questioned its official policy and expressed preference for couples to exercise their own judgment in respect of reproductive technology.

SOCIO-CULTURAL EXPERIENCE

QUEST FOR BIOLOGICAL PARENTHOOD

The data showed that problems with infertility lie more with the social than the biological conditions of infertility. Had it not been for the social pressure and the dominant social construction of family placed on biological motherhood, women might be content with involuntarily childless. The following four excerpts from the narratives reflect strongly held views as to why women in the study samples wanted to have children.

People with children apparently have no clue how an infertile woman feels. They don't know how isolated I feel sometimes. They apparently have no idea what it feels like to see pregnant women, and babies or be invited to your nephew's or niece's birthday parties and have all the other childbearing mothers being present talking about their children. Men don't have any names when they cannot have children. They don't really know how incomplete I really feel. (Jennifer, age 34)

The way our culture works is that growing up we played with dolls, learned to sew, cook, and wash, and were taught how to be a caring and nurturing mother, and later pressured to get married and have a baby. When a year passed, everybody, including parents, grandparents, co-workers, and church people begin to ask why you don't have a child as yet... I wanted to be a mother over everything else I could be. (Julie, age 35)

The thought of childlessness drives me crazy. Christopher and I tried carefully to time our intercourse to my fertile days, followed all the things that my doctor asked me to do and we prayed as diligently as we could and I am still childless. I feel like I have failed my husband and my parents for not being able to have a

baby. I always wanted to be a mother who lovingly raises her children. If we had money, we could try another cycle of IVF. Isn't poverty another curse for people who have an illness but cannot find the money to pursue treatment to their satisfaction even if the illness remains uncured? What can I say to those who ask us if we are going to have children? I cannot get pregnant and we have no money to pursue treatment? (Ronda, age 33)

What is a home without children? Could you say that a family lives in that home when you know it's only a wife and her husband who live there? Children are the pride of a Jamaican family. We need children for the continuance of our generation. I personally want to make my own contribution. Children help to keep your marriage stable. Although it happens, it is easier to walk away from marriage when there are no children than when there are children. Whatever is my economic status during old age, my children, if they are alive, will take care of me. Jamaican adult children take pride in caring for their aged parents in their homes. They take care of us to the very end. Not being able to have one's own children is bringing endless grief to my husband and me. I tell you the truth, I cry endlessly about my situation. (Jennifer, age 34).

All participants wanted to be parents and they equated infertility with unfulfilled human identity. Consistent with the findings of prior research (Goodwin, 2001; McDonald, 1998; Peterson, 2000; Ryan, 2001; Sewpaul, 1995), this study shows that women, more than men, wanted to have children because, as women, they believed that motherhood is essential to female identity. Such a belief is a reflection of social construction, which gave women the vocabulary and confidence to

voice their views, as observed by Thorsby (2001). According to Parry (2005,) these women are products of pronatalist societies and a context in which some very traditional ideas about family structures still prevail. The very existence of the ARTs, and beliefs that couples hold that they have to pursue sophisticated treatment, reinforces dominant pronatal messages. Some women in the study took risks in treatment modalities in order to fulfill the cultural norm of motherhood. They had numerous surgeries and endured painful medical procedures. Valentine (1986) elaborates on the social pressures facing the infertile noting that “childlessness is stigmatizing regardless of etiology”, even where couples remain voluntarily childless (p. 66). For some women in the study sample, a decision to discontinue treatment brought with it a myriad of conflicting thoughts and feelings.

THE SECRET OF INFERTILITY

The phrase, “it is a personal and private matter,” captures very well a culture of secrecy regarding infertility in the Jamaican and U.S. societies. This statement probably could be made just about in any pronatalist society. Both American and Jamaican participants reported that they often kept their infertility a secret because it made them feel vulnerable to questions, comments, and criticisms. Kaufman (as cited in Morley, 1994) argues that “Infertility is often seen as a failure – both by others and the individual - a failure sexually, a failure in a role, and as a failure in developmental progress” (p. 76). When participants’ attitudes toward infertility were compared the data indicated that Jamaicans were more private than Americans about their infertility. While they may share information about their infertility experience with selected family members and friends, they are unlikely to disclose information about third party reproduction. According to Berson (1984), the experience of infertility affects the blueprint of one’s life. The fairy-tales lose their meaning and myths about growing up, getting married, and having a family are altered. Infertile people tend to survive in a ‘culture of secrecy’; if I don’t talk about my infertility, people will think that I am not yet ready to have children. For example, Monica said whenever she was asked about children she

would say “We are not ready yet for children.” According to Applegarth (2007), in order to keep secrets of infertility, infertile people find themselves lying, pretending, covering-up, isolating themselves, and sometimes overburdening their partners with their pain and anxiety. Instead, she suggests that sharing the secret of infertility may ultimately be good for their mental health and well-being.

Men in particular are secretive about their infertility because they feel that others will link their infertility with impotence and lack of masculinity. Men also felt inhibited to share their experience because they fear the risk of not being understood. Henry, for example, refused to tell anyone about his AID child, not even his parents and siblings. Thirdly, men fear sharing their experience of infertility because they fear betrayal of trust. Public knowledge of someone’s infertility could lead to stereotyping or being stigmatized as “failure,” “not a real man,” “less than a man,” “unmanly,” and “a loser” (Webb, 1999). Because of the above mentioned reasons, some women in the study sample protected their husbands by allowing people to believe that they had problems with infertility rather than their husband.

Although desperation was evidenced only among a small number of couples and individuals, it signals the need for a positive reframing of infertility and the self. Males and females for whom infertility has had profound negative effect need help to: 1) deconstruct the myth of one notion of motherhood, fatherhood, and family; 2) construct a picture of infertility as a biological error unrelated to religion (Sewpaul, 1995); and 3) construct more positive self image (Webb, 1999). Deconstruction of the dominant social construction of motherhood, fatherhood, and family is needed so that infertility does not get constructed as a personal failure. Deconstruction will also help infertile people to reprioritize their life goals and change their values. According to Salzer (as cited in Sewpaul, 1995, p. 231), “Infertility has no particular meaning; it is a medical

problem that prevented people from having children. It is not the reason infertility has affected you that brings meaning and purpose; it is ... what you decide to make of it.” When patriarchal and religious teachings that associate ‘children with blessing’ and ‘barrenness with curse’ are deconstructed, some persons or couples may be helped to see the good that comes from their experience of infertility, like feeling more compassionate or empathetic with others who are experiencing loss or feel closer to one’s partner, as expressed by some participants in this study. According to Covington (2006) this theoretical framework is the foundation for understanding infertility as a cultural, religious, and existential experience.

ADOPTION

In this study, adoption was considered by 6 American couples as a viable option to biological children, compared to 2 Jamaican couples. Adoption occurs in 2-4% of all families in the United States (Goodwin, 2001), while in Jamaica it is less than 1% (Jamaica-Adoption News, 2007). The responses from participants showed that adoption was not the panacea for all infertile couples and highlighted dilemmas regarding the meaning of motherhood and fatherhood. Although adoption offers a new set of choices for couples, for some Americans and for most Jamaicans in the study, the identity of ‘adoptive parents’ was congruent with the one constructed in fantasy. An example of this can be seen in the following quote:

An adopted child is not my biological child, and from a cultural standpoint we Jamaican males see adoption as the very last option. To carry on the family line, adoption and things like IVF by donor and artificial insemination by donor would not work. (Charles, age 35)

Marlene’s comment reflects the dilemma involved in adopting within or outside of the family’s bloodline:

The decision to adopt is not easy for us Jamaicans. To a great extent, we do not practice formal adoption. I really do not know many people who either were formally adopted or

formally adopted someone. However, if couples have a problem with infertility, which they cannot resolve, probably they should adopt a child if they really need one. Sometimes family members give you one of their children (informally) and when you spend everything you have on him and he comes out good or better than the other children from that home, they come back and take the child away, so it's best to formally adopt in that sense. If they have never really parented and they can't live without a child, then for whatever its worth, go for a child that could pass for your biological child.

The dilemmas involved in adoption decisions may be extended to: inadequate supply of certain ethnic and racial children for adoption; fear that biological parents could return for the child; and fear of wrongful adoption - where the adoption agency fails to disclose information about the state of the adopted child's mental and/or physical health. In this case the adopted parents may be ill-prepared to deal with the social, financial, and medical problems that they encounter later (Renner, Jackson, & Hines, 2002). A resounding message that emerged from this study, as with Sewpaul's (1995) study, is that adoption is regarded as the option of last resort. This again both reflects and reinforces dominant societal messages about biological parenthood and grants the market and the legitimacy for the ARTs.

Spirit Induced Miscarriages

Among some Jamaican participants, evil spirits were perceived to be responsible for some of their miscarriages. The evil spirits were identified as deceased doctors, nurses, and midwives (who may or may not be family members or former care givers) who delivered these babies prematurely. Women reported feeling physically touched on their belly or vagina area, which precipitated the miscarriage. These incidents reportedly took place while the women were

alone at home or in a hospital room. Two women described their experiences of miscarriages due to the work of evil spirits as follows:

It happened more than once. My doctor told me that there was nothing else he could do to help me keep the baby. Every time I was about to have a miscarriage I felt like somebody's hand was in my panties. Then came the pain and the bleeding. Before I knew it, I would loose my baby. My problem is completely outside the domain of natural medicine; it is of a spiritual nature. I always have my Bible open on the pages of the Psalms, but even that did not drive away the spirit that took my baby. (Jennifer, age 34)

I was three months pregnant and on complete bed rest in the hospital. A lady from my church told me that when she visited me in hospital she had a very "out of the natural" experience. She said that when she entered my room I was sleeping but a tall old woman was standing at my bedside. As she got closer to my bed this woman disappeared and she was afraid. She managed to come close to me after much prayer. She said that she was too afraid to tell me, but she sang and prayed with me during her visit. I did not know what she saw until two weeks after I lost my baby and was back home, she visited and shared her story with my husband and me. I spent many hours reflecting on the story I was told because that old lady she described appears to be my deceased grandmother who was a midwife... I do recall that the day my church sister visited, I was waiting on my husband and he called to say he would be delayed. My nurse was there to give me the message and my medication and then she left. I was feeling quite good and was looking to

see all my visitors. However, I dozed, off but was not in a very deep sleep. To be honest, after a while I actually felt much sedated-like and like somebody was rubbing my stomach and then lifted my underwear. I did try to open my eyes and I saw no one, so I thought I was dreaming. Later that day, I got very ill: cramping, dilating and I lost my baby that very night. (Simone, age 37)

Numerous studies discuss people's desire for children and the heartbreak of infertility. However, this study is among the few that discuss the phenomenon of spirit either causing or curing infertility and being responsible for miscarriages. The Trobrian Islanders believed that pregnancy was caused by spirits, and not a result of sexual intercourse. Australian Ingarda peoples thought women became pregnant by eating special foods or by embracing a sacred tree hung with umbilical cords from previous births. Infertile women of the Carib tribe in Mexico make pilgrimages to Isa de las Mujeres (Island of Women) and many infertile Roman Catholic women make pilgrimages to Medjugorje in Bosnia-Herzegovina (Covington, 2006).

While it remains unclear where belief in evil spirit (demons) causing infertility originated, the verdict is that such belief is widespread. The notion of demons is found in Iranian, branches of Indo-European, and Greek and Egyptian mythologies. A review of the literature on slavery in the Caribbean and the United States indicated the belief in miscarriages caused by evil spirits (demons) is essentially a cultural belief of African slaves, which has survived 169 years in Jamaica. In contemporary Bangladesh, infertility in women is commonly attributed to supernatural causes, particularly evil spirits (Sharma et al. 2000). Likewise, in contemporary America, there are those who believe that evil spirits can enter an innocent person who may be unborn, but is cursed from the mother's womb (Margoni, 2007). Two years ago there was a TV show entitled "Crossing Over," which not only popularized but sensationalized 'talking with the dead.' In Jamaica, it is believed that

people who have committed murder are often haunted by their victim's spirit (Cardinall, cited in Ashanti Cultural Influence in Jamaica, 2003).

The belief in ghosts was prevalent among the study sample. Ghosts were perceived to be benevolent or harmful to unborn or newly born child. In an attempt to protect babies from the attack of the evil spirit, both American (especially African-American) and Jamaican participants placed a Bible opened at Psalm 90 in their bedroom or wherever the baby slept. In verses 5-10, the reader is told, not to be afraid. If he/she trusts God, He will protect them from illness and evils spirits. But this may not be perceived as adequate safeguard. Women who felt vulnerable to miscarriage by the work of evil spirit pursued help from faith healers. It is important that those who work in a social context in which these beliefs are upheld respond to this phenomenon in a respectful and caring way. As Porkinghorn (1992) reminds us, "not only does the real express itself differently in diverse locations and times but the repertoire of interpretive schemas used to understand reality vary according to location and time" (p. 148).

CONCLUSION

The above findings show the differences and similarities between American and Jamaican couples with the experience of lived infertility. Thirteen themes emerged from the study of which several are consistent with the findings of prior research. The following chapter discusses the study findings and their implications for American and Jamaican societies and offers some recommendations.

*Experience is not what happens to people,
It is what people do with what happens to them.
-----Aldous Huxley*

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to explore the “lived-experience” of infertility and assisted reproductive technologies in Jamaica and the United States. Through a combination of convenience and snowball sampling (also called chain referral and referential sampling) I got the required thirty couples from both Jamaica and the United States. A qualitative methodology of phenomenology was chosen for this study and the data were tape-recorded, transcribed, coded, arranged and analyzed for categories and emergent themes according to a revised version of Colaizzi’s phenomenological method explained in Chapter Two. For me, the research process was a learning adventure and a period of personal growth. During the course of the research, I developed a strong appreciation for the couples who so freely and honestly shared with me the stories of their “lived-experience” of infertility, even though they were intensely private. These stories, which formed the bedrock of this study, are deeply rooted in and shaped by participants’ cultures, contextual realities and individual psyches.

The two theoretical frameworks used to frame the investigation of this study were the biopsychosocial model and postmodernism. The biopsychosocial model provides an overview of the literature with specific reference to the interaction of the biomedical, psychological, and socio-cultural aspects of infertility. This model underscores the holistic system’s approach or a multidisciplinary approach to infertility, which is multifarious in nature, treatment, and experience. According to Saleebey (2001), the biopsychosocial model focuses on the multidisciplinary of professional disciplines, the multiplicity of methods of inquiry, and the diverse perspectives that

guide one's understanding of infertility. The postmodern perspective was used as an analytical framework to emphasize the inherently socially constructed and political nature of infertility and for examining socially constructed notions of motherhood, fatherhood, parenthood, and family. From a postmodern perspective these concepts are dynamic rather than static, and there is no "correct" or absolute definition for each (Shaw et al., 2003).

CONCLUSIONS AND IMPLICATIONS

The pervasive and enduring impact of infertility reflected in the literature and participants' narratives reflect a dominant social construction of family, which obscures alternative forms of family. While adoption was an acceptable alternative to biological children for some infertile couples in America, for Jamaicans, adoption was largely perceived as a social stigma. Owing to a strong preference for genetic parenthood within the society, most Jamaican participants reported that adoptive parents are different from biological parents in that they lack biological ties, and that parents with non-kin adopted children did not receive the same recognition from society as did biological parents. Jamaican couples that adopted children usually arranged informal, over formal, adoptions in which the children are next-of-kin. In such cases, the regular interaction between kin members ensured adopted children's knowledge of their biological parents' identity and continued contact with them (March, 1995). For this reason, most of the adoptions in Jamaica were open adoptions. The findings of this study show that, in contrast, the American participants used formal legal procedures to arrange the adoption of the child who was usually a non-kin member and that most of the adoptions among Americans were closed adoptions.

From a postmodern perspective, this study also examined cultural and gender differences in the literature and participants' discourses, and concluded that infertile women, especially have not been a privileged group in society. Cross-cultural literature on infertility has shown that throughout the world people of all religions, races, and cultures look down on the infertile. Liberal,

radical, socialist/Marxist, psychoanalyst, and postmodern forms of feminism were used to examine the gendered construction of reproductive choices. Despite feminism not being a monolithic women's movement, its central issues are a demand for equality between the sexes, a focus on woman's lack of control over her body, and her right to control her body. However, infertility did not become an issue for feminists until the advent of *in vitro* fertilization and other sensationalized technological solutions to infertility (Solomon, 1988). Most feminists would argue that labels such as "mother" and "infertile woman," prescribe certain patriarchal standards and expectations of our culture. Within a patriarchal society the inability to conceive a pregnancy can cause disruption and anguish for infertile people, especially women. Consequently, women more than men are more likely to be submerged into the network of medical experts needed to achieve a pregnancy by assisted reproductive technologies. Radical feminists associated with FINRRAGE (Feminist International Network of Resistance to Reproductive and Genetic Engineering) are critical of the social context within which reproductive technologies are developed and used, and therefore reject all forms of assisted reproductive technologies (Brinkmann, 2001). According to Arditti, et al. (1984), the continuing medicalization of childbearing and motherhood and the male expropriation of reproductive power from women further a woman's subordination. Corea (1985) asserts that reproductive technologies are tied to patriarchal concepts of womanhood, parenthood, and family, making their further development and use unjustifiable in terms of the potential consequences for women as a social group, despite the promise they might hold for some individual women. Radical feminists believe that a woman's desire to procreate is as bad as the medical community's desire to create babies by artificial means. They contend that pronatalism should be eradicated in order to allow women autonomous choices about reproduction (Petersen, 2004). Liberals, on the other hand, maintain that infertile women suffer when they do not have "reproductive freedom." Women

suffer when they do not have a right to legal abortion, safe contraceptives, and access to assisted reproductive technology (Alpern, 1992; Andrews, 1990; Long, 1990). According to Sandelowski (1986), radical feminists deny the autonomous will of the infertile woman when they argue that the motivation for children was not really her own. When radicals suggest that an infertile woman might satisfy her need for a child through adoption, they ignore the complex problems involved in adoption. When they suggest that the infertile woman might be happier remaining childfree, they contradict the emphasis that many feminists have increasingly placed on “natural” maternity. Both the literature and the findings of this study have implications for effective counseling with infertile women. First, the counselor should recognize that regardless of which member of the couple is infertile, infertility is very much a central issue for women and for the couple involved. Second, the counselor should recognize that for the infertile woman “to choose” or “not to choose” assisted reproductive technology treatment is not just a personal, but a political and social issue. Third, the counselor should distinguish between suffering caused by infertility and suffering engendered by medical treatment of infertility because grief and pain play a major role in the resolution of involuntary biological childlessness among infertile couples who have discontinued fertility treatment.

Feminist discourse and the results of this study confirm that husbands and wives do not necessarily face infertility with the same degree of distress and pain. In a patriarchal society, infertility is an identity-threatening experience as it threatens the woman’s attainment of an important identity of motherhood. Some theorists have noted that it should be expected that women would be more distressed by infertility, given the centrality of motherhood in the socialization of women (Callan & Hanessey, 1989). Others have reported that women have more

tangible physical experiences with infertility, resulting in more distress (Darsney, 1996; Berg, et al., 1991; Ryan, 2001; Stanton et al., 1991).

The study suggests that it is more socially acceptable for women than men to acknowledge to friends, partners, or health care professionals that they are overwhelmed emotionally and mentally, and to ask for help. On the basis of dominant social constructions of masculinity anything that implies susceptibility of one sort or another puts men on shaky ground. Men are required to be strong, competitive, and aggressive and they fear that their request for help might be misconstrued as weakness. Both the literature and the findings of this study revealed that the messages imparted to boys about manhood support the dominant hegemonic form of masculinity, which emphasized emotional restraint, success, and achievement. According to Ballew (2007), "Girls and women are taught a language of emotions that is often not provided to boys and men. Girls are expected to feel and express emotions. Boys are taught to control [their] emotions" (p. 1). Precisely because it is the socially constructed form of masculinity that is being taught to boys, future studies on men need to be focused on determining the dominant character of masculinity and also to determine how that form of masculinity is affected by infertility. We could transform a "patriarchal" society by teaching alternative expressions of masculinity and gender role socialization.

An outstanding implication of this study is that it is one of the few cross-cultural studies which included men. Men are reported in most of the earlier studies to resist counseling. This study differed from other phenomenological studies of infertile couples in that it had a male interviewer who shared a marriage with an infertile wife. For this reason, I identified myself to participants as being a part of the population being studied by this study. Using myself as an instrument of data collection, the men especially received permission to break with the ideals of

what men talk about and they shared their experience with infertility. My experience with the male participants from both study samples underscores the value of men interviewing men about their experience with infertility, as with a male interviewer, men are more likely to express their true emotions. Several of the male participants reported that they were participating in the interview because I was a man. One man said to me, "I find it easier to connect with a male especially when it comes to private and personal matters like sex and infertility." The implication is that with more male interviewers we are likely to learn more about the "male" lived-experience of infertility, as most of what is currently known about infertility is from a female's perspective. While I could conjecture supportive reasons, I find no solid empirical data to support the claim that it is easier for men to connect with a male interviewer when discussing personal issues such as infertility. Consequently, I am suggesting that this is an area for further investigation.

Among the reasons for the infertile couple's difficulty in coming to terms with their childlessness, this study confirms the ineffectiveness of the medical model to produce a baby; the inadequacy of the traditional view of the family (See Chapter Six); and the inadequacy of the current religious teachings on infertility and religious injunctions against assisted reproductive technologies (See Chapter Four) to deal with the pain and grief of involuntary biological childlessness. All three reasons are interconnected. What is even more daunting is that people who are religious are finding it more difficult than non-religious people to resolve their infertility (Brinkmann, 2001; English, 1999). According to Balla English, infertility is a very controversial issue, and many people including clergy have difficulty talking about it because there are so many questions and the answers are few. Griel posits that this is because "traditional" theodicies demand a spirit of resignation which is not acceptable in a culture of science and technology. As he contends:

Explanations that rely on such concepts as “God’s will” cannot be convincing when we believe as strongly as we do in human ability to pull ourselves out of our condition through technical knowledge. To accept the kinds of answers traditional theodicies can give implies a spirit of resignation. Such a spirit of resignation does not currently exist in the pursuit of infertility treatment. (cited in Brinkmann, 2001, p. 152)

The failure of the faith community to recognize the crisis posed by infertility is another finding of this study. Many participants had difficulty reconciling “children as blessings,” “children as a gift,” or “infertility as a mystery.” If children are blessings, the infertile are not blessed. If children are a gift, which means they are given without regard for readiness, deservingness, or fitness (Ryan, 2001), why are infertile couples exempt? “Infertility as a mystery” does not provide any more consolation to the infertile couple than “infertility as a curse.” On the basis of these beliefs, infertile couples in this study sample experienced anger, guilt in relation to past sexual sins, and a weakening of their faith (See Chapter Six). According to Ryan, “The difficulties infertile believers encounter in drawing a usable or healing wisdom from faith traditions stem both from how we treat infertility within communities of faith and how we talk about infertility in theological terms” (p. 157). For the majority of the study participants the quest for biological children superseded religious injunctions that are antithetical to the use of assisted reproductive technologies. It was not surprising to learn that Jamaican infertile couples had no moral dilemmas in relation to using assisted reproductive technologies. With the exception of the Catholic Church, no faith tradition in Jamaica to date has demonstrated that they have the intellectual ambitions to develop a bioethical response to assisted reproductive technologies which were introduced in that country six years ago. All the faith traditions uphold pronatalist views and believers with infertility are left to make their own judgment

with respect to the technology used to realize their dream of a biological child. The same does not hold true for all infertile Americans who are from faith traditions. While most Protestant Churches are pronatalist and are supportive of assisted reproductive technologies, the Roman Catholic Church upholds pronatalist views. However, their official teaching is against all forms of assisted reproductive reproduction, therefore producing dissident clergy and members as the literature and the finding of this study indicate.

Finally, the findings of this study confirm prior studies that infertility is a crisis of the body, a crisis of the mind, and a crisis of the spirit, and call into question people's views of themselves, their life goals, their faith, and their relationship with their spouses and with others. Infertility impacts a couple's general health, their marriage, and social interactions. Infertility brings a deep sense of grief and loss (Butler & Koraleski, 1990; Cook, 1987; Morley, 1994; Resolve, 2007; Ryan, 2001). From the narratives of the American and Jamaican study sample, the data show that while there has never been a greater choice of alternatives for building the family, the medical treatment of infertility has created several psychological, social, and economic problems. The progressive medicalization of infertility has created a need for a service which is not readily available or affordable to every American with infertility. The literature and the study findings identify two categories of people who use the services of assisted reproductive technologies. The first comprises those persons who exclusively bear the cost of their infertility treatment. The second comprises a fraction of the population residing in one of the fifteen states that have mandatory health coverage for infertility. Infertility treatment is an important aspect of reproductive health care, yet one quarter of all health plans in American provide some level of coverage for infertility treatment (Resolve, 2007). More women would be likely to attempt IUI, IVF, ZIFT, or GIFT if they lived in states that required insurance companies to provide coverage

for the procedures (Reproductive Health Services). Jamaicans on the contrary have no insurance companies that provide coverage for assisted reproductive procedures. Consumers of this scarce but vital service pay out-of-pocket or take out small bank loans. When pronatalist societies like the United States and Jamaica leave access to infertility treatment to the free market, they fail to attend sufficiently to the reality of race and class bias in the distribution of reproductive health care service. Secondly, the medicalization of infertility puts pressure on infertile couples to meet society's expectations. Infertile couples are given a subtle but direct message that "You never fail until you stop trying" (Brinkmann, 2001, p. 150). Because there is always hope left, at least in principle, couples will try one treatment after another as reported by participants of this study. Thirdly, infertility treatment is to help infertile couples have a live baby. When the dominant experience of infertility treatment is of a failure rather than success, inability to find effective infertility treatment may say more about limited medical understanding of infertility than about the infertile couples.

RECOMMENDATIONS FOR APPLICATION

Based upon the findings of this study, the following recommendations are made as a matter of priority to help all persons experiencing infertility and for professionals working with individuals or couples experiencing infertility.

I. PSYCHO-EDUCATION

Psycho-education involves helping infertile persons/couples meet the psychosocial challenges of assisted reproductive technologies, including support, education, and research. Psycho-education must have a primary prevention component which alerts young people to potential fertility difficulties and their prevention. Education at this level includes prevention and treatment of reproductive tract infections (RTIs) –sexually transmitted diseases, endogenous infections, and iatrogenic infections, and to encourage health-seeking behaviors.

Infertile people and their families need psycho-education because the literature and this study concur that infertility is a major life crisis that affects people's life goals, view of themselves, marriage, and social relationships. Family psycho-education includes teaching coping strategies and problem-solving skills to families, friends, and/or caregivers to help them deal more effectively with the infertile person. Psycho-education for the infertile individual or couple should be related to the medical aspects of infertility, interpersonal relationships, and ways to enhance quality of life. Therapists should acknowledge the intrusiveness and distress caused by medical treatment and help people make practical and optimal choices about continuing treatment or opting for alternative lifestyles.

2. INFERTILITY COUNSELING

Canada and New Zealand have made infertility counseling mandatory and the United Kingdom has made such counseling available to its people. Professional organizations regarding the promotion of infertility counseling are located in these countries, for example, the Australian and New Zealand Infertility Counselors Association (ANZICA) Inc. and the British Infertility Counseling Association. These organizations share common objectives to provide a structure to promote the particular interests of infertility counseling (ANZICA); offer a variety of training and education services to its members (British Infertility Counseling Association); provide ethical guidance to its members (ANZICA); and demonstrate a commitment to the total well-being of people with infertility problems before, during and after treatment and those who choose not to undergo any kind of medical intervention (BICA).

In the United States and Jamaica, infertility counseling is provided by private individuals and agencies. There is also no national infertility counseling organizations incorporating social workers, psychologists and infertility counselors. As a consequence counselors may be inadequately trained; service may not be available or might be inaccessible or be too expensive for

lower-income persons without insurance reimbursements. This study recommends that in compliance with the National Association of Social Workers Code of Ethics (NASW) to uphold competence and professional development, Schools of Social Work in the United States and Jamaica should provide all its graduates with the knowledge and skills to respond to the emotional needs of couples with infertility, respond to the couples and their network, and help couples to utilize self-help and support groups.

The infertility counselor may be any mental health professional (e.g., social worker, family therapist, psychiatrist or psychologist) who has knowledge of the medical, psychological and social aspects of infertility. Infertility counseling should be made available in conjunction with medical treatment or after the couple terminates treatment following unsuccessful efforts to fall pregnant. According to Daniels (2003) “social workers, with their psychosocial perspective, are seen to have a unique contribution to make to a more holistic approach to infertility counseling” (p. 1).

The literature and findings of this study confirm that infertility is a stressor and crisis involving interaction among physical conditions predisposing to infertility, medical interventions addressing infertility, reactions of others, and individual psychological characteristics. “Stanton and Dunkel-Schetter applied stress and coping theory to infertility, noting that infertility is characterized by the dimensions of what individuals find stressful: unpredictability, negativity, uncontrollability, and ambiguity” (Covington and Burns., 2006, p. 24). Help from the counselor must also be directed to helping individuals/couples assess the isolating effects of their experience and find ways to magnify and best utilize their available resources (Brown, 2004). Counseling, above anything else, must facilitate the resolution of infertility issues and help the individual/couple to integrate the infertility experience into their total life experiences.

As the couples move toward resolution, they need direction, support, and clarification from a counselor who understands their experience. The counselor should acknowledge that adaptation to involuntary biological childlessness is a slow and painful process of pursuing solutions, considering options, grieving losses, and redefining the self, the family, and the future (Cooper-Hilbert, 1998). Social workers, as described in Chapter One, are attuned to the wider issues-social, financial, and emotional, as well as medical and especially social support, which is generally the couple's greatest need. Supporting this claim, Zastrow & Kirst-Ashman (2001) note that the social worker as educator can inform people about options and procedures with specific and accurate data.

Based on the literature and the findings of this study, infertility is often the first crisis the couple encounters. Infertility is usually accompanied with grief and loss whether it is a profound distinct loss at the onset of treatment or a gradual accumulation of losses over time. Counseling should focus on grief as infertility involves grief and loss issues. Grief will be an issue for the infertile couple regardless of the outcome of treatment and whether or not the couple has a child by any means. The losses of infertility may involve the loss of privacy and control of one's body, the loss of life goals, self-confidence, the loss of individual and/or couple's health, status, physical and psychological well-being, prestige, assumption of fertility, and anticipatory grief at the possibility of being childless (Covington et al., 2006). Grief counseling however must be a treatment of choice.

In addition to the clinical workers providing clinical counseling services, I recommend that social workers assume the roles of advocates for infertile individuals and couples, challenging unjust and unresponsive systems and influence decision makers. With advances in technology and internet, advocacy practices will be changing within the times (Schneider and Lester, 2001) but the

goals of advocacy remains constant; that is working for policy changes, for example, use forums to communicate the message; seek opportunity to be Board members of appropriate organizations; engage with policy makers; seek out opportunities to speak at professional women's group meetings and conferences; and write papers for professional journals. Social workers may choose to serve a dual role as clinician-advocate or may specialize in either psychotherapy or advocacy.

3. GROUP THERAPY

In view of the social withdrawal and isolation experienced by many individuals and couples dealing with infertility, group therapy is recommended to restore interaction and support. Group therapy is a very useful therapeutic intervention among people who feel helpless and hopeless and believe that they have little to contribute to help others, particularly other people sharing their experience with infertility. In view of the Jamaicans' indifference to group therapy expressed by the study participants, it is recommended that counselors/therapists use the church as a vehicle to disseminate information concerning the value of group therapy for infertile couples. It is further recommended that churches with counseling center ministries should organize self-help groups for individuals/couples with infertility. Since a number of participants in this study recounted less-than-helpful responses from other members of their faith community, it is also recommended that faith groups review the way they perceive infertility and people experiencing fertility difficulties.

4. PUBLIC EDUCATION AND ADVOCACY

Several of the findings of this study have implications for public education and advocacy on behalf of people with infertility. There are strong indications that most people in our society have no knowledge of the problems brought by an experience of infertility. There were also reports of pastors, family members, friends, and co-workers making remarks about children that caused hurt to people who were involuntarily childless. Therefore public education is recommended for the general public and infertile people as well. No single agency or profession is sufficient for this

task. Hence, a collaborative or interdisciplinary teamwork is needed. There is need for the participating groups to do ongoing research. Unlike abortion issues, which are fairly crystallized and articulated, the issues and institutional values concerning infertility and reproductive technologies are only now being discovered and defined (Zastrow & Kirst-Ashman, 2001). However, social workers can bring to public education a unique view to the issue of infertility because they have a holistic view of all the systems that impact people with infertility. Public education must aim at de-stigmatizing infertility, explicating the nature of infertility and its prevention, and addressing gender sensitivity, with a view to helping men to be more emotionally involved with their partners, irrespective of which member of the couple is infertile. With respect to advocacy, social workers may join other pressure groups to challenge barriers to reproductive health services.

5. INFERTILITY AS A PUBLIC HEALTH ISSUE

In light of the prevalence, causes, and difficulties involved in the diagnosis, treatment, and consequences of infertility, it is recommended that infertility be categorized as a public health issue in Jamaica and the United States. Research studies indicate that one in ten couples of reproductive age experience difficulty in becoming pregnant (Evers, 2002; Sherrod, 2004). Since infertility for some people is perceived as a private and personal matter, the real number of infertile couples might be even greater. Because the role of public health is to protect, promote and restoration of people's health (Evens, 2004), preventing infertility caused by preventable factors such as infection, environmental and occupational toxicant exposure should be a priority (See Chapter Three). Many of the causes of infertility in Jamaica and the United States revealed by this study can be successfully treated as a public health concern. In addition to a national infertility prevention and treatment program, there is need for continued public health efforts in data

collection and surveillance, public debates, and development of health policy that ensures that public and private services are safe and effective where they are available (Evens, 2004).

6. MANDATED HEALTH POLICY THAT COVERS INFERTILITY TREATMENTS

This thesis has highlighted the complex moral, religious, legal and feminist aspects of the ARTs. Radical feminist thought spans extreme ends of the spectrum, with Firestone (1971) believing that the ARTs hold potential for liberating women from their procreative functions and thus from patriarchal subjection to feminists of the FINRRAGE analysis that expressed the view that the ARTs have contributed to the medicalisation of infertility and to the appropriation of women's reproductive functions by men. Thus while Firestone advocated the unchecked development and use of the ARTs, FINRRAGE called for the total banning of all ARTs. Sewpaul (1995) cogently argues that neither of these are viable options and she called for regulated use of the ARTs. In view of the pain and anguish expressed by infertile couples and their desire for biological parenthood – whether biologically and/or socially driven – I believe that the ARTs need to be made accessible to infertile persons. If all religions and cultures across all societies reify biological parenthood, then society should assume some responsibility to help the infertile to deal with the complex problems that they confront and enable access to treatment.

In view of the fact that in Jamaica there is no insurance coverage for assisted reproductive technologies (ART,) and in America there are only fifteen states that have passed laws requiring some level of infertility coverage, I recommend that all insurance carriers be mandated by law to provide coverage of infertility treatment. This recommendation, based on Giwa-Osagie's (2001) argument, endorses the right to health care and argues for a comprehensive health care package that includes assisted reproductive technologies. Research shows that “the cost of including a well managed infertility benefit is minimal. Massachusetts, the state with the most comprehensive

mandate for infertility coverage, found that the cost of coverage was one of the lowest among its mandated benefits ...” (Resolve, 2007, p.1). Furthermore, appropriate utilization controls put in place by insurance companies may actually reduce costs and improve outcome by eliminating the inappropriate use of costly covered procedures and encourage specialists to use the most effective and efficient treatment for a specific type of infertility (Resolve, 2007). Since more people would have insurance coverage, a mandated coverage for infertility treatment in Jamaica and the United States would be an excellent way to distribute the benefits of reproductive medicine in a way that assures greater access.

CONCLUSION

When Jamaica and the United States are compared, the results show several differences and similarities. With respect to differences, there are some gender specific differences in their response to infertility and differences in view of adoption. There are also marked differences in relation to the assisted reproduction industry. America has in excess of 400 fertility clinics, while Jamaica has one fertility clinic. From that perspective, the need for ART in Jamaica far exceeds the availability of facilities and expertise. However, for socioeconomic reasons and lack of knowledge, ART is not a high priority on the national agenda when compared to access to treatments for other health related issues. With respect to the similarities between the two countries: pronatalism is upheld; the health status of people of childbearing age varies by important indicators of socioeconomic positions; infertility causes major marital, family, and social problems; and from a socioeconomic perspective, access to fertility treatment is not ideal and is mostly inequitable. The literature and the findings of this study also indicate that both Americans and Jamaicans share a common pool of reasons for desiring biological children and infertile couples will do everything within their means to have a biological child. The use of assisted reproductive technology to achieve biological parenthood is revolutionizing and changing traditional views of parenthood,

conception, and life itself. As Debora Spar (2007) so eloquently puts it: “A revolution is taking place and it’s being driven by the most fundamental of all urges - the desire to reproduce.”

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APPENDIX A

INFERTILITY RESEARCH PARTICIPANTS WANTED

INTRODUCTION OF INVESTIGATOR: I am a professor of social work at Roberts Wesleyan College, Rochester, New York and a doctoral student in the School of Social Work and Community Development at the University of KWA ZULU Natal, South Africa. I am interested in learning about the individual and couple's experiences of infertility and their attitudes, opinions and concerns about assisted reproductive technologies.

DESCRIPTION OF THE STUDY: This study is in partial fulfillment of a Doctor of Philosophy Degree. The title of the study is "A Phenomenological Study into Infertility and the Assisted Reproductive Technologies: U.S.A and Jamaica Compared." Participants in this study must be a couple with personal experience of infertility. In this study infertility is defined as the inability to conceive a pregnancy after a year or more of regular sexual relations without contraception or the inability to carry a pregnancy to a live birth.

TIME INVOLVEMENT: The interviews will run between 45 -90 minutes. Interviews will be audio-taped.

CONFIDENTIALITY: All data received are for research purposes and will be kept confidential. In order to ensure confidentiality, all data will be collected anonymously. On request, I will be willing to share with you the findings at the conclusion of the study.

BENEFIT OF THE STUDY: The results generated from this study will help family counselors, therapist, other mental health and medical professionals understand the lived-experience of infertility, and for the benefit of the individuals and couples who are dealing with infertility and assisted reproductive technologies.

INFORMATION: Attached below is a Consent Form to be signed by willing participants. Please detach and enclose it in the self-addressed, stamped envelope and return to me at Roberts Wesleyan College where I work. Following the receipt of a Consent Form from you, I will call you to schedule a time and place convenient for the interview. If you have further questions about the study, you may contact me at (585) 594-6435 (Roberts Wesleyan College) or (585) 247-3158 (home), or my faculty sponsor and committee chair, Professor Vishanthie Sewpaul (Ph.D.) at the University of KWA ZULU NATAL, South Africa. She may be contacted at: Tel.: 27-31-2601241 or Fax: 27-31-2602618.

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APPENDIX B**CONSENT FORM FOR RESEARCH STUDY**

SCHOOL: University of KWA ZULU Natal, South Africa

STUDY: Interview of couples with the lived-experience of Infertility

I _____, agree to participate in this research study under the direction of Peter Grinion who is a Ph.D. student at University of KWA ZULU Natal, South Africa.

The purpose of the research is to learn about infertility and assisted reproductive technologies as experienced in the United States and Jamaica. The procedure for the data collection involves a taped interview and the completion of a brief demographic form. Participants are guaranteed confidentiality and anonymity.

There is no compensation, monetary or otherwise, for involvement in the study, however, on request researcher will be willing to share the findings of this study. Injuries are not expected from the interview. However, some participants may experience mild emotional discomfort during the interview. Participation in this study is voluntary. Refusal to participate will involve no penalty.

I have read this consent form and I understand the procedures to be used in this study and the possible risks, inconveniences and/or discomforts that may be involved. All of my questions have been answered. I understand that I may discontinue my participation at anytime.

Signature of Respondent

Date

Telephone: _____

Address: _____
(Optional)

I have explained and defined in detail the research procedure in which, the participant has consented to participate.

Signature of Investigator

Date

APPENDIX C

DEMOGRAPHIC RESEARCH QUESTIONNAIRE

ID # _____

Your current country of residence is: _____

Age: _____ D.O.B. _____

Race: _____ African American _____ White _____ Hispanic _____ Native American
_____ Other (Please specify) _____

Marital status: _____ Single _____ Married Date of Marriage _____

Religious affiliation: _____ Catholic _____ Baptist _____ Methodist _____ Presbyterian,
FreeMethodist _____ Episcopalian _____ SDA _____ Pentecostal _____ Evangelical
_____ Jewish _____ Muslim _____ Church of Christ _____ Other (please
specify) _____Indicate the highest level of education you have completed: _____ High School _____ Associate
or Bachelor Degree _____ Masters or higher Degree

Current occupation _____ Income _____

Which family type best describes your situation?

_____ A couple living alone

_____ An individual living alone

_____ A couple living with at least a biological or adopted child

_____ An individual living with at least a biological or adopted child

_____ Other (please specify) _____

Where is your residence located? _____ rural community _____ city _____ suburban

When did you receive diagnosis of infertility? _____ Diagnosis _____

When and where did you begin treatment? _____

APPENDIX D

THE BIOPSYCHOSOCIAL IMPACT INTERVIEW GUIDE

Sample Interview Questions

1. When did you first suspect that you were having trouble conceiving?
 - a. To what did you originally attribute the problem?
 - b. What were your immediate reactions?
 - c. What did you do? How did you come to seek medical help?

2. What has your experience been with the medical community?
 - a. Have you been given a definitive diagnosis?
 - b. How did you react to hearing this diagnosis?
 - c. Are you currently undergoing treatment?
 - d. What have your experiences been like with treatment?
 - e. How your decisions regarding treatment been influenced by moral, financial, or religious concerns?
 - f. What would you like other couples or health providers to know about your experience?

3. How are you coping with infertility/treatment? What means are you using to cope?
 - a. Who has provided you with the most support?
 - b. How do you feel about the situation at this point?
 - c. Do you think you need more support from others than you are currently getting? What type?

4. What effect has the infertility had on your life?
 - a. Has it affected your job/work in any way?
 - b. How has it affected your relationships with your family and friends?
 - c. Do you think that it has impacted you social life? Please tell me how?
 - d. How has it impacted your relationship with your partner?
 - e. What is the impact of infertility on relationships at work and career development?

5. What concerns you have with telling others about your infertility problems? Have you told others about the problem? Who have you told?
 - a. Who was the first person that you told (outside of the medical community), and how did they react?
 - b. Do their response change your level of concern about telling others in any way (positively or negatively)?

6. Have your decisions about assisted reproductive technologies been influenced by moral or religious concerns?
 - a. What does your church teach about infertility/assisted reproductive technologies?
 - b. Does your personal position conflict with the official position of your church on ART?

- c. Do you find the church supportive to the needs of infertile couples?
7. Since infertility treatments are very expensive and essentially elective, do you believe that private health care coverage should be mandated and made available to all infertile couples?
 - a. Do you consider the inability of some infertile couples to afford infertility treatments a justice issue? Why?
8. Why do you desire biological children?
 - a. What does it mean to be infertile? [Prompt for the importance of becoming a biological parent and female/male differences]
9. What is the role of extended family in your experience? [Prompt for cultural or family themes related to fertility and gender.]
10. Describe how treatment decisions have been made related to infertility treatment.
11. Describe strengths you discovered as a couple by your participation in treatment.
Prompt for male /female differences]
12. Describe the role of spirituality/religion and its impact on you choices in regard to your treatment options. [Prompt for ethical and moral concerns.]
13. How has your reaction to infertility differed from that of your spouse?
 - a. What comes to mind when you think of childless people?
 - b. Do you have childless relatives and friends?
 - c. Are they viewed as “tragic” or “terrific” people by your family?
[Prompt for male/female differences].
14. What made you choose to use assisted reproductive techniques?
15. What kinds of treatment for infertility are you currently undergoing? What other treatment(s) for infertility have you had in the past?
What kind of treatment is your partner undergoing?
16. Have any of the following affected your feeling about the need to resolve your infertility?
 - a. awareness of your own aging (e.g. grey hair)
 - b. awareness of spouse’s aging
 - c. awareness of siblings already having children
 - d. awareness of your parents or in-laws illness or aging deaths of friends or relatives [Prompt for the need to become a biological parent]
17. Questions for interviewer.