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Relationship Among Self-Esteem, Blame and Guilt, and Sexuality of Infertile Young Women

by

Alva H. Jordan

A Thesis
Submitted to the Faculty of
Mississippi University for Women
in Partial Fulfillment of the Requirements
for the Degree of Master of Science in Nursing
in the Division of Nursing
Mississippi University for Women

December 1989

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Relationship Among Self-Esteem, Blame
and Guilt, and Sexuality of
Infertile Young Women

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Dedication

This study is dedicated to all infertile women.

Abstract

This descriptive correlational study purported to ascertain the relationships among self-esteem, blame and guilt, and sexuality of infertile young adult women, and to explore the basis for the study the Roy Adaptation Model (1976) was utilized.

The convenience sample was comprised of 31 infertile women with diverse conditions who had undergone medical treatments for at least one year. The Infertility Questionnaire (IFQ) of Bernstein, Potts, and Mattox (1985) and researcher-developed questions were used in data collection to assess adaptation of the women to infertility. Quantitative data were analyzed using Pearson's Product Moment Correlation while content analysis was used to describe the qualitative data. Data were collected at a private infertility clinic for three consecutive weeks.

Results of the study supported the three correlational hypotheses. When infertile women experience blame and guilt, self-esteem and sexuality are decreased. Also, as self-esteem is lowered, sexuality is decreased. The main coping strategies used by these women were prayer, hobbies, anger, and crying. Perceived supportiveness of significant

others and health care providers was found to decrease emotional distress. Implications for clinical practice and nursing education were suggested, and three recommendations for further research were offered.

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I am most appreciative of the insight and sensitivity of not only my research advisor, but also a person with whom I share a sisterhood: Dr. Virginia L. Cora. Thank you, Virginia, for your commitment, guidance, and encouragement, and for your role in helping me begin adaptation to my own infertility crisis. You listened with empathy.

I am grateful for the support and dedication of the faculty, especially the members of my research committee: Ms. Mary P. Curtis and Ms. Jessica Alexander.

Words cannot express my gratitude to the women who participated in this study and to the very cooperative staff of the infertility clinic.

Finally, my typist, Phyllis McCorkle, is dearly thanked for her patience and dedication.

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Chapter I

The Research Problem

Infertility is an unexpected, unwanted reality for 20% of all married couples in the United States (Kraft & Polombo, 1980). Defined as the inability to conceive after one year of unprotected intercourse or the inability to carry a pregnancy to a live birth, infertility has become a prominent disorder and the percent of infertile women continues to soar (Florence, 1984)

A primary cause of the proliferation in infertile women can be attributed to pelvic inflammatory disease (PID) (Larkin, 1985). Sexual experimentation in the adolescent population and the sexual freedom of the 1970s both have led to increased incidences of PID. During the 1970s many women began using the intrauterine device and oral contraceptives as sources of birth control. These methods prevented pregnancy, but not pelvic infection. Therefore, PID ran rampant and caused irreparable damage to reproductive structures for young women.

Another substantial reason for infertility among women is increased maternal age. Women are now waiting later in life to start families after having established their

careers. Chances of conception decrease markedly after 30 years of age (Woods, 1981).

Women who are beset with infertility display a variety of emotional reactions: diminished or loss of self-esteem, shame and guilt complex, and decreased sexuality. Using Bernstein, Potts, and Mattox's (1985) study as a basis, the purpose of this research was to ascertain the relationship between self-esteem, blame and guilt, and sexuality of infertile young adult women.

Introduction to the Problem

Being infertile has caused women mental anguish since Biblical times. As noted in Genesis 30:1, "And when Rachel saw that she bore no children, Rachel envied her sister, and she said unto Jacob, 'Give me children or else I die.'" Unfortunately, today, this statement reflects the feelings of many infertile women. Research has indicated that the suicide rate of infertile couples is approximately twice that of couples with children (Garner, 1985).

Past eras have cited the problem of infertility as a result of a dysfunctional female reproductive system. This belief was derived from the teachings of the Old Testament and folklore from early civilization which blamed the victim (most often the woman) and saw her as heroes fallen from grace or being punished by higher powers (Mennings, 1980). This assumption has contributed to the punitive and guilty feelings experienced by infertile women.

The belief also existed that infertility was a result of being under psychological distress. Physicians offered very little assistance as women were advised to "relax, relax, relax!" "It will happen!" However, recent research has shown that 40% of all infertility cases can be attributed to men, 40% to women, and 20% to both members of the couple (Kraft & Polombo, 1980).

Because having children is taken for granted by most people, society has, until recent years, shown little interest in infertility or the people who experience the problem. The advent of invitro fertilization in 1978 resulted in the birth of Louise Brown and captured the nation's interest in the medical treatments of infertility. However, the emotional needs of infertile women continued to be unrecognized.

In 1980 Mennings studied the emotional needs of infertile couples and concluded that these couples experience the typical grief responses of shock, denial, anger, isolation, and resolution. The nurses' role was to promote adaptation during each of the stages. Other studies by Draye (1985) and Clapp (1985) were similar to Mennings' study in the identification of infertility as a stressor that evokes a grief response. However, the psychological effects of infertility have not been studied extensively.

Medical research and successful treatment for infertility have progressed rapidly since the 1970s. Now an

estimated 50% to 60% of all infertility can be treated if appropriate care is sought (Griffin, 1985).

Treatments to correct infertility range from various drug therapies to improve ovulatory and hormonal deficits or cervical mucous quality to corrective surgery for tubal or uterine abnormalities. Most recent alternatives to have a child include invitro fertilization, surrogacy, and egg donor programs. Despite the advanced technology, 4 to 5 million people will never conceive (Griffin, 1985).

Both women who achieve pregnancy and those who are unable to achieve pregnancy before and after treatment can benefit from emotional support and counseling. Unfortunately, family members and friends offer such platitudes as: "relax," or "you need to take a romantic vacation." These statements make it especially difficult for infertile women to share thoughts and feelings about their infertility and may lead to a sense of isolation.

Healthy feelings in the areas of self-esteem, blame and guilt, and sexuality are deemed vital to a person's emotional and physical well-being (Mennings, 1978). Although the infertile woman will show a propensity for negativity in one or more of these areas, the extent to which self-esteem, blame and guilt, and sexuality influence each other has not been researched.

Self-esteem is an estimate of value that each person places upon herself. It is a phenomenal process in which

the person perceives characteristics of herself and reacts to those characteristics emotionally or behaviorally (Wells, 1976). People with a healthy self-esteem have confidence, are optimistic, enjoy new challenges, feel worthy of praise, and do not abuse themselves or allow others to hurt or abuse them (Mennings, 1978).

In contrast, persons with poor self-esteem lack self-confidence, are pessimistic, feel unworthy, are embarrassed by compliments and praise, and tend to allow abuse from others (Mennings, 1978). Women who define their value as human beings and their femininity as being mothers and cannot choose to complete their image through pregnancy and parenthood may feel stripped of their self-worth (Hendricks, 1985).

The blame and guilt complex arises as infertile women attempt to make a cause-and-effect relationship between infertility and something they have done (or not done) in life. The event which precipitates guilty feelings and thoughts of unworthiness may or may not be grounded in real events. Some guilt producing actions reported by infertile women are premarital sex, an abortion, the use of birth control, sexually transmitted disease, masturbation, and any unusual sex practices (Mennings, 1978).

Because infertility is inherently sexual, the concept most likely to be threatened by infertility is sexuality (Mennings, 1980). Society and tradition are ubiquitous in

the shaping of a woman's sexuality, specifically, her role in the reproduction of children. The inability to conceive coupled with ingrained rationalizations may cause a woman to feel void of sexual identity. Sexuality has a strong bond to childbearing. Therefore, the infertile woman may find it difficult that she still possesses sexuality.

When the social assumption that a family naturally includes children is challenged by the threat of infertility, a disruption of the way in which a person views her world occurs (Schneider, 1984). This disequilibrium can result in changes regarding one's sense of worth, in feelings of attractiveness, self-concept, identity, body image, or it can result in a significant change in role performance and role expectations.

This study examined the interrelatedness of the concepts of self-esteem, blame and guilt, and sexuality of infertile young adult women.

Theoretical Framework

The theoretical framework for this study was Roy's Adaptation Model (1976). A person, Roy theorized, is an adaptive system both as an individual and as a member of a group. Within this system input is recorded, processed, and eventually produces a response. This behavioral response has the potential of being adaptive or maladaptive. The contingencies of coping with the response lie with the regulator and cognator subsystem activities. Regulator

coping is accomplished through innate, neural, chemical, and endocrine activity, while cognator coping mechanisms are through cognitive-emotive channels. Resultant behaviors are categorized as four adaptive modes which are physiological needs, self-concept, role function, and interdependence. The person, then, responds adaptively to a constantly changing environment with regulator and cognator mechanisms that act through these four modes.

This study contributes to Roy's theory of adaptation by providing nursing a method for understanding the physical and emotional aspects of infertility and through counseling and education to assist these women to adapt to their infertility. A discussion follows of the four adaptive modes of physiologic needs, self-concept, role function and interdependence as they relate to infertility.

Self-concept. The self-concept mode is divided into three components: (a) physical self, (b) personal self, and (c) interpersonal self (Roy, 1976). The physical self has been described as the person's image of self as a physical being and of her capacity to use herself to accomplish what she wishes to do when and where she wishes to perform that behavior. Body image begins to develop early in life by self-observation and by the assessments of others. The latter has been described as most significant with the shaping of a person's identity. The reproduction of children is applauded by society and tradition; thus,

conception represents a way of maintaining body integrity. A basic assumption of most women is that they are fertile and having children will occur when and if they desire. When the problem of infertility is recognized, the incorporation of this body image discrepancy may be a difficult task. Problems in physical self often are experienced as loss. The infertile client may grieve a loss which is not actual, but potential: loss of potential natural children, loss of fertility, loss of the pregnancy experience.

The personal self is comprised of three components: moral-ethical-spiritual self, self-consistency, and self-ideal (Andrews, 1986). One's moral-ethical-spiritual self includes one's belief system and an evaluation of who one is. Problems in this adaptive mode frequently take the form of guilt (Roy, 1976). The infertile woman may blame herself if she had an abortion years ago and now believes that the infertility is God's punishment.

Self-consistency is concerned with a person's ability to maintain a stable self-image over time (Roy, 1976). Even if a woman conceives, she still bears the label of being "infertile." Pregnancy following infertility is regarded as a high-risk situation. From a nursing perspective, the couple is at some increased risk for psychologic complications if they have self-image problems (Garner, 1985).

Self-ideal is that aspect of the person's self which relates to what the person expects herself to be and do (Roy, 1976). Problems of powerlessness arise out of deficits in personal self. The infertile woman whose physician refers to her infertility as "unexplained" may feel particularly distressed because she does not understand why she is unable to conceive. Women also report losing control of their own bodies, that is, being told when and how to have sex and having numerous medical tests and examinations.

According to Roy (1976), self-esteem is a significant concept to consider in examining the self-concept mode. It is integral to each component of self-concept. Only when the person has a consistent concept of self is she able to place value on that self. Therefore, the infertile person's self-ideal and expectancies may be in a state of disequilibrium and may lead to unhealthy self-esteem.

The interpersonal self is the self with the task of living with others. The infertile woman may feel isolated from family and friends, especially if these people are fertile.

Role function. Role function, as defined by Roy (1976), is the expected behaviors of a particular role. Role performance is the actions taken in relation to expected behaviors of a particular role. With infertility, the couple may experience a sense of role failure.

Interdependence. Interdependence is the comfortable balance between dependence and independence in relationships with others (Roy, 1976). Each person develops interdependence during the adult stages of the life cycle. Most infertile couples are in a period when the woman is no longer building independent or dependent behaviors, but is working with patterns already established up to this point. This stage is characterized by building and establishing families. Infertility can cause stifled growth as the woman may feel incomplete without children. Problems of interdependence may be manifested by alienation, disengagement, hostility, and loneliness.

Significance of the Study

For reasons such as role perception, lack of time or knowledge, physicians may not provide the needed counseling and support to infertile women. Nurse clinicians have significant roles in developing the treatment plans of infertile women through education and counseling. Olliver, Lesser, and Bell (1984) related that several factors have contributed to increased nurse clinicians' participation in infertility care. First was the clinician's ability to provide health teaching, perform routine testing, interpret those tests, and develop a therapeutic relationship. Secondly, consumers have expressed satisfaction with the clinician's ability to attend to both the physical and emotional needs of an infertility problem.

A third factor that influenced nurse clinician involvement was federal funding decisions (Olliver et al., 1984). In 1979, the Office of Family Planning allocated funds for the integration of infertility services into existing family planning and planned parenthood programs that received federal funding. Since family planning programs use nurse clinicians, they had to learn to do many of the initial procedures of an infertility work-up. Administratively, these clinicians were found to be the most cost-effective providers of delivering infertility care (Olliver et al., 1984).

Mennings (1980) predicted that people who have healthy self-esteem and take pride in themselves will have normal feelings and see the situation as something external and unfortunate that is happening to them. This study proposes an addition to the body of nursing knowledge by further assessing the mental and emotional needs of infertile women and providing a scientific basis for nursing to include the provision of counseling and appropriate education in the health care of these women.

Assumptions

This study was based on the following assumptions:

1. Young adult women's self-esteem is vital to their individual well-being.

2. Young adult women experience blame and guilt as emotional reactions to significant life events.

3. Sexuality is integral to emotional and physical well-being of young adult women.

4. Self-esteem, blame and guilt, and sexuality are concepts that can be measured.

5. Infertility in young adult females is a significant life event.

Statement of the Problem

This descriptive correlational study examined the question: What is the relationship among self-esteem, blame and guilt, and sexuality in infertile young adult women?

Hypotheses and Research Question

The three hypotheses for this study were:

1. The higher the blame and guilt complex, the lower the self-esteem of infertile young adult women.

2. The higher the blame and guilt complex, the lower the sexuality of infertile young adult women.

3. The lower the self-esteem, the lower the sexuality of infertile young adult women.

The qualitative research question was: How do young adult women adapt to their infertility?

Definition of Terms

For the purpose of this study, terms were defined in the following manner:

Self-esteem. Self-esteem was an estimate of value that a person places on herself. In this study, self-esteem was

measured by the total score on the self-esteem subscale of the Infertility Questionnaire.

Infertility. Infertility was the inability to conceive after one year of unprotected sexual intercourse or the inability to carry a pregnancy to a live birth. For the purposes of this study, infertility was further defined as the inability to conceive after one or more years of medical treatment for the following conditions: ovulatory dysfunctions, tubal disease, cervical mucous abnormality, or "unexplained" infertility.

Young adult women. Young adult women were females aged 24 to 40 years who were desirous of pregnancy as evidenced by having undergone medical treatment for infertility for at least one year.

Blame and guilt. Blame and guilt complex was the infertile women's feelings of being responsible for their condition due to having done a wrong deed. In this study, blame and guilt were measured by the total score on the self-esteem subscale of the Infertility Questionnaire.

Sexuality. Sexuality was the individual quality and character of being a woman or a man. In this study, sexuality was further defined as the response of the infertile woman to her partner sexually and was measured by the total score on the sexuality subscale of the Infertility Questionnaire.

Summary

In summary, Chapter I defined the problems of female infertility as being a decrease in self-esteem and sexuality and feelings of blame and guilt. Chapter II provides a review of research on the psychological aspects of infertility. Found in Chapters III, IV, and V are methodology, findings, and outcomes of this study, respectively.

Chapter II

Review of Literature

Research studies measuring infertility and self-esteem, blame and guilt, and sexuality are limited. Reviewed in this chapter are studies related to the psychological manifestations of infertility as experienced by women and, in some cases, couples.

Self-Esteem, Blame and Guilt, and Sexuality

Bernstein, Potts, and Mattox (1985) noted the necessity of a specific infertility questionnaire after realizing that infertile couples experienced psychological distress but often tested within normal range on psychological tests. The purpose of their study was to test the effectiveness of a newly developed Infertility Questionnaire (IFQ) for the measurement of three dimensions: self-esteem, blame and guilt, and sexuality. The IFQ is a 21-item questionnaire scored on a 5-point Likert scale. It was tested for validity by having the respondents also complete the Symptom Check List (SCL-90), a self-reporting assessment used for over 20 years. The SCL-90 is scored on a 5-point Likert scale and measures the degree of psychological distress in nine dimensions: somatization, obsession-compulsion,

interpersonal sensitivity, depression, anxiety, anger-hostility, phobic anxiety, paranoid ideation, and psychoticism.

The test was administered to 40 couples of which 39 women and 31 men returned the completed forms. Participants were chosen systematically using every third client from a roster of subjects attending the reproductive endocrinology infertility clinic at a university hospital.

Bernstein et al. (1985) found that in the self-esteem section of the IFQ, women scored significantly higher for impairment than men ($p < .05$). The gender difference was not statistically significant for blame and guilt and sexuality. Thirteen percent of the sample scored higher on the IFQ than on the SCL-90. The results of this study were that the IFQ is a valid and simple method of assessing emotional impairment accompanying infertility and can be used to assess the need for counseling and referral.

Due to the scarcity of studies related to the coping strategies with infertility and intrapsychic effects, Valentine (1986) examined the emotional impact of infertility on individuals and the marital relationship. Valentine's methodology included media announcements to attract an initial sample and the snowball sampling technique to locate additional subjects; the sample consisted of 14 families (12 couples and 2 women). A 2-hour audiotaped interview was conducted in which participants were requested

to discuss conflicts, feelings, and sources of stress pertaining to infertility.

Valentine (1986) concluded that individuals who experience infertility expressed intense emotional reactions and feelings of loss and of being in a crisis. She further recommended that social workers utilize this information in assisting infertile clients to adjust to feelings of loss, crisis, and overwhelming stress and that medical practices be adopted to respond to the emotional needs of infertile patients.

Since the majority of information related to infertility was on its diagnosis and treatment, Sandelowski and Pollock (1986) conducted a descriptive study to understand the experience of infertility from the perspective of women who lived with the problem. The theoretical basis for this study was phenomenology, whose purpose is to discover rather than to verify preexisting notions of reality of these women.

The sample of 48 women was selected from newspaper advertising and an infertility clinic serving primarily the medically indigent. The first interview was audiotaped, then the women were interviewed a second time to clarify and validate data from the initial interview.

The major elements of the infertility experience were ambiguity, temporality, and otherness (Sandelowski & Pollock, 1986). Ambiguity was the predominant response in

the subjects' description of their infertility experience. The women expressed uncertainty about reasons for infertility, being able to achieve life's goals, safety of infertility treatments, and whether pregnancy would be achieved and carried out successfully; they also expressed suspicion about past fertility and what in life is within human control.

The concept of temporality was used to describe expressions of time, both earthly and body. The women described time limits, feelings of "running out of time," and time frames for menstruation, sex, and ovulation. Temporality was linked with ambiguity because the women never knew how much time it would take to achieve success or when the "end" would arrive.

Other women described their feelings of somehow "being different, as manifested by making social comparisons, being unfairly singled out, being left out, and being defective. One of the investigator's recommendations identified the need for study of the diversity of women's experiences of infertility to define implications for practice (Sandelowski & Pollock, 1986).

Since research addressing the effects of infertility on interpersonal relationships was minute, the purpose of Davis' study (1984) was to view the personal reactions of individuals to infertility. A convenience sample of 30 subjects was obtained from a physician specializing in the

treatment of infertility in a large metropolitan medical center in the Southeastern United States. Criteria for inclusion in the study was that participants be unnamed infertile women seeking treatment for the purpose of conception, not currently pregnant, and lacking a history of psychiatric disorders. They also had to be able to read and write English, be reachable by telephone to the clinic.

The instruments for the study were the Multiple Affect Adjective Check List (MAACL), which was developed to provide valid measures of anxiety, depression and hostility, and a semi-structured interview guide which was based upon a synthesis of the findings of existing research, anecdotal reports, and the investigator's personal knowledge of infertility. The conceptual framework of the study, King's systems theory served as the organizing framework for development of the interview guide. Dichotomous questions, open-ended and Likert type, were used to gather information.

Primarily, content analysis and descriptive statistics were used to analyze the data. Depression received the highest negative frequency, followed by hostility and anxiety. Marital relationship reactions also were primarily negative. Recommendations were that more thorough assessments and counseling be available for women in infertility clinics (Davis, 1984).

The psychology of women has been studied often from the contents of male based psychology as noted by Allison

(1976). She saw a need to study women strictly from a female standpoint. Pregnancy and conception are female events; therefore, these categories were used to study the female psyche. The purpose of the study was to scrutinize the relationship between fertility and women's roles.

A comparative study was implemented with an infertile group of 29 women aged 21 to 48 years and a fertile group of 29 women the same ages. The husbands also participated. Subjects were obtained from private practices in Los Angeles, California.

Each subject completed three instruments: the Maferr Inventories of Feminine Values from which role conceptions and role discrepancies were measured; the Lifestyle Questionnaire which gave self-report of experienced role conflict; and a medical history questionnaire. The husband completed only the Maferr Inventory to indicate role expectations for his ideal woman. A semi-structured interview also was conducted to explore the woman's experience and the meanings of pregnancy and parenthood to her.

Results of the study indicated that the infertile women rated real self and ideal women as significantly more traditional than fertile women ($p < .005$). The infertile group reported less experience of role conflict than the comparison group in the areas of child care, relations with husband, household management, and time management, and on a summation of all role conflict areas measured by the

Lifestyle Questionnaire. The infertile women showed greater occupational commitment than the comparison group women.

The infertile group displayed less discrepancy among different sets of internally experienced role expectations (real self, ideal woman, and perception of man's ideal woman). The two groups were not significantly different on size of discrepancies between wife's role conceptions and husband's role expectations for women; nor did they differ significantly on occupational commitment of subject's mother. Allison (1976) recommended further research be conducted on role conflict in women because she hypothesized that the inability to have children led the infertile women to focus on desiring a traditional role.

Lukse (1985) studied the effect of group counseling on the frequency of grief reported by infertility couples. They hypothesized that there was no significant difference in the reported frequency of grief by infertile couples before attending therapeutic counseling than after they attended these counseling sessions.

Fourteen couples and one woman were chosen by referral to attend a six-session structured group infertility counseling program. The instrument was a 26-item questionnaire adapted from the Differential Emotions Scale (DES) and the Index of Sexual Satisfactions, the Index of Self-Esteem, and the Index of Marital Satisfaction. The instruments were all reported to be valid. Construct validity was

ascertained by having five people in the medical and education profession and three infertile couples review and report the relevance of the items.

The purpose of the questionnaire was to collect data concerning the feelings about loss of control, anger, self-concept, and marital and sexual relations. Persons completed the questionnaire prior to beginning the session to determine pretreatment level of frequency of grief and after the sessions.

Group sessions consisted of informal discussions related to feelings, responses, and goals. Using the open-ended approach, role play situations also were used.

Data was analyzed by Wilcoxin matched pairs. A significant difference occurred in the frequency of grief reported by infertile couples before attending therapeutic counseling and after counseling. Women scored higher than men on both the pretest and posttest for grief. Counseling had positive effects for women as reported by higher scores in self-concept.

The role of emotions in infertility treatment is a controversial issue in Freeman, Garcia, and Rickals (1983). The purpose of their study was to describe behavioral and emotional factors in anovulatory infertile women. The sample was composed of two groups of women: the anovulatory group was 49 women who were being treated with hormonal therapy; the other group was comprised of 104 women who were

infertile but did not have a diagnosis of anovulation. Two research questions were posed: Did the anovulatory infertile women have greater anxiety, depression, emotional disturbance, neuroticism, sexual inhibition, and diminished ego strength at the onset of treatment than fertile women? Did anovulatory infertile women differ in these measures from women with other causes of infertility? The instrumentation included five self-assessment measures: the Hopkin Symptom Checklist (HSCL-90), a measure of nine emotional factors; the Langner Screening Scale (LSS), a psychopathologic screening measure; the Eysenck Personality Inventory (EPI), which measured neuroticism and extraversion; the Mood Analog Scale, a semantic differential to rate close relationships and evaluate ego strengths; and a sexual function inventory adapted from the Derogatis Sexual Function Inventory (DSFI). The Minnesota Multiphasic Personality Inventory (MMPI) was completed but only by the treatment group.

Scores on the HSCL-90, EPI, LSS, mood analog scale, and MMPI were in the normal range and did not differ significantly between the treatment and comparison groups. These results showed that neurotic personality structure and psychopathologic traits were not significantly greater in the treatment group (infertile) and comparison group (fertile).

Freeman et al. (1983) recommended that more studies be conducted on treatment regimens, length of treatment, and inclusion of male partners to learn about the role of sexual functions in infertile groups.

A descriptive study was conducted by Milne (1988) to assess the needs of couples undergoing invitro-fertilization (IVF). The sample of 28 couples was obtained from a large teaching hospital in Vancouver, British Columbia. The couples had completed at least one treatment attempt of IVF and were English speaking. A joint interview with both partners was arranged 3 or more weeks after embryo transfer. The interview guide consisted of 6 closed-ended questions and 12 open-ended questions that were designed to elicit the couples' perceptions of both positive and negative aspects of the procedure, reactions of others, sources of social support, impact on lifestyle and marital relationship, and ideas for improvement of the entire process.

In their overall experience of the IVF procedure, six used positive words such as "hopeful" and "exciting" and 22 expressed strongly negative feelings with words such as "devastating, "physically and emotionally draining." The positive aspects of the experience were described as interactions with health personnel, hope, camaraderie with other patients, and outcome (two couples conceived). The negative aspects of the IVF experience were described in four categories: interactions with health personnel,

characteristics of the procedure, outside influences, and husband's attitudes. Fifteen couples identified the waiting period after the embryo transfer as the most difficult aspect of the experience. Eight couples compared the experience to a previous class. Results of the study indicated that couples undertaking this procedure need comprehensive information and a great deal of support.

Summary

This study concept bears a resemblance to Bernstein et al.'s (1985) research that investigated the effects of infertility on self-esteem, blame and guilt, and sexuality in infertile couples. These authors concluded that couples do show lowered self-esteem, have feelings of blame and guilt, and have lowered sexuality.

The research studies cited described the women's physical and psychological reactions to their infertility. It is evident that infertility is a crisis that can wreak emotional havoc on a person. The coping strategies of infertile women are slightly mentioned. Although one study suggested group therapy as a way to cope with infertility, no research was found that specifically assessed their coping mechanisms. Each of the authors reviewed in the literature recommended further research to continually explore the psychological problems of infertility. This study is significant in that the variables being examined are described as necessary for emotional and physical well-

being (Mennings, 1980). The assessment of coping strategies used by infertile women will provide a basis for more comprehensive health care for these clients.

Chapter III

The Research Design

Infertility has been described as a significant source of stress for women who face the problem. The purpose of this study was to ascertain the relationship among self-esteem, blame and guilt, and sexuality of infertile young adult women.

Design of the Study

The study was primarily a descriptive correlational survey with an added qualitative dimension. The quantitative data, which were both descriptive and correlational, described the demographic variables of the sample and analyzed the dependent variables (self-esteem, blame and guilt, and sexuality) in relation to the independent variable, infertility. The qualitative data served to analyze further the independent variable, infertility and to answer the research question: How do infertile women adapt to being infertile? The controlled variables of the study were age, sex, length of infertility treatment, and infertility conditions. The intervening variables may have been stress, anxiety, honesty in responding to the

questionnaire, and a reluctance to share information during the interviews.

Setting, Population, and Sample

The facility chosen for data collection was a private infertility clinic in a teaching hospital located in a large metropolitan area in the southeastern portion of the United States. The requisites for inclusion in the study constituted that the participants (a) were female and between the ages of 24 and 40, (b) had undergone medical treatment for infertility at least one year, and (c) were diagnosed with one or more of the following conditions: ovulatory/hormonal dysfunction, endometriosis, tubal disease, habitual miscarriages, cervical mucous abnormality, or unexplained infertility. The clinic received referrals from all over the state and from small towns in some surrounding states. While the most frequent referral was for invitro-fertilization, all infertility conditions were treated at this clinic.

With regard to internal and external validity of the research design, the primary threat to internal validity was selection biases. Although the sample was chosen by convenience, the participants were of broad age ranges and possessed a variety of infertile problems. Also, subjects were required to complete the questionnaire prior to examination by the physician since the outcome of the physical examination could influence the answers to the

questionnaire. The instrument also was a threat to internal validity because of its recent development; however, its appropriateness for use in this study was supported by previous testing and comparisons with other well established and utilized psychological tests.

Limitations

The following limitations were posed on the study:

1. The small sample of participants were chosen by nonrandom convenience sampling; therefore, the study is generalizable only to this group of infertile women.

2. The psychological profiles of these women were unknown prior to the study.

3. Due to the sensitivity of the subject matter, participants may have difficulty providing complete, honest, and objective answers.

Instrumentation

The instrument used to collect quantitative data was an Infertility Questionnaire (IFQ) developed in 1985 by Bernstein to measure psychological distress associated with infertility (see Appendix A). The instrument was a 21-item questionnaire of three dimensions: self-esteem, blame and guilt, and sexuality. Eight of the questions were designed to measure self-esteem, five questions measured blame and guilt, and eight questions measured sexuality. The IFQ is scored on 5-point Likert Scale in which answers range from a

high of 5 (strongly agree) to a low of 1 (strongly disagree). The total test score was determined by adding the score received from each of the three dimensions and dividing by 21. A mean score of 1 to 3 denoted no distress, 3.1 to 4 was mild to moderate distress, and 4.1 to 5 revealed severe distress. Although the IFQ has not been reported as widely used, the SPSS reliability and validity programs were used to establish test-retest and Cronbach's alpha.

Test-retest results performed on the pilot group of 10 couples with a two-month interval was 0.92, indicating stability. Alphas for the subscales were 0.83, 0.72, and 0.79, respectively, with a total test alpha of 0.88. An item-by-item correlation matrix also established construct validity, with the majority of the correlation ranging between 0.35 and 0.45 (Bernstein et al., 1985).

The qualitative data portions of instrumentation were eight open-ended questions that explored coping and adaptation of infertile women to their condition (see Appendix B).

Procedure

Consent to conduct the study first was obtained from the Mississippi University for Women's Committee on Use of Human Subjects in Experimentation (see Appendix C). Next, consent to utilize the facility for data collection was

obtained by letter from the senior partner in a group of three physicians (see Appendix D).

Thirty-one women participated in the study. Each was approached individually by both the nurses employed by the clinic and the researcher as they entered the examination rooms. The nature of the study was explained, and subjects then were presented a consent form (see Appendix E) and asked to sign it before data collection began. To prevent response bias, completion of the qualitative and demographic data were requested before the IFQ was given. Data were collected for 3 consecutive weeks 2 days each week on the same days with morning and afternoon sessions.

Data Analysis

Data analysis was accomplished by first using a scoring sheet to derive scores for self-esteem, blame and guilt, and sexuality (see Appendix F). The test scores of the three subscales were totaled together and divided by 21. This overall score measured the distress of infertility in terms of no distress, mild to moderate distress, and severe distress. Summarization of the women's statements regarding feelings about their infertility was used to report the qualitative findings. Pearson's Product Moment Correlation, which describes the relationship between two variables, was instrumental in testing the three hypotheses.

Chapter IV

The Findings

The problem statement of this study was: What is the relationship among self-esteem, blame and guilt, and sexuality in infertile young adult women? In Chapter IV, a description of the demographic and infertility characteristics of the sample, correlations of the three directional hypotheses, and qualitative findings are presented. The raw data and code book for this study may be found in Appendix G.

Demographic Characteristics of the Sample

Thirty-five subjects were screened and met the study requisites. Two women refused to participate, and due to time constraints, two women were unable to complete the questionnaire. The resultant sample was 31 participants.

The subjects' age range was 24 to 42 years with a mean age of 32.8 years. Twenty-three women (74%) were Caucasian; 4 (13%) were black Americans; and 4 (13%) were native Americans. Twenty-nine women (94%) were married, one (3%) was single, and one (3%) was separated.

With regard to education, 16 of the women (36%) were 2-year college graduates, while 10 of them (32%) were high

school graduates. Eight women (26%) were 4-year college graduates and one (6.5%) had been to graduate school. The most predominant religious preference was Protestant (n = 18; 58%), other religions (n = 9; 29%), and Catholic (n = 4; 13%).

In response to income levels, 10 women (32%) reported an annual total household income of $50,000-$75,000. Nine women (29%) were within the $35,000-$50,000 range, and one person each stated an income of above $100,000 and less than $10,000.

Infertility Characteristics of the Sample

Although 15 women (48%) indicated having conceived a child, only 5 (16%) had given birth to a full-term baby. Twenty of the young women (66%) did not know the reason for their infertility. Even though several women reported a combination of factors that prevented conception, 13 (42%) reported ovulatory hormonal problems, 8 (26%) had tubal disease, 7 (23%) had unexplained infertility, 4 (13%) had endometriosis, 3 (10%) had a miscarriage, and 3 (10%) had cervical mucous abnormality.

The most frequent duration of medical treatment for infertility was the 1-2 year category (55%); the next most frequent duration was 3-4 years (20%). One person (3%) had undergone treatment more than 10 years. A variety of treatments were used for the group: 24 women (77%) had utilized fertility drugs as a mode of therapy; 17 women

(55%) had not had any surgery; while 14 (45%) had undergone surgery at least once. One participant had attempted invitro-fertilization nine times; the other 30 women had never tried to conceive using this method.

In consideration of temporality, 19 (61%) of the respondents desired to continue medical treatments until pregnancy was achieved. Twenty-seven women (87%) gave no age for discontinuance of infertility treatments. Only four women specified ages: two women indicated age 40, one age 41, and one age 43. None of the participants reported the number of years they would continue trying to conceive.

When money became a problem, however, 2 women (6.5%) would then discontinue treatment, and 7 (22.6%) were undecided about time frames. When interviewed, some of the women responded, "I may be broke, but I will continue." "I'm undecided about how long to continue treatments." "I would probably stop now if I didn't have regrets." "Afraid I'll regret having not tried." Another stated, "It's too old to try after age 40." The words of another person, "If it doesn't work, I will have to accept it." "I've got 5 years left. This will be one of my things that I don't achieve." "People don't achieve everything." "Age doesn't concern me."

Twenty-six women (84%) disclosed a willingness to try invitro-fertilization for conception; however, for 30 women (97%) surrogacy, and for 27 women (87%) egg donor were

unpopular choices to achieve pregnancy. Twenty women (65%) would try artificial insemination. This statement from one woman summed up the feelings of several women: "I will try invitro, would not try surrogacy or egg donor--the whole purpose is to have my own child." Another's opinion of invitro-fertilization was, "seems too unnatural--like a machine or chemical doing the job I should be doing." The participant who had undergone invitro nine times stated, "We would have tried all of these to conceive."

Seventeen of the subjects (55%) had plans if they did not conceive. Ten (32%) planned adoption, 5 (16%) favored remaining childless; one (3%) planned foster children, and 4 (13%) reported no plans at the time of the survey.

Correlational Findings

The three subscales of the infertility questionnaire, self-esteem, blame and guilt, and sexuality, were analyzed in terms of the distress experienced by the 31 infertile young adult women. The scores on the scales ranged from 1 to 5. A mean score of 1-3 indicated no distress, 3.1 to 4 was mild to moderate distress, and 4.1 to 5 was severe distress.

The mean score for the self-esteem subscale was 2.230, the blame and guilt subscale was 2.097, and the sexuality subscale was 2.540. These scores all indicated no distress with infertility. Two women (6%) scored in the severe distress range on the blame and guilt component. On the

sexuality subscale, one woman (3%) scored in the severe distress range.

The three hypotheses were tested using Pearson's Product Moment Correlation with a significance level of .05. The first hypothesis, the higher the blame and guilt, the lower the self-esteem of infertile young adult women, was accepted with an $r(31) = .5361$, $p = .001$. The second hypothesis, the higher the blame and guilt complex, the lower the sexuality of infertile young adult women, was accepted as significant with an $r(31) = .6222$, $p = .000$ level. The third hypothesis, the lower the self-esteem, the lower the sexuality of infertile young adult women, also was significant with an $r(31) = .5094$, $p = .002$ level.

Qualitative Findings

The research question, "How do young adult females adapt to their infertility?" was ascertained utilizing interview data attained from three questions on the survey. These questions were:

1. Do you have plans if you do not conceive, and, if yes, what are your plans?

2. How have you been able to cope with being infertile?

3. How helpful/sensitive do you feel people in your life have been to your problem of infertility?

With regard to the first question, the prevalent answer was adoption. Thoughts and feelings about plans were

diverse: "We don't want to adopt," "I teach kindergarten and I am with children all day." Another stated, "Keep thinking I'm going to get pregnant. Haven't thought about it." And another expressed, "I am 100% optimistic that I will conceive."

In reply to the second question, the 31 women offered 99 responses to the 12 coping strategies (see Table 1).

Table 1

Coping with Infertility by Young Adult Women

Coping Strategy	Number	Percentage
Prayer	23	74
Crying	18	58
Hobbies	15	48
Anger	14	45
Activities outside home	10	32
Vacations	6	19
Increase number of work hours	5	16
Other	3	8
Prescribed drugs	2	7
No coping strategies	2	7
Support groups	1	3
Alcohol, drugs	0	0

Note. *N* = 31.

Prayer was of paramount importance to these women, followed by hobbies, anger, and crying. Alcohol and drugs were not used as coping strategies by these women. The group expressed much anger and frustration at their conditions as noted in the following four responses:

> Angry at women who have tubals and abortions. Angry at not having the chance to be a mother. Use to not be able to sit through christenings. Hard to see pregnant women after a treatment. Each time after a treatment, I think, this is it--makes me hesitant to keep trying.

> I cry when I start my period, I cry when I don't start. I have never cried so much about anything in my life. Just a lot of frustration. I find myself getting upset at people who slap children and complain. Pregnant people who are not happy. People who have a whole bunch and don't want any of them.

> I told my husband that I wish there was a little something wrong with you.

> Why me? Is it something I have done? Religion and God plays into this.

The third question addressed the supportiveness of health care providers and significant others (see Table 2). Overall, husbands were considered to be extremely helpful. For 15 of the women (48%), their families were rated as being very supportive. Three of the varied responses about families were:

> Family don't really understand why I keep trying. They say, "Why do you keep putting all of us through this?"

Table 2

Supportiveness of Health Care Providers and Significant Others for Infertile Young Adult Women

Support Group	4 Extremely	3 Very	2 Somewhat	1 Little	0 None	*M*
Husband/Partner	21	7	2	1	0	3.633
Physicians	20	4	5	0	0	3.517
Family	15	9	3	2	1	3.167
Friends	11	11	5	1	1	3.034
Nurses	14	4	4	2	3	2.889
Co-Workers	7	5	3	2	5	2.318
Clergyman	6	5	2	2	7	2.045

Note. $N = 31$.

> My family doesn't approve, they are an older family. It's probably better that you don't have one. You couldn't go on vacation like you do. It's not the end of the world. Well, it's not to them.
>
> If God wanted you to have children, you would have them.

Viewpoints of the women on nursing care generally were very positive. Some of the negative responses about nurses were:

> Haven't had much contact with them.
>
> Nurses do not realize the pain. Just another patient. People who've not been down the same road do not understand.
>
> Doctors listen--Give doctors more credit than nurses.
>
> Nurses are not as sensitive as physicians.

<u>Additional Findings</u>

Several significant findings were identified in data analysis that did not relate directly to the three hypotheses. These findings were concerned with infertility and the helpfulness of support systems.

With regard to infertility, self-esteem was inversely correlated to years of treatment, $\underline{r}(31) = .3568$, $\underline{p} < .024$, and to willingness to try artificial insemination, $\underline{r}(31) = .3801$, $\underline{p} < .017$. The more helpful the family, the higher the self-esteem, $\underline{r}(30) = -.5339$, $\underline{p} < .001$. Friends were also directly correlated to self-esteem, $\underline{r}(29) = .3843$,

$p < .020$. Helpfulness of clergy was directly correlated to self-esteem, $r(22) = -.4093$, $p < .029$.

For women who were habitual aborters, the blame and guilt tended to increase, $r(31) = -.4234$, $p < .009$. With regard to support systems, when the women perceived husbands to be supportive, the blame and guilt decreased, $r(30) = -.3653$, $p < .023$. Likewise, when families were perceived as being supportive, blame and guilt decreased, $r(30) = -.3805$, $p < .019$. Also, when nurses were perceived as being supportive, blame and guilt decreased, $r(27) = -.3437$, $p < .039$.

Finally, the attitudes of the women regarding the helpfulness of nurses, the more positive was their sexuality, $r(27) = -.4024$, $p < .019$. Likewise, the more helpful physicians, the higher the sexuality, $r(29) = -.3294$, $p < .040$. Sexuality, when linked with women who had endometriosis was inversely significant, $r(31) = .4533$, $p < .005$. Support from family members inversely affected sexuality, $r(30) = -.4592$, $p < .005$.

Chapter V

The Outcomes

Adaptation to being infertile can be a lengthy stressful process for women who are void of the much needed support of significant others and health care provides. In Chapter V, a discussion of the study findings, conclusions, and recommendations are presented.

The purpose of this study was to ascertain the relationship among self-esteem, blame and guilt, and sexuality and infertile young adult women. The convenience sample for this descriptive correlational study consisted of 31 infertile women between the ages 24 and 42, a majority of whom were married, and Caucasian, and all of whom were receiving medical treatment for their infertility at a private infertility clinic. To collect data from subjects, the Infertility Questionnaire (IFQ) by Bernstein, Potts, and Mattox (1985) was used in conjunction with a researcher-developed interview to assess coping and adaptation to infertility.

Summary of Findings

Demographically, the sample characteristics were very similar. The majority of the women were married, Caucasian,

and within the 30 to 39 year age range. Differences in educational status, religious preferences, and income levels were insignificant.

Most of the respondents denoted a combination of factors for the inability to conceive and thus medical treatments were multifaceted. The group was synonymous for indecision as to a time factor for discontinuance of the pregnancy conquest. The factors questioned were money, age, years, plans for nonoccurrence of conception, and consent to achieve pregnancy through unconventional means.

Pearson's Product Moment Correlations were used in testing the three hypotheses which were found to be significant at the .05 level.

1. The higher the blame and guilt, the lower the self-esteem of infertile young adult women.

2. The higher the blame and guilt, the lower the sexuality of infertile young adult women.

3. The lower the self-esteem, the lower the sexuality of infertile young adult women.

The open-ended interview with the women concerning coping and adaptation revealed prayer as being the most effective. Negative coping's greatest frequencies were crying and anger. Generally, without inhibition, the women were more apt to express their thoughts of anger related to their infertility. Predominantly, significant others and health care providers were reported to be very helpful in

showing support and concern; however, many negative responses were expressed by these women.

Additional correlations related to demographic information indicated that positive attitudes of spouses, significant others, nurses, and physicians about infertility tended to be therapeutic for the infertile woman. These attitudes may help increase self-esteem, lower blame and guilt, and increase sexuality. Years of treatment in relation to longevity was correlated significantly to self-esteem. Miscarriages were correlated negatively to blame and guilt. The women with endometriosis experienced decreased sexuality.

Discussion and Conclusions

Research described in the literature, not unlike this study, showed that infertile women do experience severe distress. Societal expectations and tradition continue to influence the thoughts and feelings of infertile women. The conceptualization of this research was from Bernstein et al.'s (1985) study and confirmed these authors' findings that women suffer significant damage to self-esteem and are likely to feel blame and guilt. This study further explained relationships among the variables and found that as family members and significant others offered support, blame and guilt decreased. However, many women in the sample reported a hesitancy to share the experience because infertility is such a deeply personal experience. For a

large portion of the sample, the infertility problems were miscarriages and unexplained infertility. Both of these conditions remain a mystery to the medical profession; therefore, these women may have been more apt to feel more blame and guilt.

The concept of the study of Lukse (1985) is supported by the nurse researcher; however, only one participant in this study had been to counseling sessions for infertility and reported a degree of respite from emotional distress. The consensus of the sample, though, was that supportiveness of health care providers for infertility can decrease negative feelings about infertility. It is then imperative that nurses begin to examine ways and means of providing supportive counseling for the client.

Qualitatively, this study somewhat parallels Sandelowski and Pollock's (1986) research in the description of the women's experiences of infertility as being ambiguity, temporality, and otherness. The women expressed ambiguity about their diagnoses of "explained" and unexplained infertility. Temporality was a concern among the women, particularly since time frames for sexual relations are significant in infertility. The loss of spontaneity in sex was a factor because of some of the treatments. Temporality was again expressed by the setting or not setting time limits to conceive a child. Some women expressed the number of years left to have a child or their

ages to discontinue pregnancy attempts. Otherness was expressed by the women in terms of social comparisons. The women in this study compared themselves negatively to other women who were able to have children. They wondered why they were infertile and others whom they believed to be undeserving could conceive without difficulty. But, extreme optimism that conception would occur was present among the subjects. Half of the sample had been in treatment for 1 to 2 years and many only recently had been admitted to this clinic. For many of the women, this infertility center represented the omega, and hope was the only positive left. Also, there was a reluctance of participants who had been in treatment longer than 1 to 2 years to accept the fact that conception may never be realized and move on toward resolution.

The findings of this study are similar to the results noted in the studies of Davis (1984), Allison (1976), Valentine (1986), and Freeman (1983). In response to intense and multiple emotional reactions to infertility, women coped with infertility by using positive (prayer, hobbies) and negative (crying, anger) strategies.

Being mindful of the halo effect in several instances is warranted in this study. Of interest is the observation that none of the 31 women disclosed using alcohol or drugs as a method of coping with infertility. This finding may have been due to the status of the nurse as a researcher.

Also noteworthy was the statement by the women that physicians provided more emotional support than nurses. The perception of physicians by lay persons as healers offers an explanation to this statement.

Roy's theory of adaptation (1976) was found to be an entirely appropriate approach in providing care to infertile women. The infertile client eventually experiences difficulties in one or more of these areas: physiological needs, self-concept, role function, and interdependence. Education related to the causes of infertility, roles, and the importance of support systems and most importantly, the nurse clinician offering support is vital.

Implications for Nursing

The findings of this study are not generalizable beyond the sample; however, the findings do have implications for nursing, especially for clinical practice and nursing education. The nurse clinician caring for the infertile client should exhibit genuine interest and make a concerted effort to assess the client's emotional needs and coping strategies. While counseling the client, the clinician should encourage the woman to share her thoughts and feelings about infertility with her husband and significant others.

Recommendations

The following recommendations were derived from this study:

1. Since the sample was mostly Caucasian and middle class, this study should be conducted in women of other races and socioeconomic levels.

2. Studies that address specific relationships among variables, such as age, length of infertility, type of infertility, family support and blame and guilt, self-esteem, and sexuality should be done.

3. A study should be conducted to ascertain the effectiveness of various modes of adaptation to infertility on the self-esteem, blame and guilt, and sexuality of young adult women.

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Appendix A

Code #_____

Personal Profile

Directions: Please place an "x" beside the correct answer in the following questions and fill in the blanks where applicable.

1. What is your age?______

2. What is your race?

   ______ 1. Black American
   ______ 2. Caucasian
   ______ 3. Hispanic
   ______ 4. Native American
   ______ 5. Other, please specify____________________

3. What is your marital status?

   ______ 1. Married
   ______ 2. Single
   ______ 3. Other, please specify____________________

4. Educational Background

   ______ 1. Graduate school
   ______ 2. 4-year college graduate
   ______ 3. 2-year college graduate
   ______ 4. High school graduate
   ______ 5. Less than high school

5. Religion

   ______ 1. Protestant
   ______ 2. Catholic
   ______ 3. Jewish
   ______ 4. Other, please specify______________________

6. What is your occupation?________________________________

7. Annual total household income

_____ 1. Less than $10,000
_____ 2. $10,000 - $14,999
_____ 3. $15,000 - $24,999
_____ 4. $25,000 - $34,999
_____ 5. $35,000 - $49,999
_____ 6. $50,000 - $74,999
_____ 7. $75,000 - $99,999
_____ 8. $100,000 or more

8. Have you ever conceived a child?

_____ Yes
_____ No

If yes, how many times? __________

9. Have you ever given birth to a full term baby?

_____ Yes
_____ No

If yes, how many? ________

10. Do you know the type of infertility problem you have?

_____ Yes
_____ No

11. What type of infertility problem is it? (Check all that apply)

_____ 1. Endometriosis
_____ 2. Ovulatory/hormonal
_____ 3. Tubes blocked
_____ 4. Miscarriages
_____ 5. Cervical mucous abnormality
_____ 6. Unexplained problem/cause is not known

12. How long have you been receiving medical treatments to correct your infertility?

_____ 1. 1-2 years
_____ 2. 3-4 years
_____ 3. 5-6 years
_____ 4. 7-8 years
_____ 5. 9-10 years
_____ 6. More than 10 years

13. What medical treatments have you undergone to correct the infertility problem?

_____ 1. Fertility drugs
_____ 2. Surgery - How many times? _______
_____ 3. In-vitro fertilization. How many times?____
_____ 4. Other drug therapies.
Please specify: ______________________________

14. How long do you plan to continue medical treatments to correct the problem?

_____ 1. Until pregnancy is achieved
_____ 2. Until age _______
_____ 3. _______ number of years
_____ 4. Until money becomes a problem
_____ 5. Undecided

15. Which of the following treatments are you willing/unwilling to try in order to have a child?

	Willing	Unwilling
1. In-vitro fertilization	_______	_____
2. Surrogacy	_______	_____
3. Egg donor	_______	_____
4. Artificial insemination	_______	_____

16. Do you have plans if you do not conceive?

_____ Yes
_____ No

If yes, do you plan

_____ 1. Adoption
_____ 2. Remain childless, if no children
_____ 3. Foster children
_____ 4. Surrogacy
_____ 5. No plans at this time

17. How have you been able to cope with being infertile? (Check all that apply)

_____ 1. Anger
_____ 2. Crying
_____ 3. prayer
_____ 4. Support groups
_____ 5. Participation in activities outside the home
_____ 6. Increased number of hours at work
_____ 7. Hobbies
_____ 8. Use of alcohol, drugs
_____ 9. Prescribed drugs - "Nerve Pills," Tranquilizers
_____ 10. Taking vacations
_____ 11. No coping strategies
_____ 12. Other coping strategies. Please specify: ____________________

18. How helpful/sensitive do you feel people in your life have been to your problem of infertility?

	Extremely 4 (100%)	Very 3 (75%)	Somewhat 2 (50%)	Little 1 (25%)	None 0 (0%)
1. Husband/partner	_____	_____	_____	_____	_____
2. Family	_____	_____	_____	_____	_____
3. Friends	_____	_____	_____	_____	_____
4. Clergyman	_____	_____	_____	_____	_____
5. Nurses	_____	_____	_____	_____	_____
6. Physicians	_____	_____	_____	_____	_____
8. Others, specify	_____	_____	_____	_____	_____

Appendix B

Code #______

Infertility Questionnaire

Instructions: Please circle the number closest to the reaction that most accurately expresses your current feelings.

Answer:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Circle:	5	4	3	2	1

1. I feel bad about my body because of our inability to have a child.

   5 4 3 2 1

2. Since our infertility I feel I can do anything as well as I used to.

   5 4 3 2 1

3. I feel I am as attractive as before our infertility.

   5 4 3 2 1

4. I feel less masculine/feminine because of our inability to have a child.

   5 4 3 2 1

5. Compared with others, I feel I am a worthwhile person.

   5 4 3 2 1

6. Lately, I feel I am sexually attractive to my partner.

   5 4 3 2 1

Answer:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Circle:	5	4	3	2	1

7. I feel I will be incomplete as a man/woman if we cannot have a child.

   5 4 3 2 1

8. Having an infertility problem makes me feel physical incompetent.

   5 4 3 2 1

9. I feel guilty about somehow causing our infertility.

   5 4 3 2 1

10. I wonder if our infertility problem is due to something I did in the past.

    5 4 3 2 1

11. My spouse makes me feel guilty about our problem.

    5 4 3 2 1

12. There are times when I blame my partner for our infertility.

    5 4 3 2 1

13. I feel I am being punished because of our infertility.

    5 4 3 2 1

14. Lately, I feel I am able to respond to my spouse sexually.

    5 4 3 2 1

15. I feel sex is a duty, not a pleasure.

    5 4 3 2 1

Answer:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Circle:	5	4	3	2	1

16. Since our infertility problem, I enjoy sexual relations with my spouse.

    5 4 3 2 1

17. We have sexual relations for the purpose of trying to conceive.

    5 4 3 2 1

18. Sometimes I feel like a "sex machine" programmed to have sex during the fertile period.

    5 4 3 2 1

19. Impaired fertility has helped our sexual relationship.

    5 4 3 2 1

20. Our inability to have a child has <u>increased</u> my desire for sexual relations.

    5 4 3 2 1

21. Our inability to have a child has <u>decreased</u> my desire for sexual relations.

    5 4 3 2 1

Adapted from J. Bernstein, N. Potts, & J. Mattox. (1985, November-December). Assessment of Psychological Dysfunction Associated with infertility. <u>JOGNN</u>, 64s.

Appendix C

Approval of Committee on Use of Human Subjects in Experimentation

MISSISSIPPI UNIVERSITY FOR WOMEN
Columbus, MS 39701

Office of the Provost
P.O. Box W-1603
(601) 329-7142

May 10, 1989

Ms. Alva Jordan
Division of Nursing
Campus

Dear Ms. Jordan:

The Committee on Use of Human Subjects in Experimentation has recommended approval of your research proposal, and I am happy to approve their recommendation.

Sincerely,

Joyce Hunt

Joyce M. Hunt
Interim Provost

JH:wr

pc: Mrs. Mary Pat Curtis
Dr. Annette Barrar

Where Excellence is a Tradition

Appendix D

Consent to Use Facility

3308 Wisteria Road
Columbus, MS 39701
July 20, 1989

Dr. Bryant Cowan
Chairman, Department of OB
University of Mississippi Medical Center
2320 North State Street
Jackson, MS 39216

Dear Dr. Cowan:

My name is Alva H. Jordan, RN. I am a graduate student attending Mississippi University for Women in Columbus, Mississippi, completing research entitled, "Relationship Among Self-Esteem, Blame and Guilt, and Sexuality of Infertile Young Women."

I am asking your permission to utilize the University of Mississippi Infertility Clinic for data collection beginning August 1 through August 15, 1989. The desired number of subjects is 30 to 50, and there will be no obligation of staff time. This study has been approved by Mississippi University for Women Institutional Review Board (IRB).

Enclosed please find copies of the abstract, instrument, and IRB letter. Will you please advise me of the necessary procedures as soon as possible? If you need further information, please call me at (601) 329-4802. Your assistance and prompt reply are greatly appreciated.

Sincerely,

Alva H. Jordan, RN, BSN

Enclosures

UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
2500 North State Street
JACKSON, MISSISSIPPI 39216-4505

School of Medicine
Department of Obstetrics and Gynecology

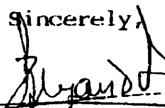
Area Code 601
984-5300

August 8, 1989

RE: Alva Jordan:

The protocol entitled "The Relationship Between Infertility and Self-Esteem in Young Adult Females" was approved by the Division of Reproductive Endocrinology. Alva has permission to interview infertile couples during her visit under the supervision of Dr. Cowan and Dr. Jutras.

Sincerely,



Bryan D. Cowan, M.D.
Associate Professor and Director
Division of Reproductive Endocrinology

BDC/cn

Appendix E

Code # _____

Participant Consent

Dear Participant:

My name is Alva H. Jordan, RN. I am a graduate student attending Mississippi University for Women completing a study related to how infertility affects the way women view themselves. This study may assist health care providers in learning more about the emotional needs of infertile women.

I am asking you to participate voluntarily in this study because you have an infertility problem. The information you give will be kept completely confidential and your name will not be used. You will be asked to complete two short forms that will take approximately 15 minutes of your time today only. Your decision to participate or not to participate will not affect your care at this clinic in any way.

Your signature on this form indicates that you understand the above information and you are willing to help with this study.

______________________	______________________
Date	Signature of Participant
	______________________
	Signature of Researcher

Appendix F

Infertility Questionnaire: Scoring Sheet

A: Self-Esteem (Q 1-8)	B: Blame/Guilt (Q 9-13)	C: Sexuality (Q 14-21)
Q 1: 5=5 4=4 3=3 2=2 1=1 ______	Q 9: 5=5 4=4 3=3 2=2 1=1 ______	Q 14: 5=1 4=2 3=3 2=4 1=5 ______
Q 2: 5=1 4=2 3=3 2=4 1=5 ______	Q 10: 5=5 4=4 3=3 2=2 1=1 ______	Q 15: 5=5 4=4 3=3 2=2 1=1 ______
Q 3: 5=1 4=2 3=3 2=4 1=5 ______	Q 11: 5=5 4=4 3=3 2=2 1=1 ______	Q 16: 5=1 4=2 3=3 2=4 1=5 ______
Q 4: 5=5 4=4 3=3 2=2 1=1 ______	Q 12: 5=5 4=4 3=3 2=2 1=1 ______	Q 17: 5=5 4=4 3=3 2=2 1=1 ______
Q 5: 5=1 4=2 3=3 2=4 1=5 ______	Q 13: 5=5 4=4 3=3 2=2 1=1 ______	Q 18: 5=5 4=4 3=3 2=2 1=1 ______
Q 6: 5=1 4=2 3=3 2=4 1=5 ______		Q 19: 5=1 4=2 3=3 2=4 1=5 ______
Q 7: 5=5 4=4 3=3 2=2 1=1 ______		Q 20: 5=1 4=2 3=3 2=4 1=5 ______
Q 8: 5=5 4=4 3=3 2=2 1=1 ______		Q 21: 5=5 4=4 3=3 2=2 1=1 ______
TOTAL: ______ A DIVIDE BY 8 = ______ X	TOTAL: ______ B DIVIDE BY 5 = ______ X	TOTAL: ______ C DIVIDE BY 8 = ______ X

TOTAL TEST SCORE: ADD SUBSCALE A, B, AND C AND DIVIDED BY 21 = ______ x

MEAN SCORE OF 1 - 3 = NO DISTRESS
MEAN SCORE OF 3.1 - 4 = MILD TO MODERATE DISTRESS
MEAN SCORE OF 4.1 - 5 = SEVERE DISTRESS

Appendix G

Raw Data

Subject	Age	Race	Marital Status	Ed	Rel	Inc	Conc	Birth	INF PRB	Type Inf						Length Tx	Med Tx			
1-2	3-4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	39	2	1	4	2	6	2	0	1	1	0	0	0	0	0	1	1	2	0	0
02	37	2	1	2	1	7	0	0	1	1	1	0	0	0	0	3	1	2	0	0
03	26	2	1	4	4	5	0	0	0	0	1	1	0	0	0	2	1	4	0	0
04	30	4	3	3	4	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0
05	42	2	1	2	1	5	1	1	0	0	0	0	0	0	1	2	1	0	0	0
06	24	1	1	3	4	3	1	0	0	0	0	0	1	0	0	1	1	2	0	0
07	38	2	1	2	1	6	1	0	0	0	1	0	0	0	0	1	1	0	0	0
08	26	2	1	3	4	2	0	0	0	0	0	0	0	0	1	2	0	0	0	0
09	32	2	1	4	1	5	1	0	1	0	1	0	0	1	0	1	1	0	0	0
10	31	2	1	4	1	6	0	0	1	0	0	1	0	0	0	1	1	0	0	0
11	33	2	1	4	4	4	0	0	1	0	1	0	0	0	0	1	1	0	0	0
12	29	2	1	2	1	5	0	0	1	0	1	0	0	0	0	2	1	1	0	0
13	38	1	1	2	2	4	1	0	1	0	0	1	1	0	0	1	0	2	0	0
14	37	2	1	3	1	4	1	1	0	0	0	0	0	0	1	1	1	0	0	0
15	35	2	1	1	1	5	0	0	1	1	0	0	0	1	0	4	1	2	0	0
16	29	4	1	4	4	5	0	0	1	0	0	1	0	0	0	2	0	2	0	0

Note. See Code Book of Data for key.

Subject	Age	Race	Marital Status	Ed	Rel	Inc	Conc	Birth	INF PRB	Type Inf						Length Tx	Med Tx			
1-2	3-4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
17	33	2	1	3	4	6	1	0	1	0	1	0	1	0	0	1	1	0	0	0
18	31	1	1	3	1	4	1	0	1	0	0	1	0	0	0	3	0	3	0	0
19	38	2	1	1	1	6	0	0	1	0	1	0	0	0	1	1	1	0	0	0
20	33	2	1	2	1	8	1	1	1	0	1	0	0	0	0	1	1	0	0	0
21	31	4	1	2	1	6	0	0	1	0	1	0	0	0	0	1	1	0	0	0
22	31	2	1	3	4	6	0	0	0	0	0	0	0	1	0	1	1	0	0	0
23	31	2	1	3	1	6	1	0	0	0	1	0	0	0	0	1	1	1	0	0
24	35	2	1	4	4	4	0	0	1	0	1	0	0	0	0	1	1	0	0	0
25	34	2	1	2	1	5	1	0	1	0	0	1	0	0	0	4	1	3	9	0
26	31	2	1	3	1	4	0	0	1	0	1	0	0	0	0	1	1	1	0	0
27	30	2	1	4	1	5	1	0	0	0	0	0	0	0	1	3	1	3	0	0
28	37	2	1	3	2	5	1	1	0	1	0	0	0	0	1	4	1	0	0	1
29	26	1	1	4	1	1	1	1	1	0	0	1	0	0	0	1	0	1	0	0
30	35	2	2	4	2	6	0	0	1	0	0	1	0	0	0	6	1	2	0	0
31	36	4	1	3	1	6	1	0	1	0	0	0	0	0	1	2	1	0	9	0

Subject	Con Tx							WUNW Tx				Plans	Plan B					Coping										
	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51
01	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0
02	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1	1	0	1	1	0	0	0	0	0
03	1	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	1	1	0	1	0	1	0	0	0	0
04	1	4	3	0	0	0	0	1	0	0	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	0	0	0
05	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0
06	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
07	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0
08	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
09	1	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	1	1	1	0	1	1	1	0	0	0	0
10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0
11	1	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	1	1	0	1	0	1	0	1	0	0
12	1	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	1	1	1	0	1	1	1	0	1	0	0
13	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
14	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
15	1	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0

Subject	Con Tx							WUNW Tx				Plans	Plan B					Coping										
	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51
17	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	1	0	0	0	1	0	1	0	0
18	1	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19	0	4	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0
20	1	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0
21	1	0	0	0	0	1	0	1	0	1	1	1	1	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0
22	1	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0	1	1	0	0	0	1	0	1	0	0
23	1	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	1	0	0
25	1	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1
26	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
27	1	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	1	0	0	0	0
28	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	1	1	0	0	0	1	0	0	0	0
29	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0
30	0	4	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
31	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Subject	Inf Sens							IFQ Scores																				
	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
01	4	4	2	.	.	.	2	3	4	4	2	4	3	2	3	5	2	1	2	2	4	5	3	3	4	2	2	2
02	4	3	2	2	2	3	3	4	1	3	4	2	3	4	4	4	4	2	2	3	4	2	4	2	4	2	2	3
03	3	2	3	1	1	2	4	5	5	2	2	3	2	5	3	5	5	4	2	5	2	4	2	2	2	2	2	4
04	.	4	.	.	.	.	.	4	3	4	2	5	4	2	2	2	2	1	1	1	4	2	4	3	2	3	4	2
05	4	.	.	.	.	.	.	1	1	1	1	5	5	1	1	1	1	1	1	1	1	1	3	4	1	3	3	1
06	4	4	3	.	.	4	4	5	4	4	2	2	4	2	2	4	4	4	2	4	4	1	3	4	2	2	4	2
07	4	4	4	.	.	4	4	2	5	5	1	5	4	3	1	2	3	1	1	1	4	1	5	2	2	3	2	2
08	4	4	4	4	4	4	4	2	5	5	1	5	5	1	1	1	1	1	1	1	5	1	5	3	2	3	3	3
09	4	3	4	3	3	3	4	4	4	4	1	4	4	4	4	4	5	1	1	4	4	1	4	3	4	3	3	3
10	4	4	4	4	4	4	4	4	5	5	1	1	5	3	1	4	1	1	1	1	5	1	5	1	1	1	1	1
11	4	4	4	0	4	4	4	1	5	5	1	5	5	1	1	1	1	1	1	1	5	1	5	1	1	1	1	1
12	3	2	2	0	0	4	4	5	3	3	4	4	4	3	4	4	3	2	3	3	4	3	4	4	4	3	4	3
13	3	3	3	3	0	0	2	2	5	5	2	5	5	1	1	5	5	4	3	3	3	3	3	4	4	2	2	2
14	3	3	3	3	3	4	4	4	4	4	3	4	4	4	3	4	2	2	3	2	4	2	4	3	2	3	4	2
15	4	3	3	3	2	4	4	2	5	5	1	5	5	1	2	1	1	1	1	2	5	1	5	2	4	3	2	2
16	3	3	2	2	2	2	4	1	5	5	1	5	5	3	1	2	2	1	1	3	5	1	5	1	1	1	1	1

Subject	Inf Sens							IFQ Scores																				
	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
17	4	4	4	.	4	4	4	4	5	5	4	4	5	4	3	4	3	1	1	1	5	1	5	4	4	3	3	3
18	2	0	0	0	0	0	2	1	1	5	4	1	4	2	1	2	1	4	1	2	4	2	4	2	2	2	3	3
19	4	4	4	.	.	4	4	2	5	5	1	5	5	4	1	1	3	2	1	2	5	1	5	4	2	1	1	1
20	4	4	4	0	0	3	4	3	5	5	4	4	4	5	4	3	1	1	1	3	3	1	5	1	1	4	3	1
21	4	3	3	1	.	.	3	3	2	3	3	4	4	2	3	4	2	1	1	1	3	2	4	3	2	1	2	4
22	4	4	4	4	4	4	4	3	5	5	3	4	3	3	2	3	3	1	1	1	2	1	4	3	4	4	2	2
23	4	3	3	3	3	1	2	3	5	5	1	5	5	4	1	3	3	1	1	1	5	1	5	1	3	1	1	1
24	4	4	4	4	4	4	4	2	5	5	1	5	5	1	1	1	1	1	1	1	5	1	1	3	2	3	4	1
25	3	1	1	.	.	3	3	4	4	4	3	3	3	5	5	2	2	2	2	2	4	2	4	3	2	3	3	2
26	4	4	3	4	3	4	4	1	4	4	3	5	5	3	1	3	3	1	2	3	5	1	5	1	1	1	3	3
27	4	4	4	4	4	4	4	2	4	4	4	5	4	4	3	2	1	1	1	1	4	2	4	2	2	4	3	3
28	3	1	3	0	3	2	4	4	3	4	5	2	2	5	4	4	5	1	1	4	2	2	2	3	5	1	1	5
29	4	4	3	0	0	2	4	1	4	5	1	2	5	1	1	1	2	2	1	1	2	2	2	2	2	4	4	1
30	4	2	2	0	0	0	2	1	3	4	3	4	3	4	3	4	4	1	1	2	3	2	3	2	2	2	2	3
31	2	3	3	0	1	1	3	1	5	5	1	5	3	3	3	2	2	1	4	2	5	1	5	1	1	1	1	5

Code Book of Data

Variable	Code	Label	Description
0	1–2	Code	Code Number
1	3–4	Age	Age of female . Not given
2	5	Race	Race of Female 1 = Black American 2 = Caucasian 3 = Hispanic 4 = Native American 5 = Other . = Not given
3	6	Mar Stat	Marital Status 1 = Married 2 = Single 3 = Other . = Not given
4	7	Educat	Educational Background of Females 1 = Graduate School 2 = 4-year college graduate 3 = 2-year college graduate 4 = High school graduate 5 = Less than high school . = Not given
5	8A	Rel	Religion of Female 1 = Protestant 2 = Catholic 3 = Jewish 4 = Other . = Not given
6	8B	Occup	Occupation of Female . = Not given
7	9	Inc	Annual Total Household Income 1 = < $10,000 2 = $10,000 - $14,990 3 = $15,000 - $24,999 4 = $25,000 - $34,999 5 = $35,000 - $49,999 6 = $50,000 - $74,999 7 = $75,000 - $99,999 8 = $100,000 or more . = Not given
8	10	Conc	Conception of Child 0 = No 1 = Yes . = Not given
9	11	Birth	Birthed a Full-Term Baby 0 = No 1 = Yes . = Not given

Variable	Code	Label	Description		
10	12	Inf PRB	Infertility Problem Known		
			0 = No		
			1 = Yes		
			. = Not given		
11	-	Type Inf	Type of Infertility Problem		
	13		1 = Endometriosis	0 = No	1 = Yes
	14		2 = Ovulatory/Hormonal	0 = No	1 = Yes
	15		3 = Tubes blocked	0 = No	1 = Yes
	16		4 = Miscarriages	0 = No	1 = Yes
	17		6 = Cervical mucous abnormality	0 = No	1 = Yes
	18		7 = Unexplained problem	0 = No	1 = Yes
			. = Not given		
12	19	Leng Tx	Length of Time Receiving Medical Tratments to correct infertility		
			1 = 1-2 years		
			2 = 3-4 years		
			3 = 5-6 years		
			4 = 7-8 years		
			5 = 9-10 years		
			6 = More than 10 years		
			. Not given		
13		Med Tx	Method of Treatment		
	20		1 = Fertility drugs	0 = No	1 = Yes
	21		2 = Surgery (indicate number of times		
	22		3 = Invitro fertilization (Indicate number of times)		
	23		4 = Other	0 = No	1 = Yes
			. = Not given		
14		Con Tx	Continuance of Medical Treatments		
	24		1 = Until pregnancy is achieved	0 = No	1 = Yes
	25-26		2 = Until age ______		
	27-28		3 = Number of years		
	29		4 = Until money becomes a problem	0 = No	1 = Yes
	30		5 = Undecided	0 = No	1 = Yes
15	31	WUNW Tx	Invitro Fertilization		
			0 = No		
			1 = Yes'		
			. = Not given		
	32		Surrogacy		
			0 = No		
			1 = Yes		
			. = Not given		
	33		Egg Donor		
			0 = No		
			1 = Yes		
			. = Not given		
	34		Artificial Insemination		
			0 = No		
			1 = Yes		
			. = Not given		
16	35	Plans	Plans if no Conception		
			0 = No		
			1 = Yes		
			. = Not given		

Variable	Code	Label	Description		
		Plan B	Type of Plan		
	36		1 = Adoption	0 = No	1 = Yes
	37		2 = Remain childless	0 = No	1 = Yes
	38		3 = Foster	0 = No	1 = Yes
	39		4 = No plans at this time	0 = No	1 = Yes
	40		5 = No plans at this time	0 = No	1 = Yes
			. = Not given		
17		Coping	Type of Coping		
	41		1 = Anger	0 = No	1 = Yes
	42		2 = Crying	0 = No	1 = Yes
	43		3 = Prayer	0 = No	1 = Yes
	44		4 = Support groups	0 = No	1 = Yes
	45		5 = Participation in other activities	0 = No	1 = Yes
	46		6 = Work	0 = No	1 = Yes
	47		7 = Hobbies	0 = No	1 = Yes
	–		8 = Alcohol, drugs	0 = No	1 = Yes
	48		9 = Prescribed drugs--tranquilizers, nerve pills	0 = No	1 = Yes
	49		10 = Vacations	0 = No	1 = Yes
	50		11 = No coping strategies	0 = No	1 = Yes
	51		12 = Other coping strategies	0 = No	1 = Yes
			. = Not given		
18	52	Inf. Sens 1	Sensitivity to Infertility 1. Husband/partner 4 = Extremely 3 = Very 2 = Somewhat 1 = Little 0 = None . = Not given		
	53	Inf. Sens 2	2. Family 4 = Extremely 3 = Very 2 = Somewhat 1 = Little 0 = None . = Not given		
	54	Inf. Sens 3	3. Friends 4 = Extremely 3 = Very 2 = Somewhat 1 = Little 0 = None . = Not given		
55		Inf. Sens 4	4. Clergyman 4 = Extremely 3 = Very 2 = Somewhat 1 = Little 0 = None . = Not given		
56		Inf. Sens 5	5. Co-Workers 4 = Extremely 3 = Very 2 = Somewhat 1 = Little 0 = None . = Not given		

Variable	Code	Label	Description
57		Inf. Sens 6	6. Nurses 4 = Extremely 3 = Very 2 = Somewhat 1 = Little 0 = None . = Not given
58		Inf. Sens	7. Physician 4 = Extremely 3 = Very 2 = Somewhat 1 = Little 0 = None . = Not given
19-39	59-79	IFQ 1-21	IFQ Question 1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree . = Not given