

SELF-ESTEEM LEVELS IN NORMAL
AND COMPLICATED PREGNANCIES

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DEDICATION

This effort is dedicated to pregnant women everywhere whose special sensitivity and unique perception of the world has been a puzzle and a constant source of growth and joy in my life.

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CHAPTER 1

INTRODUCTION

Pregnancy is usually seen as a very common event in the life of a woman. Yet, this experience is most complex and differs in meaning for each individual. For many, the successful achievement of motherhood is still equated to being a successful woman (Cabela, 1973). Therefore, completing a pregnancy without complication becomes of greatest importance. For others, perhaps just accomplishing what one sets out to do is important. Rubin (1968) stated that,

The ability to use himself in such a way, functionally, as to achieve precisely what he intended--no more, no less, and precisely at the right time and place--gives a person a sense of high accomplishment. (p. 21)

One might assume then, that the woman whose pregnancy is less perfect than she intended, endangering her own life as well as that of her unborn child, might suffer a decrease in her sense of worth or self-esteem.

How she will respond to this situation will have far-reaching effects not only within herself, but also within her family. For, in a sense, her entire family is pregnant. Each member has a great deal invested in the

coming child who will change the family make-up as well as each person's role within the family. Each member is affected by everything that happens to the pregnant woman and in turn she is influenced by their response (Littlefield, 1973). Should a woman experience a sense of failure and ultimately a lowered self-esteem, the family will also suffer. Should the woman have to undergo physical discomfort, weeks of severe limitations in her activity, hospitalization resulting in separation from family and friends and mounting financial burdens, the entire family will almost certainly be under significant stress. How the family will eventually resolve the situation will determine whether or not they will be able to provide a healthy environment for the new baby (Littlefield, 1973).

Discussing the significance of self-esteem, Cooper-smith (1967) noted that in clinical practice (Fromm, 1939) it has been found that

persons who are plagued by doubts of their worthiness can neither give nor receive love, apparently fearing that the exposure that comes with intimacy will reveal their inadequacies and cause them to be rejected. (p. 3)

This statement has great implications in terms of mother-infant relationships. It would follow that a woman with low self-esteem would have a limited relationship with

her child. Coopersmith (1967) found that women with low self-esteem tend to have children with low self-esteem. Unfortunately, these findings indicate that a woman's low self-esteem level is not only detrimental to her functioning, but also may influence her child's feelings of worth.

Just as a pregnancy affects the entire being of a woman and her family, so is nursing intimately involved with every aspect of the pregnant family's experience. For nursing bases its practice on the premise that "Survival and the level of health of a society is inextricably bound to maternal and child health" (American Nurses' Association, 1973, p. 913). It becomes essential then that nursing be more aware of those who would be more vulnerable to the stress of a problem pregnancy. In actuality, however, we as health professionals have very little tested knowledge concerning the meaning of a problem pregnancy to a woman, how it might affect her self-esteem level, and how it might eventually influence the functioning of her family. It was the purpose of this study to add to the body of knowledge in this area by making an initial inquiry into any differences which may exist in levels of self-esteem between women who are having complicated pregnancies and those who are not.

It was hoped that the results would contribute pertinent information about the effects of complicated pregnancies which could be used to lessen the stress of such an experience.

Problem of Study

The problem of this study was to determine if there was a difference in levels of self-esteem between women who have complicated pregnancies and those who do not.

Justification of Problem

An individual's self-esteem level is a basic element of one's personality, so much so that Coopersmith (1967) saw it as being "significantly associated with personal satisfaction and effective functioning" (p. 3). The quality of a woman's life and her ability to mother, then, may be dependent upon her level of self-esteem. Any situation that could contribute to or alter an individual's feelings of self-worth becomes of utmost importance to the health and welfare of women and their families. A discussion of the various theories of self-esteem will follow to provide a greater understanding of the development of self-esteem within an individual.

Some of the earliest writings on the subject of self-esteem were done by James (1890/1950). He saw three

possible influences upon its development. The first factor was human aspirations and values. He contributed the equation, "self-esteem = $\frac{\text{success}}{\text{pretensions}}$ " (p. 310), which is explained as being the ratio of one's actualities to a person's supposed potentialities. In other words, self-esteem is dependent upon the degree to which one's achievement meets one's aspirations. Individuals do not determine this alone, however. James (1890/1950) believed that the standards of those around us help determine the degree of success we will feel. A person also can gain self-esteem from the collection of those objects or persons which might be viewed as expressions or extensions of oneself.

Mead's (1934) ideas of self-esteem support those of James (1890/1950). He discussed the role that significant others play in determining an individual's feelings of worth. An individual sometimes unconsciously will adopt the values and attitudes of others and then will express these as one's own. As a consequence, the person will evaluate his worth in the same manner as those around him would.

Writing about the self-image, Rogers (1951) stated that this image is derived from interaction and feedback from the environment in which one lives. That

individual, then, will reflect self-worth in response to the values and biases of that particular environment.

Sullivan (1953) believed that an individual must constantly protect oneself from loss of self-esteem which could cause feelings of distress or anxiety. Individuals with a sense of high self-esteem in some way have learned to minimize incidences that could threaten their self-esteem. He suggested that early experiences within the family may contribute to a person's ability or lack of ability to handle threatening situations.

Horney (1945, 1950) agreed that the individual must cope with feelings of anxiety. She believed that to overcome these feelings, one bolsters self-esteem levels by forming an idealized image of his capacities and goals. Unfortunately, this idealized image may also serve to make an individual feel even more worthless if he is not able to achieve this self-image which he has created.

The only theorist who speaks to the effect of physical problems upon the individual's self-esteem is Adler (1927, 1956). He noted that physical conditions which are out of the ordinary can produce feelings of inadequacy. It would follow from his theory that any inability to function in a normal way, that is, to bear children

without complication, could potentially affect one's feeling of self-esteem.

With the subject of self-esteem being addressed by such noted theorists, it seems unusual that very little work has been done in this area to substantiate these ideas. Only two major studies deal with the individual's feelings of worth. Coopersmith (1967) took the elements that he saw as basic to one's level of self-esteem, that is, success, values, aspirations, and defenses, and tested them scientifically to determine their relationship to the development of self-esteem.

Success, it was found, can be defined only within the individual's particular setting. Two people might experience the same things and yet evaluate themselves differently because of their situations. Some of these differences might be in the acceptance that they have been shown or in the opportunities they have been given in which to express themselves (Coopersmith, 1967).

In terms of values, it was found that all people, regardless of their level of self-esteem, will apply very similar standards in judging their worth. In fact,

the value preferences that people actually employ in judging their worthiness are those that are generally espoused by their group rather than those that they may dwell upon in their private and fantasy experiences. (Coopersmith, 1967, p. 244)

The personal aspirations that one has, however, are dependent upon the individual's expectations of how he will perform. It was also found that in dealing with the possibility of failure, those people who already have a somewhat higher level of self-esteem tend to cope more effectively with any problems (Coopersmith, 1967).

In evaluating these findings it would seem that every individual's level of self-esteem is dependent upon a number of variables that are understood only within that particular person's experience and environment. It would seem difficult to predict which persons might react negatively to an inability to function in a normal way, although one could assume that some would suffer a decrease in self-esteem.

Coopersmith (1967) confined his studies to the development of an individual's self-esteem. He dealt with those situations in early childhood that might contribute to a particular self-esteem level. Rosenberg (1965), however, addressed himself to the effect of various social situations such as family breakup or birth order on the personality of the adolescent. He felt that certain experiences in a person's life could alter one's self-appraisal. He also examined the differences in interpersonal attitudes and behavior of those with high and

low self-esteem, believing that these differences would eventually affect the individual's future success in society.

Rosenberg (1965) also found, contrary to general thought, that "the social prestige of a nationality or religious group is generally unrelated to the self-acceptance of its members" (p. 61). In particular, Blacks in his study did not have particularly low self-esteem levels as expected (Rosenberg, 1965). Cooper-smith's (1967) findings supported Rosenberg's (1965). He found a weak and insignificant relationship between self-esteem and social class indicating that the broader social context does not play as important a role in interpreting one's own successes as has often been assumed. What did seem to be significantly related to self-esteem in Rosenberg's adolescent population was the amount of paternal attention and concern which does seem to differ according to social class, religion, and ethnic group (Rosenberg, 1965).

For the purposes of this study, the condition that was used as a complication of pregnancy was pre-eclampsia or, as now is often termed, pregnancy-induced hypertension. According to the Committee on Terminology of the American College of Obstetricians and Gynecologists, pre-eclampsia

is defined as "the development of hypertension with proteinuria, edema, or both, due to pregnancy . . . after the 20th week of gestation" (Hughes, 1972, p. 422). The condition as defined above should be treated primarily by bedrest within a hospital setting (Pritchard & MacDonald, 1976). For this reason pre-eclampsia as a complication was particularly conducive for use in this study.

To understand the significance of this study more fully, it is essential to be aware of the frequency of complicated pregnancies. Unfortunately, these statistics are rarely stated due to the variances in definitions, diagnoses, and treatment of complications in pregnancy. According to one source (U.S. Department of Health, Education, and Welfare, 1975) "Among mothers of legitimate live births in 1972, about 16 percent were reported by the hospital to have one or more complications of pregnancy" (p. 57). However, this figure leaves out the large number of illegitimate births which have a greater potential for complications due to young age, nutrition, and financial factors. An English authority (Walker, MacGillivray, & MacNaughton, 1976) stated that 30% of women require antenatal admission due to difficulty in pregnancy. This source does not specify the complications which require admission.

Records from a Southwestern city public hospital indicate that in 1975, 5.6% of the women seeking prenatal care required hospitalization on the long-term care pregnancy unit within that institution (Jimenez, 1977). Jimenez indicated that one could presume that for every patient admitted to the unit for care there would be at least one other pregnant woman in the community requiring similar treatment, but refusing to accept the hospitalization or not even diagnosed due to lack of prenatal care.

It is apparent, then, that while the statistics vary they all tend to indicate that serious complications in pregnancy requiring hospitalization are all too frequent. While in some populations approximately 10% have serious complications making hospitalization essential, many more have lesser complications allowing ambulatory care but perhaps still threatening to the woman and her family. It was hoped that the results of this study would be a step in improving our knowledge concerning pregnant women and in facilitating the physical, psychological, and emotional health of future generations.

Theoretical Framework

James (1890/1950) was the first theorist to address the issue of self-esteem. He believed that a person's

feelings of worth are dependent upon the degree to which one is able to succeed in areas that are of greatest importance to that individual.

In this society the successful achievement of motherhood is still equated by most with successful womanhood (Cabela, 1973). A complication in one's pregnancy can be seen as a threat to one's successful attainment of motherhood and subsequently a threat to attaining womanhood.

If these theories are correct, one could expect lower self-esteem levels in those experiencing complicated pregnancies. This study has explored these predicted differences in self-esteem levels between women with normal pregnancies and women with complicated pregnancies.

Assumptions

The assumptions made for this study were the following:

1. Self-esteem is an essential ingredient to a healthy personality.
2. "Survival and the level of health of a society is inextricably bound to maternal and child health" (American Nurses' Association, 1973, p. 913).

Research Questions

The research questions that were posed by this study were:

1. Among Black American and Anglo-American primigravidas between the ages of 18 and 35 and receiving full or partial funding for their obstetrical care through a public hospital, is there a difference in self-esteem levels between those having normal pregnancies and those having complicated pregnancies?

2. Do the variables of ethnic group, age, marital status, educational level, and hospital unit assigned have an influence on self-esteem levels in primigravidas experiencing normal or complicated pregnancies?

Definition of Terms

For the purpose of this study these terms were defined as follows:

1. Self-esteem--"a personal judgment of worthiness that is expressed in the attitudes the individual holds toward himself" (Coopersmith, 1967, p. 5).

2. High self-esteem--a feeling of respect and self-worth that the individual holds for himself (Rosenberg, 1965).

3. Low self-esteem--a feeling of self-rejection, self-dissatisfaction, and self-contempt (Rosenberg, 1965).

4. Level of self-esteem--a score obtained from the Rosenberg Self-Esteem Scale, D-1 (Appendix G).

5. Normal pregnancy--a pregnancy unaccompanied by chronic illness or other conditions that require such close medical supervision as to necessitate attendance in a pregnancy complication clinic or hospitalization.

6. Complicated pregnancy--the condition of pregnancy termed pre-eclampsia or pregnancy-induced hypertension with the development of hypertension with proteinuria, edema, or both, after the twentieth week of pregnancy for which a patient is hospitalized (Pritchard & MacDonald, 1976).

7. Hypertension--"a diastolic blood pressure of at least 90 mm Hg, or systolic pressure of at least 140 mm Hg, or a rise in the former of at least 15 mm Hg or the latter of 30 mm Hg. The blood pressures cited must be manifest on at least two occasions six hours or more apart" (Hughes, 1972, p. 423).

8. Proteinuria--"more than 0.3 g per liter in a 24-hour collection, or greater than 1 g per liter in at least two random urine specimens six hours or more apart" (Hughes, 1972, p. 423).

9. Mental illness--condition involving a history of drug addiction, alcoholism, suicide attempts, or in-patient or out-patient psychiatric treatment.

Limitations

The following variables were considered to be limitations to this study:

1. There were no controls for self-esteem levels prior to the present pregnancy of each subject.

2. The level of significance that each subject placed upon the complication she was undergoing in terms of her understanding and acceptance of the seriousness of the problem may have influenced her responses.

3. The degree to which the subject would associate having a complicated pregnancy with an inability to successfully carry out a normal function of womanhood was not explored.

4. There were no controls for any differences in self-esteem related to the varying weeks of gestation of each subject.

5. There were no controls for age, marital status, educational level, or religion due to the method of selection of the population that was chosen.

6. There were no controls for any differences in self-esteem that may have resulted from the varying atmospheres of each of the four obstetrical units on which subjects were placed.

7. The conclusions from the data were applicable only to the population from which the samples were chosen.

Summary

Self-esteem as discussed in this chapter is basic to an individual's healthy functioning and interpersonal relationships. According to James (1890/1950), an individual's feelings of worth are dependent upon the degree to which one is able to satisfy one's aspirations. For those women who value motherhood, one might expect a loss of self-esteem to occur if their ability to attain motherhood is threatened. It was the purpose of this exploratory study to determine if there were differences in self-esteem levels between women having complicated pregnancies and those having normal pregnancies.

CHAPTER 2

REVIEW OF LITERATURE

The review of the literature for this study deals with five topics: theories in self-esteem, research in self-esteem, body image and self-esteem, childbearing and self-esteem, and pre-eclampsia.

Theories in Self-Esteem

The self-esteem concept is rooted in the earliest literature on "the self." The following discussions are a review of the major contributors in the area of self-esteem.

William James

The origin of the self-esteem concept is thought to be found in discussions on "the self" written within the last century. Probably the earliest self-psychologist was William James who made several contributions to this topic.

James (1890/1950) divided the self into three parts: the "material Me," the "social Me," and the "spiritual Me." Within the "material Me" are included the possessions which a person has acquired; that is, his home,

family, and the individual's physical body. The "social Me" is composed of the various forms of recognition one receives from others around him. James (1890/1950) stated that "a man has as many social selves as there are individuals who recognize him and carry an image of him in their mind" (p. 294). The "spiritual Me" refers to feelings and emotions which an individual perceives or reflects upon. All these areas will affect the total self.

If they wax and prosper, he feels triumphant;
if they dwindle and die away, he feels cast
down, -- not necessarily in the same degree for
each thing, but in much the same way for all.
(James, 1890/1950, pp. 291-292)

Probably of most relevance to this discussion is the equation that James (1890/1950) formulated to describe the means by which individuals evaluate themselves: $\text{Self-esteem} = \frac{\text{Success}}{\text{Pretensions}}$ (p. 310), a ratio of one's actualities to his supposed potentialities. He believed that an individual's feelings about himself depend entirely upon what that person backs himself to be. Being a psychologist, he stated that he was horrified if another person knew more psychology than he did. However, not proposing to know Greek, he was not at all uncomfortable to show his ignorance in that area. How positive a person feels about himself, then, is an indication of how

close that individual comes to being what he aspires to be. James also suggested that how high an individual's goals are may affect his ability to feel successful. One person may set his goals so high that they are unattainable and consequently experience low self-esteem, while another may set his goals lower, be more able to reach them, and subsequently feel better about himself. James suggested that an individual may easily improve his self-esteem by either adjusting his aspirations or by increasing the level of his achievements.

Also of note is James' (1890/1950) opinion that while an individual's feelings about himself are based on a personal set of goals, he will generally weigh himself by the same standard by which he measures others in terms of success or status. Man has an inborn need to achieve, however; and when faced with the prospect of failure in relation to his aspirations, he will renew his efforts toward satisfaction with himself.

Charles Cooley

Cooley (1902) thought of the individual only within a social context. Contributing the idea of "the looking-glass self," Cooley indicated that a person's judgment of himself is dependent upon how he perceives the

reactions of others to him. An individual does not see himself as others see him, but as he imagines they see him.

The idea that an individual develops of himself comes from "the imagination of our appearance to the other person, the imagination of his judgment of that appearance, and some sort of self-feeling, such as pride or mortification" (Cooley, 1912, p. 152). Thus, the evaluation a person makes of himself may not be in actuality how others view him, but how he interprets or assumes them to feel.

G. H. Mead

Mead (1934), too, was concerned with the manner in which a person comes to value himself. As James and Cooley before him, he felt that the individual can only be interpreted within his own social world. He saw "the self" as a social phenomenon. Wells and Maxwell (1976) summarized Mead's perception of "the self" as, "a product of the interactions in which the person experienced herself as reflected in the behavior of the other" (p. 17). Mead (1934) believed that a person internalizes the values and attitudes that significant others hold toward them. After taking these attitudes as his own, the individual will treat himself the way others in his world

have. Thus, if the person's significant others reflect positive feelings toward him, the individual will come to respect and value himself.

Mead (1934) also discussed the "I-Me" concept related to self-attitudes. He differentiated between the "I" portion, the spontaneous part of the self, and the "Me" portion, the part of the self that reflects upon, judges, and evaluates the person. According to Wells and Maxwell (1976), Mead proposed that man has a built-in desire to continually reach for self-enhancement which he defined as a sense of superiority in relation to others.

Alfred Adler

According to Adler (1927, 1956), all individuals start life with basic feelings of inferiority purely as a result of being helpless and dependent upon those around them. In an effort to compensate for these feelings of inferiority, the individual strives for security, mastery, and self-realization. Some feel that this striving for superiority could be interpreted as man's search for meaningfulness.

A neurotic individual suffers from negative interactions with his environment due to overprotection or neglect and thus feels unable to cope or master his world.

As a result, a neurotic individual overcompensates in his attempt to deal with these abnormal feelings of insecurity and anxiety. His world becomes distorted, he loses objectivity and suffers a constantly threatened self-image (Adler, 1927, 1956).

Adler (1927, 1956) focused on the total person, interrelating the psychological, social, and physical aspects of the individual. Important to his discussions were the effect of "organ inferiorities," actual physical defects or deficiencies in strength or size which could accentuate the natural feelings of inferiority which all individuals experience. With some individuals these feelings could serve as a motivating force to help compensate for the disability. In others the feelings of inferiority could work as a destructive force. He believed that one's response to a defect has much to do with the amount of acceptance, support, and encouragement which the individual receives from those around him (Adler, 1927, 1956).

Karen Horney

Horney (1945, 1950) viewed disturbances within the parent-child relationship as a causal factor in increased anxiety developing within the child. Parents who cannot

give love and warmth to their children due to their own neuroses create an atmosphere of rejection that has long term effects within the child. The child may ultimately acquire a feeling of rejection toward himself.

Anxiety, according to Horney (1950), is a major cause of unhappiness and of a decrease in personal effectiveness. This basic anxiety sets off a series of events and psychological processes which end in the individual's feeling of self-hate, self-contempt, and low self-esteem.

In an effort to cope with this anxiety, Horney (1950) theorized that the individual forms an "idealized self" or a fantasy of those qualities which the individual feels "he has, could have, or should have" (p. 13). This grandiose image may relieve the anxiety at intervals, but may create even more stress when the individual compares his "actual self" with this glorified version of himself. Horney (1950) saw the "real self" as representing all the innate potential of the individual. Self-realization, mankind's goal, is the never ending process by which an individual's "actual self" becomes congruent with his "real self."

Erich Fromm

Fromm (1941) traces the success of an individual to the kind of experience he had within his family. He believed that an irrational, authoritarian home in which the child is not treated with dignity or as having value breaks the child's spirit for independence and spontaneity. He is left with feelings of worthlessness. This negative attitude toward oneself will affect a person's desire for independence and growth toward self-fulfillment.

Feelings of worthlessness will affect a person's interaction with the world. Fromm (1939) believed that a person's love for himself is a prerequisite to accepting and loving others. As cited by Thetford and Schucman (1975), Fromm also believed that "as society treats a person, so will he come to treat himself and society, for the health or illness of both are inextricably woven" (p. 689).

Henry S. Sullivan

Sullivan (1953) suggested that the newborn infant is not yet a person psychologically. As he grows, experiences his world, and interacts with those around him, his person develops. The "self" is built from

experiences and appraisals of others. Gradually the child comes to differentiate the "good me," that collection of experiences which are rewarded, the "bad me," behavior which caused disapproval and tension, and the "not me," those experiences which created intense anxiety. The "self" seeks to modify behavior in such a way as to increase the amount of approval and decrease the amount of disfavor from significant individuals in the person's immediate world. How well the individual is able to draw approval, minimize criticism, and guard his self-esteem will determine his ability to maintain strong feelings of self-worth (Sullivan, 1953).

Abraham H. Maslow

Maslow (1954) proposed five hierarchial needs that man strives to satisfy. Most basic are physiological needs, followed by needs for safety, love and belonging, esteem, and finally self-actualization. Esteem, described by Maslow (1942), indicates a sense of sureness, pride, mastery, and even superiority over others, termed "dominance-feeling." This need must be satisfied before an individual can reach for self-actualization.

Gordon Allport

Allport (1955) considered man's sense of self as the focal point in the psychology of personality. Selfhood is regarded as a process which begins in infancy and through the awareness of the body continues toward gradual self-identity and ego enhancement (Allport, 1961). All these stages are part of the "me" that a person recognizes and accepts as himself. Allport (1955) titled this self as the "proprium." The proprium works to enhance the self. Self-evaluation, a part of the proprium, is essential to activate a continuous process of self-enhancement and self-evaluation.

P. M. Symonds

Symonds (1951) regarded the body as the center of the self and also as the core of self-esteem. Self-esteem was described as a self-feeling that developed through the experience of having one's needs met through others, self-love, or that which was built as a result of numerous achievements, self-respect.

Carl Rogers

Rogers' (1951) theory was based on clinical observations. He was most concerned with the self-images that people develop as a result of their interaction with

the world. The child internalizes any expressions of acceptance or disapproval from his family and eventually comes to view himself as others have viewed him. Negative self-judgments that an individual may develop interfere with his acceptance of himself, cause him suffering, and make him unable to function as he would like. Man has a basic tendency to grow, however, despite negative perceptions of himself; and through an accepting, nonjudgmental atmosphere, an individual can learn to express himself and gradually grow to accept himself as he is.

Research in Self-Esteem

In spite of the numerous theorists who have dealt with the subject of self-esteem, there has been a great deficit of carefully defined research that relates to this topic. Coopersmith (1967) and Rosenberg (1965) are responsible for the major studies of self-esteem which are discussed here.

Stanley Coopersmith

Coopersmith's (1967) study was conducted from 1959 through 1965. The main focus of his work was the examination of conditions which foster various self-esteem levels. Self-esteem in his study was defined as

the evaluation which the individual makes and customarily maintains with regard to himself . . . a

personal judgment of worthiness that is expressed in the attitudes the individual holds toward himself. (Coopersmith, 1967, pp. 4-5)

Coopersmith (1967) intended to measure what he called the "enduring estimate of general self-esteem" which he felt was formed early in life and remained relatively stable. Some of these attitudes are conscious and some are unconscious. He attempted to measure both levels through the individual's expression of self-worth as well as through objective behavior evaluations of others toward the individual. Thus, if a low-esteem subject reported high self-esteem due to a defensive or denial system, observations by others would help to pinpoint the inconsistency in evaluation.

Coopersmith (1967) investigated four areas to determine their relationship with self-esteem: success, values, aspirations, and defenses. Self-esteem is not related to height and physical beauty. In fact, it is only slightly related to social status and academic performances, the expected indicators of feelings of success. It was discovered that an individual's immediate world has much more influence over what the person sees as success than society's standards.

Coopersmith (1967) had proposed that people place different values upon various achievements and that how

well they succeeded in an area would determine how much weight they would place on the achievement. In other words, should an individual achieve in one particular area, he will probably value that accomplishment more than other areas. The study did not confirm this hypothesis, however. It indicated that generally most individuals apply very similar standards to judge their worth.

Another hypothesis in this work dealt with aspirations. Coopersmith (1967) conjectured that the level of one's aspirations would determine one's ability to fulfill them. If an individual held extremely high aspirations, he would probably fall short and suffer a lower self-esteem than another individual that strove for less, but was able to accomplish the goal. Contrary to this proposal, they found that those with higher self-esteem set higher goals for themselves than those with medium or low-esteem. "Personal aspirations, in short, reflect personal expectations rather than more general standards or vague secret hopes" (Coopersmith, 1967, p. 246).

Coopersmith's (1967) research also dealt with defenses, or the ability an individual has to deal with failure or threats to one's self-esteem. The results showed that children who hold high feelings of self-worth are more effective, display fewer marked problems, have lower

anxiety scores, exhibit fewer psychosomatic illnesses, and are less sensitive to criticism. These findings suggest that children with high self-esteem ratings have a stronger ability to cope with anxiety and threats to their feelings of self-worth.

Coopersmith (1967) also investigated the characteristics of parents with children of high self-esteem. While no specific patterns of behavior were noted in these families, three conditions were found to be prevalent in these homes. Parents of children with high self-esteem demonstrated total or nearly total acceptance of their children, set clearly defined limits and enforced them, and respected individual behavior within those limits. Of particular note for child rearing in today's society were the indications that children with high self-esteem also had parents with equally high feelings of self-worth. They showed more attention and concern toward their children and were more demanding of them. They also tended to be very active outside the home and spent no more time with their children than did the parents with children of low-esteem (Coopersmith, 1967).

Morris Rosenberg

Rosenberg (1965) conducted research in the area of self-esteem relative to adolescents because he believed

that they were at a point in their lives where their self-image was of great importance. Adolescents, he theorized, became more aware of their self-image due to enormous physical changes and major life decisions required at this time. Unclear expectations of the adolescent role also contributed to this awareness.

Primarily, Rosenberg (1965) attempted to determine the relationship of various social factors on the self-esteem and also to ascertain the effect of self-esteem on certain attitudes and behaviors. Reasoning that since the individual's self-esteem level is affected by what those around him think of him, Rosenberg expected to find that those in the upper social classes would think more highly of themselves. Only a moderate difference was noted, however. Fifty-one percent of those in the highest class ranked high in self-esteem, while 38% showed high self-esteem in the lower classes. There was an unexpected class difference in self-esteem between boys and girls. Where the highest class boys were more likely than the lowest class boys to have high self-esteem, the highest class girls were only slightly more likely than the lowest class girls to have high self-esteem.

Rosenberg (1965) also explored whether or not there was a difference between upper and lower classes in their

values and behaviors toward boys. Using closeness of father-child relationships, he did find that upper class boys were more likely than lower class boys to report close relationships with their fathers. Comparing father-child relationships and self-esteem, he found that both boys and girls who stated that they had close relationships with their fathers were more likely to have high self-esteem and stable self-images than those who described their relationships as more distant. Rosenberg suggests then that within each class there are norms of behaviors and values related to family relationships, and that these behaviors toward children are related to the adolescent's ultimate esteem level more than their general classification within society.

Rosenberg (1965) also associated religion with self-esteem levels. Again, the amount of interest that is shown to children which differs according to religious values seems more important in determining self-esteem levels than is the social prestige of the religious group. Studying a Jewish population, Rosenberg (1965) found that while this group did not rank high in prestige within the community, the level of interest toward their children was very high, positively affecting the feelings of worth displayed by their children. The most important concept

derived from Rosenberg's work indicated that the interpersonal environment of an individual is much more essential in determining his feelings of worth than is the society in general.

Body Image and Self-Esteem

Body image has been defined as the mental picture of the body's appearance (Schilder, 1951). This image which includes perceptions, attitudes, and feelings that an individual holds toward his body may not coincide with his actual physical body. The body image is thought to develop through previous experiences, social interactions, and the current sensations that the individual is receiving. So one's body image is a dynamic process open to constant revision (Kolb, 1959).

Demonstrating a significant linear relationship between self-concept and body concept, Zion (1965) projected that "the security that one has in one's body is related to the security with which one faces one's self and the world" (p. 494). Consequently, a discussion of the woman's body image in pregnancy is relevant to the topic of self-esteem levels in pregnancy.

Research by Secord and Jourard (1953) has shown a positive correlation between body cathexis, the degree of feeling of satisfaction or dissatisfaction with the various

parts or processes of the body, and self-concept. Secord and Jourard (1953) suggested that because of the social importance of the female body, a woman learns to equate her self-concept more closely with her body than does a man whose value is determined in this society by his achievements. In a subsequent study they discovered that women generally have fixed opinions as to the ideal feminine shape (Jourard & Secord, 1953). A woman's satisfaction with her own body varied with the difference between her actual measured size and the size which she considered to be ideal. In our culture a woman will suffer loss of self-esteem if she does not feel or appear beautiful (Jourard & Secord, 1953). Based on these conclusions, one could surmise that a woman's satisfaction with her body as well as her total self-concept would suffer as she came closer to term.

Recent studies (Treadway, Kane, Jarrahi-Zadeh, & Lipton, 1975) indicated that pregnant women, as opposed to non-pregnant women, tended to feel less feminine and have an increased level of concern toward their body and its functions. Treat (1969) had similar findings with women in their sixth month of pregnancy. The majority were passively accepting of the changes, but when given an opportunity to vocalize, focused on physical changes,

changes in body image, and feelings relating to their femininity. Differences between pregnant and non-pregnant women were also noted in human figure drawings (Tolor & Digrazia, 1977). They concluded that it was possible to detect both somatic and psychological changes in the drawings of pregnant women.

Since it has been demonstrated that one's own body image is affected by those closest to you (Schilder, 1950), current research concerning pregnant women now includes information on the husband's response or alterations of body image during the childbearing experience. Shane and Linn (1977) found that in their population husbands tended to be more satisfied with their wives' bodies than did the pregnant women themselves. Furthermore, the women were unable to predict the attitudes of their husbands to their bodies, while the husbands demonstrated knowledge of their wives' negative feelings toward their pregnant bodies.

Colman and Colman (1971) postulated that the more closely identified a husband is to his wife, the more he will experience alterations in his body image. Indeed, a study by Fawcett (1978) found that wives and husbands exhibit similar patterns of changes in body image as measured through perceived body space.

While the most obvious change in pregnancy is the woman's increase in size, some other normal physical characteristics, perhaps even more bothersome, may include nausea, frequency of urination, heartburn, changes in sleeping patterns, enlarging breasts, numerous pigmentary changes, and vague physical discomforts. All these changes must be considered in terms of their affect on a pregnant woman's body image. Many of these changes bring with them increased awkwardness, discomfort, or gradual decreased functioning (Littlefield, 1973). Rubin (1968) suggested that,

to lose or be threatened with the loss of a complex, coordinated, and controlled functional activity which has been achieved and integrated into the personal system is to lose or be threatened with the loss of self. (p. 22)

For the woman who experiences some loss of functioning or is frustrated by physical discomfort or limitations, one could presume some loss of self-esteem.

The woman diagnosed as having a complicated pregnancy must deal not only with normal physical alterations, but also with the enormous physical and emotional demands of a problem pregnancy. Galloway (1976) suggested that this type of individual must accept herself as a high risk mother, deal with whether or not the pregnancy will accept her, and finally accept the pregnancy as it is.

Part of one's body image includes perceptions of one's state of health. The pregnant woman who suddenly is told she has complications must adjust to a new definition of herself. She may feel that she is imperfect or inadequate to have a normal pregnancy. Whether or not she is able to integrate this new description of herself may affect her ability to follow through with necessary tests or activity or dietary restrictions (Galloway, 1976).

The woman will also struggle with the fear of losing the pregnancy, being unable to add to her family, or perhaps being childless forever. Finally, accepting the pregnancy as it is is difficult. The woman must cope with the potential risks to herself and to her infant, fears about her infant's normality, possible surgery with scarring, and sacrifices in terms of energy, time, or money (Galloway, 1976).

A woman with a complicated pregnancy has stresses to deal with far beyond those generally befalling a woman with a normal pregnancy. She finds her situation out of her control and must cope with her inability to have her body function in the normal way as she had hoped. As Rubin (1968) indicated,

The ability to use himself in such a way, functionally, as to achieve precisely what he intended--no more, no less, and precisely at

the right time and place--gives a person a sense of high accomplishment. (p. 21)

Thus, a woman who is experiencing a complicated pregnancy and cannot control her situation or actualize her intentions for a normal pregnancy may face feelings of worthlessness or low self-esteem.

Childbearing and Self-Esteem

James (1890/1950) believed that self-esteem is related to how well an individual achieves in an area he values the most. Consequently, should a woman prize the experience of bearing and raising children, any threat to her motherhood could affect her feelings of self-worth. Bart (1971) through clinical observations found that people often define their concept of themselves through their roles in society. Which role an individual chooses is affected by societal values and influences (Bart, 1971). In this society the most important role for women is considered to be wife and mother, and "the loss of either of these roles might result in the loss of self-esteem in the feeling of worthlessness and uselessness that characterized depressives" (Bart, 1971, p. 172).

In discussing the woman with a complicated pregnancy, Cabela (1973) also suggested that a woman's self-esteem could dwindle through her inability to carry out

successfully a normal function of women. Both parents may tend to feel lowered self-worth if there is danger to the fetus, especially if this pregnancy is their first (Cabela, 1973).

The importance of pregnancy and its outcome being a positive one is considerable if the childbearing stage is seen as a developmental step in the life of a woman. Williams (1977) stated that "The motive for doing it well can be quite strong, with positive, maturing consequences for the woman" (p. 281). Any hindrance to "doing it well" may interfere with the emotional and psychological growth of the woman if she does hold the role of motherhood as important and has difficulty coping with threats to her success in this area.

Pre-eclampsia

A review of pre-eclampsia as a disease process in pregnant women, the specific complication used in this study, is essential to this discussion. The following terms have been recommended by the Committee on Terminology of the American College of Obstetricians and Gynecologists.

Pre-eclampsia as is used in this study is defined as: "the development of hypertension with proteinuria, edema, or both, due to pregnancy . . . after the 20th

week of gestation" (Hughes, 1972, p. 422). Pre-eclampsia is differentiated from eclampsia as the latter is seen as: "the occurrence of convulsions, not caused by any coincidental neurologic disease such as epilepsy in a woman who also fulfills the criteria for pre-eclampsia" (Hughes, 1972, p. 422).

Hypertension within these terms is defined as

a diastolic blood pressure of at least 90 mm Hg, or systolic pressure of at least 140 mm Hg, or a rise in the former of at least 15 mm Hg, or the latter of 30 mm Hg. The blood pressures cited must be manifest on at least two occasions six hours or more apart. (Hughes, 1972, p. 423)

Proteinuria is defined as: "more than 0.3 g per liter in a 24-hour collection, or greater than 1 g per liter in at least two random urine specimens six hours or more apart" (Hughes, 1972, p. 423). Edema is defined as: "swelling of the face and hands and is characteristically present after arising in the morning" (Gant, Worley, Cunningham, Whalley, 1978, p. 398).

Significance and Incidence

Pre-eclampsia or pregnancy-induced hypertension is one of three complications: hemorrhage, hypertension, and sepsis that take the highest toll in maternal and perinatal deaths (Pritchard & MacDonald, 1976). The incidence ranges from 2% of deliveries in the Far East to

29.9% in Puerto Rico (Ferris, 1975). In the United States pre-eclampsia most commonly is stated to be around 5%, but at the hospital used as the setting for this study, 25% of black primigravidas have had diastolic blood pressure readings of at least 90 mm Hg on two or more occasions six or more hours apart (Pritchard & MacDonald, 1976). The disease does affect primigravidas more often with those at either end of the childbearing age range being at the highest risk (Pritchard & MacDonald, 1976).

There also is a high incidence in multigravidas over 35 and with other obstetrical complications such as twin pregnancies, diabetes, hydramnios, hydatidiform mole, and obesity (Ferris, 1975). Those women who have had pre-eclampsia in first pregnancies will have an approximately 33% chance of acquiring the disease during subsequent pregnancies (Ferris, 1975). A familial tendency has also appeared through Chesley's studies (1968). While black women tend to have pre-eclampsia in greater numbers, Pritchard and MacDonald (1976) indicated that socio-economically more affluent white women can also develop this disease process and, if not detected and treated, may have just as severe a course.

Diagnosis

Pre-eclampsia or pregnancy-induced hypertension is diagnosed "on the basis of the development of hypertension with proteinuria, or edema, or both, due to pregnancy . . . after the 20th week of gestation" (Hughes, 1972, p. 422). A diagnosis of chronic hypertension should be differentiated from pre-eclampsia if possible. Chronic hypertension can be determined by a history of hypertension, if available, elevated blood pressure readings before the 20th week of pregnancy, or by persistent hypertension long after delivery (Pritchard & MacDonald, 1976). More difficult to assess is chronic hypertension with superimposed pre-eclampsia. This is determined through evidence that the patient has chronic hypertension as well as pre-eclampsia and meets the criteria for pre-eclampsia (Pritchard & MacDonald, 1976).

Some authorities differentiate between mild and severe pre-eclampsia. It should be noted, however, that these categories may be misleading as some women may not convulse with very high pressure readings while others convulse with seemingly low blood pressures. Pritchard and MacDonald (1976) suggested that the diagnosis of mild or severe pre-eclampsia is best done in retrospect.

Pathophysiology

The actual cause of pre-eclampsia is yet unknown. Investigations continue primarily in the areas of the renin-angiotensin-aldosterone system, prostaglandins, the immune system, and the intravascular coagulation system.

The two major components of this disease are vasospasm and increased extracellular fluid retention. In normal pregnancy dilation of the vasculature occurs to accommodate increased cardiac output and an increased blood volume. This phenomenon is most commonly evidenced in erythema of the palms and the development of spider telangiectases (Ferris, 1975).

Inexplicably this normal process is disturbed in pre-eclampsia with a constriction of blood vessels which causes hypertension, reduction in perfusion of organs with resulting damage to these organs and to the vessels themselves (Pritchard & MacDonald, 1976). Kaplan (1978) has devised a scheme which incorporates these phenomena to produce a logical explanation of the cause and process of pre-eclampsia. This discussion will follow that scheme as a means of exploring the possible mechanisms of this disease.

Uteroplacental hypoperfusion is thought to result from an imbalance between the placental size and the uterine blood flow. This imbalance can occur either as a result of poor uterine blood flow from a vascular related disease such as diabetes or pre-existing hypertension. The imbalance may also occur as a result of an enlarged placental mass, as in multiple pregnancies. As a consequence of the uteroplacental hypoperfusion, degeneration of the trophoblast occurs with the release of thromboplastin and subsequent deposition of fibrin and fibrinogen within the glomerulus. The presence of these materials in the renal system is thought to be responsible for proteinuria and reduced glomerular filtration rate. Increased sodium retention causes an expanded fluid volume with edema and hypertension following (Kaplan, 1978).

A second consequence of uteroplacental hypoperfusion is the release of uterine renin which in turn generates the production of angiotensin. Within the uterus this substance takes on a non-traditional role causing vasodilatation. It is suggested that angiotensin in this situation must trigger the release of prostaglandin E, a potent vasodilator, causing increased uterine blood flow. It has been noted that in pre-eclamptic women,

levels of prostaglandin E within the placenta are significantly reduced (Demers & Gabbe, 1976), adding to the evidence that the reduced synthesis or altered metabolism of prostaglandins may be significant in the development of pre-eclampsia. Angiotensin has also been associated with increased aldosterone to cause sodium reabsorption and retentions of fluids (Genest, Nowaczynski, Koiw, Sandor, & Biron, 1960; Laragh, Ulick, Januszewicz, Kelly, & Lieberman, 1960).

Researchers have noted that women with pre-eclampsia have an increased reactivity to pressor hormones (Brown, 1946; Talledo, Chesley, and Zuspan, 1968). Most significantly, Gant, Worley, Whalley, Crosby, and MacDonald (1974) have demonstrated an increased pressor response very early in pregnancy before hypertension occurs. They found that a pressor response was induced in women destined to acquire pregnancy-induced hypertension by lying in the supine position after lying in the lateral recumbent position. Pritchard and MacDonald (1976) in describing this study stated that,

Ninety-three percent of women 28 to 32 weeks pregnant who demonstrated an increase in diastolic blood pressure of at least 20 mm Hg when turned from side to back later became overtly hypertensive; conversely, 91 percent who did not demonstrate such a rise did not become hypertensive. (p. 554)

Other research (Gant, Daley, Chaud, Whalley, & MacDonald, 1973) indicated a specific sensitivity to angiotensin in those women who eventually were diagnosed with pre-eclampsia. These discoveries have changed the description of pre-eclampsia from a disease with a sudden onset to one with an early and progressive pattern. It has been proposed that the sensitivity to angiotensin could be a result of a decreased presence of prostaglandin (Everett, Worley, MacDonald, & Gant, 1978). Due to the occurrence of fibrin deposition in pre-eclampsia, another theory proposed is that of an intravascular coagulation process. Kaplan (1978) held that this theory could not explain the various components of the disease, and agrees with others (Pritchard, Cunningham, & Mason, 1976) that the above process is probably the result and not the cause of the disease.

Immunologic injury is the other most popular theory presently (Kaplan, 1978). It has been suggested that a defect occurs in the mechanism which prevents the rejection of the fetus. This idea assumes that pre-eclamptic women are experiencing an initial reaction to foreign antigens. Given previous exposure to these elements as in a second pregnancy, these women demonstrate decreased susceptibility to the disease. Clinical evidence that

pre-eclampsia is primarily a disease of first pregnancies is usually offered as support to this theory (Kaplan, 1978).

Impaired Organ Function

Pre-eclampsia is believed to be related to a number of changes in body organs, presumably in response to the occurrence of vasospasm. It is appropriate to review the various changes that are thought to occur within this disease.

Utero-Placental Function. First of all, the circulation to the uterus and placenta is thought to be decreased although at the present time no precise measurements of uterine blood flow have been made. Research does indicate indirectly, however, that pre-eclamptic women do have decreased uterine perfusion. Gant, Madden, Siiteri, and MacDonald (1972) tested the clearance of dehydroepiandrosterone sulfate in pregnant women. The clearance of this substance is dependent upon its conversion to estrogen by the placenta, a function of utero-placental blood flow. Those women who were eventually to acquire the signs of pre-eclampsia had a decreased uterine clearance of this substance. Clinically, placental infarcts and retarded fetal growth are seen as

indications of decreased circulation to the uteroplacental system (Pritchard & MacDonald, 1976).

Renal Function. Renal function is also affected by toxemia (Pritchard & MacDonald, 1976). Normally, the renal blood flow and the glomerular filtration rate are significantly elevated in pregnant women. A reduction with pre-eclampsia may bring the GFR levels within the normal range for the non-pregnant woman, but much reduced from the pregnant norm. Levels below the non-pregnant state occur in those patients with severe pre-eclampsia and eclampsia (Pritchard & MacDonald, 1976).

Changes within the glomerulus, including swelling and a deposit of a fibrinogen-like substance are among the subendothelial cells, a common occurrence with pre-eclampsia; but as yet, the cause and the interpretation of these changes is not completely identified, nor clearly understood. Some data indicates that these glomerular changes have been resolved within 4 weeks post-partum (Spargo, McCartney, & Winemiller, 1959), while others have reported only a gradual resolution over 2 years (Mantner, Chung, Grishman, & Dachs, 1962). Pritchard and MacDonald (1976) reported that the clinical data from the study hospital indicated that complete

recovery of renal function can be expected after the occurrence of pre-eclampsia in pregnancy, excluding those who have underlying chronic vascular disease.

Liver Function. Lesions in the liver have long been associated with the most severe cases of pre-eclampsia and eclampsia. Ferris (1975) noted that these lesions are typically found to be localized hemorrhages in the periportal areas or damage resulting from tissue ischemia. Sheehan and Lynch (1973) reported that any damage that might occur is a result of arteriole spasm within the liver.

It should be noted, however, that not all the literature coincides and that some research (Pritchard & MacDonald, 1976) indicated that no liver damage was found in 6 pre-eclamptic and 12 eclamptic patients who had liver biopsies done. Studies of hepatic function within the same institution revealed only infrequent abnormalities in pre-eclamptic and eclamptic patients.

Central Nervous System Function. Changes in the central nervous system are most often associated with eclampsia. Ferris (1975) claimed that

The most common cause of death in eclampsia is cerebral hemorrhage and evidence of hemorrhage is found in about 60 percent of

patients who die within 2 days of the onset of the convulsions. (pp. 68-69).

Upon examination the brains show petechial hemorrhages as well as thrombosis of the precapillaries with infarction (Ferris, 1975). According to Sheehan and Lynch (1973) these lesions suggest that they are the result of an intense vasoconstriction with secondary thrombosis of small vessels within the brain. Ferris (1975) reported that in some instances large hemorrhages into the white matter, basal ganglia, or pons occur causing a sub-arachnoid hemorrhage. Due to the fact that the blood pressure readings of women who have suffered cerebral hemorrhage are not considered high enough to cause arterial rupture, Ferris (1975) speculated that perhaps cellular changes in cerebral capillaries, as yet undetected, might some day prove to be responsible for these cerebral hemorrhages.

EEG testing frequently shows non-specific abnormalities in women after convulsions. It has been demonstrated, however, that even the family members of eclamptic patients tend to have a greater amount of positive EEG activity suggesting that some of the women who convulse may be inherently more inclined to do so (Pritchard & MacDonald, 1976).

Pulmonary Function. As with the central nervous system, pulmonary changes are only described following convulsions. The changes that have been noted are increased respiratory rate or pulmonary edema resulting from heart failure, circulatory overload, or aspiration of gastric contents (Pritchard & MacDonald, 1976).

Endocrine Function. Numerous hormonal changes take place in pregnancy-induced hypertension. Compared to normal pregnancy, the levels and activity of most of the hormones are decreased (Kaplan, 1978). These hormones which are found in reduced levels are plasma, renin substrate, plasma renin concentration, plasma angiotensin-II, plasma aldosterone, and plasma deoxycorticosterone. A discussion of these hormones and the mechanisms by which they are thought to operate has been presented.

Fluid and Electrolyte Changes. In pre-eclampsia, the electrolyte levels do not appear to be abnormal unless the patient has undergone either diuretic therapy, sodium restriction, or diuresis from administration of water with oxytocin. Extracellular fluid is increased in volume above that of a normal pregnant woman (Pritchard & MacDonald, 1976). The possible mechanisms for this occurrence were presented earlier in this chapter.

Hematologic Changes. The three hematologic changes associated with pre-eclampsia and eclampsia are a lack of the normal pregnancy hypervolemia, abnormalities in the coagulation mechanism, and an increased erythrocyte destruction. The blood volume is decreased considerably in pre-eclampsia with extreme deficiencies found in eclamptic patients. This situation is thought to be a result of the vasoconstrictive qualities of the disease. Generally a rise in hematocrit will coincide with the increasing severity of the disease and the decreasing blood volume. A fall in the hematocrit has not been found to indicate improvement, but instead has been associated with blood loss after delivery (Pritchard & MacDonald, 1976).

The second hematologic change occurs in the mechanism for coagulation with either intravascular coagulation or abnormal erythrocyte destruction complicating the pre-eclampsia-eclampsia disease process (Pritchard & MacDonald, 1976). Some researchers (Page, 1972) believe that the difference in coagulation may even be basic to the development of the disease. Others (Pritchard, Cunningham, & Mason, 1976) continue to substantiate the theory that coagulation changes are the consequence of the disease. Likewise, some studies (Pritchard &

MacDonald, 1976) show an infrequent occurrence of erythrocyte destruction in their patients, which when evident tends to absolve soon after delivery.

Clinical Aspects of Pre-eclampsia

Clinically, the disease shows itself primarily through the elevation of blood pressure, sudden weight gain, and ultimately proteinuria (Pritchard & MacDonald, 1976). A blood pressure of concern is one where there is

a diastolic blood pressure of at least 90 mm Hg, or systolic pressure of at least 140 mm Hg, or a rise in the former of at least 15 mm Hg, or the latter of 30 mm Hg. The blood pressures cited must be manifest on at least two occasions six hours or more apart. (Hughes, 1972, p. 423)

A weight gain of significance would be one which exceeded 2 pounds in any given week, or 6 pounds in a month. Most importantly is the aspect of sudden and excessive weight gain which is indicative of abnormal extracellular fluid retention. More visible signs of this fluid retention are puffiness of hands and face which become evident usually after abnormal weight gain (Pritchard & MacDonald, 1976).

The third sign of pre-eclampsia, proteinuria, usually develops later than hypertension or a sudden weight gain. It is defined as "more than 0.3 g per liter

in a 24-hour collection, or greater than 1 g per liter in at least two random urine specimens six hours or more apart" (Hughes, 1972, p. 423). These three signs, however, usually go unnoticed by the patient. Should the disease be allowed to advance, the pregnant woman may develop more apparent symptoms, such as frontal or occipital headaches, visual disturbances, puffiness of eyelids and fingers, and epigastric pain (Pritchard & MacDonald, 1976).

Thorough prenatal supervision is basic to the prevention of serious outcomes of this disease especially in those individuals who are high risk for acquiring the disease: primigravidas, those with a family history of pre-eclampsia, multiple births, diabetes, chronic hypertension, hydatidiform mole, and fetal hydrops (Pritchard & MacDonald, 1976). Every woman should be examined every two weeks during the 7th and 8th months and weekly during the last month of her pregnancy. Of most importance are careful monitoring and evaluation of blood pressure readings and weight checks. Thorough preparation of all women should include an assessment of their knowledge of signs and symptoms of the disease. Restriction of weight gain to 15 to 20 pounds and the use of diuretics

are no longer considered appropriate for prevention and treatment of pre-eclampsia (Pritchard & MacDonald, 1976).

Pritchard and MacDonald (1976) cited the following objectives as pertinent in the treatment of pre-eclampsia: (a) prevention of convulsion, (b) delivery of a surviving child, (c) delivery with a minimal trauma, and (d) prevention of residual hypertension. This authority (Pritchard & MacDonald, 1976) also emphatically stated that "Ambulatory treatment has no place in the management of pregnancy-induced or pregnancy-aggravated hypertension" (p. 566). Only multigravidas with the mildest signs of pre-eclampsia can be monitored at home and only then under very close supervision.

Hospitalization should occur for a systolic blood pressure of 140 mm Hg or above or a diastolic pressure of 90 mm Hg or above. A thorough medical follow-up should include the following: (a) a complete history and physical exam, (b) weight on admission and every two days following, (c) blood pressure readings every 4 hours except between 12 midnight and morning, (d) daily urine testing for protein, (e) frequent measurements of creatinine clearance, and (f) frequent evaluations of fetal growth. Bedrest and adequate nutrition are essential, with no restriction or forcing of sodium or fluids

indicated. Further management is dependent upon the course the disease takes, duration of gestation, and the condition of the patient's cervix. Should signs of convulsions increase, administration of magnesium sulfate is recommended with termination of the pregnancy after complete evaluation of the fetal and placental status is made (Pritchard & MacDonald, 1976).

The postpartum period may bring rapid improvement in the majority of cases, or in some, continued severity with eclampsia remaining a possibility or reality. Close supervision should continue into the postpartum period until all danger of convulsions is abated with management with magnesium sulfate recommended. Hypertension continuing two weeks after discharge should be evaluated carefully (Pritchard & MacDonald, 1976).

Pritchard and MacDonald (1976) reported a study conducted on a high-risk pregnancy unit. Of a total of 625 primigravidas who were admitted and maintained on the unit, the perinatal mortality was 9/1000. The rate was 129/1000 in those women who left the unit against medical advice. These statistics indicate the necessity and benefit of close medical supervision of those women with pregnancy-induced hypertension.

Summary

This chapter reviewed the literature concerning theories of self-esteem, research in self-esteem, body image and self-esteem, childbearing and self-esteem, and pre-eclampsia, the complication used in this study. The theorist of greatest relevance to this research was James (1890/1950), whose writings proposed that an individual's feelings of worth are dependent upon how close he comes to being what he aspires to be. The two main researchers in self-esteem were Coopersmith (1967) and Rosenberg (1965), whose works provided major contributions concerning the social factors which affect the development of one's self-esteem. A person's satisfaction with his body is related to the individual's sense of self-esteem. In pregnancy, women generally experience an increasing dissatisfaction with their body, possibly affecting their level of self-esteem. The extent to which a woman values motherhood is also of importance as it may affect the significance of a high-risk pregnancy to her life. This chapter reviewed the current research in pre-eclampsia which has changed the description of pregnancy-induced hypertension from a disease of sudden onset to one with an early and progressive pattern.

CHAPTER 3

PROCEDURE FOR THE COLLECTION AND TREATMENT OF DATA

This study evaluated the differences in self-esteem levels between women having complications with their pregnancies and women having normal pregnancies. This chapter presents the procedure for the collection and the treatment of the data obtained in the implementation of this study.

An exploratory method was chosen for this research. The design employed was a non-experimental, comparative survey which assumed that the subjects were exposed to the independent variable, in this case a pregnancy complication, through natural means rather than by being assigned to a complicated or uncomplicated group by random selection. This approach will establish only associative relationships which will be helpful in making predictions and for generating hypotheses for future experimental studies (Abdellah & Levine, 1965).

Setting

The setting for the study was dependent upon the sample in which the client was involved. Those clients

who were in the normal pregnancy group received and completed the questionnaire at one of two obstetrical clinics that were chosen for use in this research. Both of these clinics were partially staffed by registered nurses from the city health department who participated in the delivery of antepartal care to the county hospital's clinic population.

The data collection was conducted in both morning and afternoon prenatal clinics beginning at either 9:00 a.m. to 12:30 p.m. Women with appointments to these clinics began arriving as early as one-half hour before the clinic began. A lag time of at least one-half hour existed between the patients' arrival time and their being seen for their prenatal examinations. It was therefore possible to administer the questionnaires to the patients without interfering with their scheduled appointments.

As patients were checked in at the clinic, their prenatal records were pulled and these charts were scanned for information that would qualify them as subjects for the study. A small private area was made available to the researcher for the purpose of explaining the purpose and procedure of the study to the subjects,

obtaining their consent, and providing them with an opportunity to complete the questionnaire.

The setting for the data collection from the complicated pregnancy group was four obstetrical units of an 800 bed county hospital. Three of these units primarily housed women in their postpartum period, but did occasionally admit women antepartally with complications. The average census of these units was approximately 40. The fourth unit was a high-risk antepartal unit which had an average census of 25 patients.

The women who participated in the complicated pregnancy group were given the questionnaire between 48 and 96 hours after their admittance to any of the four obstetrical units at the hospital used in this study. The individuals received instructions and the questionnaires at their bedside if they were to remain on bedrest. A small private area on the unit was made available for those who were free to walk around the unit.

Population and Sample

Target Population

The target population of this study was limited to women receiving obstetrical care through the public hospital of a large Southwestern city. This population

included primigravidas whose fetal estimated gestational age was at least 28 weeks. This population was restricted to Black-American or Anglo-American women between and including the ages of 18 and 35. They were receiving full or partial funding for their obstetrical care as designated by the letter "S" located on their clinic cards and stamped on their medical records. The medical history of this population was void of a previous history of infertility, chronic physical illness, or admitted mental illness. In addition this population included only those individuals who were able to demonstrate an ability to read and understand the consent form used in this research. This target population included only those people who met the criteria between June 1977 and February 1978, the time period when the data were collected.

Sample Population

Two groups were selected from the target population. The complicated sample group consisted of 30 subjects who had been admitted to one of the hospital's four obstetrical units for the complication pregnancy-induced hypertension or pre-eclampsia. Only those individuals who were able to complete the questionnaire between

48 and 96 hours after their admittance to the hospital were included in this group. A convenience sampling design was employed to obtain the complicated sample group. All patients who met the criteria were accepted into this sample group.

The normal sample group chosen from the target population also totaled 30 subjects. A quota sampling design was employed with this group. By matching the two groups in terms of ethnic group participation, it was possible to prevent the overloading of the normal sample group with subjects from a particular ethnic group (Abdellah & Levine, 1965). Thus, all women who met the criteria for inclusion into this normal sample population were accepted in order into this group until the quota was reached for Black or Anglo-Americans.

Protection of Human Subjects

Before the collection of data was begun, this study was approved by the Texas Woman's University Human Research Review Committee (Appendix A), the other educational facility associated with this study (Appendix B), and the two cooperating clinical agencies (Appendix C).

Complete anonymity was guaranteed as well as assurances given to subjects that any refusal to participate

in the study would not affect the individual's hospital or clinic care in any way. Those willing to participate in the study were protected further by signing a consent form from Texas Woman's University which introduced the investigator, outlined the procedure, and discussed potential risks and benefits to the participants (Appendix E). Another consent form from the educational facility associated with the participating hospital (Appendix F) also required a consenting signature from the subject. Of the 70 individuals who were approached for possible inclusion in this study, 68 agreed to participate. Eight of these subjects were rejected from the study due to inability to read, inadequate gestational age, or change in pay status.

Instrument

The tool selected for this study was the Rosenberg Self-Esteem D-1 Scale (1965) (Appendix G) which was used as the basis for his research in self-esteem. The Likert-type scale consisted of 10 simply stated items. These 10 statements revolved around liking, disliking, approving, or disapproving of the self. The subject was asked to respond to each item with only one of four answers ranging from strongly agree to strongly disagree.

Rosenberg alternated positively and negatively stated items to avoid having subjects respond in a "response set."

The 10 statements were combined in a pattern for scoring which produced only six total responses. For example, one out of two or two out of two positive responses were considered positive for a particular combined item. These six responses could then be summed resulting in a single positive or negative score ranging from -6 to +6. The -6 indicated the highest self-esteem level, while the +6 score indicated the lowest self-esteem score.

Validity

Rosenberg (1965) claims that his scale is valid. The scale correlated .56 with a self-esteem interview, .67 with a difference between Self and Ideal Self test, and .83 with a difference between Self and Social Ideal test (Silber & Tippet, 1965). The scale's major point, however, is its construct validity which is described by Rosenberg (1965).

Reliability

According to Silber and Tippet (1965), the Rosenberg Self-Esteem D-1 Scale has a test-retest correlation

of .85 ($n = 28$) over two weeks. In terms of reproducibility, a coefficient of .92 was obtained using the Guttman procedure. In this method several items are grouped together for scoring purposes so that the responses to two or three of the items are totaled and given one positive or negative score. In this way "the adequacy of each item is not determined primarily by its relationship to a total score but by its patterned relationship with all other items on the scale" (Rosenberg, 1965, pp. 16-17). In addition to Rosenberg's Self-Esteem D-1 Scale, demographic data were collected on a separate form (Appendix G).

Data Collection

The data collection for this study began in June 1977 and was completed in February 1978. A bi-weekly review of new admissions to the obstetrical units was made to check for patients who could qualify for the study. As the complicated sample group quota of 30 came close to being met, a search was made in the prenatal clinics for the normal sample group.

As stated previously, after an individual was evaluated as having met the criteria for inclusion to the study, she was directed to a private area made

available for the research interviewer. For the normal sample group to whom the questionnaire was given in a clinic, an interviewing cubicle or an empty room was provided. For the complicated sample group, an empty room was used on the obstetrical unit. If the subject was on bedrest, she was seen at her bedside with the privacy curtains closed. Clinic patients chosen were reassured that they would not be delayed for their appointment. It was explained to all participating subjects that complete anonymity would be guaranteed that no one other than the researcher would have access to the individual's answers to the questionnaire. Also, it was made clear that any refusal to participate would not affect her hospital or clinic care in any way. If the woman was willing to participate in the research, she was asked to read and sign a consent form from Texas Woman's University (Appendix E) and another from the educational facility associated with the participating hospital (Appendix F). Careful evaluation of the woman's ability to read was made at this time through brief questioning concerning the consent form.

The subject was told that the questionnaire (Appendix G) consisted of 10 statements and that there were four possible answers: strongly agree, agree, disagree,

and strongly disagree. The subject was to choose the answer that she viewed as most closely expressing her reaction to the statement. The subject was also asked to provide demographic data including age, marital status, and educational level (Appendix G). Information from the patient's chart was collected regarding race, estimated gestational age, and the unit to which she was assigned. The woman was then told that she would be given approximately 10 minutes to complete the questionnaire although there was no time limit. Afterwards, the subject was asked to insert and seal the completed questionnaire in the envelope provided. The envelope was then collected and an opportunity was provided for the subject to express any feelings or comments she might have concerning the questionnaire or its content.

Treatment of Data

The Mann-Whitney U test is considered to be a powerful test for independent sample groups and for use with ordinal data (Downe & Heath 1974). In this study there were two independent sample groups: one of women with normal pregnancies and one of women with complicated pregnancies. The Rosenberg Self Esteem D-1 Scale (1965) is scored such that it results in a single positive or

negative value which can easily be applied to the Mann-Whitney U test.

To use the Mann-Whitney U test, the scores from the self-esteem tool must first be ranked and summed for each sample group. Since each group was larger than 20, the U statistic must be determined through the equation:

$$U_1 = N_1 N_2 + \frac{N_1 (N_1 + 1)}{2} - \Sigma R_X$$

where N_1 = the number of cases in the normal pregnancy group

N_2 = the number of cases in the complicated pregnancy group

and R_X = the sum of the ranked scores for the normal pregnancy group (Downe & Heath, 1974).

A z score was then computed from the U statistic using the formula:

$$z = \frac{U_1 - (N_1 N_2 / 2)}{\sqrt{N_1 N_2 (N_1 + N_2 + 1) / 12}}$$

where the numerator is U_1 minus the mean of U and the denominator is the standard deviation of the U.

The resulting z score was evaluated to determine if any variance between the self-esteem scores of the sample groups was more likely attributable to random sampling rather than to a real difference in self-esteem levels.

The .05 level of significance was employed as being that most customarily used in psychological and sociological studies (Abdellah & Levine, 1965). At this level, a z score of at least 1.96 is required to be assured that the variance does not lie within the 5% probability of being due to chance factors. The closer the z score is to zero, the more likely it is that any variance is the result of chance.

This statistical test of significance was also applied to the evaluation of several demographic subsets of the normal and complicated sample groups. The demographic factors studied for statistical variance were: marital status, race, hospital unit assigned, and level of education.

CHAPTER 4

ANALYSIS OF DATA

The intent of this study was to determine if a difference existed between the self-esteem levels of women who have normal pregnancies and those who have complicated pregnancies. In addition, demographic data were collected and tested to determine if any variances in self-esteem levels occur within these subsets of the normal and complicated sample populations. The demographic variables evaluated were marital status, race, hospital units, and educational levels. This chapter will discuss the analysis of the data collected for this study by first describing the sample populations and then by reporting the results of the study. The chapter will end with a summary of all of the findings of this study.

Description of Sample

The sample population included 60 subjects with pregnancies of at least 28 weeks gestation. The subjects comprised two groups: a complicated pregnancy group and a group experiencing normal pregnancies. Each group

contained 30 subjects, the complicated pregnancy group being located in hospital obstetrical units and the normal group attending prenatal clinics for their obstetrical care.

The marital status, age, race, last grade completed in school, and estimated gestation were examined for all 60 subjects. The subjects of the complicated group were further identified as to the specific hospital unit to which they were confined.

Analysis of the marital status data revealed a total of 28 single subjects, 15 in the normal group and 13 in the complicated group. There were 28 married subjects, 12 in the normal group and 16 in the complicated group. Three subjects in the normal group and one subject in the complicated group indicated that they were divorced or separated.

Examination of the age data revealed a total of 46 subjects in the age range of 18 to 20 years, 25 in the normal group and 21 in the complicated group. There were 13 subjects in the age range of 21 to 24 years, 5 in the normal group and 8 in the complicated group. One subject in the complicated group was in the 25 to 29 year age range.

Analysis of the data pertaining to race demonstrated the racial balance of Blacks and Anglos as intended by the method of data collection. The sample consisted of 30 Black and 30 Anglo-Americans, 15 of each ethnic group in both the normal and complicated groups.

Examination of the last grade completed in school revealed that a total of 43 subjects completed high school. Of these 43 subjects, 11 had completed some college courses (grades 13, 14, and 16). Table 1 shows the educational level of the normal and complicated groups.

Table 1
Educational Level of Subjects in the
Normal and Complicated
Sample Groups

Completed Grade of School	Normal n = 30	Complicated n = 30
8	1	1
10	9	6
12	15	17
13	4	2
14	1	3
16	0	1

Data for the estimated gestational age of the subjects were unreliable for the normal group due to conflicting and inadequate data in the medical records regarding the diagnosis. The estimated gestations for the complicated group appeared to be reliable due to more extensive physical examinations required in the hospital setting. The analysis of this data for the complicated group indicated that 19 of the 30 subjects had estimated gestations between 34 and 39 weeks. Table 2 illustrates the distribution for the complicated group.

Table 2

Estimated Gestations (EGA) of the Subjects
in the Complicated Sample Group

EGA (weeks)	Complicated Sample Group n = 30
28-30	5
31-33	2
34-36	8
37-39	11
40-42	4

For the complicated group the data concerning hospital units to which the subjects were confined were

evaluated, revealing a total of 16 subjects who were confined to the high-risk pregnancy unit of the hospital. The remaining 14 subjects were assigned to three post-partum units within the same hospital.

Findings

The evaluation of the self-esteem scores of the total sample population of Black and Anglo subjects resulted in mean scores of -2.7 for the group experiencing normal pregnancies and -2.2 for the group experiencing complicated pregnancies. The frequency distribution of the scores for these groups is shown in Table 3. The range and the mean of the scores is shown in Table 4.

Table 3

Frequency Distribution of Scores of the Normal and Complicated Sample Groups

Score	Normal n = 30	Complicated n = 30
-6*	7	5
-4	9	6
-2	7	10
0	3	5
+2	3	2
+4	1	2
+6**	0	0

* = highest self-esteem

** = lowest self-esteem

Table 4

Mean and Range of Scores of the Normal
and Complicated Sample Groups

	Normal n = 30	Complicated n = 30
Range	-6 to +4	-6 to +4
Mean	-2.73	-2.20

Testing for the significance of these mean variations between the normal group and the complicated group resulted in a U statistic of 518 and a z score of 1.01. This z score is not significant at the .05 level.

The self-esteem scores of the subjects were also evaluated for marital status, race, and educational level for the normal and complicated pregnancy groups. The variable of the assigned hospital unit was evaluated for the complicated group.

In evaluating marital status, all unmarried, separated, or divorced subjects were in the single population. Statistical tests were performed to determine if there were a difference in self-esteem levels between those having complicated pregnancies and those having normal pregnancies within this single population. The mean of the scores for the normal group was -3.66 and -1.86 for

the complicated group. The ranges of scores for both groups were -6 to +4. In testing for the significance of the mean differences, the U statistic was 122 and the resulting z score was $-.15$, not significant at the .05 level.

Racial differences were also explored through a variety of groupings. First, the differences in self-esteem scores were evaluated between Black-American and Anglo-Americans regardless of the presence or absence of pre-eclampsia. The range for both groups was -6 to +4. The mean for the Black population was -2.7 and the mean for the Anglo population was -2.1 . The U statistic was 512.5 and the resulting z score was $.92$, not significant at the .05 level. The frequency distribution of scores for these populations is shown in Table 5. The range and mean of scores is shown in Table 6.

Table 5

Frequency Distribution of Scores of the Black
and Anglo Populations--Normal and
Complicated Pregnancy
Groups Combined

Score	Black n = 30	Anglo n = 30
-6*	5	7
-4	11	4
-2	8	9

Table 5 (continued)

Score	Black n = 30	Anglo n = 30
0	4	4
+2	0	5
+4	2	1
+6**	0	0

* = highest self-esteem

** = lowest self-esteem

Table 6

Mean and Range of Scores of the Black and
Anglo Populations--Normal and
Complicated Pregnancy
Groups Combined

	Black n = 30	Anglo n = 30
Range	-6 to +4	- 6 to +4
Mean	-2.73	-2.07

An analysis of the data to determine if there were a difference between Black women having a complication in their pregnancy and Black women having a normal pregnancy, revealed a mean of -2.3 for the complicated group and a mean of -3.2 for the normal group. The frequency distribution of scores for these groups is shown in Table 7 and the range and mean of scores is shown in Table 8.

Table 7

Frequency Distribution of Scores in the Black
Population--Normal and Complicated
Sample Groups

Score	Normal n = 15	Complicated n = 15
-6*	3	2
-4	7	4
-2	3	5
0	1	3
+2	0	0
+4	1	1
+6**	0	0

* = highest self-esteem

** = lowest self-esteem

In testing for significance of the difference of these means, a U statistic of 141.5 and a z score of 1.20 were calculated. This difference proved to be the

Table 8

Mean and Range of Scores in the Black
Population--Normal and Complicated
Sample Groups

	Normal n = 15	Complicated n = 15
Range	-6 to +4	-6 to +4
Mean	-3.20	-2.27

greatest noted in this study, though still not considered significant at the .05 level.

Further groupings of the data focused on racial differences within the normal and complicated sample groups. Within the normal population the scores of Black and Anglo-Americans were ranked and summed. The Black group had a range of scores from -6 to +4 and a mean of -3.2. The Anglo group had a range of scores from -6 to +3 and a mean of -2.3. The U statistic equaled 134 with a z score of .89 which was not significant at the .05 level.

The complicated group also showed minimal differences between Blacks and Anglos with ranges for both groups of -6 to +4, a mean for Black women of -2.3 and for Anglo women of -1.9. The U statistic was 121 and the z score was .35 which was not significant at the .05 level.

Educational levels were evaluated for the normal and complicated pregnancy groups. The education range for the normal group was 8 to 14 years with a mean of 11.5 years. The range for the complicated group was 8 to 16 years with a mean of 11.9 years. These differences were not significant at the .05 level of significance, having a U statistic of 503.5 and a z score of .79.

Data relating to the hospital unit on which members of the complicated sample group were placed were also evaluated. This analysis was performed to determine if women placed on a special, more isolated high-risk unit exhibited differences in self-esteem levels from other members of the complicated pregnancy sample group who were placed on postpartum units. Of the total complicated sample group of 30 subjects, there were 16 women who were maintained on the high risk pregnancy unit. The remaining 14 women were admitted to the three postpartum units at the hospital employed in the study. The range of the scores of the subjects on the high-risk unit was -6 to +4 with a mean of -2.1. The U statistic from these scores was 118.5 and the z score was .27. This z score is not significant at the .05 level.

Summary of Findings

The Mann-Whitney U test was performed to test differences between two groups of pregnant women, one group with normal pregnancies and the other with complicated pregnancies. The groups were compared on scores of self-esteem and demographic variables of marital status, race, educational levels, and hospital units. None of the comparisons were significant at the .05 level.

A comparison of Blacks only demonstrated the highest difference, with the complicated group of Blacks showing lower self-esteem scores than the normal group. The z score for this comparison was 1.2 or not significant at the .05 level.

CHAPTER 5

SUMMARY OF THE STUDY

The diagnosis of a high-risk pregnancy, one which may endanger the life of the woman as well as that of her unborn child, has an enormous impact upon the woman and her entire family. Many stresses of such an illness are obvious including possible physical discomfort, severe limitations in one's activity level, separation from family and friends, as well as financial burdens. The emotional impact of a complicated pregnancy is different in meaning for each individual and not so easily delineated or understood. It was the purpose of this study to gain new information in this area by determining if there were a difference in self-esteem levels between women having normal pregnancies and women having complicated pregnancies. Also considered were the influences of ethnic group, age, marital status, educational levels, and hospital unit assigned upon the self-esteem levels of these two groups.

Summary

To determine if there were differences in self-esteem levels between women having normal pregnancies and

those having complicated pregnancies, a non-experimental, exploratory research design was used. The target population consisted of Black and Anglo-American adult primigravidas receiving full or partially funded obstetrical care through the public hospital system of a large city in the Southwest. Two sample groups were chosen using a mixed sampling design. One group, selected by convenience sampling, included women who had been admitted to the hospital for pre-eclampsia. The other group, chosen by quota sampling, consisted of women experiencing normal pregnancies who were attending a clinic for prenatal care. Subjects in both groups were asked to complete the Rosenberg Self-Esteem D-1 (1965) questionnaire as well as a demographic data form.

The analysis of the data included determination of the range and mean of both sample populations as well as the computation of the Mann-Whitney U test. Data from the demographic form as well as information concerning ethnic group and hospital unit assigned were evaluated using these statistical methods.

Discussion of Findings

The differences in self-esteem noted between the normal sample group and the complicated group were small

and not significant at the .05 level. However, the mean of the scores of the complicated group was lower than that of the normal population. Unfortunately, no other research has been conducted in this area. The possibility that the measurement of the self-esteem tool used was not adequately precise must be considered. The researcher did note that women who had made statements that reflected decreased feelings of self-worth often responded to the questionnaire with answers which were not consistent with these verbalized feelings. It was also possible that the race of the researcher might have had an affect on the response to the questionnaire of some of the subjects.

The marital status and the educational level of the subjects were evaluated to determine if women would differ in their levels of self-esteem within each group depending upon their marital status or level of education. The data from this study indicated no differences of significance for either of these variables. Research relating marital status or educational level with pregnancy complications does not exist for comparison.

Data concerning the hospital units to which the complicated patients had been assigned were collected and determined to be not significant at the .05 level.

This finding does not support the belief that women on the postpartum units might experience lowered self-esteem levels as they were continually exposed to women who had had normal pregnancies and experienced a short and uncomplicated hospital stay. The high-risk unit, it was believed, would shelter the women from these continual reminders of the abnormal qualities of their pregnancies. In addition, the specialized more concentrated medical attention provided on the high-risk unit was thought to affect the woman either by alarming her to the severity of her illness or by reassuring and making her feel more worthwhile as a result of the additional attention.

The racial differences explored also revealed no significant differences at the .05 level. The differences between all Blacks and all Anglos in self-esteem scores did correlate with Rosenberg's (1965) study of adolescents. He, too, found only a moderate difference between racial groups in levels of self-esteem scores.

The largest difference, though not significant, was among Black women between normal and complicated pregnancy groups. One might conjecture that if this difference truly existed, it may have been related to a cultural difference in the valuing of the mothering role.

Conclusions and Implications

All of the results of this study were considered not significant at the .05 level. The greatest difference noted was among Black women between normal and complicated pregnancy groups.

The data from this study suggest that nurses cannot assume that a woman who experiences a complication in her pregnancy will suffer a lower self-esteem level. It is essential that professionals provide opportunities for each woman with a high-risk pregnancy to express her feelings concerning her diagnosis and to explore with her the meaning of that particular pregnancy in her life.

Recommendations for Further Study

Due to the lack of research concerning the emotional impact of complicated pregnancies upon the woman and her family, the primary recommendation is for further research in all aspects of this topic. Specifically, it is recommended that this study be replicated using a more refined tool. In addition a study which tests women before and after they contract an illness would give more information concerning the causal effects of a pregnancy complication. The final recommendation of this study is for research which would test the relationship of a

woman's values concerning mothering and its effect on a woman's responses to a high-risk pregnancy.

APPENDIX A

TEXAS WOMAN'S UNIVERSITY
DALLAS, TEXAS 75235



COLLEGE OF NURSING

June 8, 1977

Ms. Allidah V. Poole Hicks
6431 Vickely
Dallas, Texas 75214

Dear Ms. Hicks:

The Dallas Center Sub-committee for Human Research has approved your proposal for "Self-Esteem Levels in Normal and Complicated Pregnancies." Following acquisition of agency approval, you may now proceed with your data collection as planned.

Sincerely,

Geri Goosen

Geri Goosen, R.N., M.S.
Assistant Professor/Coordinator
Graduate Medical/Surgical Nursing
Chairman of Human Research Committee

cc: Dr. Phyllis Bridges
Graduate Dean

GG:js

OFFICE OF THE ASSOCIATE DEAN
TEXAS WOMAN'S UNIVERSITY
DALLAS CENTER
1810 INWOOD ROAD
DALLAS, TEXAS 75235

OFFICE OF THE DEAN
TEXAS WOMAN'S UNIVERSITY
BOX 53028, TWU STATION
DENTON, TEXAS 76206

OFFICE OF THE ASSOCIATE DEAN
TEXAS WOMAN'S UNIVERSITY
1130 M. D. ANDERSON BLVD.
HOUSTON, TEXAS 77025

APPENDIX B

May 10, 1977

Estelle Kurtz, M.S., R.N.
Department of Nursing

Dear Ms. Kurtz:

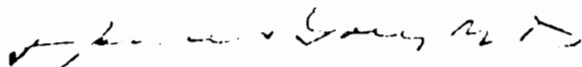
The Human Research Review Committee has approved your request for a study entitled "Proposal for Study-Self-Esteem Levels in Normal and Complicated Pregnancies."

The committee asked me to remind you that both the university and the Department of Health, Education and Welfare regulations require that written consents must be obtained for all human subjects in your studies. These consent forms must be kept on file for a period of three years past completion or discontinuation of the study and will no doubt be subject to inspection in the future.

Furthermore, we have been directed to review any change in research procedure that you might find necessary. In other words, should your project change, another review by the committee is required, according to DHEW regulations.

You are reminded that all grant applications and any solicitation of funds must be processed through the office of Grants Management and Development. Funds received as a result of an application having been submitted directly to a granting agency by a faculty member will not be accepted by the institution.

Sincerely,



Andres Goth, M.D.
Chairman
Human Research Review Committee

rmc

APPENDIX C

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS

DALLAS CENTER
1810 Inwood Road
Dallas, Texas 75235

HOUSTON CENTER
1130 M.D. Anderson Blvd.
Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE _____

GRANTS TO Allidah V. Poole Hicks, R.N.

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Whether or not there is a difference in self-esteem levels between women who are having complications in their pregnancies and those who are not.

The conditions mutually agreed upon are as follows:

1. The agency (~~may~~) (may not) be identified in the final report.
2. The names of consultative or, ^{nursing} administrative personnel in the agency (may) (~~may not~~) be identified in the final report.
3. The agency (~~may not~~) (does not want) a conference with the student when the report is completed. *Send appropriate copy of findings*
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: _____

Date May 17, 1977

Allidah V. Hicks
Signature of student

[Signature]
Signature of Agency Personnel

Estelle D. Kuntz, M.S., R.N.
Signature of Faculty Advisor

*Fill out and sign three copies to be distributed as follows: Original -- Student; first copy -- agency; second copy -- T.W.U. College of Nursing.

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS

DALLAS CENTER
1810 Inwood Road
Dallas, Texas 75235

HOUSTON CENTER
1130 M.D. Anderson Blvd.
Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE City of Dallas Public Health Department

GRANTS TO Allidah V. Hicks, R.N.

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Whether or not there is a difference in self-esteem levels between women who are having a complication in their pregnancies and those who are not.

The conditions mutually agreed upon are as follows:

1. The agency (may) ~~(may not)~~ be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) ~~(may not)~~ be identified in the final report.
3. The agency (wants) ~~(does not want)~~ a conference with the student when the report is completed.
4. The agency is (willing) ~~(unwilling)~~ to allow the completed report to be circulated through interlibrary loan.
5. Other: Please furnish agency with a copy of completed study.

Date _____

Allidah V. Hicks
Signature of student

[Signature]
Signature of Agency Personnel

Estelle D. Kurtz, M.S. R.N.
Signature of Faculty Advisor

*Fill out and sign three copies to be distributed as follows: Original -- Student; first copy -- agency; second copy -- T.W.U. College of Nursing.

APPENDIX D

PRINCETON UNIVERSITY PRESS

PRINCETON · NEW JERSEY 08540

Allidah V. Hicks
6431 Vickery
Dallas, Texas 75214

20 October 1976

SOCIETY AND ADOLESCENT SELF-IMAGE, by Morris Rosenberg (Princeton University Press, 1965; Princeton Paperback, 1968): Scale D-1 (Self-Esteem) in the Appendix D

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APPENDIX E

TEXAS WOMAN'S UNIVERSITY

(Form A -- Written presentation to subject)

Consent to Act as a Subject for Research and Investigation:

(The following information is to be read to or read by the subject):

1. I hereby authorize Allidah V. Hicks, R.N.
(name of person(s) who will perform
procedure(s) or investigation(s))

to perform the following procedure(s) or investigation(s): (Describe in detail)

I understand that the researcher is attempting to obtain more information concerning pregnant women's feelings about themselves. I will be asked to complete a two-part questionnaire with a total of 13 questions. It should only require a maximum of ten minutes of my time, although there is no set time limit for completing the questionnaire. When I have finished the questions, I have been asked to place them in the envelope provided. The researcher will return in 15 minutes and will invite me to talk about the questionnaire or any feelings that I may have concerning it.

2. The procedure or investigation listed in Paragraph 1 has been explained to me by Allidah V. Hicks, R.N.
(name)
3. I understand that the procedures or investigations described in Paragraph 1 involve the following possible risks or discomforts: (Describe in detail)

Perhaps some of the questions that will be asked of me on the questionnaire may cause me to have some feelings or thoughts that could be uncomfortable. In the case that this should occur, I understand that the researcher will invite me to talk about these feelings immediately after the completion of the questionnaire.

(Form A -- continuation)

3. I understand that the procedures and investigations described in Paragraph 1 have the following potential benefits to myself and/or others:

The researcher is hopeful that the results of the study will provide nurses and doctors with more information about the way pregnant women feel. With this knowledge, it is hoped that those in the health professions can give special attention and provide better services to pregnant women to help make pregnancy a good experience for all.

4. An offer to answer all of my questions regarding the study has been made. If alternative procedures are more advantageous to me, they have been explained. I understand that I may terminate my participation in the study at any time.

Subject's signature

Date

(If the subject is a minor, or otherwise unable to sign, complete the following):

Subject is a minor (age____), or is unable to sign because:

Signatures (one required)

Father

Date

Mother

Date

Guardian

Date

APPENDIX F

23313

CONSENT TO INVESTIGATIONAL PROCEDURE OR TREATMENT

If subject is a patient, his attending physician must be consulted and this completed form placed in the patient's medical records.

SUBJECT _____ UNIT NO. _____

1. I hereby give my consent to Allidah V. Hicks, R.N. to perform or supervise the following investigational procedure or treatment:

The subject will complete 3 questions concerning age, marital status,

and educational level, and then complete a 10-item self-esteem

questionnaire

on

NAME OF SUBJECT

2. The nature and purpose of the procedure or treatment, possible alternative methods of treatment, the risks involved, and the possibility of complications have been explained to me by Allidah V. Hicks, R.N. I understand that the procedure or treatment to be performed is investigational and that I may withdraw my consent for my (his, her) further participation as a subject at any time without affecting my (his, her) status as a patient. With my understanding of this, having received this information and satisfactory answers to the questions I have asked, I voluntarily consent to the procedure or treatment designated in Paragraph 1 above upon

NAME OF SUBJECT

TIME

DATE

WITNESS: _____

SIGNED: _____
SUBJECT OR PERSON RESPONSIBLE

WITNESS: _____

RELATIONSHIP

Verification of explanation and patient consent should be recorded in the progress notes of the medical record.

Instructions as to persons authorized to sign:

If the subject is not competent, the person responsible shall be the legal appointed guardian or the nearest of kin.

If the subject is a minor under 21 years of age, the person responsible is the mother or father or legally appointed guardian.

If the subject is unable to write his name, the following is legally acceptable:

John H. (His X Mark) Doe and two (2) witnesses

APPENDIX G

Please place an (X) under the answer that best describes how you feel toward each statement.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. I feel that I'm a person of worth, at least on an equal basis with others.	_____	_____	_____	_____
2. All in all, I am inclined to feel that I am a failure.	_____	_____	_____	_____
3. I feel that I have a number of good qualities.	_____	_____	_____	_____
4. I feel I do not have much to be proud of.	_____	_____	_____	_____
5. I am able to do things as well as most other people.	_____	_____	_____	_____
6. I wish I could have more respect for myself.	_____	_____	_____	_____
7. I take a positive attitude toward myself.	_____	_____	_____	_____
8. I certainly feel useless at times.	_____	_____	_____	_____
9. On the whole, I am satisfied with myself.	_____	_____	_____	_____
10. At times I think I am no good at all.	_____	_____	_____	_____

DEMOGRAPHIC DATA FORM

Please place an (X) by the answer that applies to you.

AGE:

_____ 18-20
_____ 21-24
_____ 25-29
_____ 30-35

MARITAL STATUS:

_____ Single
_____ Married
_____ Separated
_____ Divorced
_____ Widowed

YEARS OF SCHOOL
COMPLETED:

_____ through grade 8
_____ through grade 10
_____ through grade 12 (high school)
_____ additional education - 1 yr.
_____ additional education - 2 yrs.
_____ additional education - 4 yrs.

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