THE EMOTIONAL RESPONSE OF WOMEN TO MISCARRIAGE

by

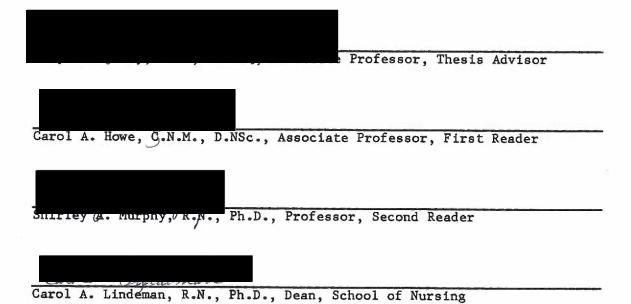
Barbara Whitnah, R.N., B.S.N.

A Thesis

Presented to
Oregon Health Sciences University
School of Nursing
in partial fulfillment
of the requirements for the degree of
Master of Nursing

July 1984

APPROVED:



This study was supported by a traineeship from the United States Public Health Service Grant Numbers 2ALL NU00250-07 and 2ALL NU00250-08.

ACKNOWLEDGEMENTS

Many people deserve thanks for their gracious efforts of support and input in this research endeavor. Family and friends on both coasts have been patient as well as unfailing in helping me maintain a sense of humor. Carol Howe and Shirley Murphy provided hours of able assistance in all phases of the research process, contributing valuable input and lending expert direction.

I would like to dedicate this thesis to my advisor, Mary Ann Curry, for whom words of thanks seem inadequate. In the midst of some very difficult times, she never failed to encourage and inspire.

TABLE OF CONTENTS

CHAPTE	ER .	PAGE
I	INTRODUCTION	1
	STATEMENT OF THE PROBLEM	1
	SIGNIFICANCE TO NURSING	2
	REVIEW OF THE LITERATURE	3
	Incidence and Etiology of Spontaneous Abortions Psychosocial Factors Influencing Early Pregnancy	3
	Grief Theories	8
	Studies Focusing on Perinatal Death	
	Studies Examining the Psychological Effects of	18
	Spontaneous Abortion	26
	Summary	31
		21
	CONCEPTUAL FRAMEWORK	33
	RESEARCH QUESTIONS	35
II	METHODS	37
	DESIGN	37
	SAMPLE AND SETTING	37
	VARIABLES	37
	DATA COLLECTION INSTRUMENT	38
	PROCEDURE	40
	ANALYSIS	41

CHAPTE	R	PAGE
III	RESULTS AND DISCUSSION	42
	SAMPLE DESCRIPTION	42
	RESEARCH QUESTIONS	45
	Research Question 1	45 51 56
	ADDITIONAL FINDINGS	60
IA	CONCLUSION	62
	SUMMARY	62
	LIMITATIONS	63
	IMPLICATIONS FOR NURSING PRACTICE	64
	SUGGESTIONS FOR FUTURE RESEARCH	66
REFERE	NCES	67
APPEND	ICES	72
A	LETTER TO HEALTH CARE PROVIDERS	74
В	QUESTIONNAIRE	76
C	COVER LETTER	83
D	INFORMED CONSENT	85
D	CORRELATION MATRIX FOR THE GRIEF SCORE SCALE	87
ABSTRAC		80

CHAPTER 1

While it is commonly called a miscarriage, official terminology for the unplanned loss of a pregnancy prior to 20 weeks gestation is spontaneous abortion (SAB). Spontaneous abortions are not rare events; 15 to 20 of every 100 pregnancies ends in a SAB (Weatherbee, 1980). Disproportionate to the frequency of spontaneous abortions, however, is the meager amount of information available regarding this phenomena. Even more scarce than existing knowledge of the causes of spontaneous abortions is an understanding of how such a loss affects a woman psychologically. For many years it was assumed that any early pregnancy loss was a quick, routine event having little significance for pregnant women and therefore easily dismissed (Stephany, 1982). Among other things, women were told that it was all for the best because the baby would probably have been deformed, or that it would be easy to replace this lost baby with another pregnancy (Wetzel, 1982).

However, some researchers have acknowledged that the loss associated with a spontaneous abortion is a significant one. Yet much remains to be learned with regard to whether the complex phenomena of grief applies and if so, in what way. The recent surge in media coverage and discussions in popular literature on the subject of spontaneous abortion may indicate that women as health care consumers are seeking to gain understanding in regard to their responses to spontaneous abortion and meet needs that have not been adequately addressed by health professionals. The purpose of this study is to

describe the emotional response of women to spontaneous abortion.

Significance to Nursing

Regardless of whether or not a spontaneous abortion may be considered a loss, it is still an unplanned event having emotional impact (Seibel & Graves, 1980). Increased understanding of how women respond to a SAB will help nurses better focus their efforts to provide wholistic, compassionate care both at the time of the SAB and in the ensuing months.

It is recognized that adequate grief work must occur for the healthy resolution of a loss (Lindemann, 1944), and if a SAB is indeed a loss, then the role of health care providers interacting with these women must include recognition and assistance with the grieving process. Knowledge of the components of the normal grieving process is therefore essential not only for adequate assessment of the client but to guide in the intervention and evaluation phases.

Nurses in a wide variety of settings interact with such clients, therefore the study has significance to nursing. Information gained is expected to be relevant to nurses in emergency rooms, inpatient labor and delivery settings, outpatient obstetrical services, nurse-midwives and women's health care nurse practitioners. The information gathered may also be valuable to nurses in health education, serving as a source for the dissemination of accurate information. This study could also be a stimulus for further nursing research.

Review of the Literature

Literature relevant to this investigation encompasses several topics. First, information regarding the incidence and etiology of spontaneous abortions will be presented. Next, a review of theories of psychosocial factors influencing early pregnancy will be discussed. Literature pertaining to theories of grief will then be presented, followed by research specific to perinatal loss. Finally, studies focusing on the emotional impact of a spontaneous abortion will be discussed.

Incidence and Etiology of Spontaneous Abortions

A spontaneous abortion is defined as an unplanned termination of pregnancy prior to 20 weeks gestation or one in which the fetus expelled weighs less than 500 grams (Niswander, 1976). Such a loss is estimated to occur in almost one in every five pregnancies (Weathersbee, 1980).

While chromosomal abnormalities are associated with 47% of first trimester spontaneous abortions, the etiology is often undetermined in the remaining cases (Hassold, Matsuyuma, Newlands, Matsura, Jacobs, Manuel, & Tsuei, 1978). Possible causes identified include abnormal development of the products of conception, systemic maternal diseases and infections as well as an abnormal uterine environment. Also suggested are trauma, defective sperm, psychogenic factors, and external influences such as smoking and drugs (Neeson and Stockdale, 1981).

Psychosocial Factors Influencing Early Pregnancy

A variety of psychosocial factors influence the emotional impact of

a SAB. This review will focus on the particular psychological tasks applicable to the first trimester of pregnancy. Motivation for parenting will also be discussed.

Psychological tasks of the first trimester. Deutsch (1945) was one of the first theorists to explore the psychological aspects of pregnancy. Based on clinical observations of pregnant women seeking therapy for various suspected emotional problems with pregnancy, Deutsch developed her perception of the normal woman's responses to pregnancy. According to Deutsch, early pregnancy is marked by a "tremendous upheaval in the female organism as a whole" (p. 126). Emotional and physiological changes in pregnancy serve to bring to the forefront pre-existing psychological tensions. These conflicts are focused in two specific areas, within the woman herself as well as between the woman and her own mother.

First, adjusting to the idea of being pregnant involves dealing with the conflicting tensions to both support and terminate the pregnancy. Both healthy and neurotic women engage in an active subconscious effort to "interrupt the harmony of the pregnancy state" (p. 150). Deutsch claims that oral and expulsive issues from early childhood and puberty are revived and expressed by means of gastrointestinal symptoms as well as signs of a threatened spontaneous abortion. She goes on to state that whether the fetus remains to be considered an intruder or is accepted with pleasure depends on the woman's general psychological state.

Second, pregnancy brings to the fore pre-existing conflicts in terms of the pregnant woman's relationship to her own mother. Deutsch states that this is at "the center of the psychologic problems of pregnancy and of the whole reproductive function" (p. 141). Tension arises when the woman's need to be independent conflicts with her fears of inadequately performing in her anticipated role as mother. Deutsch believes women fight against any need for dependence on their own mothers but that pregnancy heightens this need by bringing weaknesses and concerns to a conscious level, thus causing conflict.

In addition to these two areas of conflict, Deutsch reports that early pregnancy is also marked by introversion. Attention typically focused on the world is transferred inward towards the fetus which is responsible for all this change.

Bibring (1959) used a psychoanalytic perspective as well, building on Deutsch's work. From psychiatric screening interviews with prenatal patients evidencing psychological problems, Bibring, like Deutsch, concluded that pregnancy was a time of intense upheaval of psychological processes. The psychologic and somatic changes due to pregnancy cause a period of crisis in which earlier unsettled conflicts emerge and disequilibrium occurs. However, Bibring believed that in a mentally healthy woman this period of crisis ultimately results in growth in that the outcome is accompanied by mastery of new functions.

More recent work has been done in the field of psycho-obstetrics. Cohen (1979), like Deutsch and Bibring, based his theories on clinical experience. He perceived that pregnancy was a state necessitating certain psychological adjustments which may be considered develomental tasks. According to Cohen, early pregnancy is almost universally accompanied by feelings ranging from ambivalence to rejection. However,

the one major task of the woman in the phase of pregnancy prior to fetal movement is the resolution of any negative attitudes towards the fetus. Cohen considered a woman's partial or complete nonacceptance of the preganncy by the time of fetal movement to represent a failure in achieving developmental tasks and indicative of an emotional or psychiatric disorder.

Tilden (1980) developed a cohesive synthesis of these developmental tasks of early pregnancy based on the work of major theorists (Bibring, 1979; Bibring, Dwyer, Huntington & Valenstein, 1961; Colman, 1969; Colman & Colman, 1973-1974; Deutsch, 1945; and Rubin, 1976). Tilden described a consensus among the theorists regarding major psychological tasks of pregnancy. During the first trimester there is an increase of self-awareness, accompanied by introversion, dependence, somatization, and narcissism. While there is early ambivalence and possible rejection of the pregnancy, the woman gradually incorprates the intruding fetus. The fetus is first seen as an outsider and then is viewed as merged with the self. At the completion of this psychological work the woman accepts the fetus.

In summary, the first trimester is a period marked by great emotional upheaval. Major theorists have suggested that women initially have ambivalent or negative feelings toward the pregnancy which gradually progress to acceptance of the fetus. In addition, it has been suggested that women experience increased dependence and introspection.

Values regarding parenthood. Also of relevance to this investigation are the prospective parents' values in regard to parenthood. How one views the anticipated child and one's relationship

with him/her could play a role in how one would respond to an unexpected pregnancy loss.

Many theorists (Brice, 1982; Deutsch, 1945; Grace, 1978; and Quirk, 1979) have claimed that parents have a large emotional investment in the pregnancy and anticipated birth. Offspring represent many things—an extension of self, a link to the future, evidence of one's femininity or masculinity, and attainment of a socially sanctioned role. Quirk (1979) suggests that such perceptions play a major role in bereaved parents' responses to perinatal loss.

Rabin (1965) has classified such perspectives into several categories of motivation for parenthood. These are (1) biologic--narcissistic, an inate drive; (2) generative--proof of sexuality; (3) instrumental--serving a purpose such as saving (4) self-enhancement--meeting one's emotional needs; and marriage: (5) altruistic -- unselfish motivation, desire to give love. Rabin questioned 191 undergraduates, 90% unmarried, about attitudes toward marriage and childbearing. In open-ended responses to the questions 'Men (Women) want children because . . . ", half of the participants saw male motivation for parenthood to be a need for proof masculinity. More than half of the respondants believed that women's motivation was the fulfillment of an inate function and purpose in life. Other frequently cited responses included a genuine desire to love and care for children, social pressure, partner's desire for children, and a desire to have a family. While attitudes expressed in this study may not be accurately reflective of current perspectives, they point to possible motivations to consider when trying to understand

the motivation for parenthood.

Grief Theories

A review of the grief literature is appropriate as these theoretical viewpoints serve as a foundation for studies on pregnancy loss. This review will be divided into three subsections: (1) the classic grief theories, (2) the stage theories, and (3) other theoretical perspectives pertinent to this study. Each of the theorists discussed present their own perspectives regarding the nature of grief. Some classify grief in terms of behavior and others in terms of feelings. What emerges as a common perspective, however, is that grief is a response to a loss that may be described with specific terminology.

Classic theories. Freud (1917), in "Mourning and Melancholia," reported four characteristics of mourning: (1) depressed spirits, (2) lack of interest in the outside world, (3) inability to adopt a new object of love, and (4) avoiding all activities associated with thoughts of the deceased. Freud felt that while mourning was not consistent with the "normal attitude of life" (p. 153), it was not pathological and needed no intervention. According to him, normal grief following the death of someone important is time-limiting and resolved by reality.

Like Freud, Lindemann (1944) sought to understand the components of grief. Lindemann's work on grief is one of the most frequently cited theoretical perspectives. He observed 101 subjects, including bereaved disaster victims of the Coconut Grove fire and their close relatives, relatives of members of the armed forces, psychoneurotic patients who

lost a relative during the course of their treatment, and relatives of patients who died in the hospistal. By means of a series of psychiatric interviews, Lindemann observed symptoms common to those experiencing acute grief. Defining grief as "a definite syndrome with psychological and somatic symptomatology" (p. 141), Lindeman outlined five major categories of symptoms which he believed common to all experiencing grief, symptoms he classified within the range of normal grief. These symptoms are: (1) somatic distress, (2) preoccupation with the image of the deceased, (3) guilt, (4) hostile reaction and (5) loss of patterns of conduct. Somatic distress includes such sensations as tightness of the throat, lack of appetite, lack of strength, shortness of breath, and exhaustion. Preoccupation with the image of the deceased involves such phenomena as clear visual images of or hearing the voice of the deceased. Those experiencing grief feel guilty; they believe they have failed by perhaps being negligent in some way. Another symptom is hostility. Lindemann described the typical grief reaction as including a "disconcerting loss of warmth in relationship to other people" (p. 142); grievers are irritable and angry. Finally, typical activity patterns are offered. The author noted a sense of aimless, disorganized rapid activity as well as a loss of meaning in activities of daily living. Lindemann briefly noted a possible sixth category, the taking on of the traits of the deceased. This characteristic is not as commonly noticed as the other five, but often present in those bordering on abnormal grief responses.

Lindemann proposed that grief work must be successfully accomplished for adequate resolution of grief reactions. He states,

"The duration of a grief reaction seems to depend upon the success with which a person does the grief work, namely, emancipation from the bondage to the deceased, readjustment to the environment in which the deceased is missing, and the formation of new relationships" (p. 143).

Lindemann's work contrasts with Freud's in that unlike Freud, Lindemann believed intervention was necessary for the healthy resolution of grief. Secondly, Lindemann developed perspectives addressing the nature of both normal and pathological grief responses; the latter he believed to occur because of a delayed or improperly addressed grief response. Freud did not consider grief as being pathological. Lindeman's sampling strategy combined psychoneurotic patients and subjects without mental illness and also neglected to present evidence of consistency in timing and content of the interviews. However, Lindemann's work is widely accepted. Many subsequent studies have been based on his findings and support his descriptive theory.

Parkes (1972) is often cited among the classic grief theorists. In 1972 he published a synthesis of his previously published studies, which described his findings on the process and nature of bereavement. These findings were based primarily on the London study, the Harvard study, and the Bethlem study. The first two of these described the grief responses of young widows and/or widowers. In the London study, 22 widows were followed through the first year following the loss, and in the Harvard study, 68 widows and widowers were questioned once, 14 months after their spouse's death. The third study explored the experience of 21 bereaved psychiatric patients in a one-time assessment of grief responses. Data were collected by means of interviews and

questionnaires.

From his work, Parkes (1972) viewed grief as

a complex and time-consuming process in which a person gradually changes his view of the world and the places and habits by means of which he orients and relates to it. It is a process of realization, of making psychologically real an external event which is not desired and for which coping plans do not exist (p. 465, 1972).

According to Parkes, grief is characterized by anxiety, restlessness, a desire to locate the lost individual, guilt, feelings of emptiness, a tendency to adopt the traits of the deceased, as well as anger. The anger is often directed at those encouraging the bereaved into premature acceptance of the loss.

Parkes' research, while carefully designed and analyzed, needs replication with larger sample sizes. High refusal and attrition rates hindered the Harvard study. In addition, Parkes, like Lindemann, included the grief responses of both those with and without mental illness in his theory development, which is perhaps a conceptual flaw. Yet, the importance of his contributions cannot be ignored.

Clayton, Desmaris, and Winokur (1968) also undertook a study to delineate the symptoms of normal bereavement. Forty Caucasion subjects, 20-89 years old, who had lost a relative anywhere from 2-26 days previously were interviewed by a psychiatrist. The tool used in this research measured the presence of particular depressive symptoms. The interviewers also inquired about symptoms indicative of anxiety

neurosis, alcoholism, schizophrenia, and acute brain syndrome. Each relative was questioned as to the presence of these symptoms at three different times—since the death, during the terminal illness, and prior to that point. Although 32.5% were lost to follow-up, 67.5% were interviewed again at 4-16 weeks after the loss.

These researchers discovered that only three symptoms--depressed mood, sleep disturbance, and crying were experienced by more than 50% of the subjects. Difficulty concentrating, anorexia, and loss of interest in television and news were also reported frequently, but in less than 50% of the cases. No statistically significant relationship was found between the symptoms and the variables of gender or age of the bereaved, length of the deceased's illness, and relationship to the deceased. At the follow-up interview, Clayton et al. found that 81% were improved, 4% worse, and 15% claimed they felt better in spite of no improvement in their symptoms. Only 2% of their subjects sought psychiatric help following their loss. The authors concluded that "in an unselected population bereavement is a relatively mild reaction for most subjects" (p. 72). Although Clayton et al. did make a contribution in describing the characteristics and intensity of normal grief, their preselection of indexes measuring depressive reactions as well as various psychiatric syndromes may have biased their data collection. Moreover, the grief responses reported by these subjects may have been influenced by the use of anticipatory grieving during the terminal illness, a factor not present in the previously cited studies.

In summary, the classic grief theorists, on the basis of clinical observations, described a fairly consistent set of somatic and

psychological symptomatology accompanying the normal grief response. While certain methodological problems exist, these theories are widely accepted and are the conceptual foundation for much research.

Stage theories. Stage theories are among the most widely recognized of the theoretical perspectives of grief. While their roots are based in medical and psychological research, their sphere of influence has broadened considerably to the extent that stage theories are commonly cited in the lay literature.

Bowlby (1961), known for his work with children in the area of attachment, was one of the earlier stage theorists. By means of observing both animals and humans, he concluded that there were three stages of grieving. The first is the urge to recover the lost object. Bowlby claims "a situation of sudden loneliness evokes . . . an ancient instinctual response" (p. 333). This is the stage of protest, which is often marked by weeping and anger. The second phase of mourning occurs as despair sets in and behavior becomes disorganized. Activities are no longer self-sustaining and the individual becomes depressed. Bowlby believed that most bereaved individuals move on to the third stage, which is reorganization. All of these phases are part of the adaptive processes common to man. Bowlby describes the mourning responses of lower species to point out the primitive biological processes inherent in humans, such as an urge to recover the lost object and expression of grief and anger, but also acknowledged the possible presence of mourning behavior specific to man, namely the tendency to identify with the lost object.

Kubler-Ross (1969) has been widely accepted by the lay and

professional community alike as an expert in the field of thanatology. Her theory was developed from $2\frac{1}{2}$ years of interviews with over 200 dying patients. Subjects described their own experiences to Kubler-Ross, who initially conducted these interviews herself while being observed by four theology students. The interviews were very flexible--as long or as short as the subject desired, eventually utilizing various interviewers, and attended by different people.

What Kubler-Ross presented in her book On Death and Dying (1969) is a synopsis of her observations of the coping mechanisms used by an individual learning about his/her own terminal illness. Five stages are outlined, lasting for unspecified amounts of time and not necessarily existing exclusively. The first is denial, when the individual refuses to accept reality. "No, not me, it cannot be true" was the phrase most frequently expressed (p. 38). Once the individual realizes a mistake was not made, the feelings of denial are replaced by anger. Kubler-Ross also reported feelings of rage, envy, and resentment. The question at this point is "Why me?". After an individual expresses anger at people and God, he/she entertains the thought that an agreement can be made to prevent or postpone the inevitable. This third stage is one of bargaining, which Kubler-Ross claimed is short but as helpful as the others in one's coping with death. Bargains are often made secretly, and never expressed to others. When bargaining is found to be futile, there is the realization of the depth of the loss. Such cognizance of the magnitude of the loss results in depression. This stage of depression is often brought on by the intensity of the illness, which, as Kubler-Ross puts it, strips away numbness and stoicism. A loss by death not only includes loss of life, but changes in lifestyle, finances, self-esteem, and relationships.

Kubler-Ross then claimed that if an individual lived long enough and had been given assistance in progressing through the previous stages, there would follow true acceptance of death without any anger or depression. The individual had learned to express his/her feelings and to mourn the inevitable losses. Rather than being a joyful time, Kubler-Ross described it as one void of feeling, in which the individual no longer struggles.

Kubler-Ross suggested that the stages she identified reflect common responses of people to tragic news. Because Kubler-Ross stated that such responses were coping mechanisms people used frequently in the face of difficult experiences, her five stages have been applied in many loss and bereavement situations. The "theory" is untestable in its present form and is therefore considered descriptive. If indeed grief does occur in stages, research findings have not yet explained how long each phase lasts or should last, or how long it takes for the bereaved to reach the final, or resolution phase. Perhaps the development of such rigid criteria is undesirable as it may pose artificial limits on human responses.

Other theoretical perspectives. Bugen (1977) and Murphy (1983) have pointed out that stage theories are not to be accepted without question. They make the point that not all those experiencing grief go through every stage and that some never reach the resolution phase. Their comments are based on findings of some researchers that indicate at one to even two to four years after the loss a significant amount of

grief still remains. These authors suggested that there is insufficient empirical evidence to conclude that everyone experiences the orderly series of stages and that grief has a time-limited outcome.

Bugen (1976) focused attention away from stage theories and onto a new way of conceptualizing grief. Unlike the previous theories, Bugen's model can be utilized to predict grief outcomes. He presented a two-dimensional model, focusing on the closeness of the relationship and the perception of preventability. Each loss is classified according to whether the relationship was central or peripheral as well as if the death was preventable or unpreventable. Bugen predicted that the closeness of the relationship affected the intensity of the grief response and that the perceived cause of the death impacted on the duration of mourning. Those with central relationships to the deceased (defined as important to and needed by the bereaved) would experience intense grief responses, while those with peripheral relationships (those of negligible importance) were associated with milder responses. Bugen considered an intense response to be marked by severe physical and psychological distress. While depression, irritability, and loneliness may be present in a mild grief response, the severity is not as great. In terms of the effects of perception of causality, Bugen reported that the bereaved individual who saw the loss as preventable would have a prolonged (longer than 6 months) mourning response. On the other hand, an unpreventable death would result in a briefer response.

Based on how the bereaved perceived the closeness of the relationship and the cause of death, Bugen assigned each bereaved to one of four categories of grief responses; intense and prolonged, intense

and brief, mild and prolonged, and mild and brief. After discussing his model Bugen presented case studies, two from Lindeman (1944) and two from his own clinical experience, to apply his concepts. While his model was not presented with empirical data, it is a potentially useful contribution to the field and warrants clinical evaluation and possible application. Its suggested ability to predict the grief response could be of great value in assessment and intervention during a loss. Bugen suggested that for successful resolution of an intense grief response, an individual must be helped to perceive the relationship as no longer central but as peripheral.

Weisman (1973) presented another way of examining death, namely by considering each loss as either timely or untimely. While no one usually views a death as timely, Weisman used this phrase to represent a death where actual survival time is the same as what was expected. There is something almost acceptable in this form of dying; the death seems appropriate based on the achievement of expected tasks and ability to function at certain levels. Weisman suggested that the dying individual feels a sense of completion and satisfaction of having met both internally and externally imposed expectations, and accepts ensuing death. In addition, conflicts between the soon to be bereaved and the dying are minimal. Survivors usually perceive that the deceased lived a full life.

In contrast, an untimely death can be either premature, unexpected, or calamitous. According to Weisman, a premature death occurs when a person dies before reaching old age. Desires to see potential realized are crushed when someone dies too early. When a death is sudden and

unpredicted it is considered an unexpected death. It is not limited to those in any age group or state of health. Weisman included such examples as a fatal car accident or myocardial infarction. These deaths are shocking to the survivors as they conflict with normal expectations. Calamitous death is violent, destructive and demeaning. This would include deaths from natural disasters, murder, and suicide.

Weisman's model, like Bugen's, may be helpful in predicting grief responses. If it is to be used in assessment and intervention, it too must be validated in clinical settings. Weisman has studied coping mechanisms of terminal cancer patients but to date has not published any data incorporating the concept of timely versus untimely death.

Studies Focusing on Perinatal Death

Until the past few years, research specifically related to the psychological impact of spontaneous abortion has been non-existent. Instead, investigators have focused on the broader topic of perinatal death. Most of these studies have, by definition, been restricted to pregnancy loss in the perinatal period, usually considered to range from the 28th week of gestation until 28 days after delivery. An examination of this literature is appropriate since research on perinatal loss serves as a foundation upon which recent work specific to spontaneous abortion has been built.

Kennell, Slyter, and Klaus (1970) were the first to examine and report the mourning response of parents to the loss of a newborn. Along with examining the effects of tactile contact with the infant on the grief response and the factors influencing the establishment of an

affectional bond between mother and infant, Kennell et al. wanted to observe how parents reacted to the death of their neonate. This study involved interviewing 20 women from mixed socio-cultural and economic backgrounds who had lost an infant in the intensive care nursery. tape-recorded interviews were held 3 to 22 weeks after the death of the infant. Based on concepts from studies of Parkes (1965) and Lindemann (1944), the researchers looked for six signs they thought indicated a mourning response: sadness, loss of appetite, inability to sleep, irritability, preoccupation with the lost infant, and inability to return to normal activities. The presence of three of these signs (in any degree at all) was established as the criteria for considering a subject to be mourning. Each variable was analyzed in terms of length of time it had been present and a number was assigned pertaining to severity. An overall mourning score was then given to each mother. Each interview was scored by two raters with a high inter-rater reliability (agreement on 89% of the items and within one point on 11%).

For analysis, Kennell et al. divided their subjects into high and low mourning groups using a median split. They did not consider those in the high group to be experiencing pathological grief, a response to loss which Linedmann (1944) characterized as a distortion of normal grief and represented by differing sets of symptoms. The authors did find that there was a correlation between a high mourning score and several variables such as previous pregnancy loss (p < 0.05), lack of communication with a supportive person (p < 0.01), and positive feelings about the pregnancy (p < 0.05). However, they found, among other things,

no correlation between mourning scores and the length of the baby's life. They observed grief in mothers who had lost their baby as soon as one hour after birth. Based on this, Kennell et al. proposed that attachment (affectional bonding) begins prior to physical contact and caregiving.

While this often-cited study is widely accepted, several limitations must be addressed. A small, nonrandom sample as well as a great variation in the time of the interviews (3-22 weeks after the loss) indicate a need to replicate the study using a larger population questioned at a consistent time after the loss. Variations in several months after the time of the loss could greatly affect a subject's emotional response and confound the grief score as well as the analysis of the effects of different variables.

These findings were reinforced by Peppers and Knapp (1980), who concluded that prenatal attachment does occur, and therefore a pregnancy loss at any gestation is a loss to be mourned. These authors, building on Kennell et al.'s previous work, examined the possible differences the grief response related to length of gestation. They asked a convenience sample of 65 women who had had a pregnancy loss (stillbirth, neonatal death, or spontaneous abortion) from six months to 36 years before to rate themselves on a grief scale. The grief scale was an expansion of the one used by Kennell et al. In addition to the six variables chosen by Kennell et al., Peppers and Knapp difficulty in concentration, anger, guilt, failure to accept reality, time confusion, exhaustion, lack of strength, depression, and repetitive dreams of the lost child. These categories appear to be based on

Lindemann's (1944) symptomatology of acute grief. Subjects were asked to rate themselves both at the time of the loss and at the time of the study on each symptom on a scale of one (no problem) to nine (extreme difficulty). They found no significant differences between grief scores regardless of length of gestation, which led them to conclude that the emotional response to pregnancy loss is as great for a spontaneous abortion as for a stillbirth or neonatal death. Peppers and Knapp criticize the assumption that grief is proportionate to the closeness of and length of time invested in the relationship. While this initial examination analyzing the relationship of length of gestation to intensity of grief is significant, the study should be repeated using a larger cross-cultural population with more recent losses. There is inherent weakness in the design of this study using retrospective data covering such a wide range of time, and therefore its results cannot be accepted without question. In addition, no mention was made as to whether any of the subjects had experienced a previous pregnancy loss which might be a significant factor in one's emotional response. Finally, Peppers and Knapp did not report the incidence of SABs, stillbirths, and neonatal deaths in their population. It cannot be assumed that all categories were evenly represented, which certainly would influence the interpretation of the data.

Several other studies focused specifically on stillbirth or neonatal death. Wolff, Nielson, and Schiller (1970) studied the emotional responses of 50 women to a stillbirth, following 40 of them one to three years after the loss. The majority of the population was married, multiparous, and from a poverty or low-income group. Seventeen

had a history of previous stillbirth. All subjects were interviewed by a multidisciplinary team on the second postpartum day and again one to two days later, prior to discharge. Forty were followed with one or more interviews at unspecified times in the next one to three years. The researchers determined that all the subjects were depressed initially and that data during the follow-up showed that all but two had normal grief reactions. However, the authors did not mention the criteria used for making these assessments. All of the subjects were concerned with why the baby died. Seventeen blamed themselves and nine felt others were at fault. Ten said it was God's will and the remaining did not attribute it to any cause.

These findings need to be replicated in other populations. A more consistent follow-up would have improved the design. There was no mention made of the assessment criteria chosen by the researchers. In addition, the high incidence of previous stillbirth is one potential factor influencing a grief response that was not addressed by the authors.

Giles (1970) also interviewed women who had recently experienced a neonatal death or stillbirth. In a one-time interview immediately after the loss, Giles asked about the subject's obstetrical history, reactions to past bereavements, attitude about the recent pregnancy as well as response to the loss. Giles presented the feelings the subjects reported, listing a variety of emotional and physical symptoms consistent with grief literature. These included fatigue, sleeplessness, anorexia, guilt, anger, and sadness.

Rather than seeking to capture the full range of emotional

responses, Jensen and Zahourek (1972) chose to focus on depression. They studied 25 women who had experienced either a neonatal death or a stillbirth to see if there was a high incidence of depression following the loss. The subjects were interviewed by a psychiatric nurse one to two days after their loss and then by a visiting nurse six weeks and one year following the infant death. Initial assessment tools included Zung's Self-Rating Depression Scale, the Checklist of Symptoms of Depressive State by Hamilton, and an interview to assess factors considered to both positively and negatively affect the grieving process. Variables suggested by the authors as having a positive affect on the process were support (boyfriend, husband, or family), presence of other children in the home, knowledge enabling anticipation pregnancy-related problems, and an ability to cry in response to the loss. Four factors suggested as negatively influencing grief work were other recent stresses or loss, ambivalence about the pregnancy, previous mental illness, and the inability to cry.

The researchers also interviewed a control group of 12 mothers who had not lost their infants in order to determine the incidence of depression in this population immediately following delivery. No contact beyond the initial post-delivery interview was made with this group. Jensen and Zahourek mentioned that while matched on several parameters, the control group was more educated and more stable in terms of marital status and the absence of psychiatric illness.

The researchers found that there was a statistically significant difference in the Zung score between the control group and the subjects at the time of the initial postpartum interview. No correlation was

found between any of the predictor variables and the Zung score. They also found that only 40% of the bereaved subjects had a normal Zung score at 1 year following the loss, indicating that depression was not a rapidly resolving phenomenon in this population. A high (50%) attrition rate, incompletely matched controls, and failure to follow the control group longitudinally hampers application of these results. Barring design limitations, this study indicates that women who experience neonatal death or stillbirth are at higher risk initially for depression than mothers whose babies live.

In addition to these particular studies on perinatal loss, much narrative literature has also been published. However, the content of these presentations is anecdotal in nature. While lacking in careful research design, findings reported and suggestions offered both support and add to current theoretical understanding. While it is beyond the scope of this literature review to critique each of these articles separately, a summary of the majority of this literature (is offered Some of the more recent publications are: Crout, 1980; Estok & here. Lehman; Furlong & Hobbins, 1983; Furman, 1978; Gilson, 1976; Kowalski & Bowes, 1976; Kowalski & Osborn, 1977; Schneider & Daniel, 1979; Seitz & Warrick; and Zahourek & Jensen, 1973. These presentations typically follow the same format, namely beginning with a review of classic grief theories, usually citing Lindemann, Parkes, Clayton, Kubler-Ross, or a combination of them. Following this discussion the authors proceed to describe the experiences and feelings surrounding a perinatal death. Clinical examples are frequently used. Common reports include sadness, anguish, shock, anger, weeping, disbelief, guilt, a need to see and

touch the baby, a need to grieve openly and receive support, a desire (not often initially acknowledged) for permanent momentos, and a need to know why the baby died.

The concept of parental tasks of adjustment to perinatal death developed by Furman (1978), is a helpful addition to the research-based and narrative literature on perinatal loss. Based observation, Furman concluded that the mourning following a perinatal loss differs significantly from that experienced with other deaths. According Furman, mourning involves two distinct (1) detachment and (2) identification. The former refers to bereaved's efforts to diminish the emotional ties to the deceased. Identification, a task which might appear contradictory to detachment, involves the adoption of traits of the deceased. This, according to Furman, serves to ease the feelings of tragedy associated with the loss. It is this process of identification that makes detachment bearable.

What makes perinatal death uniquely difficult is the fact that detachment must occur without identification. The parents have not had the opportunity to develop a relationship with the unborn child and get to know him/her as an actual individual. There are no memories to remember and no attributes to incorporate. Thus, the parents must bear the pain of detachment without the mitigating effect of identification. Secondly, Furman claims that the loss associated with perinatal death is also a loss of part of one's self, such as occurs with an amputation. The parents must learn to accept that part of themselves is gone forever. Furman cites frequent responses of feelings of emptiness and a lack of self-esteem. According to her, one's body image is threatened

and feelings of failure dominate. Furman believes parents must be informed of these aspects of mourning a pregnancy loss so that they may better understand and deal with their feelings.

In examining the perinatal loss literature, it appears that a SAB should theoretically represent a loss as does any other form of perinatal death, and therefore, it may be considered in the context of theories relative to grief and loss. Yet, any analysis of the impact of spontaneous abortion must also consider research specific to this phenomena.

Studies Examining the Psychological Effects of Spontaneous Abortion

There have been several studies focusing on the psychological impact of SABs, considering both positive and negative responses. As a part of a larger study, Simon, Rothman, Goff, and Senturia (1969) examined the responses of women to spontaneous abortions to determine what these responses entailed and if there was a correlation between the spontaneous abortion and ensuing psychiatric illness. One of the four researchers interviewed each of the 32 subjects, women who had been hospitalized for a SAB three months to ten years before. The subjects were located through a review of medical records. Thirteen reported feeling depressed at the time of the spontaneous abortion, with most of these feelings beginning before the actual loss occurred, at the time when they were told the SAB was inevitable. Nine stated they felt disappointed, and six were relieved the spontaneous abortion had occurred. Two reported they felt both disappointment and relief, and two gave responses that were not categorized. Seven reported conscious

feelings of guilt that concerned them.

The interviewers gave 20 women a psychiatric diagnosis at the time of the interview. Thirty percent of this subgroup reported moderate to marked guilt. And of the 13 reporting depression at the time of the loss, eight had psychiatric illness (classified as neurosis, personality trait disturbance, or schizophrenia) at the time of the interview as determined by the interviewer. One out of the nine reporting disappointment had a similar diagnosis.

While lending helpful insight into the emotional impact of a SAB, certain limitations preclude generalizability of the findings. The sample was not randomly selected, there was a wide variation in the time period elapsed since the loss, and interrater reliability was not reported. Additionally, it is unclear whether any of the subjects could have had pre-existing psychological problems or if the women assigned a psychiatric diagnosis after the SAB had developed such symptoms solely as a result of the SAB.

Seibel and Graves (1980) assessed 82 inpatients immediately following a dilatation and curettage for inevitable abortion. The patients were given a questionnaire examining such things as feelings about the pregnancy, past obstetrical history, feelings about responsibility for the loss, as well as an emotional status inventory based on the Multiple Adjective Affect Checklist (MAACL), a well-established tool that measures feelings of anxiety, depression, and hostility. Each woman was questioned as to the presence or absence of sixteen affect adjectives, including four positive descriptors (lucky, free, relieved, and pleased) and twelve negative terms measuring anxiety

(nervous, afraid), depression (lonely, terrible, alone, guilty, hopeless), and hostility (disgusted, mad, angry, bitter, hostile).

The authors reported that 29.3% of the patients identified had at least one positive affect adjective and 13.4% reported two or more. Eighty-nine percent reported one or more negative adjectives and 23.1% checked four or more. Separate examination of each of the categories of negative adjectives revealed that 53.7% checked one or more adjectives in the depression group, 51.2% checked one or more in the anxiety group, and 41.5% checked one or more in the hostility group. Most commonly checked feelings were nervous, disgusted, afraid (checked by one-third of the subjects) and lonely and terrible (checked by one-fourth of the respondents). Those with planned pregnancies were more likely to report being unhappy ($p \le 0.05$) and more likely to check adjectives reflecting hostility ($p \le 0.02$). They were also less likely to check any positive adjectives (p < 0.01) than those in the unplanned pregnancy group. No significant differences were found between the groups in terms of the percent who checked one or more depression or anxiety adjectives. The number of those who reported three or more negative affect adjectives was identical regardless of whether in the planned or unplanned pregnancy group. Seibel and Graves suggested that "even though a woman may not be unhappy about the termination of pregnancy, the experience, nevertheless, may be emotionally upsetting for her" (p. 163). and Graves also reported that 58% of the women felt it was desirable to have a support person with them at the time of the loss. Significantly, one out of four of the subjects believed she was personally responsible for the SAB, and 71% claimed that they would feel better if they knew

more about what had caused the SAB.

These findings suggest that any spontaneous abortion, regardless of whether the pregnancy was planned or not, carries with it significant emotional reactions. Further, these emotional responses are frequently accompanied by the presence of either misinformation or a lack of knowledge about how the loss occurred. It is important to note, however, that the researchers obtained these responses at the time immediately following the loss. The stress of such an experience might have made it difficult for the subjects to complete the questionnaire at such a sensitive time. Also, the number of negative adjectives compared to the positive adjectives in the checklist may have introduced bias in terms of suggesting how the woman was supposed to feel.

Descriptive research was done by Hai and Tong (1981), who found that all 24 subjects interviewed reported sadness and depression following a SAB. Sixty-one percent of the pregnancies in this nonrandom population were unplanned. The women described feeling "horror, total panic, devastated, horrible, upset, and frustrated." Fifty-two percent blamed themselves for the SAB. Over three-quarters stated they had never anticipated as great an emotional impact as they experienced, and while 83% said they received some emotional support, almost half reported that they would have liked more emotional support. Thirty-eight percent felt resentful of other pregnant women, new mothers, those having therapeutic abortions, or those seeming to not want their children.

Several methodological questions were not addressed, however. The authors did not report who conducted the interviews, and, if more than

one interviewer was involved, how reliability was ensured. There was no mention as to when the loss occurred relative to the interview. Finally, it was never stated whether the feelings reported by the women were those at the exact time of the loss or at some point thereafter. Apart from these limitations, this study does suggest that women having a SAB need emotional support.

Stack (1980) developed a list of factors which he thought could make a woman having a SAB prone to the development of a pathological grief reaction. These are personal impressions based on clinical experience and while they have not been developed from a carefully designed study, they do provide some important perspectives to consider and test. These factors pertain to the frequent failure of others to validate the loss, the stage of psychological adaptation to the pregnancy at the time of the loss, and the impossibility of predicting or controlling the event. Stack noted the following:

- 1. People usually do not even know that the woman was pregnant.
- The woman is often embarrassed to mention that she has lost a baby.
- She has frequently not resolved the ambivalence that is typical of the early, narcissistic stage of pregnancy.
- 4. She has not identified the fetus as a new person but rather has considered it part of herself.
- 5. The woman is not able to identify with the "lost person" even to the extent of having felt fetal movement and having recognized "someone else" was there.

- 6. She rarely sees the baby she has lost. She can only fantasize about the sex, size, and personality of this person who was never meant to be.
- 7. There is no funeral.
- There is rarely recognition by the caregivers that a significant event has occurred.
- 9. Caregivers, family, and friends often encourage denial and intellectualization. They rarely encourage the woman to cry, talk about the loss or assume the role of the bereaved person.
- 10. A miscarriage is usually sudden and unpredictable; it does not allow the woman a period of anticipatory grieving and preparation for loss.
- 11. Guilt is a nearly universal feeling experienced by women who have had a miscarriage.
- 12. A sense of helplessness occurs when the woman is bleeding and neither she nor the physician can do anything to stop it. (p. 101).

Summary

Spontaneous abortions, or unplanned pregnancy losses prior to 20 weeks gestation, occur in up to 20% of all pregnancies. Despite their frequent occurrence, little is known about the emotional responses women have after such an event. They occur at a time in pregnancy when the woman is experiencing a great psychological transition—the task of adjusting to the idea of having a baby. A SAB must also be considered in the light of the woman's pre-existing perceptions of pregnancy,

involving such factors as her attitudes regarding the attainment of the mothering role and the value placed on the anticipated child.

Grief theories provide concepts with which to understand normal responses characterizing loss. A variety of psychological and somatic symptomatology as well as variables believed to affect the grief response were described.

Research-based and descriptive literature on perinatal death uses grief theories to examine pregnancy loss. Studies on perinatal death suggest that attachment begins prior to birth and that the grief response is not related to length of gestation. Certain variables, such as the presence of support and the planning of pregnancy, have been found to influence the grief response. The narrative literature on perinatal death focuses on clinical examples supporting the significance of such a loss as well as on the importance of effective interventions aimed at promoting a healthy resolution of the grief.

Literature focusing specifically on women experiencing a spontaneous abortion indicates that regardless of whether the pregnancy was planned or not, a SAB can be an emotionally upsetting experience. Feelings of depression, guilt, and anxiety were commonly described.

In summary, spontaneous abortion has been considered within the theoretical perspective of grief and efforts have been made to describe a woman's response to such an event. Yet, the relative lack of studies exploring early pregnancy loss as well as design limitations of existing research indicates the need for further inquiry.

Conceptual Framework

One woman having a spontaneous abortion indignantly mentioned that the health care providers working with her considered it just a "minideath" (Eck, 1980). Even though spontaneous abortions occur fairly frequently, the psychological implications of such an experience cannot be casually dismissed.

It appears that any pregnancy loss, regardless of length of gestation, may result in a grief response. A spontaneous abortion is a loss like any other death and therefore women experiencing a spontaneous abortion must receive validation of the reality of their loss as well as support in moving toward resolution.

The meaning of the pregnancy to the woman greatly influences this response. It has been hypothesized that the importance of the relationship, or in this case, anticipated relationship, affects grieving. While evidence suggests that even the unplanned early termination of an unwanted pregnancy leads to sadness, the intensity of the response is considered to increase as value placed on the lost object increases. Another important factor in the grief response is the "acceptability" of the death; the assumption is generally made that any pregnancy wil be carried to term and will result in a healthy baby. Thus, an early unplanned pregnancy termination is an untimely premature death.

Even if the woman had a few days of potential SAB symptoms, thoughts and feelings may be focused on hope rather than anticipatory grieving. The emotional impact may be heightened due to the unpreventability as well as the undetermined etiology, both of which

interfere with the woman's attempts at understanding or control, thus making acceptance difficult.

Not only is the spontaneous abortion a loss of a potential child; it is different from the death of another relative in several ways. As Furman (1978) pointed out, the dual mourning process of detachment followed by identification is not possible with the death of a fetus. The parents must detach while having very little identification with the fetus, leading to a sense of emptiness. Further, the loss may signify more than the fetal death. It may represent the inability to reproduce or to carry a baby to term. It may also be viewed as the loss of the dream child around which fantasies had been built.

Based on the review of the literature, the following assumptions will guide this study:

- 1. An unplanned pregnancy termination is a loss.
- 2. Grief is the natural response to loss.
- A grief framework is appropriate to evaluate responses to spontaneous abortions.

Many factors have been suggested as influencing a grief response. Several of these have been identified in the research literature and others are based on the author's clinical observations. As seen in Figure 1, these factors may either intensify or diminish the grief response. Three of these factors have been identified as variables of interest in this investigation. They are planning of the pregnancy, presence of a support person, and previous obstetrical loss. It is suggested that a planned pregnancy, a history of previous obstetrical loss, and lack of a consistent support person may intensify a grief

response. Conversly, no previous obstetrical loss, a consistent support person and an unplanned pregnancy may diminish the grief response.

While the classic and stage theories of grief suggest typical responses that may actually be observed, they may be inadequate to fully understand SABs. There is a need to learn more of the nature and the intensity of the response following early pregnancy loss. For this, the bereaved must speak and share their experiences.

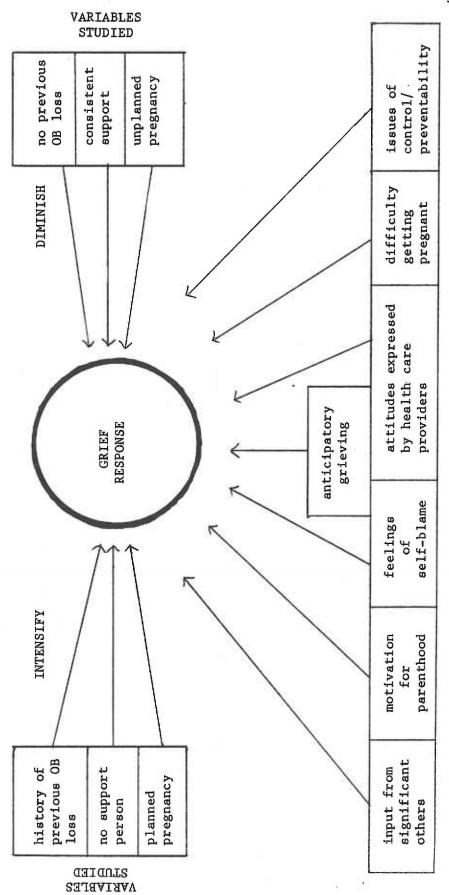
Research Questions

The following research questions were asked: (1) What are the emotional responses of women experiencing a spontaneous abortion?, (2) What is the intensity of the grief response as measured by a grief score?, and (3) What is the relationship between the grief response and the following variables—previous pregnancy loss, planning of the pregnancy, and the presence of a support person?

OTHER INFLUENCING FACTORS

CONCEPTUAL FRAMEWORK

FIGURE 1



CHAPTER 2

METHODS

This chapter will describe the research methods used for this study. The design, sample and setting, variables measured, data collection instrument and procedure will be discussed. This section will conclude with a review of the methods of data analysis used.

Design

A descriptive retrospective design was used. Data were collected by a questionnaire, which is described in a later section.

Sample and Setting

The sample was 15 Caucasian English-speaking females between the ages of 19 and 45 who had experienced a spontaneous abortion between February 1, 1984 and May 14, 1984. Only first trimester losses were included in order to avoid the possible confounding influence of fetal movement. Contact was made with potential subjects at the time of their follow-up visit to their health care provider, which occurred one to two weeks following the spontaneous abortion. Subjects were recruited from private offices of one of 15 cooperating obstetricians, which is defined as the study setting. The initial contact letter sent to physicians may be found in Appendix A.

Variables

The dependent variable was the woman's grief response to the SAB, as measured by the grief score. As discussed in the conceptual framework it is possible that the intensity of the grief response can be

influenced by several variables. These include the presence or lack of emotional support, previous pregnancy loss, feelings of self-blame for the loss, the occurrence of fetal movement, as well as whether or not the pregnancy was accepted. Other variables include medical problems experienced with the pregnancy, length of gestation at the time of loss, value placed on the anticipated child, feelings related to control, and satisfaction with treatment by health care providers at the time of the loss.

It was beyond the scope of this study to examine the influence of all possible variables, and therefore three variables were selected for current examination. Selection was influenced by literature suggesting their relationship to the grief response following a pregnancy loss. They were: (1) previous pregnancy loss, (2) presence of a support person, and (3) planning of the pregnancy.

Data Collection Instrument

A four part questionnaire was used to collect data (Appendix B). Part One (questions 1 through 4) gathered demographic information for the purposes of describing the study population. The second part (questions 5 through 23) consisted of both open-ended and forced-choice questions relating to feelings about the loss, planning of the pregnancy, presence of a support person during and following the loss, perceived etiology of the SAB, and previous obstetrical history.

The third part was designed to obtain a grief score for the respondant. This score was based on the grief score concept first used by Kennell, Slyter, and Klaus (1970) and later expanded by Peppers and Knapp (1980). Total grief scores ranging from 15 to 75 were obtained

from each subject. No reports of reliability and validity of the Likert scale instrument were provided by either Kennell et al. (1970) or Peppers and Knapp (1980). However, Kennell et al. did state that the grief score obtained by the interviewer was the same or within one point of the mother's self-rating in 85% of the cases.

The items used for the grief score were reviewed by a panel of maternal-child health nursing experts for content validity and revised as suggested. Internal consistency between items and the total score was computed by Cronbach's Alpha (r=0.89). Care must be taken in interpreting this value due to the extremely small sample size.

The final part of the questionnaire was the short form of Beck's Depression Inventory (BDI) (Beck & Beck, 1972). It was used to further describe the study population. As eight to nineteen percent of the population at large considers itself to be depressed (Murrell, Himmelfarb, & Wright, 1983), it was important to determine if this sample varied, possibly due to the spontaneous abortion. consisted of 13 forced-choice items. The short BDI has a 0.96 correlation with the long BDI, a tool with well-established reliability The long BDI, a 21 item tool, has a split-half and validity. reliability of 0.93, and each of the 21 items correlates significantly with the total test score. The BDI has a correlation of 0.75 to 0.82 with the Hamilton Rating Scale, a widely accepted depression index. Comparisons to clinical evaluations of depressions range from 0.61 to 0.67 correlation. Finally, the BDI is able to distinguish between depression and anxiety, a failure of other tools (Minnesota Multiphasic Personality Inventory, Multiple Affect Adjective Checklist, and Zung's

Self-Rating Depression Scale) (Beck & Beck, 1972).

Internal consistency for this section of the tool was determined; a Cronbach's Alpha of 0.90 was obtained. Again, the small sample size necessitates cautious interpretation.

Procedure

Assistance of staff members in eachdesignated study collection setting was essential for the identification of potential subjects. Women who met the study criteria were given a letter by the office nurse which explained the purpose and nature of the study (Appendix C). individual who agreed to participate was then asked to sign an informed consent form (Appendix D), approved by the University Human Subjects Review Committee, and provide her address and phone number. The investigator then mailed a questionnaire to the study participant along with a stamped, addressed return envelope. All women also received a card with a phone number for reaching the researcher as needed for either clarifying the study or for arranging a time to discuss in person her feelings regarding the SAB, if so desired. If a subject desired, arrangements were made for the researcher to pick up the questionnaire in person and listen to the participant's concerns at that time. If no personal contact was desired, the subject returned the questionnaire in the mail within one week.

The researcher maintained anonymity by assigning code numbers to all questionnaires and by keeping the signed consent forms and questionnaires locked separately. The questionnaires have only been accessible to the researcher. Finally, data were reported together so that individual responses were not identifiable.

Fifteen consent forms were signed in the health care settings and questionnaires subsequently mailed. Fourteen were returned. Additionally, three women verbally agreed to participate but did not sign consent forms in the office due to a lack of either staff or client time. Consent forms were mailed to these individuals; one woman returned the form and completed a questionnaire.

An estimate of the number of women agreeing to participate and those choosing not to do so was determined with the assistance of staff members in the study settings. Rates of refusal ranged from 0% to 50%, with an average rate of acceptance of approximately 80%. Reasons cited for not participating included insufficient time while at the office visit to read the cover letter and sign the consent form, a lack of interest, as well as a desire to participate only if the spouse could also be included in the study.

Analysis

The primary method of data analysis was descriptive statistics.

Means and frequencies on the study responses were computed.

CHAPTER III

RESULTS AND DISCUSSION

In this chapter the findings of the study will be discussed. A description of the sample will be followed by an anlysis and discussion of each research question. A description of incidental findings will conclude the chapter.

Sample Description

Fifteen Caucasian, English-speaking women participated in the study. Their mean age was 31 years. All subjects were partnered. As seen in Table 1, this was a well-educated, upper-middle income group with 50% having annual incomes between \$30,000 and \$40,000 and a mean of 15 years of education. Slightly more than one fourth (n=4) were primigravidas, with the mean number of total pregnancies being 2.87. Nine of the subjects reported no live births. In terms of previous obstetrical loss, no subject had experienced a premature delivery, stillbirth, or neonatal death. However, over one-quarter reported one or more elective abortions and one third had had a previous spontaneous abortion (SAB). One participant wrote in that she had had an ectopic pregnancy, a category not included in the questionnaire. Thus, eight, or slightly over half of the sample had a history of previous pregnancy loss.

Forty percent of the study pregnancies were planned, 13.3% were unplanned, and the remaining 46.5% were considered only partly

Table 1
Selected Characteristics of Study Sample

Variable	Range	Mean	S.D.
(n=15)		**	
Age	21-39	31.13	4.61
Education (years)	12-18	15.07	2.22
Number of Pregnancies	1-7	2.87	1.73
Number of Live Births	0-6	0.93	1.62
Number of Previous Therapeutic Abortions	0-4	0.60	1.18
Number of Previous Spontaneous Abortions	0-1	0.33	0.49

planned. Of the 6 women whose pregnancies were planned, 2 reported that they had difficulty getting pregnant. When questioned as to their attitude about the pregnancy at the time immediately preceding the SAB, all but one of the participants were either feeling "basically pretty happy" or "extremely happy" about being pregnant. Only one of the respondants reported having had initial negative feelings about the pregnancy, but had come to accept it by the time of the loss. The mean number of weeks of gestation at the time of the SAB was 9.43.

Each subject was evaluated for depression using the short form of the Beck's Depression Inventory (BDI). This was done to determine if there was any difference in the degree of depression found in the study sample as compared to the population at large. A possible score of 0-39 was obtained by totalling responses on the 13 items. According to the criteria established by Beck & Beck (1972), a score of 0-4 indicates none or minimal depression, 5-7 reflects mild depression, 8-15 indicates moderate depression, and over 16 indicates severe depression. Fourteen of the subjects completed the short BDI. The scores ranged from 0-17, with a mean of 4.07. The majority (n=10) fell into the none/minimal category; two were classified as mildly and depressed. In comparison to the population at large, the percentage of this sample who were depressed (n=4) is higher. Twenty-eight percent of the subjects were classified as mildly, moderately, or depressed; as previously noted, eight to mineteen percent of the U.S. adult population is depressed (Murrell et al., 1983). This difference may be due to several factors. First of all, the study sample may have been more depressed due to their recent loss. Conversely, other recent

life events could also affect one's level of depression. These factors were not controlled for in this investigation.

Even though the incidence of depression in the study was higher than that reported by the general public, the overall depression scores were relatively low. As previously mentioned, the majority of the subjects were classified as being either not depressed or minimally depressed. Further investigation is warranted to understand this finding. One could suggest that a woman does not respond to a SAB with a marked degree of depression. On the other hand, perhaps the time at which the subjects completed the BDI is a critical factor. Stage theories of grief would suggest that a bereaved individual experiences three other phases of response to loss before becoming depressed. On this basis, one may consider that this sample had not reached that phase in the grief resolution process, and that data collection at a later point would yield different results. However, one must keep in mind that any interpretation of these findings is conjecture as the sample size was so small.

Research Questions

Findings relevant to the three research questions will be analyzed.

Because of the small sample and descriptive nature of the analysis, a discussion of the findings will be included in this section.

Question One

Research question one, which asked what are the emotional responses of women experiencing a SAB, was answered by two open-ended questions. Content analysis was used to analyze the responses, which varied from

one word to one page for each of the two questions.

The first open-ended question asked each subject how she felt immediately after the SAB. As seen in Table 2, the most commonly cited feelings were disappointment and disbelief, followed by sadness. One-third of the participants mentioned feeling emptiness. Fear and anger were reported by slightly less than 30% of the respondants, and one in five felt lonely, a desire to know why it happened, as well as a concern regarding one's ability to become a mother. Individual subjects reported feeling shocked, stunned, lost, apologetic, confused, upset, almost depressed, or guilty. Others offered descriptive statements about feeling a lack of self esteem, betrayed by the medical community, feeling like something that belonged to them had been taken away, and a feeling that the event was unfair.

Although many respondants listed negative affect adjectives, some other perspectives were also acknowledged. One individual wrote that she felt good that she could conceive again. Another mentioned relief because the baby could have been abnormal and that SABs were nature's way of taking care of mistakes.

It appears that the majority of comments, though, were indicative of a negative emotional experience. Comparing these responses to previous research, several points can be identified.

First of all, the negative affect responses are consistent with grief literature. The particular expressions of guilt and anger are consistent with Lindemann's (1944) theoretical perspectives on grief. Parkes (1972) reported feelings of emptiness as one major characteristic of grief, something mentioned frequently in this study sample. Clayton,

Table 2

Reported Responses of Subjects Following Their Spontantous Abortions

Response	Number of	Respondents	Percentage of Total Sample
Disappointment		8	53.3%
Disbelief		8	53.3%
Sadness		6	40%
Emptiness		5	33.3%
Fear		4	36.6%
Anger		4	26.6%
Concern about child- bearing potential		3	20%
Loneliness		3	20%
Desire to know "Why"		3	20%
Feelings of hurt		2	13.3%

Desmaris, & Winokur (1968) found a depressed mood characteristic of grievers, and the sadness, disappointment and hurt cited by the respondants could be considered indicative of such a state. The high percentage of study participants who reported feelings of disbelief is consistent with stage and crisis theories. The initial reaction to a loss is marked by such feelings as inability to accept what has happened as well as questions of "Why me?".

It does appear, then, that a grief framework is a useful means of viewing SABs, as a majority of the participants cited feelings that are components of theoretically established grief responses. However, one cannot ignore the positive affect adjectives mentioned by several respondants. This raises several possibilities. First of all, perhaps the classic and stage grief theories do not fully apply to everyone experiencing a SAB. Rather, perspectives offered by Weisman (1973) may be more appropriate. As discussed earlier, Weisman categorized losses as either timely or untimely, depending on the bereaved's perception of the acceptibility of the death. The responses of relief cited by several subjects may be consistent with what Weisman considered a timely death. Based on a woman's perceptions about the SAB, it is conceivable that one could report acknowledging the loss as acceptable. Such comments as "It was for the best because the baby could have been deformed" reflect such beliefs.

Secondly, perhaps the reason why positive adjectives are not mentioned when describing the response of women to perinatal loss is that it has been assumed feelings would be negative. For example, no literature on late pregnancy loss addresses the possible feeling of

relief that participants in this study cited when they assumed the reason for the loss was a defective child.

Third, it could be that while a loss, a SAB entails a different type of grief response, perhaps varying in both nature and duration, than other types of losses. Stack (1980) reported 12 factors specific to a SAB that would suggest a unique grief response to such a loss (see p. 30). Subjects did report several of these factors including guilt, lack of recognition of the loss, misguided support from family and friends, and feelings of helplessness. Rather than conflicting with traditional theoretical perspectives on grief, these factors refine and focus concepts specifically to early pregnancy loss, and are consistent with the psychological tasks of early pregnancy.

Studies in the areas of both perinatal loss and the emotional impact of spontaneous abortion discovered findings similar to the present ones in terms of the acknowledgement of many negative affect adjectives. Wolff et al. (1970), Giles (1970), and Jensen & Zahourek (1972) examined maternal reaction to late pregnancy loss and also found emotional symptoms consistent with a grief response. Such responses are comparable to those identified in this investigation.

Simon et al. (1969) and Seibel and Graves (1980) identified both positive and negative descriptors used by women who had experienced a SAB. Simon et al's sample had half as many participants claiming disappointment when compared to this study sample, but a much higher number feeling depressed. Only slightly more in the former group reported feelings of relief. Seibel and Graves found that almost one in three of of their study participants acknowledged at least one positive

affect adjective, a higher precentage than in this group. Perhaps if respondants in this present study were given a list of both positive and negative adjectives, as was done by Seibel and Graves, more would have checked positive descriptors. On the other hand, 89% of those in Seibel and Graves' study also reported one or more negative adjectives, slightly less than was found in this study. Hai and Tong (1981) reported that all of their subjects cited sadness and depression after their SAB. No mention of any positive adjectives was made. However, it is impossible to know if the interviews were open-ended or guided in terms of anticipating and only allowing negative responses.

The second open-ended question used to answer research question one asked women in the study if they had the reaction to the SAB that they expected to have. Almost half reported yes, but a variety of reasons were provided. Some had been through the experience before. Some were not surprised by the guilt and sadness they felt and another mentioned needing to grieve just like any other death or loss. One individual wrote yes and no--she knew she would feel angry and hurt, but did not expect to feel so jealous of other pregnant women or to have such strong emotional needs. Half reported that they did not expect to have the reaction that they did. Of these, more than half did not think that it would be so difficult emotionally. One woman wrote that she did not realize how emotionally attached to the unborn one could be. Another mentioned that it was hard losing the baby after just having adjusted to the idea of being pregnant.

On the other hand, almost as many women reported that they had expected a more severe impact. The following comments were offered: "I

thought I'd be upset for a longer period of time," or "I kept waiting for a full-blown depression, and that never came."

The literature and clinical experience suggest possible explanations for why certain individuals may have experienced a more difficult time than they expected and why others did not. A woman may have had a harder time if she had unsupportive friends or health care providers, if she perceived the SAB as evidence of her failure in a feminine role, if she feared for her future childbearing potential, if she did not realize how attached she was to the unborn, and/or if there were concurrent life stressors at the time of the SAB. Conversely, a woman may have had a less severe reaction than expected for the following reasons: the presence of pre-SAB warning signs to allow time for anticipatory grieving, understanding health care providers and friends, a clear-cut etiology, a fatalistic attitude, and friends who had had a SAB and gone on to have healthy children.

In summary, analysis of research question one reveals that the majority of subjects reported negative affect adjectives consistent with reponses found in the grief literature. Several subjects reported positive feelings, as well. Half of the subjects did not expect to have the type of response that they did--many wrote that it was harder than expected, while almost as many found their reaction less intense than expected. Due to the small sample size (n=15), these findings are not generalizable.

Question Two

Research question two asked what the intensity of the grief response was as measured by a grief score developed for the study. The

scale was comprised of fifteen items, which asked study subjects to rate the intensity of somatic and psychological symptoms commonly associated with a grief response. A total grief score was calculated by summing the responses to the Likert scale questions. Possible grief scores ranged from 15-75. As seen in Table 3, the sample range was from 17-47. The mean was 28.2, the median was 27 and the standard deviation was 8.19. As was described in the last chapter, the Cronbach's Alpha was 0.89. Appendix E contains the correlation matrix for the grief scale items.

Most of the participants clustered in the lower half of the scale, sixty-six percent scored in the lower third of possible scores. Only one subject scored higher than the 50th percentile on the range of possible scores. However, one cannot assume this means the group had a minimal grief response. One can only compare this data to the other results obtained using the same index of grief. Kennell et al. (1970) measured their study sample (n=20) using a similar index. Possible scores on their index ranged from 0-24, with actual scores ranging from 3-23. The mean was 14.2. The scores were very evenly distributed; 44% were below the 50th percentile and 56% were above it. This differs significantly from the scores obtained in the current study. Peppers and Knapp (1980) also used a grief scale to assess response to perinatal loss. They reported mean grief scores of 75.6, 87.8, and respectively for women having a SAB, stillbirth, or neonatal death, with possible scores ranging from 16-144. Peppers and Knapp did not provide the actual score of their 65 subjects so it is impossible to determine the actual distribution of scores; however, it does appear that the

Table 3

Actual Grief Scores of Sample

Score	Absolute Frequency
17	1
18	2
24	1
26	2
27	3
29	2
31	1
38	1
39	1
47	1

intensity of the response, as measured by a grief score, was greater for their sample than for the 15 women participating in the present study. It must also be mentioned that the differences in grief scores obtained in this study and the ones by Kennell et al. (1970) and Peppers and Knapp (1980) may be due to design. This study controlled for the effect of time on the grief response by obtaining data at one fixed point shortly after the loss. Other studies varied greatly in the time elapsed from the time of the loss to the time of reporting responses to loss.

For the purposes of describing this sample, a brief profile of those with high and low grief scores will be presented. The individual with the highest grief score (47) was 33 years old and had had one previous SAB. While she did not blame herself for this second SAB, she did at least partly attribute it to her exercise regime. She reported that this was an unplanned pregnancy. She was the only participant who, when asked about her attitude towards the pregnancy, reported having any initial negative feelings that were later resolved. This individual did have a consistent support person throughout and following the SAB. One major concern she voiced was regarding her childbearing potential. Her BDI score, 17, put her as the only person in the severely depressed category. It is impossible to determine if the depression was related to the SAB or to other causes, possibly pre-existing. In contrast, the two participants with the next highest grief scores had BDI scores in the lowest possible range. One of these subjects had a previous SAB and also reported that this was a planned but difficult to achieve pregnancy. The other individual had a planned pregnancy, no history of

pregnancy loss, a consistent support person, and no feelings of self-blame.

As mentioned before, however, one must interpret the BDI scores with caution. It is yet to be determined how such an index of depression actually relates to the presence of a grief response. Subjects with a high grief score could have low depression scores if indeed depression is a later response to loss, as suggested by the stage theorists. A Pearson's Product-Moment Correlation was done to determine if there was any correlation between the grief scale scores and the BDI scores. The correlation of 0.59 ($p \le 0.01$) suggests a moderate relationship between the scores. However, such findings can be applied only to these subjects. Substantiation of any possible relationship must come from further investigation with larger samples.

At the other end of the continuum were the three participants who had grief scores of 17 or 18. All of them had a history of past pregnancy loss--one had an ectopic pregnancy, one had a SAB and the other a therapeutic abortion. One of the pregnancies was planned and the other two were partly planned; all had consistent support and no one reported feelings of self-blame. All ranked in the minimal/none range on the short BDI.

In examining these particular subject profiles one may surmise that there are other variables and issues that affect the grief response as measured by this grief score. One other major consideration is that the participants were asked to complete the grief score based on a memory of feelings experienced since the SAB. Retrospective designs carry the weakness of not as accurately reflecting reality as would responses

measured concurrently with the events of interest.

In summary, analysis of research question two reveals that these subjects had a relatively low group mean, but fairly well-distributed range of grief scores. The fact that the scores were low does not necessarily indicate that the subjects did not have an intense response to the SAB. Further testing is needed to ascertain if such findings are truly consistent with women having a SAB or if such responses are due to a small sample being studied at only one point in time.

Question Three

Research question number three, which asked what is the relationship between the grief response and the variables of previous pregnancy loss, planning of the pregnancy, and the presence of a support person, was analyzed by comparing the mean grief scores of the groups of subjects divided in terms of presence or absence of the variables.

Previous pregnancy loss. The relationship between the variable of previous pregnancy loss and the grief score was analyzed by a two tailed t test. There was no statistically significant difference in the grief scores of women who had had a previous pregnancy loss and those who had not (t=-0.66, df=13, p<0.52). This varies greatly from the findings of Kennell et al. (1970) who found a statistically significant relationship between a high mourning score and previous pregnancy loss.

Several reasons may be considered for this lack of correlation between previous loss and the grief score. First of all, it is difficult to obtain representative data for analysis with such a small sample. The fact that the actual raw grief scores were unevenly

distributed over the range of possible scores with a clustering around the low end may have prevented any significant findings. A relationship may exist between a history of previous pregnancy loss and a grief response, but it was not reflected in this small sample. On the other hand, it can be suggested that a variety of variables not addressed or controlled for in this study could impinge on a grief response, and these could be responsible for the lack of a relationship between a history of pregnancy loss and the grief response. Such variables could be attitude towards the pregnancy, feelings of self-blame, issues of control and preventability, treatment by health care professionals, age and perceived childbearing potential, and anticipatory grieving.

The third consideration is that the assumption on which the possible relationship was made was unfounded. Only one study (Kennell et al, 1980) has suggested a possible link between a history of previous prgnancy loss and a high grief score. Conceptually, there is rationale for this link. On the other hand, it may be that a previous loss equips one with coping skills that help mitigate the severity of any ensuing losses.

Planning of the pregnancy. The relationship between the variable of planning of the pregnancy and the grief score was also analyzed by a two-tailed t test. The women in the partly planned pregnancy group were evaluated with those in the category of unplanned pregnancy. As seen in Table 5, when the two groups (planned vs. unplanned) were compared, there was no significant difference (t=-0.36, df=13, p<0.72). This is in contrast to the findings of Simon et al. (1969), who found a higher incidence of depression following a SAB in those women whose pregnancies

Table 4

Comparison of Mean Grief and Depression Scores of Subjects With and Without Previous Pregnancy Loss

	Previous Pregnancy Loss (n=8)	No Previous Pregnancy Loss (n=7)	t Value (two tailed)
Grief Score	$\bar{x} = 1.9810$	$\bar{x} = 1.7917$	0.66
	(SD = 0.695)	(SD = 0.405)	(NS)
BDI Score	$\bar{x} = 0.405$	$\overline{x} = 0.1643$	-1.55
	(SD = 0.503)	(SD = 0.134)	(NS)

Table 5

Comparison of Mean Grief and Depression Scores of Subjects with Planned and Unplanned Pregnancies

	Planned Pregnancy (n=6)	Unplanned Pregnancy (n=9)	t Value (two- tailed)
Grief Score	$\bar{x} = 1.9444$ (SD = 0.542)	$\bar{x} = 1.8370$ (SD = 0.577)	-0.36 (NS)
BDI Score	$\bar{x} = 0.1538$ (SD = 0.138)	$\bar{x} = 0.3939$ (SD = 0.455)	1.24 (NS)

were planned than in the group of women whose pregnancies were unplanned. Seibel and Graves (1980) also reported that women with planned pregnancies were more likely to report being unhappy, more likely to acknowledge feelings associated with hostility, and less likely to report any positive affect adjectives than women whose SAB followed an unplanned pregnancy. While one may suggest that the findings of the work of Simon et al. (1969) and Seibel and Graves (1980) point to a relationship between the planning of the pregnancy and the emotional response, such conclusions are not supported by this present study. This could be due to the small sample size and the presence of other variables not controlled for that could affect a possible relationship.

Presence of a support person. While the variable considering the presence of a support person was chosen for analysis, it became a constant. Fourteen of the 15 subjects had a consistent support person. Only one of those 14 women did not have a person present at the time immediately surrounding the loss, although that individual has been present consistently since the SAB. The remaining subject reported no consistent support at all in her life. Because of this, statistical analysis was not possible as there was no variance to evaluate. Interestingly, the woman who had the consistent support person absent at the time of the SAB had the second lowest grief score and one of the two lowest BDI scores. By contrast, the participant without any consistent support ranked fourth highest in the grief score and had the second highest BDI score.

In summary, there was no relationship between the variables of

interest--previous obstetrical loss, planning of the pregnancy, and presence of a support person--and the grief response. This could be due to the small sample or to other variables not controlled for in this investigation.

Additional Findings

In addition to the responses already discussed, many of the subjects took the opportunity to write comments regarding other feelings not specifically addressed in earlier parts of the questionnaire. One very frequent response was a fear of permanent loss of childbearing potential. Subjects reported a concern about their future ability to have children, some mentioning their age as a factor. Several subjects voiced fear about not being able to cope if their next pregnancy ended in a SAB. These responses reflect the idea that a SAB can represent more than the loss of a pregnancy; it can also be perceived as a loss of one's ability to reproduce.

When asked if they thought anything had caused the SAB, more than half reported that there was no precipitating cause. On the other hand, five said there was an actual cause. Of these, three named a reason; they were running, excess work, and a spouse. Thirteen percent said they were not sure of the cause. Over one third acknowledged feelings of self-blame. One subject reported that she perceived she had chosen caring for her living children over the unborn and would always have doubts as to whether or not she could have prevented the SAB. It was mentioned by one subject that health care providers should carefully explain existing information as to the etiology of a SAB so that the woman did not have to suffer needless guilt. Responses given as to the

perceived cause of the SAB reflect the continued existence of myths. Such misperceptions may contribute unnecessarily to a woman's feelings of self-blame.

The response that a SAB affects a man as much as a woman was stressed by one subject. She reported that her partner's desire for children was quite strong and that she found herself trying to encourage him to remain hopeful. The refusal of one woman to be a subject because her husband could not participate indicates that a man's response to a SAB is important and needs to be acknowledged.

Consistent with the literature addressing the psychological tasks of early pregnancy is the report of feelings regarding the timing of the loss. Several subjects reported that they had just reached the point of accepting the pregnancy after a phase of adjustment. The SAB, then, was difficult as the loss necessitated another change of perspective. One subject wrote that after just having gotten used to the idea of being pregnant, it was hard adjusting back to a non-pregnant state.

CHAPTER IV

CONCLUSION

In this chapter a summary of the study will be followed by a discussion of the limitations of the study. Implications for nursing practice and suggestions for future research will then be presented.

Summary

Spontaneous abortions (SAB) occur in fifteen to twenty percent of all pregnancies. Despite this relative frequency, there is little known about how such an experience affects a woman. No research-based nursing literature exists regarding the psychological impact of SABs. The purpose of this study was to describe how women respond to a SAB.

It was assumed that a SAB is a loss involving a grief response. Based on the review of the literature, certain variables were identified as having a possible relationship with a grief response. Three research questions were developed: (1) What are the emotional responses of women experiencing a SAB?, (2) What is the intensity of the grief response as measured by a grief score?, and (3) What is the relationship between the grief response and the variables of previous pregnancy loss, planning of the pregnancy, and presence of a support person?

Fifteen Caucasian women, aged 21-39 who had had a SAB in the previous two to four weeks completed a four part questionnaire designed for this study. The first part consisted of demographic information. The second part contained open-ended questions about feelings right

after the SAB as well as questions regarding the presence or absence of the variables of interest. The third part was a grief score scale based on a tool used to measure perinatal loss developed by Kennell et al. (1970) and revised by Peppers and Knapp (1980). The short form of Beck's Depression Inventory (Beck & Beck, 1972) comprised the final section of the questionnaire.

The nonrandom sample was partnered, well educated, upper-middle class, with a mean age of 31 years. Over half of the participants had a history of previous pregnancy loss. Almost half of the pregnancies were planned, 10% were unplanned and the remaining were partly planned. All but one of the women had a consistent support person present since the time of the loss. As evaluated by the Short BDI, only four were moderately or severely depressed.

While the majority of women listed negative affect adjectives when asked about their feelings after the SAB, two participants described feelings of relief. Half did not expect to have the reaction that they did; they either expected a more severe or less severe experience emotionally. The mean grief score was 28.2, with a range of 17-47 (possible range 15-75). No relationship between the grief scores and previous pregnancy loss, planning of the pregnancy, and presence of a support person was found.

Limitations

There are several limitations that may have influenced the outcome of this study. First and foremost are the problems inherent in a small, nonrandom sample. A lack of significant findings may be related to such a small number of participants. Additionally, the results must be

interpreted with great caution and only be used to describe this study group and not generalized to any other population.

The fact that a newly designed questionnaire was used to measure grief is another limitation. Reliability coefficients computed for the present version of the grief score scale yielded a Cronbach's Alpha of 0.89. Further testing of this scale is indicated.

The very nature of the study could be considered a limitation. Trying to obtain responses from women during the sensitive time following a loss is difficult. This is a vulnerable population and accurately attempting to tap into emotional responses may be hindered by still unresolved feelings. Conversely, the very act of sharing responses could be beneficial to subjects. Indeed, several subjects appreciated the opportunity to discuss their responses.

In the study settings the refusal rate was as high as 50%. Perhaps only the women who were truly concerned about their emotional response to a SAB agreed to participate and one cannot assume that they would be representative of all women experiencing a SAB. Additionally, the investigator had to rely on the office personnel to present the study to each prospective subject. There was therefore a lack of control for consistency in terms of attitudes conveyed and information provided.

Implications for Nursing Practice

Nurses in a wide variety of settings care for women having SABs.

Although health care professionals may assume they understand how to provide sensitive care at such a time, this may not always be the case.

The present study provides some data regarding the emotional responses to a SAB. It strongly suggests that women experience a

variety of feelings after the SAB, all of which must be acknowledged. While the majority of subjects reported experiencing many difficult feelings, several acknowledged relief. Nurses must realize that a SAB does have emotional impact and continually seek to understand the client's feelings. Validating her perceptions, providing support, as well as an environment in which to grieve are all essential interventions. It must be noted that an understanding of how women respond to a SAB during the first few weeks is critical as this is the time period in which they are most likely to be seen by health care providers.

It may be useful for nurses to be aware of comments made by subjects. First of all, several insisted that good support was essential for coping with the loss. Nurses can both provide this themselves as well as mobilize and reinforce the client's own support system. Addressing the family unit as a whole and providing referrals for support groups are two such means of doing so. Secondly, several women reported how destructive well-meaning comments were to them. Subjects stressed how they just wanted someone to acknowledge their feelings of loss, give them permission to grieve, and try to share the burden, rather than offering trite responses or statistics. Another respondant requested that health care providers address possible causes of the SAB so as to ease guilt associated with self-blame. Nurses could acknowledge the presence of such feelings and provide information to help minimize needless self-blame.

Finally, consistent follow-up care for the individual after the loss is essential. Instead of being a quick, routine event, these women

report symptoms consistent with a grief response that evolves over time. Nurses must support women to achieve the goal of attaining a healthy resolution.

Suggestions for Future Research

Several suggestions for future research are indiciated as suggested by this study and other studies on pregnancy loss. The grief score scale needs further testing. The many other variables that could affect a response to a SAB should also be investigated. These include the role of anticipatory grieving, age and perceived childbearing potential, infertility problems, treatment by health care professionals, perceptions of loss by significant others, value placed on pregnancy, feelings of self-blame, and issues of control and preventability.

Another possible focus of research could address the presence of myths regarding the causes of SABs. Several participants mentioned presumed causes of their SAB, all unfounded. It is undetermined how widespread such notions are, and if present, how they might effect one's response to a SAB.

Finally, longitudinal investigations could provide valuable information on the nature of the grief response over time. Gathering data at a variety of intervals after a SAB could be useful in increasing understanding regarding long term response and resolution of the loss. It could be helpful in further differentiating the response to a SAB from later forms of pregnancy loss, as well.

References

- Beck, A. & Beck R. (1972). Screening depressed patients in family practice. Postgraduate Medicine, 52 (6), 81-85.
- Bibring, G. (1959). Some considerations of the psychological process in pregnancy. The Psychoanalytic Study of the Child, 16, 113-121.
- Bibring, G.; Dwyer, T.; Huntington, D.; & Valenstein, A. (1961). A study of the psychological processes in pregnancy and of the earliest mother-child relationship. The Psychoanalytic Study of the Child, 16, 9-71.
- Bowlby, J. (1961). Processes of mourning. The International Journal of Psychoanalysis, 42, 317-340.
- Brice, C. (1982). Mourning throughout the life cycle. American Journal of Psychoanalysis, 42 (4) 315-25.
- Bugen, L. (1977). Human grief: A model for prediction and intervention. American Journal of Orthopsychiatry, 47 (2), 196-206.
- Clayton, P.; Desmaris,, L.; & Winokur, G. (1968). A study of normal bereavement. American Journal of Psychiatry, 125 (2), 64-74.
- Cohen, R. (1979). Maladaption to pregnancy. <u>Seminars in Perinatology</u>, <u>3</u> (1), 15-24.
- Colman, A. (1969). Psychological state during first pregnancy.

 American Journal of Orthopsychiatry, 39 (4), 788-797.
- Colman, A & Colman, L. (1973-1974). Pregnancy as an altered state of consciousness. Birth & The Family Journal, 1 (1), 7-11.

- Crout, T. (1980). Caring for the mother of a stillborn baby. Nursing '80, 10 (4), 70-73.
- Deutsch, H. (1945). The psychology of women: A psychoanalytic interpretation. Motherhood. Vol. 2. New York: Grune & Stratton.
- Estok, P. & Lehman, A. (1983). Perinatal death: Grief support for families. Birth, 10 (1), 17-25.
- Freud, S. (1973). Mourning & melancholia, in <u>Complete psychological</u>
 works. Standard edition. (Volume 14, pp. 243-260). London: Hogarth
 Press. (Original work published 1917)
- Furlong, R. & Hobbins, J. (1983). Grief in the perinatal period.

 Obstetrics & Gynecology, 61 (4), 497-500.
- Furman, E. (1978). The death of a newborn: Care of the parents. Birth and the Family Journal, 5 (4), 214-218.
- Giles, P. (1970). Reactions of women to perinatal death.

 <u>Australia/New Zealand Journal of Obstetrics & Gynaecology</u>, 10,
 207-210.
- Gilson, G. (1976). Care of the family who has lost a newborn.

 Postgraduate Medicine, 60 (6), 67-70.
- Grace, J. (1978). Good grief: Coming to terms with the childbirth experience. <u>Journal of Obstetric, Gynecologic & Neonatal Nursing</u>, 7 (1), 18-22.
- Hai, D. & Tong, M. (1980, October). The Grief of Miscarriage. Paper presented at the meeting of the American Public Health Association, Detroit, MI.

- Hassold, T.J.; Matsuyama, A.; Newlands, I.; Matsuura, J; Jacobs, P; Manuel, B; and Tsuei, J. (1978). Cytogenetic study of spontaneous abortions in Hawaii. Annals of Human Genetics, 41, 443.
- Jensen, J. & Zhaoutek, R. (1972). Depression in mothers who have lost a newborn. Rocky Mountain Medical Journal, 61 (11), 61-63.
- Kennell, J.; Slyter, H.; & Klaus, M. (1970). The mourning response of parents to the death of a newborn infant. New England Journal of Medicine, 283 (7), 344-349.
- Kowalski, K. & Bowes, W. (1976). Parents' response to a stillborn baby. Contemporary Obstetrics & Gynecology, 8, 53-57.
- Kowalski, U. & Osborn, M. (1977). Helping mothers of stillborn infants to grieve. The American Journal of Maternal-Child Nursing, 2, 29-32.
- Kubler-Ross, E. (1969). On Death and Dying. New York: MacMillan Publishing Co.
- Lindemann, E. (1944). Symptomatology and management of acute grief.

 American Journal of Psychiatry, 101, 141-148.
- Murphy, S. (1983). Theoretical perspectives on bereavement. In P. Chin (Ed.), Advances in Nursing Theory Development. (pp. 191-206).

 Rockville, MD: Aspen Systems Corp.
- Neeson, J. & Stockdale, C. (1981). The Practitioner's Handbook of Ambulatory Ob/Gyn. New York: John Wiley & Sons.
- Niswander, K. (1976). Obstetrics. Boston: Little, Brown & Company.
- Parkes, C. (1965). Bereavement & mental illness: pt. 2--a classification of bereavement reactions. British Journal of Medical Psychology, 38, 13-26.

- Parkes, C. (1972). Bereavement Studies of Grief in Adult Life. New York: International Universities Press.
- Peppers, L. & Knapp, R. (1980). Maternal reactions to involuntary fetal/infant death. Psychiatry, 43, 155-159.
- Quirk, T. (1979). Crisis theory, grief theory & related psychosocial factors: the framework for intervention. <u>Journal of Nurse-Midwifery</u>, 24 (5), 13-16.
- Rabin, A. (1965). Motivation for parenthood. <u>Journal of Projective</u>

 Techniques and Personality Assessment, 29, 405-411.
- Rubin, R. (1976). Maternal tasks in pregnancy. <u>Journal of Advanced</u>
 Nursing, 1, 367-376.
- Schneider, K. & Daniel, J. (1979). Dealing with perinatal death.

 Perinatal Press, 3 (7), 101-105.
- Seibel, M. & Grayes, W. (1980). The psychological implications of spontaneous abortions. The Journal of Reproductive Medicine, 25 (4), 161-165.
- Seitz , P. & Warrick, L. (1974). Perinatal death: the grieving mother.

 American Journal of Nursing, 74 (11), 2028-2033.
- Simon , N.; Rothman, D.; Goff, J.; & Senturia, A. (1969). Psychological factors related to spontaneous and therapeutic abortions. American Journal of Obstetrics & Gynecology, 104 (6), 799-808.
- Stack , J. (1980). Spontaneous abortion & grieving. American Family

 Physician, 21 (5), 99-102.
- Stephany, T. (1982). Early miscarriage: are we too quick to dismiss the pain? RN, 45 (11), 89.

- Tilden, V. (1980). A developmental conceptual framework for the maturational crisis of pregnancy. Western Journal of Nursing Research, 2 (4), 667-685.
- Weathersbee , P. (1980). Early reproductive loss and the factors that may influence its occurrence. The Journal of Reproductive Medicine, 25 (6), 315-318.
- Weisman, A. (1973). Coping with untimely death. <u>Psychiatry</u>, <u>36</u>, 366-378.
- Wetzel, S. (1982). Are we ignoring the needs of the woman with a spontaneous abortion? The American Journal of Maternal-Child Nursing, 7 (4), 258-259.
- Wolff, J.; Nielson, P.; & Schiller, P. (1970). The emotional reaction to a stillbirth. American Journal of Obstetrics & Gynecology, 108 (1), 73-77.
- Zahourek, R. & Jensen, J. (1973). Grieving and the loss of the newborn. American Journal of Nursing, 73 (5), 836-839.

APPENDICES

APPENDIX A

THE OREGON HEALTH SCIENCES UNIVERSITY

School of Nursing Department of Family Nursing 3181 S.W. Sam Jackson Park Road Portland, Oregon 97201 (503) 225-8382

Dear

I am a second year graduate nursing student at Oregon Health Sciences University. For my master's thesis, I am conducting a descriptive study of the emotional response of women who have had a spontaneous abortion. Data will be collected by means of a questionnaire.

Your name has been suggested as someone who may be willing to assist in my research. I would like to obtain as my subjects Caucasian, English-speaking women who have had a first trimester spontaneous abortion and are returning for follow-up care two to six weeks later. At that time, your office nurse or receptionist would give them a letter to explain the purpose and nature of my study and to ascertain their willingness to participate. If they agree, they would receive and return a questionnaire to me.

Anonymity will be guaranteed for those deciding to participate in this study. All questionnaires will be identified only by code number, and the signed consent forms will be kept separate from the questionnaire. The responses will only be accessible to me and all data will be pooled for analysis.

You can help by allowing me access to potential subjects as they seek such follow-up care in your office. Assistance would also be needed from a staff member in your office, such as your office nurse, who would identify potential subjects and give them a packet with an explanatory letter and an informed consent form. Both of these are enclosed, along with a copy of the abstract and the questionnaire. I plan to begin data collection in February and complete the process by the end of April. All research findings will be shared upon request.

If you have no further questions and are willing to participate, please sign the enclosed post card and write the name of the office nurse or receptionist for me to contact to arrange details. If I do not hear from you within ten days, I will contact you directly to discuss your willingness to participate. Thank you for your time.

Sincerely,

Barbara Whitnah, RN, BSN



APPENDIX B

APPENDIX B

RESPONSE TO MISCARRIAGE QUESTIONNAIRE

Ple	ase fill in the answer or check the appropria	te	S	pa	ce	•							
1.	What is your birthdate?												
2.	Which of the following best describes your living situation? Partnered (married and living with spouse; unmarried, separated, divorced, or widowed and living with partner) Non-Partnered (single, separated, divorced, or widowed and living alone)												
3.	What is the last year of education you have circle the last year of school finished.) 1 2 3 4 5 6 7 8 (grade school of the scho		omp	016	ete	ed 3	?	(F	'1∈	as	e		
4.	Which of the following best describes your the last twelve months? Less than \$5,000 \$5,000-\$9,999 \$10,000-\$14,999 \$15,000-\$19,999 \$20,000-\$24,999 \$25,000-\$29,999 \$30,000-\$34,999 \$35,000-\$39,999 \$40,000 +	tot	al	. f	an	nil	у	in	co	me	in		
5.	How many times have you been pregnant?	0	1	2	3	4	5	6	7	8	9+		
6.	How many of your children have been born alive?	0	1	2	3	4	5	6	7	8	9+		
7.	How many premature births have you had?	0	1	2	3	4	5	6	7	8	9+		
8.	How many elective abortions have you had?	0	1	2	3	4	5	6	7	8	9+		
9.	How many previous miscarriages have you had? (not counting this one)	0	1	2	3	4	5	6	7	8	9+		
10.	How many stillbirths have you had?	0	1	2	3	4	5	6	7	8	9+		
11.	Have any of your babies died in the first year of life? If so, how many?	0	1	2	3	4	5	6	7	8	9+		

riea	se ill in the answer or check the appropriate space.
12.	Was this a planned pregnancy? Yes No Partly yes/partly no
13.	If this was a planned pregnancy, did you have a hard time getting pregnant? Yes No
14.	Women report that it takes a while to adjust emotionally to the idea of being pregnant. This is particularly common during the first three months of pregnancy. Women express a wide variety of feelings: doubts, mixed emotions, delight and so on. Remembering back to the time right before the miscarriage, which of the following best describes your feelings about the pregnancy? I'd been having a hard time accepting the idea of being pregnant. I'd occasionally had negative feelings about the pregnancy but had come to accept it. I'd basically felt pretty positive about being pregnant. I was extremely happy about being pregnant.
15.	What was your due date and/or the first day of your last menstrual period? Due date First day of last period
16.	How far along were you at the time of the miscarriage? (in weeks or months) Weeks Months
17.	What do you remember feeling immediately aftter the miscarriage? (use back of this sheet if more space is needed)

18. Did you expect to have the reaction that you did to the miscarriage? Please explain. (use back of this sheet if more space is needed)

19.	Do you have what you wo (girlfriend, boyfriend, for example)	ould consi husband,	der a co	onsistent celative,	suppor or other	t person? r friend,
20.	Was this individual wit the miscarriage? Yes No	h you dur	ing the i	mmediate	time su	rrounding
21.	Has this individual been miscarriage until the pr Yes No	present esent tim	consisten e?	tly from	the tim	ne of the
22.	Do you think anything car Yes No If yes, p			ge?		
23.	Many women express concer or not done was responsible types of feelings? Yes No	rn that so	omething ne miscar	they eith riage. Ha	er may h ve you h	ave done ad these
not inumber	ng a miscarriage may be an report many different fet have experienced the items er which best represents be time following the miscar collows:	eelings are of the follow much e	d experience of the contract o	list. P	ou may lease ci	or may
		1	2	3	4	5
		no problem	minor	moderate problem	major	extreme
Examp	ole: The rain in Oregon for me.	1	2	3	4	5
24.	Sadness	1	2	3	4	5
25.	Loss of appetite	1	2	3	4	5
26.	Inability to sleep	1	2	3	4	5
27.	Increased irritability	1	2	3	4	5

		1	2	3	4	5
		no	minor	moderate	major	extreme
		problem	problem	problem	problem	problem
28.	Preoccupation with the lost baby	1	2	3	4	5
29.	Inability to return to normal activities	1	2	3	4	5
30.	Difficulty concentrating	1	2	3	4	5
31.	Anger	1	2	3	4	5
32.	Guilt	1	2	3	4	5
33.	Hard time accepting realit	y 1	2	3	4	5
34.	Confused about time	1	2	3	4	5
35.	Exhaustion	1	2	3	4	5
36.	Lack of strength	1	2	3	4	5
37.	Depression	1	2	3	4	5
38.	Repeated dreams of the los	t 1	2	3	4	5
desci	se check the statement in e libes the way you feel to apply equally well, che	oday. If	f several	ing grou statemen	ps whic ts in th	h best e group
39.	I am so sad or u I am blue or sad I feel sad or bl I do not feel sa	all the	nat I can time and	't stand I can't	it. snap out	of it.
40.	I feel that the improve. I feel I have no I feel discourage I am not particulate future.	thing to	look form	ward to.		
41.	I feel I am a com As I look back on I feel I have fa: I do not feel lib	n my life iled more	than the	see is a	lot of fa	, wife). ailures.

42.	I am dissatisfied with everything. I don't get satisfaction out of anything anymore. I don't enjoy things the way I used to. I am not particularly dissatisfied.
43.	I feel as though I am very bad or worthless. I feel quite guilty. I feel bad or unworthy a good part of the time. I don't feel particularly guilty.
44.	I hate myself. I am disgusted with myself. I am disappointed with myself. I don't feel disappointed in myself.
45.	I would kill myself if I had the chance. I have definite plans about committing suicide. I feel I would be better off dead. I don't have any thoughts of harming myself.
46.	I have lost all of my interest in other people and don't care about them at all. I have lost most of my interest in other people and have little feeling for them. I am less interested in other people than I used to be. I have not lost interest in other people.
47.	I can't make any decisions at all anymore. I have great difficulty in making decisions. I try to put off making decisions. I make decisions about as well as ever.
48.	I feel that I am ugly or repulsive-looking. I feel that there are permanent changes in my appearance and they make me look unattractive. I am worried that I am looking old or unattractive. I don't feel that I look any worse than I used to.
49.	I can't do any work at all. I have to push myself very hard to do anything. It takes extra effort to get started at doing something. I can work about as well as before.
50.	I get too tired to do anything. I get tired from doing anything. I get tired more easily than I used to. I don't get any more tired than usual.

51.	I have no appetite at all anymore.
9/	My appetite is much worse now.
/A	My appetite is not as good as it used to be.
	My appetite is no worse than usual.

52. If there is anything else that you would like to say that this questionnaire has not addressed, please use the space below to provide comments.

APPENDIX C

THE OREGON HEALTH SCIENCES UNIVERSITY

School of Nursing Department of Family Nursing 3181 S W Sam Jackson Park Road Portland Oregon 97201 (503) 225-8382

My name is Barbara Whitnah, RN, BSN, and I am a student in the masters program at the Oregon Health Sciences University School of Nursing. I am conducting a study to learn about the emotional response of women to miscarriage.

Women who have experienced a miscarriage report a variety of emotions. As someone who has recently had a miscarriage, your input is valuable to me. I would appreciate your willingness to fill out a questionnaire regarding your experience. It will take about 30 minutes to complete. If you would like to provide input in this way, please sign the attached permission form, including your address and phone number. You will then receive a questionnaire in the mail for you to complete within a week and return to me. In the packet containing the questionnaire will be a stamped, addressed envelope for return. You will also find a card with my name and phone number; please feel free to call me if you have any questions about the study or questionnaire. You may also call me if you would like the opportunity to discuss your feelings with me in person. This can be arranged as soon as you complete the questionnaire.

Confidentiality will be maintained. Your questionnaire will be identified only by a code number and not by our name. The signed permission forms will be kept separate from the questionnaires. Your responses will be pooled with other women's feedback and the results presented for the group as a whole. Therefore, your individual answers will not be identifiable.

Although you may not benefit directly from participation in this study, information you provide will help health care professionals better understand how to care for a woman having a miscarriage. You are not required to participate in this study and you may withdraw from participation at any time. Refusal to participate will in no way affect the health care you receive here.

This study is being done under the supervision of my faculty advisor, Dr. MaryAnn Curry. I can be reached at 297-5403.

If you prefer not to participate in this study, please return these papers unsigned to the office nurse or receptionist. Thank you.

APPENDIX D

APPENDIX D

THE OREGON HEALTH SCIENCES UNIVERSITY

School of Nursing Department of Family Nursing 3181 S.W Sam Jackson Park Road Portland, Oregon 97201 (503) 225-8382

investigation named "The Emotional which is being done by Barbara Whoof Dr. MaryAnn Curry. The purpose respond emotionally to a miscarriage	Response of Witnah, RN, BSN of the study	, under the supervision is to learn how women
I understand that participating questionnaire. The questionnaire as miscarriage. The time required approximately thirty minutes.	sks me about m	y feelings about the
All information I provide will be ker will be identified only by a conseparate from this consent form. My subjects responses for analysis identifiable.	de number, and y feedback wil	this form will be kept l be pooled with other
I understand that I may not benefit study. Barbara Whitnah, RN, BSN, ha may have about this investigation.		
I understand that I am in no way reand that I may withdraw from partic would in no way affect the care I re	ipation at any	time. My doing either
I have read the above explanation as in the study described.	nd agree to pa	rticipate as a subject
	Cd are a factor of	
	Signature:	
	Name (print):	
	Address:	
	Phone:	
Witness:	-	
Date:	•	



APPENDIX E

*p < .05 **p < .01 ***p < .001

APPENDIX E

CORRELATION MATRIX FOR THE GRIEF SCALE -- INTERCORRELATION AMONG THE FIFTEEN VARIABLES

15	* 00*	99°**	.20	00.	.32	*.56	*.50	02	44.	.34	**.70	*.58	*.52	*.57	
14	90°	***.78	**.63	*.45	*.56	*,46	**.61	**.65	*.61	**.70	**.65 **.70	*.52	*,51		
13	.15	.42	.10	.36	*00	.18	.28	00	08	.32	.11	96****			
12	.21	×.47	.03	.29	.05	.25	*.45	10	08	.25	.24				
11	10	4×.74 ×.47	.32	.12	*.51	*.58	**.74 *.45	.2510	*.5108	*.50					
10	•04	*.53	*.55	***	**.63	.30	*.48	*.48 ***.79	.34						
61	.05	*.54	77.	.10	** .70	*.50	.25	*.48							
ωI	01	.24	.18 **.72	*.53	.41 **.61 **.70	.12	.20								
7	.28	**.61	.18	.11	.41	.43									
91	.10	.35 *.49 **.61	*.56	.31	*.54										
12	.38	.35	.36 *.48 *.56	.39		ø									
41	.17	.36	.36			activities									
mΙ	13	.22			baby										baby
7	11			>	e lost	o norm	ing			eality					e lost
1	sadness	loss of appetite	inability to sleep	increased irritability	preoccupation with the lost baby	inability to return to normal	difficulty concentrating	anger	guilt	10 hard time accepting reality	confused about time	exhaustion	lack of strength	depression	15 repeated dreams of the lost baby
	1	7	m	4	5	9	7	∞	6	10	11	12	13	14	15

ABSTRACT

AN ABSTRACT OF THE THESIS OF

Barbara Ruth Whitnah

For the MASTER OF NURSING

Date of Receiving this Degree: July 25, 1984

Title: THE EMOTIONAL RESPONSE OF WOMEN TO MISCARRIAGE

Approved:

Mary Ann Curry, R.N., D.N.Sc., Thesis Adviser

Spontaneous abortions (SAB) occur in fifteen to twenty percent of all pregnancies. Because of their frequent occurrance, it is essential to understand the psychological impact of such an event. The purpose of this study was to describe the emotional responses of women following a spontaneous abortion. Three research questions were asked: (1) What are the emotional responses of women experiencing a spontaneous abortion?, (2) What is the intensity of the grief response as measured by a grief score?, and (3) What is the relationship between the grief response and previous pregnancy loss, planning of the pregnancy, and presence of a support person?

A sample of fifteen Caucasian women who had recently experienced a spontaneous abortion was obtained through private OB-GYN medical offices. Permission to contact the subjects was made at the time of their follow-up visit one to two weeks after their SAB. Subjects completed a questionnaire that included demographic data, responses to a SAB, a grief score index, and the short form of Beck's Depression Inventory.

ABSTRACT 2

A majority of the subjects reported symptomatology consistent with a grief response after the SAB. Several individuals acknowledged feeling relief. Approximately half of the women did not have the reaction that they expected to have. Seventy-one percent of the subjects were rated as having none or minimal depression on the BDI.

Grief scores obtained with the Likert type grief scale ranged from 17-47, with a mean of 28.2. Sixty-six percent of the subjects scored in the lower third of the possible range of scores.

Approximately half of the participants had a history of previous pregnancy loss. Almost all had consistent support during and after the SAB, and eighty-six percent of the pregnancies were either planned or partly planned. There was no correlation between the variables of planning the pregnancy, presence of support, and history of previous pregnancy loss and the grief response as measured by the grief score.

A major limitation of this study was the small, self-selected sample and retrospective design. Moreover, the collection of data at only one point in time limits understanding of the grief response to that experienced by the subjects within one month of the loss. Finally, the inability to evaluate the many factors that could affect a response to loss may have influenced the findings.

However, the data provided by the subjects may be valuable for understanding how women respond to a SAB. It can be applied and tested in clinical settings and serve as impetus for further research.