

PERCEPTION OF BODY IMAGE IN ELDERLY
PERSONS AFTER TOTAL HIP REPLACEMENT

by

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ABSTRACT

This study was done to explore the following question: "Are there differences in an older person's perception of self body image, pain, and physical disability before, one week following, and three weeks after having total hip replacement surgery?"

The conceptual framework for this study was based on theories of perception of body image, which were defined as a combination of perception, action, impression, and expression.

The sample consisted of ten subjects: six females and four males whose ages ranged from 61 to 78 years and who were admitted to the orthopedic unit in one of two hospitals in the southwestern United States.

The four parts of the questionnaire were completed by each subject one to two days prior to the surgical procedure. Parts II, III, and IV were completed again by each subject one week after surgery and three weeks after surgery, or just prior to hospital discharge, whichever was sooner.

Analysis of the data showed that differences between preoperative and first-week and third-week postoperative feelings were significant; the subjects had positive attitudes toward their body image after surgery. The subjects perceived that pain and physical disability were decreased and body image was more positive.

CHAPTER 1

INTRODUCTION

The most significant advance of our time for the treatment of hip disease and discomfort due to arthritis is the development of corrective surgical procedures, most specifically, total hip replacement.

A manpower study conducted by the Arthritis Foundation in 1973 found that approximately 20 million (ten percent) individuals living in the United States have discernible symptoms of arthritis and more than 15 million of those individuals were between 45 and 65 years of age. Arthritis does not have a high mortality rate in comparison to cancer and heart disease; however, the enormous psychological, physical, and economic impact that arthritis has on an individual because of pain and functional impairment makes it one of the major disease problems in the United States. The study documented the cost to this country in areas of manpower loss, disability pensions, and health care costs. In 1969, persons of all ages with arthritic-type diseases were bedridden for more than 70 million days due to these disabling conditions.

The report of the Arthritis Foundation (1970, p. 2), stated that "the cost in human suffering, in pain and disability is beyond measurement." In addition to the dollar cost for health care, more than 14 million work days were lost by the employed arthritics in 1969 due to these diseases. This statistic gives no indication of those

individuals who were so disabled due to the disease that they were unemployable. Arthritis is probably the most devastating affliction of modern mankind. It has been estimated that more than half of the affected population are not receiving the appropriate kind of treatment (Chao, 1976).

Since the dramatic breakthrough of Charnley's (1970) total hip replacement arthroplasty and the development of an effective prosthesis fixation cement (methyl methacrylate), many patients severely disabled with arthritic hips have been treated successfully and are able to function independently. The introduction of replacement arthroplasty not only for the hip joint but for other skeletal joints as well, has created a new dimension in the traditional treatment for the arthritic patient (Chao, 1976). Feinstein and Habermann (1977) recommended total hip replacement surgery to increase an individual's independence, and thus enable him to perform the basic activities of daily living. Cabanela (1976) reported that the Wiles of England in 1938 was the first to replace both the hip joints and Haboush of England in 1951 was the first to use acrylic cement to firmly fix the femoral and acetabular components to surrounding bone tissue. The work of Charnley, McKee, and Farrar in 1950 (cited by Galante, 1973) of England has accounted for the present widespread use of this procedure. The predictable result, a stable hip with pain-free, nearly normal motion, has made total hip replacement enormously popular among orthopedic surgeons as well as among patients with disabling hip conditions.

Total hip replacement is one of modern medicine's major contributions that not only increases the life-span of the disabled

arthritic patient but augments the quality of the life. It has simplified and shortened the care of patients with degenerative hip disease while changing the lifestyle of those individuals. After total hip replacement, the patient is free of pain and once again able to walk. However, the individual may be worried about the changes in his body appearance and apprehensive about a possible relapse and reoccurrence of pain.

The investigator for this study assumed that a patient who is suffering from a physical disability of the hip has a negative body image because it is well known that physical deterioration of a body can affect an individual's emotional adjustment (Schwab and Harmeling, 1968). Studies concerning patients' attitudes and knowledge about arthritis have found that psychological factors are positively related to patients' reports of ability to cope with life situations (Edwards and Klemmack, 1973). Individuals seem to experience great apprehension when they develop symptoms that indicate disabling dysfunction of their body parts. Because the individual's shape and posture have changed, he classifies himself as a member of a minority, an experience with concomitant negative connotations.

In 1935, Schilder (cited by Shontz, 1969, p. 170), one of the first body-image theorists, defined body image as "the picture of our own body which we form in our mind, that is to say, the way in which our body appears to ourselves." Norris (1970) emphasized that body image is the constantly changing total of conscious and unconscious information, feelings, and perceptions about one's body in space as

different and apart from all others. It is a social creation, developed through the reflected perceptions about the surface of one's body and responses to sensations originating from the inner regions of the body as the individual copes with a kaleidoscopic variety of living activities. Body image is basic to identity and has been referred to as the somatic ego.

Body image asserts that the value a person places on himself is a result of the social interplay that takes place between himself and those in his environment. The individual's sense of body image is derived from his definitions of all the various roles, values, and goals that have been acquired or accumulated.

The elderly constitutes a group with whom nurses have close and continuous contact. Most of the elderly are able to cope with their physical and social needs; however, as individuals grow older, more assistance may become necessary. Some of the disabled elderly who are chronically ill may often be considered confused and child-like in their demands. It is important that professional nurses have a clear picture of how the aged view themselves and of how they cope with life both in the community and in an institution. Lee (1976) wrote that on an individual level, this knowledge may be used to bolster an older person's self-esteem and to avoid situations that detract from his independence. On the social level, this knowledge assists nurses in avoiding social practices that deny meaningful roles to older people. Nurses in their care-giving positions can coordinate and contribute to the planning for the care of the aged in a unique way.

Based on the above discussion that there is considerable agreement that the body image, or schema, functions as a standard or frame of reference which influences the way in which a person perceives himself and affects his ability to perform. The body image is developed slowly and is learned in the process of growth and development (Norris, 1970). The present study was based on the concept of self-perception, that combines the factors of body image, physical disability, and pain. The influence of pain, physical disability, and perception of body image before and after total hip replacement surgery is explored.

Statement of the Problem

Are there differences in an older person's perception of his body image, his pain, and his physical disability before and after having total hip replacement?

Significance of the Problem

Nurses are in a unique position to meet the health care needs of the patient as a whole. It is essential for nurses to deal with the concept of perception as it relates to body image and the factors of pain and physical disability in the elderly individual with total hip replacement.

Several writers (Jourard and Secord, 1955; Secord and Jourard, 1953; and Sternbach, 1968) postulated that physical illness often alters the body image and thereby affects the emotional well-being of an individual. Schwab and Harmeling (1968) reported a negative feeling toward body parts and functions may cause the symptoms or illness. Schilder

(1950) also stated that pain would increase awareness of the part causing the pain. Plutchik, Bakur-Weiner, and Conte (1971) stated that individuals with physical disabilities would perceive their bodies differently and therefore that the nature of their body image would differ accordingly.

The concern of nursing is with man in his entirety, his wholeness. Nursing's body of scientific knowledge seeks to describe, explain and predict about human behavior.... Nursing does not develop out of a vacuum. Rather, it is the scientific extension of man's centuries-long interest in life and its manifestation (Rogers, 1970, p. 3).

Rogers (p. 96) identifies what she believes are the fundamental attributes of man and from these develops the following basic assumptions:

Man is a unified whole, is unique and manifests characteristics that are more than, and different from the sum of his parts. Man and his environment are involved in a continuous and mutual exchange of matter and energy.... Man is characterized by the capacity for abstraction and use of image, language, thought, sensation and emotion.

The literature indicates that an individual's perception of his body is altered when there is pain or a chronic crippling disease that causes physical disability and disfiguration.

"Nursing action is concerned with decisions that help individuals move from a state of dependence during an illness to one of independence and interdependence within the social system" (King, 1971, p. 62). Thus, research producing confirmation regarding factors that affect a patient's perception of health is quite appropriately within the scope and concern of nursing.

Conceptual Framework

The conceptual framework for this study is based on theories of perception of body image. The concept of body image suggests that each of us is surrounded by a perceptual field that is a dynamic equilibrium. Field theories endorse the molar view, which maintains that all parts are intimately interrelated and interdependent (Edelson, cited in Riehl and Roy, 1974).

Chardin and Cornu (cited by Riehl and Roy, 1974, p. 102) suggests that in all dynamically organized systems the properties of the parts are determined partly by the larger whole within which they exist. This means that no one part can be observed in isolation but must be viewed as part of a whole. Just as the individual part influences the perception of the whole, the patterns of the whole influence awareness of the part.

The perceptual field has been referred to as the personal field in the individual's life space, which supports the notion that the act of perceiving is private. Perception is highly subjective, and it is therefore not readily recognized by others but rather through its manifestations in behavior. An individual's perception of reality, not reality itself, is the determinant of behavior (Rogers, 1970).

Gorman (1969) viewed body image as the concept that a person has of his body, which is constantly being influenced by the past and present perceptions and experiences. "The body image is thus a plastic, dynamic entity which is continually being modified by new precepts and new experiences" (Gorman, 1969, p. 8). Studies have identified the concern of nursing with the patient's body image. Kolb (1959) conducted

a study on subjects who were having amputation surgery. Pre- and postoperative assessments included the patient's feelings about his body. Kolb's 1959 study appears to identify the nurse as one of the key figures guiding the patient through an experience that profoundly affects body image; the knowledge of this adds a new dimension and flavor to the quality of nursing judgment.

Body image is defined as one's conceptual and unconscious feelings, facts and perceptions about one's body (Gruendemann, 1975). Its distinct identity is based on outward appearance, inner somatic sensation, and the reactions of "significant others" to his body. Body image is dynamic and tends to remain quite stable throughout life unless one undergoes major trauma or surgery that changes one's external features.

The formation of one's body image begins in early childhood and continues with the process of growing and developing. Body image includes experiences at both the conscious and unconscious levels and is part of personal identity and ego integrity. Any alteration in the body affects the self-esteem or self-concept. Self-concept is the body's psychodynamic foundation and the primary influence factor in the body image.

One's body image, or mental picture of self, may not be the same as the actual structure, function, or outward appearance of the body. Rather, body image is a representation or impression of the self, built around a particular body and its external and internal manifestations as functioning and screened through layers of personally based thoughts and wishes (Gruendemann, 1975). Associated with the individual's concept of bodily self are ideas of worth as a human

being, which involve feelings of superiority or inadequacy and self-acceptance or self-rejection.

Body image is indeed a significant phenomenon in one's total self-appraisal (Gruendemann, 1975). Gruendemann identified some patients who came to surgery with such high expectations of positive body changes that they had only minimal fear of the surgical procedure. This is particularly true of patients who undergo plastic surgery for cosmetic purposes; they tend to dismiss or deny the edema, swelling, and scars, while concentrating on the new curves, colors, profiles, and responses of acceptance from significant others.

Surgery can either enhance or impair perception of body image, and in either case a psychological adaptation that incorporates the newly-manipulated body must take place. Norris (1970) discussed the work involved in recognition of body image. For stability and wholeness, it is necessary that the readjustment of body image be in realistic accord with the actual physical changes caused by surgery. There must be an acceptance of the body as it is or has become and an adaptation to it. If this does not occur, an intense internal struggle ensues, manifested by varying forms of emotional responses. Loxley (1972) identified the reappraisal process that a patient with a crippling deformity must undergo in order to align the changed body image with an altered physical body. The same process is applicable to surgical patients; for example, an image of "crippled forever" is not realistic following a successful hip reduction. On the other hand, surgery such as plastic facial surgery done with the expectation of enhancing the body image may not produce the intended changes. The

The "old face" image may still persist in spite of the physical alteration. In both of these examples there is a conflict or discrepancy between the physically altered body and the body image as perceived by the ego. Patients need assistance from the professional nurse in the resolution of this conflict.

Coopersmith's 1967 research findings regarding antecedents of self-esteem showed that American society places great emphasis on social and economic status, the amount of material comforts and security, and the knowledge and skills gained from education; these factors, however, do not significantly contribute to the development of self-esteem. He found the significant determinant for self-esteem to be the individual's interpersonal environment and his position in that framework within which he interacts. Once formed, body image becomes a permanent constant that resists change, and continued living experiences are necessary to maintain it. Coopersmith (1967) noted that people have a tendency to reject evidence that shows they are better or worse than their self-concept, and Peck (1970) referred to the need for psychological consistency. Elderly people, in particular, exhibit a characteristic behavior or rigidity, and this behavior is not necessarily considered pathological (Peck, 1970). Body image functions to provide a sense of personal continuity over time and space and defends itself against alterations, diminution, and insult (Coopersmith, 1967).

Shontz (1969) reviewed body image research and noted that the body is assumed to serve as a vehicle of expression of one's personality and that personality influences personal body perception. Shontz (1969, p. 11) stated:

Therefore, in body image research personal body perceptions are correlated with measures of personality and variations in body image are accounted for by concurring variations in personality. The goal of body image research is to measure a subject's experience of his body as a conscious or unconscious value-loaded phenomenal activity.

Definition of Terms

Terms used in this study were defined as follows:

1. Elderly individual: A person 60 years of age or older.
2. Body Image: Body image is defined as a combination of perception, action, impression, and expression, a unit in which subjective feelings and action are interrelated (Schilder, 1950).
Body image was measured with the Body Cathexis (BC) Scale of Jourard and Secord (1955).
3. Pain: Any physically uncomfortable sensation as identified by the patient.
4. Physical disability: A disability that prevents participation in physical or social activities.

CHAPTER 2

SELECTED REVIEW OF THE LITERATURE

This chapter contains a selected review of the literature on the perception of elderly individuals who have had total hip replacement surgery to the following factors: (1) pain, (2) physical disability, and (3) perception of body image.

Pain

The factor of pain is important to consider because of its centrality to the values of man, its influence on the whole of man's experience, and its existence as a common, recurring clinical entity. The function of pain is to warn of danger. Nonprofessional persons many times associate pain with danger (William, cited in Weisenburg, 1975).

According to Petrie (1967) pain is central to human experience. He states that there is nothing in human experience more central than our capacity to feel, and no aspect of this so crucial as our capacity to suffer, perhaps more particularly to suffer from extremes of physical pain. These capacities result from the impact of events and forces on some particulars of our sensory equipment, and involve our ability to act, to respond, to live, in the most intimate and fundamental ways.

Pain is often interpreted as threatening; that is, it gives an impression of damage to the body (Keele, 1972; McLachlan, 1974). Pain from an unknown cause can particularly be viewed as a threat to life

and health, both of which are central values in human culture. The study of pain is important because of its influence on other aspects of an individual's life patterns. Pain affects both an individual's perception of other experiences and the ability to handle or cope with them. Its origins may differ and the severity of its manifestations may vary, but its existence is common. Bruegel (1971) described the perception of pain as varying greatly from person to person. Pain was described as having individual and personal meanings and is influenced by the psychological and sociocultural factors that affect the individual at the time of the pain experience.

Mastrovito (1974) suggested that experiences with pain in childhood influence the individual's response to pain in later life. These experiences include the behavior and attitudes of the child's significant others that either provoke or alleviate pain. Culture, family, and individual attitudes affect concepts about pain and influence reaction to suffering.

Mastrovito (1974) defined pain as a perceptual phenomenon. It differs from other perceptions in that it is accompanied by emotional responses of varying degrees. She suggests that pain is influenced by such psychological factors as one's own emotional state, personality, past experiences, and ability to handle or cope with them.

Pain is defined as a subjective phenomenon, which involves both a physical sensation and a response experience (Sternbach, 1968; Petrie, 1967). Zborowski (1952) pointed out that culturally defined attitudes toward pain determine both one's perception and reaction to pain. Two conclusions can be drawn from Zborowski's idea: (1) similar reactions

to pain demonstrated by members of different ethnocultural groups do not necessarily reflect similar attitudes to pain, and (2) reactive patterns may have different functions in various cultures. Boas (1940) and Benedict (1940) suggest there is strong experimental evidence to show that attitudinal factors tend to influence the pain response of different cultural groups. Hardy, Wolf, and Goodell (1952) stated that knowledge of group attitudes toward pain is important to the understanding of both perception of pain and reaction to it.

Jacox (1977) views pain as complex and subjective. She points out that psychological and sociocultural factors do influence a person's experience with pain. These factors operate at every point in the pain experience, contributing to the illness or condition with which the pain is associated, the interpretation of the pain sensation, the response to the sensation, the tendency to report the pain to another person, the assessment process, the method chosen to alleviate the pain, and the response to the treatment. Schwab and Harmeling (1968) noted that negative feelings toward the body were associated with those body parts and functions that caused the symptoms or illness. They found that the patient's perception of illness affected the body-image ratings rather than the physician's analysis of the severity of the illness.

Melzack (1961, p. 41) wrote that "pain is not only a fixed response to a hurtful stimulus, its perception is modified by our past experiences, our expectations and more subtly, by our culture." The gate-control theory and the specificity theory are among the exact theories used to explain and investigate pain. The specificity theory

offers rationale for surgical intervention and the gate-control theory gives a basis for a pharmacological approach.

Petrie (1967) and Lipowski (1970) have both postulated that individuals use different coping styles to deal with pain. These styles either minimize or focus directly on pain. Experiences of discomfort as a result of pain, "are privately experienced and are only felt by the person experiencing them" (Wu, 1973, p. 31). Differences in pain tolerance according to age, sex, and race found in a study conducted by Woodrow et al. (1975) reported that the average tolerance of pain decreased with age, that men tolerated more pain than women, and whites tolerated more pain than orientals, while blacks occupied an intermediate position. Schilder (1950) stated that the effect of pain as perceived by the patient is expected to foster a negative body image, and he also pointed out that pain caused the person to focus on the part of the body associated with the pain.

Physical Disability

When an individual becomes physically disabled, some disequilibrium may ensue because of the changing of the role. For example, the role of males in our society are undoubtedly that of the breadwinner or family provider. Christopherson, Coulter, and Wolanin (1974, p. 40) stated: "objective reality may not correspond closely to perceptual reality, consequently, the new role alternatives available to the disabled individual may be completely overlooked in his perceptual organization or they may be seen only dimly."

When one of the bodily functions becomes distressed, a manifestation of this distress is that of shame. Rubin (1968) suggested that enabling another to achieve or maintain control has been called the process of "lending ego," a new description for graciousness, which is certainly a therapeutic capacity well within the province of the nurse. Dow (1966) determined that attitudes toward disability and emphasis on physique were influences that determine an individual's adjustment to loss of functioning.

Yuker (cited by Bernstein, 1976, p. 96) asserted that disabled persons who accept themselves and their disabilities tend to be relatively well adjusted, highly motivated, and hardworking regardless of the extent of their disabilities.

Successful treatment of the individual afflicted with rheumatic disease is aimed at prevention of deformity and disability and maintenance of residual functioning (Arthritis Foundation, 1973). A study by Shanas (1968) revealed that functional independence in personal care is important to the positive perception of health. Chinn and Roberts (1970) likewise found function a central concept to self-rating of health. Physical activity and abilities such as mobility around the home, dressing one's self and tying on shoes, combing one's hair, walking up and down stairs, foot care, and washing and bathing were found to be significantly related to objective health status (Rosencranz and Pihlblad, 1970).

Any alteration in the body image affects the self-esteem or self-concept of an individual (Roberts, 1976; Rosen and Ross, 1968). Some of the behavior that reveals an alteration in a person's body

image has been discussed by both Roberts (1976) and Kolb (1959). Kolb's (1959) work was done mostly with surgical patients and specifically those with an amputation, but the process of adaptation was similar, including anxiety, mourning for the lost part, hostility, and dreams. He believed that healthy adaptation was marked by a patient's willingness to discuss his loss or illness and to accept the effects and cooperate with health-care workers. An unhealthy adaptation was marked by continued denial, failure to incorporate new ideas, depression, and excessive or prolonged hostility. This sometimes progressed to a psychotic state.

Body Image

Body image is defined as a combination of perception, action, impression, and expression, all acting as a unit in which subjective feeling and action are interrelated (Schilder, 1950). Shontz (1969) has said body image, once established, defines and places demands and limitations on what the person is capable of in life. Horowitz (1966) has emphasized that body image is a tridimensional image that includes that part of our bodies we see; the sensations we receive from other modalities, including position sense; the relationship of the body to its surroundings; and the significant people and events in our surroundings. While Schilder (1950) has made clear that body image involves a conglomeration of the mental representations of the body and its organs, it does not coincide with the objective body. The body image has both physical features as in the postural model and secondary emotional values associated with this physical image.

There are two factors important in the development of body image. They are believed to be the external and the internal body images, both of which are viewed differently. The external body image is formed from kinesthetic and tactile sensations, while the internal body image is gained through pictures, diagrams, and written material, which is often erroneously understood (Orbach and Tallent, 1965). Awareness of the internal organs and their incorporation in the body image is gained through sensation of pain and discomfort (Kolb, 1959). Schilder (1950) pointed out that a person isolates the pain and reacts to it by focusing attention on the part causing the pain. At the same time, there is an effort to push the painful part out of the body image.

The formation of body image is affected by such factors as age, kinesthetic and tactile sensations, pain, sex, and family and cultural influences. The age of the person determines the level of development of body image and the stability of that image. The importance attached to certain body parts also changes with age (Weinstein et al., 1964). Several studies have found that age does not disturb or distort the body image but the value of sex-related parts does fluctuate with age (Schwab and Harmeling, 1968).

There is some controversy over the role of sex in relationship to body image. The literature tends to support the idea that women have a more clearly defined and thus a more stable body image than do men (Murray, 1972; Fisher, 1964, 1970). However, the general consensus is that there is no solid evidence for a difference between males and

females in their ability to perceive and evaluate their bodies (Fisher, 1970).

Our body, and with it our body image, is a necessary part of every life experience. One sees that the body image can constrict or expand. Fisher (1970, p. 28) noted that body constancy is a learned aspect of the body image.

As quickly as possible the culture tries to conventionalize body experience ... certain body zones are defined as publicly touchable and others are "off limits." ... By and large, the culture enjoins one to keep one's body feelings out of descriptions, judgments, and communications. The process attempts to render body experience a constant controlled variable.

Society has many disapproving and repulsive attitudes toward disfigurement or disability. Kolb (1959) stated that the person who is confronted with a disfigurement or disability expects society to disapprove. The type of disfigurement, rather than the severity, is more likely to initiate the adverse response. Fisher and Cleveland (1958) studied the relation of body boundaries to different cultural groups and found that some aspects of body image are related to the values and customs of the culture.

Few studies were found on body image dealing directly with aging. Plutchik et al. (1971) found that the group with the mean age of 83 years scored the lowest on a test measuring bodily worries and discomfort among various age groups, while the mentally ill group scored the highest. It was also assumed that a person who reported many discomforts would also report that he frequently worried about his bodily functions. They concluded that aging is not positively related to bodily worries, discomfort,

and disturbances of body image but that body-image disturbances is a function of an unusual special life experience such as mental illness.

Plutchik et al. (1973) examined the comparative value of different body parts by asking what dollar value would be acceptable in an insurance claim for the part lost in an accident. This study was applied to a number of different groups, including geriatric patients and university students with ages ranging from 23 to 76 years. The leg, the eye, and the arm were considered of greatest importance, and the finger and toe of least importance in terms of what would be asked in compensation for its loss. The findings were invariant over age groups. Males placed a greater dollar value on their body parts than did females. There was no significant relationship between age and the dollar value placed on either individual body parts or the average for all body parts. However, psychiatric patients placed significantly less value on their bodies than did individuals without psychiatric problems, regardless of age. The order in rank of body parts was thought to be due to the functional importance and the cosmetic value of each body part. Women tended to rank nose and leg higher, while men tended to rank eye and arm higher. Body-part preference was not found to vary with socioeconomic levels or with geographic location. Fisher (1964) found a relatively high consistency level on the ranking of body parts in spite of age, sex, socioeconomic level, or geographic location.

A study by Berscheid, Bohrnstedt, and Walster (1973) was conducted to measure body cathexis, which is defined as one's satisfaction with his body. In an article in Psychology Today, they offered readers

the opportunity to respond to a questionnaire in which the readers were asked to express their thoughts and feelings about their body. Sixty-two thousand readers responded by completing a 109-item "Body Image" questionnaire. From the total number of responses received, 2,000 were selected for analysis. This sample included equal numbers of men and women with ages ranging from 24 through 65 years. The analysis found that about half were quite satisfied or extremely satisfied with their body and that slightly fewer women than men expressed dissatisfaction with their face, while 49 percent of the women expressed greatest dissatisfaction with their hips and weight. The authors found no difference between the age groups in overall body image though a greater proportion of the older respondents felt physical attraction was very important. The authors reported that a "strong correlation" was found between self-esteem and positive body image. Those respondents who identified rapid positive or negative changes in body appearance were less happy than those whose body images had never changed.

Summary

The literature review presented information pertaining to the phenomenon of pain and physical disability, which would alter the perception of the body image of the patient before and after having total hip replacement surgery.

The patient who has a negative body image will frequently also be a patient who experiences pain with his disability. The pain may be a physical manifestation of tissue injury or it may be a symptom of an inability to cope with stresses that disability causes. In the

literature review there were various approaches that were used to investigate pain and disability. Pain is viewed as complex and subjective, relying solely on personal experience and varies greatly from person to person.

Pain has been described by various authors as having individual and personal meanings and as being influenced by the psychological and sociocultural factors that affect the individual at the time of the pain experience. Zborowski (1952) suggested that cultural origin influences the reaction to painful stimuli rather than the perception of the intensity of the stimuli. Patients stated that suffering, the response to pain, seems to begin even before the pain and includes many anticipatory fears. The literature also suggests some alternate and productive ways to approach the problem of pain.

Shanas (1968) and Chinn and Roberts (1970) found functional independence to be a key factor in the positive perception of health. Adjustment to disability and coping with it depends on the individual's recognition and acceptance of the disability.

A positive body image was positively correlated with increased self-esteem. Body image was demonstrated to be relatively constant and enduring despite aging but the value of body parts related to did vary with age. Socioeconomical level and geographic location had no effect on body-part values.

CHAPTER 3

METHODOLOGY

This was a descriptive study designed to answer the following question: Are there differences in an older person's perception of pain, physical disability, and body-image before and after having total hip replacement surgery?

Design of the Study

The patient population for this study was selected from two large hospitals located in a city in the southwestern part of the United States. These two hospitals were chosen because total hip replacement surgery was routinely done at both facilities. Permission to conduct the study was obtained from The University of Arizona Human Subjects Committee and from each patient's private physician (Appendix A). A list containing the names of patients who met the study criteria was obtained from the nurse or secretary in each physician's office.

Fifteen patients were identified and agreed to participate. Of these, 5 did not complete the study for the following reasons: 1 refused to complete the third questionnaire, two had medical complications, 1 had further surgery, and 1 was discharged early from the hospital.

Each patient was seen on the day of admission to the hospital and was asked if he/she would agree to participate in the study. The

investigator identified herself as a graduate student at The University of Arizona College of Nursing. The patient was assured of individual anonymity and the confidentiality of replies and also was informed as to the number of interviews that would be done by the researcher. All 15 patients agreed to participate and signed the consent form (Appendix B).

After receiving permission from the patient the structured four-part questionnaire (Appendix A) was given to the patient and was completed while the investigator was in the room. The last three parts of the questionnaire were again filled out by the patient at two later time periods. The second time, the last three parts of the questionnaire, omitting the first part (the demographic data), was completed between 1 and 8 days postoperatively. And the third time, the same three-part questionnaire was completed between 9 and 18 days postoperatively or before the patient was discharged to home. The patients were informed that after the questionnaires were completed, the investigator would answer any questions.

Sample Population

The patients for the study, who were going to have total hip replacement surgery, were selected from the practice of five private physicians. The following criteria was used:

1. Sixty years of age or older.
2. Able to read, write, and speak English.
3. Caucasian race.

Measurement Tool

A structured questionnaire developed by the researcher was used for data collection for this study. The questionnaire (Appendix A) was divided into four parts. The first part dealt with demographic information about the subjects. The second part dealt with the patient's perception of pain, the third part dealt with the patient's perception of physical disability, and the fourth part dealt with the patient's perception of body image.

Part I: Demographic Data

Part I of the questionnaire included questions about the patient's demographic data: age, sex, education, marital status, occupation, number of children, number of persons living in the household, prior admissions to a hospital, and perceived health status at the time of each interview.

Part II: Perception of Pain

Part II was developed by the investigator, and the 14 questions included were based on the investigator's clinical experience and also on a literature review. These questions asked for information about the patient's reason for seeking medical help; intensity, frequency, and location of pain, medication for pain; any physical limitations caused by pain; effect of pain on social interaction with family or friends; and any symptoms associated with the pain (Appendix B).

For this descriptive study the choice of responses to the 14 questions enabled the patient to identify the effect the pain was having on him/her. Three questions presented the patient with four

choices, 8 questions presented the patients with five choices, and 3 with six or more choices.

Part III: Perception of Physical Disability

Part III of the questionnaire included two sets of questions. The first set was a list of 11 tasks for which the subject was asked to select appropriate responses pertaining to the degree of independence for each task. These questions were partly selected from the Instrument of Activities of Daily Living scale developed by Lawton and Brody (1969). This scale measures such common daily tasks as: (1) dressing (2) bathing (3) eating (4) grooming (5) toileting (6) laundering (7) cooking (8) taking medication (9) shopping (10) housekeeping, and (11) ironing. The researcher devised an alternative method of scoring. Each question had four choices ranging from needed no assistance to needed complete assistance. The score value for each question ranged from 1 to 4 with the total score value of from 11 to 44. The lower the score the more independent the patient was with daily tasks.

The second set contained 16 questions which dealt with mental status. The values for the questions ranged from 1 to 9. The total score areas ranged from 16 to 57. The highest score identified the patient's greatest physical disability.

Part IV: Perception of Body Image

Part IV consisted of three sections. The questions pertained to how the patient perceived himself.

The first section of Part IV contained 6 questions that related to the patient's satisfaction with specific body parts. These 6 questions were selected from the Body Cathexis (BC) Instrument that was developed by Journard and Secord (1955). Each question had four choices ranging from very satisfied to very dissatisfied. The score value for each question ranged from 1 to 4 with a total score value of from 6 to 24. The lower the score the more satisfied the patient was with his body parts.

The second section contained a list of 13 different body parts. This tool for body part values was developed by Fisher (1964) to measure body-rank preference. The body parts included the arm, big toe, breast, ear, eye, foot, hand, hip, leg, nose, thumb, tongue, and tooth and were listed in alphabetical order. The patient was asked to pretend that each body part was lost in an accident and to rank the body part in the order in which he would miss it from 1 to 13.

The third section of Part IV contained three questions that dealt with the patient's attitude about himself as if he believed that surgery would make a change in his life. Each question allowed the patient to select one of four choices from a very positive to a very negative attitude.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

This chapter contains the study findings and the analysis of the data. The analysis is divided into three sections to answer the questions of this study: (1) Are there differences in an older persons's perceptions of severity of pain before and after total hip replacement surgery? (2) Are there differences in an older person's perceptions of physical disability before and after total hip replacement surgery? and (3) Are there differences in an older person's perceptions of body image before and after having total hip replacement surgery?

Demographic Characteristics of the Sample

A total of 15 subjects met the criteria for the study and completed the first study questionnaire. Of these, 5 subjects did not complete the study due to complications. The sample for the data analysis included 4 men and 6 women who had total hip replacement surgery. The age range for the 10 subjects was between 61 and 78 years of age, with a mean of 67.6 years (Table 1). The 6 females ranged from 61 to 70 years in age with a mean of 64.6 years, and ages of the 4 males ranged from 64 to 78 years with a mean of 70.5 years. Marital status is also presented in Table 1. Seven of the subjects were married, 1 was single, 1 separated, and 1 widowed.

Table 1. Distribution of Subjects by Age Group, Marital Status, and Sex

Marital Status	61-69 Years		70-78 Years	
	Male	Female	Male	Female
Single	0	0	1	0
Married	1	4	1	1
Separated	0	1	0	0
Widowed	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	2	5	2	1

Mean age = 67.6

The years of schooling of the ten subjects ranged from 8 to 19 years with a mean of 13.4 years (Table 2). Two of the subjects did not complete high school. Six of the subjects had some college education and two graduated from college.

Table 2. Distribution of Subjects by Years of Education

Years of Education	Number of Subjects	Percentage
8- 9	2	20
10-12	2	20
13-16	4	40
17-19	<u>2</u>	<u>20</u>
Total	10	100

Mean = 13.4 years

Seven of the 10 subjects were living with their spouses. One reported living alone, and 2 were living with their children. Four subjects lived in Tucson and the other 6 lived an average of 120 miles from Tucson. The average number of years the 10 subjects had lived in Arizona was 22, with a range of 5 to 60 years.

Six subjects were employed as supervisors, teachers, and observers before their retirement. Four owned their own business and were still employed at the time of the study.

Attitude toward Preoperative Health Status

The subjects were asked to rate their health status prior to having surgery. The distribution of the four health status categories was as follows: one subject reported being in good health, and three subjects reported in poor health. None rated their health status as excellent (Table 3).

Table 3. Distribution of Subjects by Perceived Preoperative Health Status

Preoperative Health Status Rating	Male		Female	
	Number	Percentage	Number	Percentage
Excellent	0	0	0	0
Good	0	0	1	10
Fair	2	20	4	40
Poor	<u>2</u>	<u>20</u>	<u>1</u>	<u>10</u>
Total	4	40	6	60

Perception of Pain

The first question in Part II asked the subject to identify his perception of pain severity before and after undergoing total hip replacement. The results are shown in Table 4. All 10 subjects perceived their pain to be severe or excruciating before surgery. Following surgery, all subjects perceived their pain to be very slight or mild during the 9-18-day postoperative period. The results also showed that only 3 subjects perceived their pain to be moderately severe during the first postoperative week. Distribution of the pain perception scores is presented in Figure 1, which shows that all subjects had a decrease in pain perception following total hip replacement surgery.

Table 4. Distribution of Subjects by Perception of Severity of Pain at Different Time Periods

Severity in Pain	Time Period		
	Preoperative	1-8 Days Postoperative	9-18 Days Postoperative
Very slight	0	4	7
Mild	0	3	3
Moderate	0	3	0
Severe	3	0	0
Excruciating	<u>7</u>	<u>0</u>	<u>0</u>
Total	10	10	10

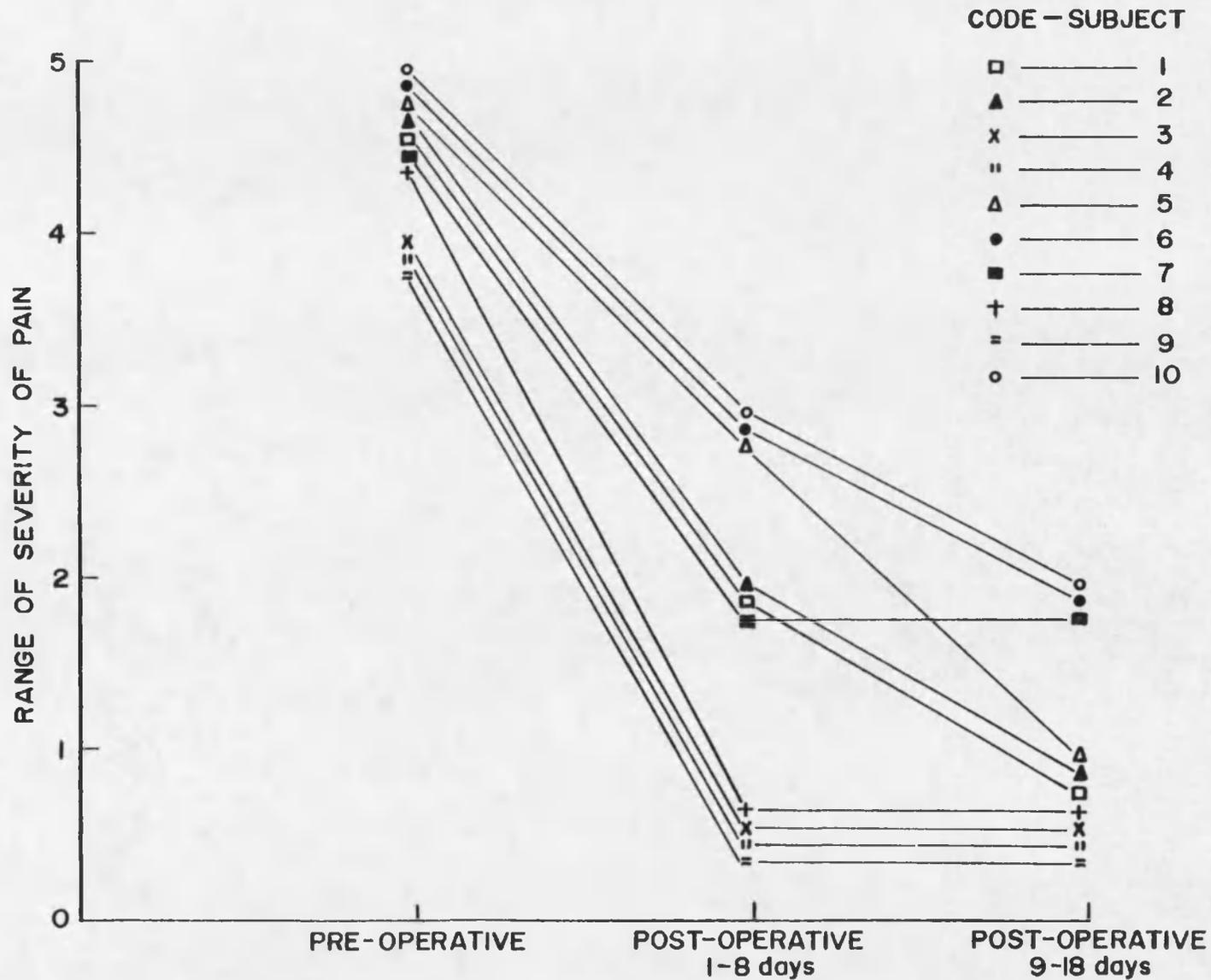


Figure 1. Distribution of Subjects by Severity of Pain at Three Time Periods

These results are important since all 10 subjects stated that pain in the hip joint was the primary reason for selecting medical care. As shown in Table 5, 9 of the subjects had reported having pain in the hip all the time and 1 most of the time. Six patients reported total relief from pain during the first postoperative period, and 7 reported relief during the second postoperative period.

Table 5. Distribution of Subjects by Frequency of Pain at Different Time Periods

Frequency of Pain	Time Period		
	Preoperative	1-8 Days Postoperative	9-18 Days Postoperative
Always	9	0	0
Most of the time	1	2	1
About half of the time	0	2	2
None of the time	<u>0</u>	<u>6</u>	<u>7</u>
Total	10	10	10

As noted in Table 6, all subjects reported that pain limited their physical activity at least half of the time preoperatively and postoperatively. However, during the second postoperative period (9-18 days), 5 subjects stated that activity was limited by pain only

Table 6. Distribution of Subjects by Limitation of Physical Activity Due to Pain at Different Time Periods

Limitation of Physical Activity Due to Pain	Time Period		
	Preoperative	1-8 Days Postoperative	9-18 Days Postoperative
Always	3	6	3
Most of the Time	6	3	2
About half of the time	1	1	5
Some of the time	0	0	0
None of the time	<u>0</u>	<u>0</u>	<u>0</u>
Total	10	10	10

half of the time as compared to 1 subject during the 1-8 postoperative periods. The same three subjects who indicated that their physical activity was limited all the time preoperatively reported no improvement following surgery. The study did not measure the extent of limitation due to pain.

Perception of Physical Disability

Part III of the questionnaire was concerned with differences in the subjects' perception of physical disability. The first question was a list of 11 tasks, for which the subject was asked to select appropriate responses indicating the degree of assistance required for each task. Each question had four choices ranked from "need no

assistance" to "need complete assistance." The score value for each choice was from 1 to 4, with the lower scores indicating greater independence in the subject's ability to complete the task. The total range of scores for this tool was 11 to 44.

The subject's response to the perception of physical disability during the three time periods is shown in Figure 2. Only subject 1 showed greater dependence before surgery than during either of the postoperative periods. All but 1 (subject 4) of the subjects identified a greater amount of independence on the Activity of Daily Living (ADL) goals between the two postoperative data collection periods. The scores for each choice ranged from 1 to 4, with the lower score indicating greater independence in the subject's ability to complete the task. Figure 2 presents the distribution of the ADL scores for the 10 subjects they ranged from 18 to 35. During the 1 to 8 day postoperative period the scores ranged from 30 to 40 as compared to a range from 20 to 38 during the 9 to 18 day postoperative period. These findings indicate an increase in dependency for all the subjects following total hip replacement.

There were five items in the task list (see Appendix A) that related to personal grooming: (1) grooming, (2) dressing, (3) toileting, (4) eating, and (5) taking bath. Table 7 reveals that preoperatively 4 subjects stated that they needed no assistance for dressing, 5 subjects needed no assistant for grooming, 8 needed no assistant for eating, 4 needed no assistance for toileting, and 5 needed no assistance for taking a bath. But during the 9 to 18 day postoperative period

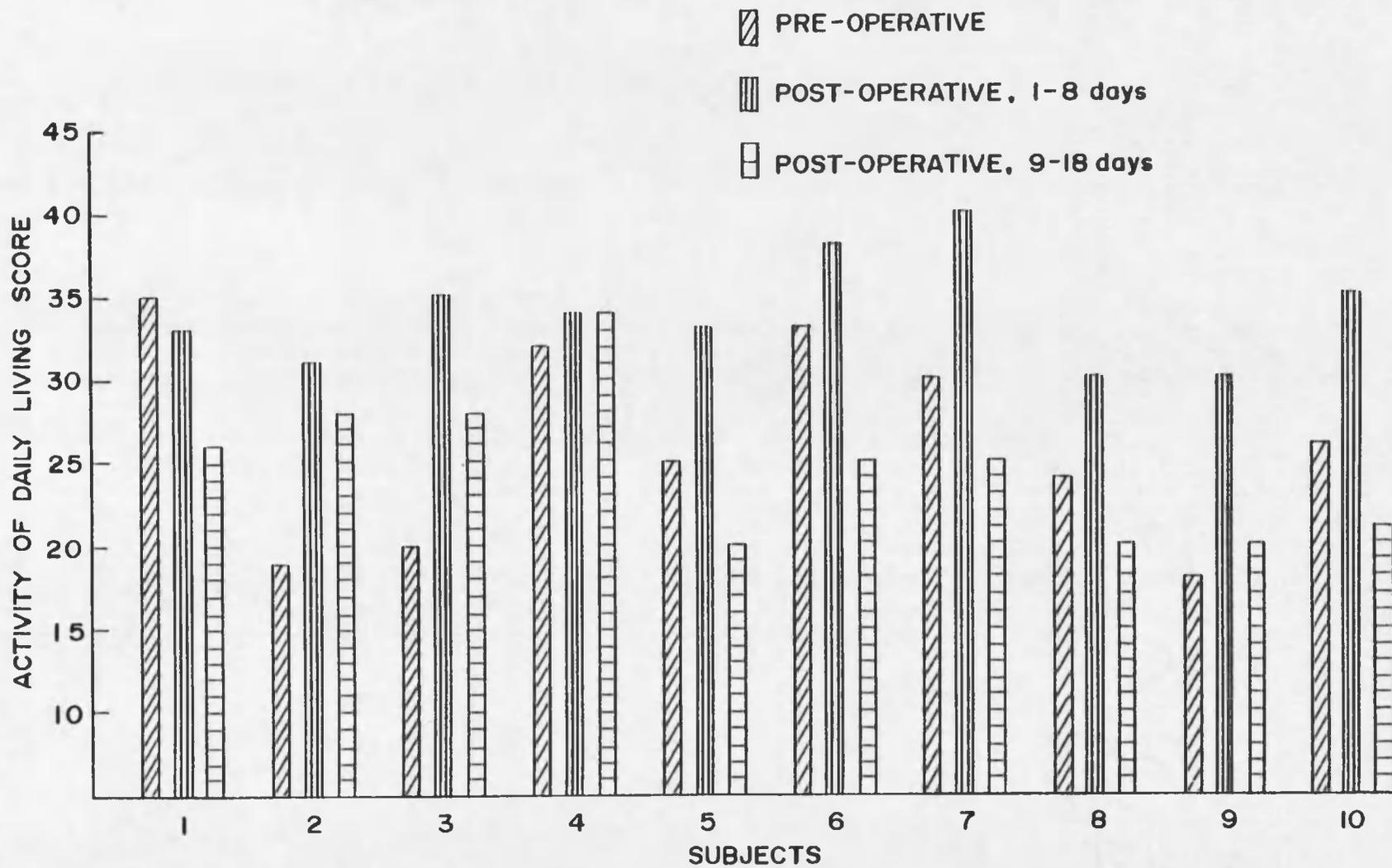


Figure 2. Distribution of Subjects by Activity of Daily Living Scores Obtained at Three Time Periods

all subjects reported that they needed no assistance for any of the tasks except grooming and only two needed assistance in grooming.

Table 7. Distribution of Subjects by Tasks on the Activity of Daily Living Scale at Different Time Periods

Tasks	Assistance Required, by Time Periods*														
	None			Minimal			Partial			Complete			Totals		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Dressing	4	1	10	1	2	0	4	5	0	1	2	0	10	10	10
2. Grooming	5	3	8	3	3	2	2	2	0	0	2	0	10	10	10
3. Toileting	4	2	10	3	3	0	3	3	0	0	2	0	10	10	10
4. Eating	8	6	10	1	1	0	0	1	0	1	2	0	10	10	10
5. Taking bath	5	2	10	1	3	0	0	2	0	4	3	0	10	10	10

*1--preoperative; 2--1 to 8 days postoperative; 3--9 to 18 days postoperative

Perception of Body Image

Satisfaction with Body Image

The questions in Part IV were to determine the difference in perception of satisfaction with body image. The six items used to assess the subject's body image were: face, hips, waist, weight, legs, and walk. Each item had a score value of 1 to 4 and the total body image score had a range of 6 to 24. The lower the score the more

Positive was the individual's perception of body image. Figure 3 presents the distribution of body-image scores for 10 subjects at three different time periods. The preoperative scores for the 10 subjects ranged from 12 to 22. During the 1 to 8 day postoperative period the scores ranged from 7 to 15 as compared to a range from 6 to 10 during the 9 to 18 day postoperative period. Table 8 indicates increased satisfaction with body image for all subjects following his replacement surgery.

Satisfaction with Body Image

The subjects were also asked to indicate how attractive they thought they were. Seven subjects indicated they were moderately attractive both before and after total hip replacement surgery. Preoperatively, all subjects indicated that they anticipated the surgery would make a positive change in their life style but after surgery only 3 indicated a positive change in life style. All subjects during the 9 to 18 day postoperative period indicated that they were very satisfied with the changes that had occurred since they had surgery.

Body-part Preference

Body-part preference was determined by the patient as explained in Chapter 3. The thirteen body parts were ranked from 1 to 13 in order of preference, with the highest rank assigned to the part with greatest value. Men placed the highest value on arms (13), legs (12), and tongue (11), while women placed the highest values on hips (13),

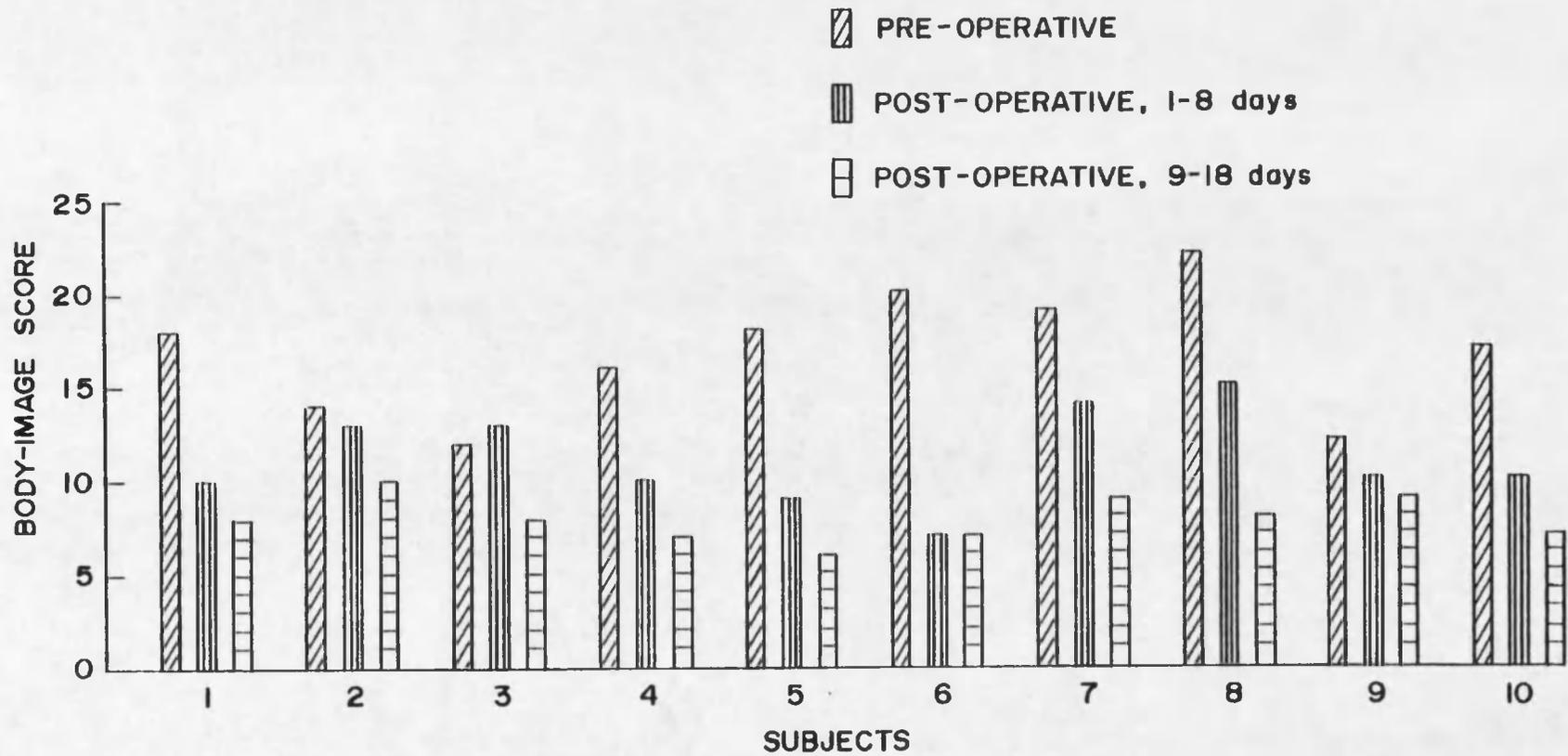


Figure 3. Distribution of Subjects by Body-image Scores Obtained at Three Time Periods

Table 8. Distribution of Subjects by Satisfaction with Specific Body Parts at Different Time Periods

Body Parts	Very Satisfied			Moderately Satisfied			Slightly Dis-satisfied			Very Dis-satisfied			Totals		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	Face	5	2	2	5	8	7	0	0	1	0	0	0	10	10
Hips	1	4	6	1	5	3	1	0	1	7	1	0	10	10	10
Waist	2	4	6	4	2	1	2	4	3	2	0	0	10	10	10
Weight	1	5	3	3	1	2	1	4	4	5	0	1	10	10	10
Legs	2	2	4	1	5	2	2	2	1	5	1	3	10	10	10
Walk	0	3	2	3	5	5	1	2	2	6	0	1	10	10	10

*1--preoperative; 2--1 to 9 days postoperative response; 3--9 to 18 days postoperative response

legs (12), tongue (11), and eyes (10). There was no change in preoperative and postoperative preferences.

Mental Status

The scores from eight questions (40-41, 43-45, 47, 49-50, and 10 from Appendix A) constituted the mental status score. Each question allowed the respondent to choose one of three options. The value of each response was from 1 to 3, with total scores for the eight items ranging from 8 to 24. The score value was such that the

lower the score the more positive was the respondent's mental health status. Nine subjects reported that they were depressed very often and 6 stated that they were irritated, discouraged, lonely, and dejected very often preoperatively. All subjects reported a change from "very often" to "not too often" in answer to questions concerning depression, sadness, irritation, discouragement, loneliness and dejection during the 9 to 18 day postoperative period.

One question asked whether the patient was more satisfied with life now than 2 years ago. This question allowed three options, the lowest score being assigned to the least satisfaction. Preoperatively, 8 patients reported that they were less satisfied with their life than 2 years before, 2 reported satisfaction about the same. During the first and second postoperative periods, all subjects reported that they were more satisfied with their life now than 2 years ago.

CHAPTER 5

DISCUSSION OF FINDINGS CONCLUSIONS, AND RECOMMENDATIONS

Discussion of Findings

This chapter discusses the relationship to the conceptual framework of the study and the study findings as they relate to the review of the literature. The conclusion and the recommendations for further study are also presented.

This study addressed three different aspects: (1) Are there differences in an older person's perception of pain before and after having total hip replacement surgery? (2) Are there differences in an older person's perception of physical disability before and after having total hip replacement surgery? and (3) Are there differences in an older person's perception of body image before and after total hip replacement surgery. The sample size consisted of 10 subjects, 4 males and 6 females.

The conceptual framework for the study was taken from theories of perception of body image. Body image can be defined as one's conceptual and unconscious feelings, facts, and perceptions about one's body (Gruendemann, 1975). Body image includes a combination of perception, action, impression, and expression, and can be considered a unit in which feelings and action are interrelated (Schilder, 1950). Plutchik et al. (1974) mentioned that one would expect that individuals with different types of physical disabilities would perceive their

bodies differently and therefore that the nature of their body image would differ.

The instrument used in this study was a four-part questionnaire. This tool enabled the investigator to measure an individual's perceptions of pain, physical disability, and body image before and after having total hip replacement. Because of the small sample size a Body Cathexis scale could not be used, but individual items from the scale were used.

Drakontides (1974) cited pain as the most frequent reason for seeking medical care, and also suggested that pain is a major symptom in many diseases. Bruegel (1971) described perception of pain as varying greatly from person to person. Pain was described as having meanings that are individual and personal and are influenced by the psychological and socio-cultural factors that affect the individual at the time of the pain experience. Schilder (1950) state that pain should increase awareness of the part causing the pain.

The findings of the present study were similar to those observations found in the literature reviewed: Before their operations, all 10 subjects identified pain as a very prominent symptom; 7 identified the degree of pain as excruciating, and 3 identified the pain as severe. Even sitting or sleeping was difficult or impossible. At the 9 to 18 day period postoperatively 7 subjects perceived their pain as very slight, and 3 perceived their pain as mild.

Shanas (1968) found independence in personal care to be important to the positive perception of health. In the present study, all

subjects indicated they were totally independent or required no assistance in personal care such as dressing, eating, toileting, and taking a bath during the 9 to 18 day period postoperatively. Eight subjects indicated that they needed no assistance in grooming during the 9 to 18 day period postoperatively. These findings indicated an improvement in ability to care for themselves after total hip replacement surgery.

The studies on body-part preference that were reviewed showed that the parts most strongly associated with a positive body image in women were breast, nose, legs, eyes, and tongue, and the importance of these parts was thought to be cosmetic and functional. Weinstein et al. (1964) reported in their study of preference for body parts that the change in body perception as related to age occurred as a devaluation of sex-specific parts with advancing age. In this study the women placed higher ranks on hips, legs, tongue and eyes, while men placed higher ranks on arms, legs, and tongue. There was no change in expressed preference after the surgery.

Conclusions

The following conclusions were derived from the data presented in the preceding pages.

1. The study contributed to nursing in that it added to the nurse's knowledge about elderly patients who have had total hip replacement surgery; particularly about their perceptions of body image, pain, and physical disability before and after having total hip replacement surgery.

2. The data suggest that the elderly patients' perception of severity of pain was decreased from excruciating to very slight after total hip replacement.
3. The data suggest that the perception of physical disability changed as they became more independent in routine personal care such as grooming, dressing, toileting, eating, and taking baths.

It is very difficult to compare the ability to walk before and after surgery in patients with concomitant lesions that also affect their ability to walk, but 7 of the 10 subjects were partially disabled before surgical repair of their hips, while all were able to perform the routine activities of daily living postoperatively.

4. The data suggest that satisfaction with individual body parts increased after surgery, particularly with those body parts involved in the surgery.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Repeat this study using a larger sample and incorporate youthful subjects into the study to determine if they respond differently than elderly subjects to total hip replacement surgery.
2. Repeat the study to include measurements collected at home after discharge to allow more time for the greatest adjustment to body image to occur.

3. Design a better method to evaluate pain. This might include the number and frequency of pain medications. The lapse of time between the last experienced pain and administration of the questionnaire should also be considered.
4. Include examination of cultural and socioeconomic differences among patients who have had total hip replacement surgery.
5. Replicate the study with the same group of subjects after two or more years, to find if there are changes in the subjects' perception of pain, physical disability, or body image.

CHAPTER 6

SUMMARY

This was a descriptive study to determine if there were differences in an older person's perceptions of pain, physical disability, and body image before and after total hip replacement surgery. Chronic diseases such as arthritis that cause degenerative processes in the hip joint are more prevalent in older patients and lead to constant pain and functional impairment. Arthritis is one of the major disease problems in the United States. Pain causes limitation of motion and dependency in self-care activities, which lead to disability. The sufferer ultimately undergoes psychosocial and vocational decompensation, with alteration in his/her life style. With increased knowledge about these changes, the nurse is in a better position to help the older patients who have had total hip replacement surgery to cope with the stress of adaptation to a changing body image.

This study was based on the concept of body image. It was assumed that a patient who is suffering from a physical disability of the hip has a negative body image, since it is well known that physical deterioration of a body part can affect an individual's emotional adjustment. Also it was thought that the subject would indicate a greater awareness of the hip and that the factor of perceived severity of pain would have a negative effect on the body image.

There were a total of 10 patients who met the criteria and completed questionnaires. Because of the small sample size, a Body Cathexis Scale (Appendix C) was not used.

A structured questionnaire consisting of four parts was developed for use in this study. The first part asked for demographic data; the second part focused on the person's perception of pain before and after total hip replacement; the third part determined the person's perception of physical disability before and after total hip replacement; and the final part identified the person's perception of body image before and after total hip replacement. Data were analysed and pertinent data reported in table form.

Analysis of data suggested that the perception of severity of pain was decreased after surgery; mobility, and therefore the individual's perception of independence, increased slightly over the study time, and there was change in the body image from negative to positive.

Findings from this study should help increase understanding of the elderly patient's needs. The increased awareness of a painful hip caused physical disability and negative body image. The findings from the study could become the basis for patient care in the orthopedic unit; the nursing staff, in meeting the patients' daily needs, must have an understanding of the patient's perception of himself in order to help the patient to help himself.

APPENDIX A

QUESTIONNAIRE

Perception of Body-Image after Total
Hip Replacement Questionnaire

Subject I.D. _____

Hospital I.D. _____

Interview No. _____

Date of Interview _____

PART I

General Information

The following questions seek to obtain some general information about you and about any previous hospital admissions you have had. The information from these questions will be used for statistical purposes only.

Please fill in the blank(s) or place a checkmark (✓) beside the appropriate response for each of the following questions:

1. How old were you on your last birthday:

_____ years

2. Are you:

_____ female

_____ male

3. What is your marital status at the present time?

_____ married and living with spouse

_____ separated

_____ divorced

_____ widowed

_____ never been married

4. What is the highest grade of school that you have completed?
Circle one:

None	0
Elementary	1 2 3 4 5 6 7 8
High school	1 2 3 4
College	1 2 3 4 5+
Professional or Graduate	1 2 3
Technical	1 2 3 4
Other (specify)	_____

5. Are you now employed....

full-time
 part-time
 retired
 If never employed, have you been a homemaker?
 yes no
 student
 other (specify) _____

6. When employed what type of work did you do?
- _____

7. Who else is living with you in your household?

spouse
 children (number)
 parents (number)
 persons other than the above (number)
 alone

8. How many years have you lived in Arizona?

_____ years

9. Do you live in the city of Tucson?

yes
 no

If no, how many miles from the Tucson area do you live?

_____ miles

10. During the past year have you had any surgery done in a hospital?

_____ yes
 _____ no

11. If yes,

How many times have you been hospitalized during the past year to have surgery?

_____ times

What kind of surgery did you have for each hospital admission?

First admission _____
 Second admission _____
 Third admission _____

12. At the present time, how would you rate your health?

_____ excellent
 _____ good
 _____ fair
 _____ poor

PART II

The following questions relate to pain you have had or are having that is due to your hip condition. Place a checkmark (✓) beside the word(s) that most nearly describe(s) your own situation.

13. Was pain the main reason for seeking medical help for your hip condition?

_____ yes
 _____ no

14. If no, what was the main reason you obtained medical help for your hip condition?

15. Please rate the severity of the pain that made you decide to have hip surgery?

very slight
 mild
 moderate
 severe
 excruciating
 other (specify) _____

16. How much of the time during the past 30 days have you had pain in your hip?

all of the time
 most of the time
 about half of the time
 none of the time

17. How often have you been taking medication for pain during the past 30 days?

daily
 every other day
 about once a week
 less often than once a week

If less often than once a week, how often do you take medication for pain? (Please be as specific as you can.)

18. How would you describe your pain during the past 30 days? (Please check all that apply.)

dull
 aching
 burning
 piercing
 sharp

19. How often during the past 30 days has your pain caused you to limit your physical activity?

always
 most of the time
 about half of the time
 some of the time
 none of the time

20. How often during the past 30 days has your pain affected your relationship with your family and/or friends?

always
 most of the time
 about half of the time
 some of the time
 none of the time

21. How often does your pain interfere with your social activity?

always
 most of the time
 about half of the time
 some of the time
 none of the time

For the following questions, please place a checkmark (✓) beside all the answers that apply to your own situation:

22. Has your pain ever caused you to have any of the following symptoms? (Please check as many as apply.)

paleness
 perspiration
 shakiness
 stiffening or tenseness
 faintness

23. Has your pain ever caused you to become.... (Please check as many as apply.)

tired
 impatient
 discouraged
 restless
 dejected

24. How often does your pain prevent you from working (either at home or on the job)?

all the time
 most of the time
 about half of the time
 some of the time
 none of the time

25. What do you usually do when you start having pain?
(Please check as many as apply.)

rest briefly before continuing with activity
 take medication and then continue with present activity
 take medication and then change to an easier activity
 take medication and then go to bed
 rest without medication
 ignore the pain and go on with the activity
 other (specify) _____

26. What is your usual reaction to pain?
(Please check as many as apply.)

fatigue
 irritability
 frustration
 anxiety
 depression

PART III

The following questions relate to how well you are able to take care of yourself. Please place a checkmark (✓) in the column that most nearly describes the amount of help you need to do the task listed below.

Example:

No assistance _____ (no help needed at all for any activity)
 Minimal assistance _____ (need help with zippers and buttons but
 can dress self)
 Partial assistance _____ (need some help with bathing and/or dress-
 ing as well as with zippers and buttons)
 Complete Assistance _____ (need help with bathing and dressing)

<u>Tasks</u>	<u>Need No Assistance</u>	<u>Need Minimal Assistance</u>	<u>Need Partial Assistance</u>	<u>Need Complete Assistance</u>
27. Dressing	_____	_____	_____	_____
28. Bathing	_____	_____	_____	_____
29. Grooming	_____	_____	_____	_____
30. Toileting	_____	_____	_____	_____
31. Laundering	_____	_____	_____	_____
32. Cooking	_____	_____	_____	_____
33. Eating	_____	_____	_____	_____
34. Taking own bath	_____	_____	_____	_____
35. Ironing	_____	_____	_____	_____
36. Doing light housekeeping	_____	_____	_____	_____
37. Shopping	_____	_____	_____	_____

The next series of questions relate to how you are able to move about. Please place a check (✓) beside the word(s) that most nearly describe(s) your own situation.

38. Are you able to get around your home....

- _____ independently
- _____ with a cane or walker or crutches
- _____ with a wheel chair
- _____ with a wheel chair and another person

39. Are you able to travel outside of your home?

- _____ yes
- _____ no

If yes:

_____ do you drive yourself

Do you depend for assistance

- spouse
 relative
 friend
 city transportation (bus)
 taxi

During the past year.....

40. How satisfied have you been with your life?

- very satisfied
 not too satisfied
 not at all satisfied

41. How often have you been sad?

- very often
 often
 not too often

42. How often you have trouble falling asleep at night?

- very often
 often
 not too often

43. How often did you feel lonely?

- very often
 often
 not too often

44. How often did you become easily irritated?

- very often
 often
 not too often

45. How often did you become discouraged?

- very often
 often
 not too often

46. How often did you have contact with your friends?

- very often
 often
 not too often

47. During the past year how much of the time were you depressed?

- most of the time
 about half of the time
 some of the time

48. During the past year how much energy did you have to do those activities that you enjoyed doing?

- more than enough
 enough
 barely enough
 not enough

49. How often during the past month did you have the urge to cry compared to the previous 11 months?

- very often
 often
 not too often

Please place a checkmark (✓) beside the words that most nearly describe your present situation.

50. How would you compare your satisfaction with life now as compared to two years ago?

- more satisfied than two years ago
 same as two years ago
 less satisfied than two years ago

51. During the past year what kind of activities did you do during your leisure hours? (Please check all that apply.)

- watched television
 listened to music
 read
 played cards
 knit, sewed
 played tennis
 swam
 played golf
 other (specify) _____

52. During the past year were there time when you felt lonely, depressed or discouraged?

- yes
 no

53. If yes, what did you do when you felt lonely, depressed or discouraged?
-
-

PART IV

This section deals with your own satisfaction with your body parts and the value you place on each body part. There are no right or wrong answers.

Questions 54 through 63 relate to how satisfied you are with your specific body part. Please check the answer that most accurately describes how you feel about the body part identified in each question.

54. How satisfied are you with your face?

very satisfied
 moderately satisfied
 slightly dissatisfied
 very dissatisfied

55. How satisfied are you with your hips?

very satisfied
 moderately satisfied
 slightly dissatisfied
 very dissatisfied

56. How satisfied are you with your waist?

very satisfied
 moderately satisfied
 slightly dissatisfied
 very dissatisfied

57. How satisfied are you with your weight?

very satisfied
 moderately satisfied
 slightly dissatisfied
 very dissatisfied

58. How satisfied are you with your legs?

very satisfied
 moderately satisfied
 slightly dissatisfied
 very dissatisfied

59. How satisfied are you with the way you walk?

- _____ very satisfied
 _____ moderately satisfied
 _____ slightly dissatisfied
 _____ very dissatisfied

Below is a list of 13 body parts. Pretend that each body part is lost in an accident. Rank the body parts in the order in which you would miss them assigning them a number from 1 to 13 in the spaces. Number the part you would miss least with the number 1 and be sure to give each body part a value between 1 and 13.

Example:

One would probably rank the following 3 body parts in this order

- 2 1. tooth
1 2. nail (least important part)
3 3. finger (most important part)

- _____ arm
 _____ big toe
 _____ breast
 _____ ear
 _____ eye
 _____ foot
 _____ hand
 _____ hip
 _____ leg
 _____ nose
 _____ thumb
 _____ tongue
 _____ tooth

The last question in this section deals with your general attitude about yourself and your feelings about your surgery.

61. How attractive do you think you are?

- very attractive
- moderately attractive
- slightly unattractive
- very unattractive

62. If you are waiting for surgery now.....

Are you anticipating that surgery will make a big change in your life?

- complete change
- moderate change
- slight change
- no change

63. If you had surgery.....

How satisfied are you with the changes since your surgery

- very satisfied
- moderately satisfied
- slightly dissatisfied
- very dissatisfied

You have just completed this questionnaire. Thank you very much for your cooperation and participation in this study.

APPENDIX B

SUBJECT'S CONSENT FORM

To Whom It May Concern:

This questionnaire is part of a research study entitled, "Perception of Body-Image After Total Hip Replacement Surgery." The purpose of this study is to help nurses to obtain information that may lead to the improvement of patient care.

Your participation in this study is completely voluntary. The completion of this questionnaire will require approximately forty-five minutes at three different points in time for a total of no more than two hours. There will be no costs, benefits, or risks to you from your participation in this study. You may withdraw from completing the questionnaire at any time, and you may refuse to answer any questions without incurring any ill will. Completion of the questionnaire indicates that you have willingly consented to participate in this study. Be assured that all questionnaires are anonymous and all information will be kept confidential. Your responses will be grouped with the responses of other individuals having total hip replacement surgery to provide us with the information we seek. Any information used in locating participants will be destroyed at the conclusion of the study and no record will be kept of your participation in the study.

We thank you for your help in this study. The success of the project depends upon your participation, and we believe you will find it interesting. We will provide you with a summary of the results of the study upon request. If you have any questions concerning this research, please do not hesitate to telephone me at the number listed below.

Theresa Gideon
Graduate Student in Nursing
1701 North Indigo Drive
Tucson, Arizona 85705
Phone (602) 743-0322

APPENDIX C

PHYSICIAN INFORMATION AND CONSENT FORM

Dear Doctor:

I am Theresa Gideon, R.N., a graduate student at The University of Arizona. I would like to request your permission to contact your patients who will be admitted to TMC for total hip replacement surgery, to determine their willingness to participate in a study.

The purpose of the study is to explore the question: Are there differences in an older person's perceptions of his self body-image of his pain and of his physical disability before and after having surgery for a total hip replacement? The tool to be used is a questionnaire. The completion of the questionnaire will require approximately forty-five minutes at three different points in time for a total of no more than two hours during their hospital stay. There will be no risk to the patient. The patient will not be identified in this study. The patient may elect not to participate in this study. The confidentiality of your patients will be maintained. The purpose of this study will be explained to the patients and the appropriate consent form will be given.

When the data are analyzed and summarized I will share the findings with you.

Please sign below if you are willing to have me contact your patients to determine their willingness to participate in this study.

I, _____, have read the consent form and the nature of this study has been explained to me. I give my permission for the investigator to contact my patients who are admitted to TMC for total hip replacement surgery.

Physician's signature

Date

Investigator's signature

Date

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