NURSING INTERVENTION FOR FACIAL TRAUMA

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CHAPTER 1

INTRODUCTION

Modern society places a high premium on the appearance of the human face. It is the key to man's identity and his most distinguishing characteristic. Therefore, significant emotional, psychological, and cosmetic problems arise from any injury to the face, and especially those injuries that involve scarring and disfigurement. The fact that the face is almost always there to see sets facial injuries apart from other injuries. Any injury to the face demands the most expert care, not only for esthetic reasons and for the preservation of the functions of the face, but for the patient's physical, social, and psychological comfort and well-being also.

Victims of serious facial trauma often experience a crisis as a result of an adverse body image change. In addition, they may experience the body image crisis disturbances of anxiety, depression, and hostility. It is theorized that a nurse who is an attentive, interested, and supportive listener will be able to ease the physical and psychological impact of serious facial trauma. By listening carefully to patients, demonstrating concern about their problems, and giving verbal and nonverbal

encouragement with an accepting nonjudgmental attitude, it is likely that facial trauma patients will be able to accept and adapt to their body structure change somewhat satisfactorily. There are definite physical and psychological implications for facial injuries that involve scarring and disfigurement. When a patient has a serious facial injury, the crisis provoked by the injury causes him to move from the initial impact and shock of the trauma to a psychological effort to flee from the reality of the situation and return to the condition that existed before the accident. His fear of irreparable damage becomes acute and this fear is shared by his family and friends. He may become excessively anxious, with the anxiety he experiences evolving into a state of depression. He may feel hostility toward himself and others, and feel that others are hostile toward him because of his disfigurement.

Plastic surgery contributes significantly to the facially injured patient's physical and psychological welfare. In the process of recovery from the effects of facial injury and subsequent repair, nursing offers constant therapeutic surveillance. In this study the nursing intervention of listening was compared with routine nursing intervention for facial trauma patients. By allowing the patient to express his feelings openly and freely, attentive listening by a nurse with a body of nursing knowledge and skills

assists him in overcoming a body image crisis, and in searching for the identification of a new and acceptable self.

Statement of the Problem

The problem of this study was to compare the effects of supportive listening as a nursing intervention with the routine nursing intervention on facial trauma patients' self perception and levels of anxiety, depression, and hostility.

Purposes

This study was designed:

1. To identify facial trauma patients' self perception and levels of anxiety, depression, and hostility before and after the administration of supportive listening nursing intervention.

2. To identify facial trauma patients' self perception and levels of anxiety, depression, and hostility before and after the administration of routine nursing intervention.

3. To compare the effectiveness of supportive listening with routine nursing intervention on facial trauma patients' self perception and levels of anxiety, depression, and hostility.

Background and Significance

A significant number of articles and books have been written on the subjects of body image, and body image disturbances and changes, including unpublished theses and professional papers. Numerous studies have been done and articles published on perception of the body image in certain diseases, or as a result of a disease; however, almost no articles or studies were found concerning disturbances or changes in body image as a result of facial scarring and disfigurement. Corbeil (1972) and Garrett (1967) discuss the need for the disfigured person to verbalize his feelings of depression, hostility, and anxiety which are often manifested as disturbances in the body image that can interfere with a person's recovery process.

The function of a listener, states Mair (1972), is to soak up fear and anxiety like a sponge. The listener does not merely listen, but while listening, actually takes the burden of stress and tension away from the patient by means of his therapeutic techniques. In facial trauma caused by an accident, by violence, or by a malignancy, listening can provide relief from anxiety. Frances (1969) suggests spending time with these patients and allowing them to talk about themselves and their problems. By this means, their anxiety will gradually move toward a

realistic adaption of their situation.

Literature on listening as therapy for the psychological impact of facial trauma is scarce. In fact, published material on facial disfigurement aside from actual plastic surgery procedures for a malignancy or for various facial injuries is scant. Garrett (1967) states it is interesting to note that despite the attention given almost all other types of physical disability, facial disfigurement has been studied rarely. Investigations of the face have focused on its expressive aspects, the personality features, but only occasionally has facial disfigurement been shown attention in regard to research.

Mattsson (1975) states that research and other imperical observations for the psychological effects of physical trauma are practically nonexistant. Victims of physical trauma may undergo extreme psychological suffering with anxiety and deep depression from which adequate psychological recovery is never achieved. Trauma to the human body, Mattsson believes, is an insult both physically and psychologically, and as such, it necessitates both physical and psychological treatment for healing to take place.

Severe psychological disturbances, including mental disorders, have been observed and traced to physical trauma,

Syndromes such as accident neuroses and psychoses have been observed clinically, with one of the most commonly observed syndromes being "traumatic neurosis" in which the victim suffers from chronic fatigue, insomnia, and restlessness, through severe anxiety to profound depression following a physical injury (Mattsson 1975).

Most of the existing knowledge of psychological healing processes has come mainly from commonsense and clinical observations, and from a limited number of outcome studies. Additional understanding of the psychological consequences of physical trauma has come from psychotherapists who often encounter cases in which the psychological healing processes have failed, and while a few of the trauma victims reach the psychotherapist, many others continue to function in society with varying degrees of psychological incapacity (Mattsson 1975).

Garrett (1967) discusses the psychological implications of facial disfigurement and states that as with all others who suffer disability, the facially disfigured often finds himself a social deviant. He "looks" different from others and because of this fact alone, he is regarded by them as being alien and consequently viewed with suspicion. His pain may be quite intense as he perceives himself an atypical member of society. When a person is burned on

the face and has scarring and disfigurement as a result, he may be stigmatized, discriminated against, and devaluated as a person. He may be subjected to avoidance and rejection from those who interact with him (Goffman 1963).

A study by Young (1974) specified stigmatizing characteristics of burn patients for the purpose of creating an awareness of primary stigmatizing variables inherent in the burn patient and his nursing care. Results indicated that when these variables were identified and brought to awareness, physical and psychological nursing care was favorably modified by nurses.

Andreasen et al. (1972) studied all burn patients admitted to a burn unit for a period of nine months to observe the physical and emotional problems presented to the staff. Reactions involving anxiety, depression, fear of deformity, and mutilation were noted in nearly all the patients. Fear of cosmetic deformity was more common among women than men, as was expected. Management of the patients with scarring and disfigurement of the face was delicate and allowed the patients time to adapt gradually with the use of a denial defense. A hopeful attitude was maintained by the staff regardless of the extent of the deformity. Patients themselves directed the amount of information they received by the questions they asked, and the staff used the questions as clues to how much reality the patients

were ready to accept. Andreasen et al.(1972) further state that patients with scarring and disfigurement needed daily reassurance that their appearance would improve with time. Statements by staff that mixed honesty with optimism provided the reassurance that seemed most therapeutic.

Individuals who have a malignancy of the face, like victims of other types of facial trauma, experience a body image crisis and a sense of loss related to the high visibility of the affected part. The very mention of a malignancy of the face elicits visions of mutilation and loss of attractiveness. Next to the threat of loss of life, where facial cancer is involved, is the thought of the possible extent of scarring and disfigurement. Donovan and Pierce (1976) outline the steps for crisis intervention in facial cancer. These steps parallel crisis intervention for any type of crisis.

Caplan (1966) sees a crisis, such as that caused by facial cancer, as a phenomenon in which the victim's repertoire for coping is insufficient, and he has no immediate way of handling the stress created by the crisis. But no matter how stressful the situation, the person will find a way (effective or ineffective) to deal with it. Chaplan believes this is why a crisis is self-limiting and only lasts a few weeks.

For crisis intervention, Messick (1970) recommends the use of the problem-solving process. In using this process and assisting the patient to solve problems, the patient's skills and strengths are usually revealed and are a positive force in reaching solutions.

Aguilera (1970) believes the role of the nurse in crisis intervention is significant, since the patient usually feels free to communicate with the nurse. The patient may feel other therapists are above him in status, and consequently, rapport is not easily established with them. The nurse is closer physically and psychologically to the patient than other therapists, and is in a position to intervene with constant and effective therapy.

To develop other nursing approaches to the specific problems created by facial trauma and its ramifications, more research is needed. Only through careful research can the most effective scientific nursing intervention for facially injured patients be applied in actual nursing practice. This research is absolutely essential in view of the fact that 1) facial trauma is commonly encountered in modern society as a result of violence 2) the rate of crime is high in the United States, especially the rate of robberies and muggings 3) facial trauma is commonly encountered as a result of automobile accidents 4) the

rate of automobile accidents is high 5) automotive engineers have not as yet redesigned many structures within the automobile that are known to cause serious facial injuries, and 6) many people are reluctant to wear seat belts that would significantly reduce the severity of facial injuries, as well as other bodily injuries (Stickler et al. 1972).

This study was concerned with the use of listening as a means of reducing tension and stress inherent in facial trauma, and with the use of listening as a means of assisting the patient to reach the highest level of equilibrium possible at any given point in time. The fear and anxiety the patient experiences as a result of serious facial trauma tends to use a great deal of his energy. By the use of listening and a simple nondirective communication technique that demonstrates interest, warmth, and support, this energy may be redirected to the cause of recovery.

Hypothesis

This study was based on the null hypothesis that there would be no difference in the effectiveness of supportive listening nursing intervention as compared to the effectiveness of routine nursing intervention on facial trauma patients' self perception and levels of anxiety, depression, and hostility.

Definition of Terms

For a constant frame of reference the following definitions were used in this study:

1. Facially Injured. Persons who had the following:

A. At least one laceration 3 cms. in length on the front or prominent area of the face.

B. Second and/or third degree burns 3 cms. in diameter on a front or prominent area of the face.

C. Amputation of any part of the face.

D. Displacement of any of the features of the face.

E. Disfigurement and/or scarring of the face caused by eye, nose, or lip injuries.

2. Supportive Listening. The act of listening to a person attentively, demonstrating concern about his problems by giving verbal and nonverbal encouragement to express his feelings, and the assumption of an accepting nonjudgmental attitude toward him and his problems by means of talking-listening sessions. (See Appendix C for supportive listening rationale).

3. Body Image. The mental picture or image of one's own physical appearance as he compares his appearance to the appearance of others. How he feels about himself as a person, his ego identity, his beliefs,

values, and goals, and his perception of his social and physical self (McCloskey 1976).

4. Body Image Disturbance. The conflict that exists between the mental image of one's physical appearance and his actual physical appearance as a result of a change or changes in the structure of his body, accompanied by a failure on his part to accept these changes.

5. Body Image Change. An alteration in one's perception of his body image; a modification of the former self.

6. Body Image Crisis. A serious mental and physical state caused by injury to the body which results in an adverse change in body image perception.

7. Anxiety. The state of being worried and apprehensive; a state of restlessness and agitation of the mind.

8. Depression. A decrease in functional activity caused by a feeling of dejection, unhappiness, and hopelessness, usually accompanied by self-blame and self-reproach (Beck 1967).

9. Hostility. A feeling of enmity, ill will, anger, and bitterness; an expression of such feelings.

10. Nurse. A person who has a state license to practice professional nursing and who establishes and maintains a helping relationship with others through the use of a body of nursing knowledge and skills.

Limitations

This study was designed with the following limitations in mind:

1. Responses to stress are individual in nature.

2. Significant others, through attitudes and interpersonal relations, influence the patient's behavior.

3. The hospital staff, family, and friends influence the patient's behavior.

4. The research process itself may influence the patient's behavior in that a patient who is aware he is a subject of a study may alter his behavior accordingly (Fox 1966).

5. The passage of time alone may bring about some degree of change in the patient's perception of his body image.

6. Age can affect the patient's perception of his body image.

Delimitations

The following delimitations were selected for this study:

1. The study was done on facially injured patients who were under treatment.

2. Adult patients, 18 years or older, were the subjects of the study.

3. Some facially injured patients would possibly be unwilling to be subjects for the study.

4. Patients who did not seem to be fully aware of the consequences of their facial injury would not take part in the study two days after admission to the hospital. Their participation was to be delayed until this awareness was evidenced by appropriate behavior.

Assumptions

The development of this study was based in part on the following assumptions:

1. All people have an image of their bodies.

2. There is a change in the body image of a facially injured patient.

3. The patient who has serious facial trauma experiences a body image crisis involving not only a body image change, but the crisis disturbances of anxiety, depression, and hostility as well.

4. The presence of anxiety, depression, and hostility adversely affects the patient's rate of recovery.

Summary

This quasi-experimental study dealt with the facial trauma patient and the unique problems he encounters. The study was conducted to compare the effectiveness of

supportive listening as a nursing intervention with the effectiveness of routine nursing intervention for severe facial trauma. Chapter I contained an introduction that is a broad overview of the study, a statement of the problem that identifies the goal of the study, and an outline of the purposes and objectives in relation to the study problem. Other topics discussed in Chapter I were the background and significance, which included literature and research related to the study subject of facial trauma, and the null hypothesis that there would be no difference in the effectiveness of the two nursing interventions under study. Definitions to clarify meanings of terms used in various parts of the study, limitations and delimitations to define the scope of the study, and assumptions to state universal truths pertinent to the study, were also included in this chapter.

Chapter II presents a review of nursing literature that deals with various aspects of the management of facial trauma. The literature reveals that the victim of serious facial trauma is in need of assistance in overcoming a body image crisis that causes great difficulty in accepting and adapting to the consequences of the trauma. Little information concerning nursing interventions that have been effective in alleviating the body image disturbance of facially injured patients was found.

Chapter III presents a discussion of the essential components of the methodology utilized in this study. The procedures for collection and treatment of data are explained. Chapter IV is devoted both to an analysis of data and a discussion of the findings of the study. Tables depicting data and the findings are included for the purpose of clarification of data and study results. Chapter V consists of a summary of finding and resulting recommendations, implications, and conclusions.

CHAPTER II

REVIEW OF LITERATURE

The presentation of the review of literature includes research and current thinking in several areas related to the problem under investigation. The reaction to trauma, the body image crisis caused by serious facial trauma, and the nursing intervention for this crisis are explored. Literature concerning the therapeutic effects of supportive listening on the sequelae of various types of facial trauma, including facial burns, facial fractures, and facial lacerations, and the special needs of the facial trauma patient is presented. A comparison of the trauma caused by facial cancer with other types of facial trauma is made, and facial trauma by violence is examined.

Reaction to Trauma

When a person's face is traumatized he is propelled into a state of tension and disequilibrium. To relieve this tension, emergency protective defenses are immediately utilized. Self-sufficiency and independence are challenged, and as in the case of other types of trauma and subsequent hospitalization the person suddenly finds himself in the sick role. However, unlike other types of trauma, the catastrophe of possible scarring and disfigurement of an

important part of his anatomy, his face, the key to his identity is the phenomenon with which he must deal physically and psychologically.

Immediately the patient becomes almost totally preoccupied with the injury and its management. A great deal of the treatment he receives when he is hospitalized is focused on medical and surgical techniques and mechanical problems related to the injury. These techniques and the resolution of problems created by the physical trauma are essential and very important; however, psychological problems and their treatment are equally important, and may easily be overlooked. These problems usually involve the patient's disrupted family and social life, his occupation and possible difficulties as a result of the injury, and his appearance and altered body image (Bernstein 1976).

When the face is traumatized, the state of crisis in which the person is plunged is outside the realm of usual experiences. A state of distress is entered that signals the person is wrestling with an overwhelming situation. Signals of distress are sent to others to alert them to the hazard and to "helping activity". A narrowed fixed span of attention and focus on only a few items rather than a scan of the entire environment is evident. A clear concept of identity is lost, and an unsatisfactory performance of roles is exhibited in that behavior is erratic. Memory is greatly affected

in terms of access to a storage of prior knowledge and experiences, and ability to make decisions is impaired (Hansell 1976).

Much of the behavior exhibited during a crisis interval is common to all people. It has the effect of calling forth a ready response from others not experiencing the crisis for alleviation of the distress. When an individual is traumatized to the point of disfigurement there is an emotional reaction to the trauma involving a gradual process of adjustment that takes place in successive phases, namely, the phases of impact, retreat, acknowledgement, and reconstruction. The phase of impact is a depersonalizing phase. It represents the initial encounter with the critical situation of the trauma, and throws the person into a state of shock. This initial emotional encounter may be at the time of the accident or whenever the person becomes aware of his injuries. Anxiety permeates the atmosphere and finds its outlet in automatic and poorly controlled behavior.

The next phase through which the traumatized person moves is the phase of retreat. After the numbness brought on by the impact extends for a period of time, depending on the nature of the trauma, a reality of the situation forces itself upon the victim's consciousness and his anxiety mounts to such a degree that he attempts

to retreat from reality. There may be a denial of his condition and the victim may deny pain, stating that he never felt better in his life. Or he may indulge in future plans that are entirely unrealistic in the light of his condition.

The next phase is the mourning phase. With the realization that there has been a change in appearance and consequently a substantial loss of the former body image, the victim goes into a mourning period. The atmosphere is that of frenzied helplessness and hopelessness.

The last phase is reconstruction. It marks the time for a new beginning. The need to mourn is replaced by the decision to try new approaches to life and living. The main task of nursing in this phase is reinforcement of the new state through support and encouragement (Lee 1970).

The patient's family, as well as the patient himself, react to the impact of severe trauma. This reaction can affect the patient's hospital adjustment and subsequent rehabilitation. Their initial reaction involves established ways of dealing with a crisis situation. However, this initial reaction may be inadequate and cause the family to act in strange and inappropriate ways. Bowden and Feller (1973) believe that well meaning

attempts to help the family psychologically without understanding the family and the reasons for its particular reaction to trauma, may only accentuate an inappropriate reaction. They recommend an early psychosocial evaluation of the family by a social worker for compilation of information that can be shared with other health team members. Then the health team can become involved in helping the family combat the frequent and usual reactions of immobilization and inability to make decisions in regard to coping with the situation.

A suggested method of assisting the family is the utilization of a nurse with a sensitive ear that will permit the family to work through the problems created by trauma, and to arrive at solutions for themselves (Lee 1970). The family, supported by the nurse, can in turn support the patient by recognizing him as a person undergoing an emotional crisis and a change in body image to which he, and they, must gradually and adequately adapt.

Body Image Crisis

A body image crisis is an event in which there is a sudden alteration in the individual's expectation of himself in relation to others or to a specific situation, and one which calls for a change in behavior, states Murray (1972). When crises take place, extra resources within

the person himself must be called forth. Factors influencing the outcome of the crisis are the reactions of others toward the person's changed appearance. If the person fears he will be unacceptable to others, the task of the nurse is to demonstrate through her own warmth and acceptance that his fears are not wholly realistic. The person will test others by looking closely for a reaction that will reveal to him how they feel about the changes he has undergone. Even a slight wrinkle of the nose or a slightly too long stare, or not making eye contact with the person can be devastating to his self-esteem (Murray 1970).

Bernstein (1976) sees a face, phenomenologically, as an interhuman event. It is comparable to a work of art and is the focal point of living meaning. Schilder (1950) believes the desire to be seen and to be looked at is as innate as the desire to see. The face is basic to the concept people form of each other, and basic to the self-concept and self recognition. Deno (1953) conducted a study on self-recognition using rearview photographs of forty male subjects. The subjects first tried to identify themselves when their heads were masked in the photographs, and later with the heads unmasked. Only a third of the subjects could identify themselves in the masked photos and slightly over a third could identify themselves in the unmasked photographs. Without facial

identification, the task proved to be somewhat difficult. Other parts of the body, the legs, the hands, the abdomen, and the back are relatively anonymous.

Peterson et al. (1976) define body image simply as "the picture of one's own body that is formed in the mind". They see the body image as having two components. First, "body sense", the actual sensory experiences concerning the body, or how a person looks to himself when he sees his reflection in a mirror or a photograph. Second, "body concept", the way a person feels about himself as a result of internal psychological processes and sensations that come from within and are an outgrowth of personal emotional experiences.

Fisher (1968) sees body image as a concept of the body which overlaps the various concepts of ego, self, and self-concept, and refers to a psychological experience which focuses on the individual's feelings and attitudes toward his own body. A crisis develops when an abrupt adverse change in these attitudes and feelings takes place as a result of severe trauma.

Self-concept, to Epstein (1973) is a very useful and necessary explanatory construct. It provides the only prospective from which an individual's behavior can be understood. Epstein does not attempt to define self-concept per se, but states it has been defined by others

in terms of the "I", or the "me", or both, or as the individual's reaction to himself. "The self" is a slippery concept to Epstein also; an adequate definition is irritatingly elusive.

Schilder (1950) sees the concept "body image" as the way in which our body appears to oursslves. He sees a unity perception of the body that he terms a "body schema". This body schema is a tri-dimensional image encompassing bodily sensations, experiences of the unity of the body, and acceptable alterations in attitudes toward our bodies. The body schema is an organized model of ourselves, and in case of severe trauma, this organization is suddenly disrupted as a result of a change in appearance. The change may be initially unacceptable and very foreign to usual attitudes and feelings in regard to the body image, and hence precipitate a body image crisis.

Rapaport (1965) sees a state of crisis not as an illness, but as an upset in a steady state, or as an upset in equilibrium, caused by a hazardous environmental event. The individual strives to maintain himself in a state of equilibrium through adaptive maneuvers and problem-solving activities. In a state of crisis the habitual problem-solving activities are not adequate and do not lead to a balanced state.

Sheahan (1972) believes the person's ability to talk about his feelings is crucial to overcoming crisis, along with the presence of an attentive listener. An effective nurse-patient relationship allows the patient to talk and work through his feelings, and to do problem-solving appropriate to the situation. Verbal expression of feelings helps to organize thought and to restore confidence to the patient. As an attentive person listens to the patient, the patient will perceive that the listener cares about how he feels. The listener may simply sit beside the patient, lay a hand on his arm, and look at him while he talks, thus conveying an accepting attitude that is exceedingly helpful. The gesture of touching can be very soothing to a worried and troubled patient. This gesture may be all that is needed to relieve a great deal of momentary tension that is perhaps interfering with the functioning of the patient.

Crisis Intervention

A crisis is the result of a temporary loss of behavioral control occurring typically in a transitional period in which normal support sources are weakened or absent. It can be best conceptualized, not as a psychological disorder, but as a socio-psychological blight or disaster. It can be operationally defined in terms of

goals for restoring an individual to his pretraumatic level of overt functioning, states Sneidman (1972).

Crises are usually of brief duration, and an adequate period of crisis intervention need not exceed three months, except for the crisis of death. Adjustment to the loss of a loved one may require a year, according to Sneidman. Crisis intervention is not a time for fancy psychological interpretations. It is a time for creating action, for mobilizing other people to help, and for doing practical things for the person experiencing a crisis. It is a time for concern and active involvement on behalf of the person who is in a crisis situation.

The function of the therapist is to reduce the proportion of the crisis to the point where the individual is able to cope with it, and in doing so, time is of the essence. Crisis is a situation in which events are occurring with overwhelming rapidity. Korner (1972) states that the primary goal of the therapist is to create a constructive change in the individual's condition as rapidly as possible.

The crisis itself, according to Korner (1972), represents a reduction in the ability to cope. Once the crisis has set in, it is the therapist's task to revive and strengthen coping abilities. These coping abilities are closely related to ego strength and ego resources.

Coping potential includes those behavioral functions that enable the organism to maintain himself in his environment continuously and fairly well.

The effective determination of a person's strength and capabilities for ongoing functioning is an essential aspect of crisis intervention. Aguilera et al. (1974) suggest that in a crisis, therapists evaluate the coping potential of the individual by reviewing the availability of the major sources of support for the patient such as family, friends, neighbors, and available community resources. Most people in a crisis situation can be helped by individuals other than professionals. But in severe crisis situations help from everyday associates may be inadequate. Professionals are needed to assure that the person will cope successfully and overcome the crisis. In coping successfully, the person adds to his ego strength and coping potential for the future crises he may encounter. Failure to overcome a crisis may permanently undermine this potential, states Sneidman (1972).

Korner (1972) outlines patient tasks in mastering a crisis situation as follows: 1) letting emotions circulate freely outward into the environment 2) perceiving the presence of others as supportive, and 3) using information and interpretations from therapists to develop thoughts and ideas that can block, surround, or deactivate the chaos of crisis and re-establish control.

The steps for the therapist to follow in crisis intervention outlined by Aguilera et al. (1974) are as follows: 1) Assessment of the individual and his problem. The therapist, by the use of focusing techniques, obtains an accurate assessment of the precipitating event, and learns whether the individual is a high suicidal or homicidal risk. 2) Planning for therapeutic intervention. This planning is designed to restore the individual to at least his precrisis level of equilibrium. Information is sought to determine the coping skills the patient may have successfully used in the past. 3) Intervening. The individual is assisted in bringing his feelings into the open, and in gaining an intellectual understanding of his crisis. 4) Resolution of the crisis. The therapist reinforces coping mechanisms the individual has used to reduce anxiety. Assistance is given as needed in making realistic plans for the future.

Listening as Therapy

Walston (1975) states that in any health care system, an important part of the nurse's role is to obtain specific information from patients by listening to them. The nurse's listening behavior and the patient's perception of her willingness to listen are factors that influence information exchange which is extremely important

to the patient's physical and emotional welfare. When a nurse does not listen it is often interpreted, and correctly so, by the patient as disinterest in him. Whether implicit or explicit, rejection by the listener tends to inhibit disclosure. To elicit expression of problems, states Sheahan (1972), it is essential to be able to convey to the patient that there is plenty of time to listen to him and that he has the nurse's undivided attention.

Sitting and listening attentively and supportively allows the listener an opportunity to learn a great deal about the patient, and to learn about his problems from his own point of view. Hill (1971) points out that to be an objective listener, a concentrated effort should be made to see less of the world within ourselves and to develop a faculty for seeing people and things as they really are. To exercise this objectivity the listener "hears the patient out" without imposing his own preconceived notions and opinions on the patient. This requires reason, humility, and a degree of self-control. Hill (1971) believes that since the objective in listening is to comprehend what the patient is saying, the listener must hold back judgments and decisions until after the patient has finished speaking. Only then can true evaluation be reached. Having listened to the fullest capacity, it is then possible to summarize, digest, and evaluate what is important to

the situation as a whole, and what is important to use therapeutically.

The function of a listener, according to Mair (1972), is to listen to what is said as well as to what is not said. Even various physical sounds other than speech have psychological significance. Sounds such as burps of indigestion may have significance in that there may be something in the patient's life-situation that he cannot swallow very well besides being unable to digest food. These sounds are termed "organ music". The rasping breath of an asthmatic may be caused by his literally choking with rage he cannot express verbally, since many asthmatics are gentle, quiet people. When we listen to patients effectively, we listen to them as a whole, their words, their sounds, and their demeanors.

Fisher et al. (1968) lend some credence to the concept of supportive listening as therapy for body image disturbances through their studies of arthritic patients. They determined by interviewing and by the Rorschach ink blot test that arthritics have difficulty in expressing their feelings, especially those of anger and aggression. They seldom lose their tempers, and are apparently persons who have emotions they are fearful of expressing. In order to avoid losing control of their emotions, they conceive their bodies as enclosed vessels with walls or

peripheries that prevent the outbreak of impulses. Even their muscle stiffness seems to be equated with inhibitions and making their body exteriors tough and resistant. These patients may benefit by expressing their feelings to an interested. supportive, nonjudgmental listener.

In this age of speed, man is trained to think he loses time when he pauses to listen, or pauses to think over a situation thoroughly. To linger on in reflection of a situation goes against the modern idealized concept of himself as a "man of action". Listening requires action, but it also requires time and concentration. In view of the pressures of life in modern society, listening can be a powerful preventative for a number of disturbances to which he is subjected.

Anxiety, Depression, and Hostility

Anxiety

A predominant early response to trauma is anxiety. It can increase physiologic and psychologic pain and hamper successful management of trauma (Luckman et al. 1975). Following a traumatic accident the hospitalization experience is usually an anxiety provoking situation in itself. The environment may be strange and unfamiliar, and the patient is uneasy and does not know what to expect. He is at once injured and suddenly thrust into a situation

almost entirely beyond his control. Lucente (1972) defines hospitalization anxiety as an unpleasant and uncanny experience perceived as a result of an environmental change and experienced as a threat of one's personal security. On the other hand, the patient is aware of the fact that the hospital is the best environment for him under the circumstances.

An awareness that all hospital patients are anxious, not only because of their illness or injury, but simply because they are hospitalized is essential for all personnel. Often when anxiety is evident in a hospitalized patient, there is a tendency on the part of the personnel to inform the patient there is nothing to worry about, to calm him, and to soothe him, without allowing him to state that he is frightened, and why he is frightened (Bird 1973). The first step in relief of anxiety is a remark by a therapist to the patient to the effect that he looks anxious. The next step is agreement by the patient, accompanied by a burgeoning relief as he begins to discuss his feelings. These feelings can then be examined as an object by both patient and therapist, thereby reducing the threat of anxiety.

Sneidman (1972) is in agreement with Bird (1973) when he states that the therapeutic maneuver in acute anxiety is not to dwell on the precipitant of the anxiety, whatever it may be. The task is to roll back the intensity of the anxiety by being concerned about the anxiety

itself, assisting the patient to admit the anxiety candidly and express his feelings in an effort to break through the the wall of anxiety.

From the clinical viewpoint, anxiety is regarded as a somewhat normal adaptive response which carries unpleasant emotional overtones, states Strongman (1973). It is recognized not only as the most common neurosis but also as basic to other neuroses. It is often believed to occur as a secondary reaction to depression. In simple anxiety, there are somatic symptoms such as palpitations, faintness, pressure on the chest, digestive disorders, lack of appetite, a dry mouth, and urinary frequency. Various mechanisms are employed by the individual to allay the highly unpleasant emotion of anxiety. These mechanisms lead to the formation of symptoms, and symptoms are ultimately considered the result of a defensive effort against anxiety.

Since anxiety is accompanied by body changes, it can produce somatic consequences as well. The physiologic responses to anxiety are designed to prepare the individual for an emergency action called "fight or flight". A person may choose either fight or flight depending on his available coping patterns. If fight is impossible because defenses are not working well, and anxiety is becoming less and less controlable, flight may be attempted. The choice of flight indicates a sense of impending panic and complete loss of

control. Therefore, the person makes himself "disappear" or makes himself into "nothing". In this state, no attempt is made to deal with the problem (Branch 1975).

Stupor and unresponsiveness result as an enforced recess, or a period of inner rest and rehabilitation ensues. When inner strength is once again equal to the task, the person will come out of his stupor to fight the problem.

Crying may occur at times as a means of dealing with anxiety. When it does, the patient should be reassured that is is quite all right for him to cry, and he should be allowed to cry until he is able to talk. After tears, the patient can often talk best, and indeed, it may be the only time he can talk (Bird 1973).

In regard to research related to anxiety and to means of dealing with it, Falkins et al. (1968) tested a therapy that involved clinical desensitization to anxiety. He paired anxiety-evoking stimuli with relaxation, which is antagonistic to anxiety. The results indicated that cognitive rehearsal of images and associations surrounding the anxiety-provoking stimuli, in the context of simultaneous relaxation, strengthened the person's resources to deal with threatening real-life situations.

The feeling of anxiety can be measured to some degree, although precise levels may not be obtainable with current availabe methods. A number of test not only reveal information about the patient's emotional state, but also

measure his anxiety level fairly well. Among these tests are the Multiple Affect Adjective Check List, The Minnesota Multiphasic Personality Inventory, the Taylor Manifest Anxiety Scale, and the Rorschach Ink Blot Test. The Multiple Affect Adjective Check List used for this sutdy correlates with all of the other above mentioned test in its measurement of anxiety.

Depression

Depression is an emotional state, a mood, or a feeling. It manifests itself in many forms but it can very easily be divided into two categories, mild and severe. Mendels (1970) and Kline (1969) divide it into several categories. To Mendels the word "depression" describes a mood, a symptom, a syndrome, and a specific group of illnesses. He believes the emotions of sadness and grief are an intrinsic part of the human condition and are a universal experience.

Kline (1969) also agrees that depression is a condition of existence. One of his classifications of depression is "existential depression" in which he explains that the pleasures of good fortune in life are constantly balanced by the sorrows of loss, failure, and bad luck. Therefore, depression is a human condition.

Beck (1967) sees depression as a condition that designates a particular type of feeling, a syndrome, and a disease entity. A person experiencing a transient sadness or loneliness may state he is depressed. Whether this "normal" mood is related to the feeling experienced in the abnormal condition of depression is open to question. The low mood or "blue" feeling experienced by the "normal" individual is similar in a number of ways to the clinical state of depression. The words used to describe feelings in both cases are the same - blue, sad, unhappy, or dejected.

Kline (1969) describes the depression syndrome as a condition with symptoms of considerable severity. There may be behavioral and psychological manifestations, decreased interest in the environment, and fatigue. In addition, there may be a disturbance of sleep, a marked loss of appetite, and a loss of weight in this state of depression.

Depression manifests itself as a disease in a psychosomatic form or as a paranoid confusional state. In its classic form, feelings of sadness, fatigue, loss of interest in the social environment, self neglect, irritability, and suicidal preoccupation are some of the manifestations. There is some indication that depressed persons view events that affect them as being beyond their personal control. The results of a study by Calhoun et al. (1973)

indicated that adolescent females showed this tendency more than any other age and sex group of subjects tested.

Many individuals react to loss through attacks of depression in an attempt to deny the feeling of loss or to compensate for it. The depression attack represents not only the inability to tolerate loss, but indicates anger that is threatening to erupt. By establishing a depressive reaction, both the loss and the anger are obscured. If the loss is not too severe, or if the individual tolerates loss well, he will be only mildly depressed and will respond to appropriate therapeutic intervention.

Severe depression is a most undesirable response to trauma. It is usually present when the patient has little to say, when he is slow to respond, or does so sparsely and in a listless way. He will have a definite reduction in speech, and it is difficult to persuade him to speak (Bird 1973).

A problem of most urgency in managing a severely depressed person is the possibility of suicide. If there seems to be a suicidal tendency, an evaluation of the risk must be made as soon as possible, and action commensurate with the extent of the risk must be implemented. The evaluation is made by questioning the patient to determine how far he has gone in thinking about suicide. Bird (1973) states that in these cases the therapeutic action of choice is to place him in a safe place where he is protected from

his self-destructive urge. Time may give the person an opportunity to sort out his feelings and perhaps make decisions that are effective in dealing with his problems.

A patient's reaction to a damaged face may be one of great distress, anxiety, and depression, including periods of mourning for the loss of the original appearance and perhaps a whole way of life. He is depressed because he realizes his face has definite social and economic value, and suddenly, he finds himself socially and economically handicapped because of his appearance. He may be prevented from getting a decent job, or from living a normal life. People stare at him everywhere he goes, and little children laugh at him. "What is my crime?" he asks. He spends a great deal of time alone in his room and may believe he is better off dead (Wood-Smith et al. 1967).

When a person has lost the battle to reduce his anxiety and he is unable to express his anger, it becomes difficult to make contact with him. When he becomes apathetic and is undemanding and uncomplaining, there is a tendency to attempt to shock him out of his apathy. But this maneuver is almost never successful. Sitting quietly with him as long as necessary and conveying the feeling that someone cares about him and his problems is more effective (Sarton 1971).

Hostility

Hostility is a negative attitude accompanied by enduring feelings of ill will or destructiveness, overtly or covertly expressed. It is often directed inward against the individual himself as a result of a feeling of guilt and worthlessness, or a feeling of the need for self-punishment. When the hostility can be turned away from the individual and directed outward, self-esteem rises and the feeling of guilt and the need for self-punishment disappears (Hofling et al. 1967).

A failure of adaptation is a cause of hostility. An individual who is unable to adapt is frustrated. Buss (1961) calls hostility "a conditioned anger response" since the development of hostility depends on the individual being angered. Buss believes that if there is an excess of the antecendents of anger (attacks, frustrations, and annoyances) there is likely to be an excess of hostility.

Hostility differs from anger in that anger is usually a short-lived emotional reaction with prominent automatic and skeletal-facial components that arise from a given situation. Hostility and anger are basically protective devices in that they are the forces which permit one to protect and defend himself. They are a defense against, or a cover for, anxiety. When a hostile person

is told that he seems angry, the truer feelings incorporating anxiety may surface and be brought to light by the patient's verbal response (Seligman 1973).

Anger is usually based on reality and is considered a positive emotion, whereas hostility is a negative emotion and is based on feelings of fear and apprehension. Anger sometimes elicits our best intellectual efforts. Martin Luther once stated, "When I am angry...my whole temperament is quickened, my understanding sharpened." Hostility has no such effect, since it is usually disruptive and distortive to the mental processes (Stearns 1974).

Hostility and aggression are primitive forms of answers given by a subject to a situation. Aggression differs from hostility in that aggression is vented actively and hostility is usually vented passively. Both emotions can become embroiled in the "fight or flight" phenomenon used to escape anxiety. If the victim is able to fight, he reacts by using aggression to destroy the source of his irritation. If he is unable to fight he utilizes flight to escape from the irritation. Anytime he attempts flight rather than fight, aggression is nil, but there is a great deal of hostility present, and the flight could be termed a "spiteful flight" (Saul 1971).

The possibility of differential release of catecholamines as a reaction to the emotional states of fear,

anxiety, aggression, and hostility has been studied by a number of behavioral scientists. The physiological response to anxiety is accompanied by adrenalin release, while the reaction to aggression and hostility is accompanied by noradrenalin release. The response of anger resembles the effect of an injection of noradrenalin, while fear resembles an injection of noradrenalin plus an injection of adrenalin. With a high arousal state, there is a release of both catecholamines regardless of the emotions involved (Bridges 1974).

The relationship of hostility to depression is seen in the manner of expressing these two emotions. Hostility may be present and openly expressed, or it may be suppressed if the individual is in a state of depression. A study by Schless et al. (1974) of depressed patients explored the association among depression, hostility, and the direction in which hostility is expressed. A spectrum of hostile behavior was found with an appropriately equal number of patients who tended to turn hostility inward and outward. Those patients who tended to turn hostility inward had higher depression scores. Patients who tended to turn hostility outward exhibited hysterical features and resentment. The findings indicated that depression is primarily an emotional signal, while hostility is a defense.

Sigmund Freud, states Fromm (1973), asserted that the hostility of depressed individuals is directed inward toward themselves rather than outward toward others. He noted that passive expressions of anger and hostility are found in the silence of depressed persons. Since Freud's observations, it has been established clinically that individuals with an unimpeded self-assertive tendency are less hostile in a defensive sense than individuals whose self-assertion is defective. Individuals with unimpeded self-assertive aggression do not feel easily threatened, and hence, are not readily placed in the position of having to react with aggression (Fromm 1973).

Facial Cancer Trauma

The effects of cancer of the face, as well as cancer of any part of the body, are similar to the effects of facial trauma caused by accidents or violence. These conditions involve changes in body image, and may precipitate a crisis. The very word "cancer" produces instant panic, fear, and a shattered equilibrium for the unfortunate victim, states Rosenbaum (1976). Upon the revelation of the presence of this dreaded condition, the patient grapples with shock and anxiety, followed by depression and some degree of anger and hostility, just as the facial trauma patient who is a victim of an accident or an act of violence

grapples with these feelings. The course of his life is radically altered in a few seconds, and an assault on his body image begins. He may have visions of a mutilated, scarred, and disfigured face or body, or of a helplessness leading to loss of life itself.

The taboos and fears associated with having cancer may flash through the patient's mind as he recalls his own former attitude toward others with cancer - avoidance, embarrassment, awkward behavior, and even over-solicitude with a tendency to treat the victim as if he were a child. Empathy with other cancer victims ensues.

Extensive face surgery may be necessary in order to prolong or save a cancer patient's life. The surgeon's main concern, states Rosenbaum (1975), is to excise the cancerous part, with the residual mutilation secondary to the cancer problem. The removal of a jaw, a nose, or an eye may be lifesaving, yet the resulting disfigurement can have a crippling effect almost as grave as the cancerous condition (Wood-Smith et al. 1967).

A study by Blumberg (1950) explored the possible relevance of certain personality variables to the rate of cancer growth. He theorized that psychological factors might reduce resistance to cancer. Medical specialists rated the cancer cases involved in the study as "fast

growing" or "slow growing" in relation to the expectancy of each particular type of cancer. The fast growing group tested to be more defensive, aggressive, anxious, and to have less ability to reduce tension than the slow growing group. The Minnesota Multiphasic Personality Inventory and the Wechler-Bellevue were used for the testing. A correlation between the results of this study and the reduction of tension in facially injured patients for a more rapid and satisfactory recovery can perhaps be drawn.

It is clear that the patient with cancer of the face has an urgent need for psychological therapy as well as physical therapy. As in the case of facial trauma resulting from accidents or violence, only by sharing his thoughts with someone who is compassionate, tolerant, and knowledgeable about his condition, can a cancer patient's psychological recovery be promoted (Rosenbaum 1975).

Facial Burns

A severe facial burn presents a typical distortion of the appearance of the face. The victim's eyes are swelled shut, his face is edematous and rounded, his lips are everted, and his mouth will not open adequately because of the tight binding of the jaws by the burn wound. This distortion is noted immediately after the face is burned.

Upon admission to the hospital and for a few days after hospitalization, attention is focused primarily on the patient's physical needs. During this period, the patient tends to be somewhat overwhelmed by the situation, both physically and psychologically. Davidson (1973) believes the greatest immediate comfort for the patient comes from vigorous, aggressive, and confident nursing action which gives the patient hope that he will not be abandoned. Just as there is a need to give the patient physical care, so there is a need to give him psychological care. The patient needs to have the opportunity to express his feelings in order to come to grips with his physical and emotional pain. This assists him to focus on himself as a "person" rather than a "victim" who must survive both his crisis and the strange world of the hospital.

Davidson (1973) observed during an exploratory burn study that most patients seemed to prefer to ventilate intense feelings of anger and frustration to the research team rather than to members of the staff on whom they had to depend for physical care. She also observed that after ventilating their anger and criticism of the staff to the researchers, the patients almost always praised the staff's dedication and skills, and referred to the burn unit as "the best in the country".

A psychiatric nurse specialist, a social worker, a clinically trained chaplain, or a psychiatrist is often better able to deal with the patient's emotional needs than the regular staff. Davidson states these specialists "seem to be more comfortable with expressed patient emotions than the staff because they do not bear immediate responsibility for the patient's care".

The physical and emotional care of the staff, however, does affect the patient's mental state, and vice versa. Davidson and Noyes (1973) reported that a team of investigators studied burn patients for a year and determined that "morale of the patients was often influenced by that of the nursing staff, which was in turn influenced by the degree of success the nurses achieved in coping with patients' behavior". The investigators established weekly meetings of the nursing staff and referred to them as "psychological rounds". The expressed purpose of these rounds was improvement in the management of patients' emotional reactions.

The families of burn patients need a great deal of support from the staff and specialists. The family members may experience intense emotional feelings, especially immediately after the burn. The acute anxiety they experience is often "manifested by short attention spans, difficulty in listening, and jumping to conclusions" (Davidson 1973).

As soon as possible a therapist should allow the family to ask questions and express their concerns. According to Davidson, it seems to be helpful for the family to receive written material describing burn treatment and stating rules of the unit. It also seems to be helpful for the family to be encouraged to keep a list of questions. This gives them a feeling that the staff is concerned about them as well as the patient.

For restoration of the face in burn cases that have resulted in contractures, there are two primary techniques: the skin graft and the pedicle flap. In managing burn contractures, the priority of treatment is the severity of the deformity, the location of the contracture, and the difficulty of treatment. If the severity of the deformities is the same, the face has priority for surgical reconstruction. There is a great deal of difficulty encountered in working with the face because of the firm attachments of facial muscle to the skin, and these attachments are impossible to replace when the face has been burned. Unfortunately, reconstruction usually leaves the patient with a stiff unnatural expression, states Lehr (1972).

During hospitalization, and even during rehabilitation, the psychological aspect of management of facial burns, in a great many cases, seems to be secondary to

the physical aspect. The recognition of the importance of psychological therapy for facial burns can do much to alleviate the anxiety and depression the patient feels as he contemplates the difficulties he is likely to encounter upon his return to normal life, especially if he has scarring and disfigurement of his face. Adequate psychological therapy can also do much to restore the patient's confidence in himself and his abilities.

Facial Injury By Violence

The face is vulnerable to violence. It is not protected by clothing and is thereby a fairly easy target for reprisal against an enemy. Because of the importance of the appearance of the face to the individual and to society, it is frequently injured by a malicious revengeful attacker. Facial burns is one of the most common types of injuries in these cases. The face is also often injured, along with the head, during robberies and muggings. Damage to the eyes and fractured facial bones are the most common types of injuries by robbers and muggers.

Among the most frequent causes of facial trauma by violence are altercations between friends and family members, usually over money or because of jealousy. Violence in the home ranges from homicides to spankings. It varies in intent; in some cases the intent is to control family

members behavior, in others it is to vent personal hostility, and in still others it is a mixture of both (Curtis 1974).

Few others can anger one so much as a family member. The intimate social contact in the family provides ample opportunity for antagonisms to have been tolerated, perhaps for years, in which the assaultive family member has been teased and taunted to the breaking point. Usually the assault takes place in the heat of passion. Infidelity of a mate, failure to pay a debt, or the use of vile names will incite the offender to overt action, or he may have to defend himself during an argument and therby be incited to overt action (Lystad 1975).

When an act of violence takes place, it may be quite difficult to determine whether the victim or the offender was the more culpable. Wolfgang (1974) speaks of the "duet frame of crime" and the "contribution of the victim to the genesis of crime". In these statements he is referring to the fact that the victim may have been a major contributor to the criminal act and may have provoked the offender into the act. Other noted criminologists write frequently of the victim-induced, victim-invited, and victim-precipitated crime.

Society at times has an attitude of marked reluctance and resistance toward accepting the innocence of victims of violence. Such reluctance is shown by community

responses, police behavior, and friends and family reactions. The community has certain attitudes that block sympathetic responses to the victim's plight, such as the primitive fear of contamination by the unlucky victim. The result is to isolate or exclude the victim because there is a feeling of uneasiness in being associated or identified with a victim (Symonds 1975).

An entirely different situation from the violence in the home and between friends and family members is the violence of robberies and muggings. Victims of these crimes are in a completely different position from the known-offender type of crimes. They are truly innocent victims in most cases because they neither know the offender nor provoke the crime. Robbery and mugging are premeditated by the offender who is a particular type of person with criminal intent. Symonds studied robbers and muggers and found that they seemed to be lacking in insight and totally lacking in ability to relate to anyone else's needs but their own. They seemed to have a marked social unrelated-ness and no hope for the future. Symonds also found them to be quiet, rational, and not psychotic.

The crimes of both robbers and muggers are commit-ted primarily for money. Unlike most robbers, muggers have no sophisticated patterns of victim selection. They are usually surprised at the victim's cooperation,

and yet they would seriously injure the victim if he did not cooperate.

Victims of violence suffer from aftereffects of an attack both physically and psychologically. Robbery and mugging victims in particular have persistent and recurrent fantasies and dreams in which the offender returns to injure them more seriously or to kill them. Victims have fleeting but recurrent thoughts of killing the criminal, but those thoughts are promptly replaced by counter thoughts of the consequences of such an act.

In a study of victims and the aftereffects of violence, Symonds (1975) found victims eager and anxious to talk about their experiences. However, he found difficulty in gaining access to the victims for talking-listening sessions because of the mistaken concept of protective silence on the part of the victims' families. Since victims may remain days or weeks in the phase of fright with excessive suspiciousness and a tendency to discuss their status as a victim with anyone who will listen, the families often urged victims to be silent. Symonds felt that discussing the experiences would be therapeutic to the victims.

Reckless et al. (1957) studied the role of self-concept in deviant behavior. He found that the self-concept was significant in protecting the noncriminal

from social and cultural pressures that tend to propel the individual toward antisocial behavior. Massem and Shore (1963) studied self-image in offenders and hypothesized that changes in self-image should be highly correlated with decreases in antisocial behavior. A special program was initiated to bring about changes in self-image by the use of a comprehensive vocationally oriented psychotherapy. The result was a significant change from antisocial behavior to socially acceptable behavior.

Therapy for the victims of facial violence is both physical and psychological. The victim's physical wound is more obvious and requires more immediate attention than his psychological wound. However, his emotional status must be assessed as soon as possible and appropriate therapy instituted. As his anxiety is relieved through therapy, the need for hostile action toward the offender and aggressive acting out behavior is removed (Menninger 1970).

Facial Lacerations and Fractures

Lacerations

A great many facial lacerations result from automobile accidents, with damage resulting from windshield, steering wheel, or dashboard impact. When an automobile decelerates upon crashing, the passenger seated next to the driver is most likely to receive serious facial

lacerations, among other injuries. He is projected forward and upward at a forty-five degree angle. The body flexes at the waist and the head strikes the upper part of the windshield and swings in a downward arc. The glass shatters causing the initial facial lacerations, and as the body recoils, the head is pulled back through the broken glass causing further lacerations. The driver also may receive facial lacerations. He often strikes the windshield, rear view mirror, or dashboard, usually causing moderately severe facial lacerations (Glantz 1969).

Lacerations of the face from automobile accidents produce a typical V-shaped slicing or avulsive wound. The eyebrow, nose, or lip may be avulsed, depending on the angle of impact. In a study by Glantz of 400 patients with serious facial lacerations from automobile accidents over a period of seven years, few of them had worn seat belts that might have prevented much of the facial damage. The chances of prevention of serious facial lacerations is best if both lap and chest belts are in place and properly fitted. If the automobile remains intact through the crash and the passengers are securely strapped in their seats, facial lacerations are minimal following a crash.

Treatment for facial lacerations includes thorough cleansing, and when necessary, meticulous debridement,

taking care not to injure the facial nerve and its branches. Homeostasis is then secured, dead space is eliminated, and the wound closed with fine buried and skin sutures. Landmarks such as eyebrows or lip margins are united first during the repair. Of particular importance is the accurate reapproximation of the vermillion border and the adjacent "white line" of the lips, since the human eye is extremely perceptive of irregularities in the oral area of the face. Lacerations of the face, regardless of how extensive they are, usually require no dressing. Care of the suture lines and topical antibiotic ointment is sufficient for effective management (Hoehn 1973).

Fractures

Although most of the facial injuries from automobile accidents involve only soft tissue, many include facial fractures. When there are facial lacerations with hematomas there may be underlying facial fractures. While some of these fractures are apparent immediately because of interference with the airway, others are subtle in their presentation. Both types of fractures are significant from a functional point of view, however. Malocclusion should signal the presence of either type of fracture, as well as paresthesias of the cheek and lips. Shifting of the jaw to the right or left when opening the mouth always indicates a fracture of the mandible. Fractures of the nasal complex

are fairly easy to detect by immediate palpation and inspection, and noting any irregularities of the orbital rim. Edema may rapidly mask these irregularities making inspection and digital palpation unreliable at times. X-ray examination of the facial area involved is essential after initial inspection and palpation (Akin et al. 1969).

When a fracture of the mid-face occurs, the patient may present with a typical "dish-face" deformity and resulting disfunction. If the facial bones are badly displaced from the base of the skull and there is considerable comminution in the orbital and sinuses areas, rents in the nasal and sinus mucus membranes may expose the lacrimal apparatus and orbital contents to infection. Management of these fractures includes close observation for signs of infection after open reduction and internal fixation. In these cases, fixation is usually maintained from four to five weeks, during which time the patient's facial repair is regularly evaluated. Monitoring the patient's body temperature, inspection and palpation of the facial area are the chief means of evaluation.

Patients presenting with mid-face injuries may also have cerebrospinal fluid as a component of nasal or ear discharge. Cerebrospinal rhinorrhea accompaning epistaxis, or otorrhea result from dural tears in the area of the fronto-ethmoid complex or from basilar skull fractures.

In these cases, packing the nose or ears is to be avoided. When the fracture has been reduced and the wound begins to heal, the discharge will cease. In the meantime, the patient should be administered antibiotics and be protected from infections as much as possible.

When diplopia is present in facial injuries, it is highly indicative of a fracture of the floor of the orbit and possibly a zygomatico-maxillary fracture. These fractures are trimalar or typical three fracture point fractures of the zygomatic arch, the lateral orbital wall, and the inferior orbital rim. Such complicated multiple fractures may require operative reduction and internal fixation by arch bars and wiring. While other injuries take precedence over maxillofacial injuries, management should not be delayed and the fractures should be reduced at the earliest possible moment (Akin et al. 1969).

The radix (root) of the nose is a site of facial weakness and is easily fractured. The nasal bones are thin and the bones posterior to them are fragile. Management of a nasal fracture includes the realignment of bone fragments and support with internasal packing. The alar and lateral cartilages are minimally debrided if shredded or contaminated before repositioning them in the depths of the wound. Lacerations are repaired after repositioning the bones (Hoehn 1969).

The mandible is the most frequently fractured bone of the face. About sixty percent of the mandibular fractures are bilateral. The temporomandibular joint and the mandibular division of the fifth cranial nerve (the trigeminal nerve) are important anatomic structures that may be injured when the mandible is fractured. The inferior alveolar nerve may also be injured with resulting anesthesia of the chin and lower lip. Characteristic signs of a mandibular fracture are deformity of the jaw and malocclusion with crepitation and swelling of the lower face.

Most mandibular fractures can be treated successfully by wired fixation of the teeth in occlusion. However, some of these fractures must be treated by open reduction to remove interposed muscle and fat and to replace the bones in anatomic position. This reduction is maintained by interosseous wires or plates. When teeth are missing the occlusal fixation is supplemented by dental prostheses which are either attached to the remaining teeth or to the bones themselves. When the mandible is endentulous, a complete dental prosthesis is prepared and wiring proceeds as for natural teeth, or a direct approach to the endentulous mandible under local anesthetic is used, fixing the parts securely with internal, interosseous wires.

Fractures of the mandible require special nursing care. Immediately after wiring the teeth, the patient

must be watched closely for nausea and vomiting. Vomitus and secretions can be removed by a suction catheter inserted in the nasopharynx or into the mouth through a gap created by missing teeth, or through the space at the back of the mouth behind the last molar. Wire cutters must be at the bedside for wire cutting if necessary. The patient subsists on a high-caloric liquid diet taken through a straw, an Asepto syringe, or a catheter. Careful mouth hygiene after each meal is a necessity for these patinets. A baby tooth brush can be used to brush the teeth. Wiring will stay in place about six weeks (Wood-Smith et al. 1967).

A difficult management problem is encountered when there is a fracture accompanied by a contiguous burn. "The problem is especially difficult because the serious soft tissue injury, difficult enough to treat alone, is complicated by the added necessity to treat the underlying fracture. Methods that would be satisfactory for treating either injury alone may be contraindicated or inadequate in the presence of a double injury" (Fitts 1969). There is much disagreement about the precise management to be used in these cases. However, the utmost cooperation and timing between those managing the fracture and those managing the burn is essential.

Facial Restoration

Plastic surgery has achieved the status of a major surgical specialty for reclamation of severely injured individuals. Dramatic results are obtained through reconstructive surgery, thereby aborting the deep psychological repercussions a disfiguring scar may cause. The aim of all plastic surgery techniques is to restore the continuity of the divided tissue, preferable with a minimum of reaction and scar tissue formation. The tissue union must be accomplished with only minimal damage to the contiguous tissue margins by the use of very sharp instruments, and the exercise of great care in handling the wound margins by means of skin hooks and sutures (Wood-Smith et al. 1967).

Injuries and repairs of the face require exceptional care which utilizes strict aseptic techniques and the application of pressure on the wounds to prevent hematomas, the greatest single cause of failure of plastic surgery. The most commonly used procedures for reconstruction of the face are skin grafts and flaps, fat, fascia, and cartilage grafts, bone grafts, alloplastic reconstructions, dermabrasions, and prostheses applications.

Nursing management of plastic surgery patients is specialized according to the repair and restoration procedure used, but in general, management is the same as for

other trauma patients. It includes emergency care with particular attention to the maintenance of a patent airway, preoperative and postoperative care, with a thorough knowledge of possible complications, and rehabilitative procedures.

Effective medical management for immediate and subsequent care of facial injuries can be outlined as emergency treatment, debridement of bone, temporary immobilization of jaws, reduction of fractures, closure of soft tissue lacerations, and supportive measures through all procedures. Restoration of appearance, return of function, and complete physical and psychological healing are the ultimate goals of facial trauma treatment.

Initial care of facial injuries is extremely important, for an inferior primary result of plastic surgery, with extensive scarring and disfigurement, may be impossible to reconstruct. Factors in obtaining a fine, almost undetectable, scar are the use of an atraumatic technique, placement of the scar in the same direction as skin lines, the age of the patient, the type of skin, and the presence or absence of complicating factors such as disorders of the skin or infections (Grabbs and Smith 1973).

Atraumatic technique involves careful handling of tissues to obtain a fine linear scar using fine catgut or polyglycotic acid (absorable) sutures. The cosmetic result of a sutured face is good if the scar is not

noticable at a distance of about two feet. A straight scar is more obvious than a slightly irregular scar, and scars opposing the natural facial lines are more apparent than those lying within or parallel to them (Jacob 1960).

In case of facial bone fracture, the optimum time for repair is as soon as the patient's general condition permits, preferably the first twelve hours following injury. Replacement of bone fragments is never delayed longer than seven days unless absolutely necessary. Beyond that time, the bony fragments make accurate reduction difficult or impossible. All facial fracture therapy depends on reduction and immobilization to the nearest solid bony structure lying above the fracture site (Committee on Trauma 1972).

Chasmar (1969) points out that automotive crash injury research has indicated that seventy percent of the victims of automobile accidents suffer injuries to the facial structure. Many of these injuries include fractures as well as soft tissue injuries. Restoration of appearance is one of the basic principles of the treatment of these patients, along with restoration of function. Although other injuries may take precedence over facial fractures and other facial injuries, unless the airway is obstructed, it is imperative that an aggressive and expedient program of treatment be outlined and executed in order for the patient to be

returned to an active, productive life in the shortest period of time possible with a minimum of facial scarring and disfigurement.

Fractures of the mandible are common as a result of automobile accidents. Some of the signs of these fractures are malocclusion of the teeth, displacement of the mandible to one side, and pain in front of the ear when biting down. The jaw is usually reduced and immobilized prior to closure of lacerations. In case of multiple facial fractures, the mandible is reduced first by alignment and immobilization by interdental wires and arch bars. The maxilla and zygomatic process are then stabilized to the reduced and immobile mandible (Irby 1974).

The mandible is often fractured as a result of violence as well as by automobile accidents. Mandibular condyle fractures are most common, with the mandibular body and angle less frequently fractured. Fractures of the malar bone (zygoma, or cheek bone) are also commonly caused either by automobile accidents or by violence. Simple elevation of the zygoma is frequently adequate for reduction if displacement is not too great and if the fracture lines are favorable for stabilization. In more serious fractures of the zygoma, reduction is accomplished by an infra-orbital incision with direct wiring. If the orbital floor is badly comminuted or absent, support

is provided by a thin piece of silastic or a thin iliac bone graft (Irby 1974).

When the zygoma is fractured the nose and eyes are examined for damage. If the nose is fractured, the bone is molded into place after being elevated to its original position by special nasal instruments. A packing is then used to keep the bone in position. An external splint made of aluminum, plaster, or plastic held securely to the face by tape is utilized for further immobilization.

If there is eye involvement in a zygoma fracture, an ophthalmologist is consulted. The presence of a penetrating wound of the globe requires high priority surgery. It is preceded only by surgery to correct a life threatening situation. If a dehiscence of the floor of the orbit exists, a "blow out" (or a "blow in") fracture is present in which the inferior ocular muscles are entrapped in the ethmoid sinus. This type of fracture is caused by a blow from a fist, or a ball, or some other nonpenetrating object that is slightly larger than the orbit. It is repaired either by sinus packing or orbital floor reconstruction with a silastic implant, or both (Akins et al. 1969).

Eyelid injuries with lacerations, both vertically and horizontally, can produce serious sequelae. In vertical lacerations, notching and contracture can cause severe deformity if repair is not precise. Horizontal

lacerations can result in a division of the levator muscle that raises the eyelid (Irby 1974).

In cases of upper lid avulsions, a lower lid flap can be used to correct the defect. The reverse is not true and should not be attempted because reconstruction of the lower lid can be accomplished very satisfactorily by nasal cartilage mucosa grafts or local skin flaps. Split thickness skin grafts should always be used on the upper eyelids because the lids have to be thin and flexible enough to open and close easily (Committee on Trauma 1972).

Full thickness skin grafts for the face are most commonly obtained from the postauricular or supraclavicular regions except for the upper eyelids and extensive burns of the face. Isografts (autografts) from other areas are used for eyelids and extensive burns because of the difficulty of obtaining split thickness skin from the postauricular and supraclavicular areas that is used in these cases. The postauricular and the supraclavicular areas of skin most resemble facial skin, hence their frequent use for facial trauma. For tissue transplantation, it is generally agreed that from a biological standpoint, the most acceptable material is autogeneous tissue of a similar consistency to the wound area. A split thickness skin graft is satisfactory for resurfacing superficial defects, but a full thickness skin graft is needed for

deeper and more serious wounds, the full thickness graft affords greater bulk and is subject to less contracture than the split thickness graft (Alexander 1976).

Unsightly scars resulting from facial lacerations can be improved after initial healing by the use of a surgical procedure that incorporates surgical abrasion of the scars. This procedure is accomplished by the use of sandpaper, and if necessary, a scalpel blade. When a scalpel blade is used, the lines of tension can be cut to improve an offset scar and to blend it with adjacent normal skin. Bone grafts from the iliac crest, split rib grafts, and fascial grafts from the upper leg can also be used for reconstruction of unsightly facial scars (Glantz 1969).

Artificial parts (prostheses) for the face are used to camouflage defects. Parts of the nose or chin may be reconstructed by the use of silicone rubber inserted under the skin. Or a missing part of the nose can be concealed by a prosthesis attached to a pair of eyeglasses. The silicone (silastic) is chemically inert and nonirritating. It retains its shape and consistency well, and studies to date indicate it is noncarcinogenic (Smith and Gipps 1966).

Special Needs of Facial Trauma Patient

Facial trauma patients' first need is for precise and efficient emergency care. Maintenance of an airway is the first consideration, followed by control of hemorrhage, assessment of associated injuries, such as a cervical spine injury or broken teeth. An inadequate upper airway as a result of facial fracture is the most common cause of death in the facially injured patient. Facial fractures may cause the patient's upper airway to fill with blood, loose teeth, mucus and/or bone fragments. Noisy breathing in the patient is an indication of an obstructed airway and requires forward traction of the tongue and mandible, removal of clots, dentures, or foreign bodies from the mouth, and possibly an endotracheal tube or a tracheostomy.

The affected area of the face will need to be cleansed with peroxide solution or phisohex as soon as possible after the accident, and the patient may need an injection of xylocaine for this procedure. If a large area is denuded, a xylocaine gel may be applied. However, pain associated with facial injuries is often mild compared to other injuries of the body, even when the injury is extensive. It is rarely necessary to use narcotics. In fact, they are contraindicated because they interfere with the monitoring of the status of the central nervous system

which is desirable in head injuries (Committee on Trauma 1972).

If irrigation is needed for emergency care, a dental water pick set on low can be used. For a "road tatoo", which is a bluish or blackened discoloration caused by embedded material from dirt and asphalt, this irrigation is essential, followed by scrubbing with gauze and a brush. Otherwise the tatoo will be permanent (Dewey 1975).

After cleansing, the edges of the facial wound can be approximated and steri-strips or butterflies applied to keep them in proper relationship in case edema causes distortion. A cold wet saline dressing, and a pressure dressing if necessary, can be applied if the plastic surgeon's arrival is delayed somewhat.

Emergency care for burns of the face includes maticulous removal of debris and burned hair (except the eyebrows). If the eyebrows are shaved a guide for accurate suturing is removed, and there is a chance the brows will grow back in an erratic pattern. Blisters are opened surgically and devitalized tissue is trimmed away. The burned area is then gently cleansed with a bland soap, and treatment is begun with sulfamylon, silver sulfadiazine (silvadine), or gentamycin cream. These medications provide a comfortable protective film for the burn. They are usually applied twice a day following a gentle wash (Blakemore and Fitts 1973).

Other needs of facial trauma patients may include preoperative and postoperative care for various plastic surgery procedures. If a patient has a skin graft or a flap, his preoperative care probably will be a pre-shave of the donor area and a phisohex bath. Postoperative care will include positioning to avoid pressure on the newly implanted graft, on the newly constructed pedicle flap, and on the donor site. A heat lamp to the donor area will promote drying and healing.

If the grafted area or the flap display excessive pallor or cyanosis, there is an indication of either a hematoma or a deficient blood supply to the area. Either of these post-surgical conditions are serious complications of plastic surgery, and the plastic surgeon would need to be notified as soon as possible.

A patient may have a bone graft which would probably be taken from the iliac crest. Postoperatively he needs to have his hip in slight flexion at all times while he is in bed. He may ambulate after twenty-four hours, however. In case of a split rib graft, the patient must have his breathing rate monitored to detect the presence of a pneumothorax. If cartilage is needed for reconstruction of the face, it may be taken from the ribs also. In case a fascia graft is utilized, adequate circulation checks of the toes are essential (Wood-Smith et al. 1967).

Reconstruction of the cheek may be derived from a tubed pedicle flap from the abdomen to the arm and then from the arm to the face. Lip construction is usually accomplished by a flap from the lower lip to the upper lip and vice versa. The postoperative care of these reconstructions is of particular importance, and includes a low Fowlers position to lower blood pressure and diminish venous oozing and edema. The skin color of the flap must be watched closely for adverse changes. Suture areas need to be cleansed with hydrogen peroxide twice daily, and the donor area covered with a substance such as telfa (Wood-Smith et al. 1967).

When the cheek is traumatized, the facial nerve may also be traumatized and either left intact or severed. In case it is severed, it will need to be surgically repaired by decompression and end to end anastomosis, or decompression and nerve grafting. If the injury results in a loss of nerve segment, a nerve graft is used. The greater auricular nerve is the most commonly used for this purpose. A good surgical result is characterized by facial symmetry, definite voluntary motion, and the ability to close the eye on the affected side. A poor result implies asymmetry of the face and inability to completely close the eye (Bowers 1975).

In ophthalmic plastic surgery, postoperative care is quite similar to other ophthalmic surgery. If the patient's eyes are covered, an introduction of the

approaching person is essential. Since these patients are more apprehensive than normal, their faces should never be touched without first announcing the intention to do so.

Burns of the eyelids occur frequently when the face is burned. Burns of the sclera and cornea are rare, however, because the eyelids close by reflex action and the constantly wet conjunctiva provides insulation. In full thickness burns of the eyelids, the main concern is protection of the cornea from drying. Rapid contracture and ectropion formation may occur, interfering with the closure of the lids. Closure of the lids by sutures may be necessary while grafts are being prepared (Artz and Moncrief 1969).

When a dermabrasion of the face is necessary, edema will be expected and present for the first twenty-four hours. No bandage will be used in order to prevent the accumulation of moisture at the site. If moisture develops, an ordinary hair dryer on a medium or cool setting may be used to dry the area. When a hard crust develops, which is a usual occurrence after seven days, lanolin will soften it. The patient must be protected from bright sunlight to prevent darkening of the new skin. When he has to go into sunlight, a sun screen cream will serve this purpose well.

If silicone is used in reconstruction, sterile warm compresses to the surgical area may be very comforting

to the patient. Needs are otherwise simple when silicone is used compared to a reconstruction method that requires a donor site also.

The patient will need posture corrective exercises if he has had to hold his head in a certain position for a number of weeks because of a skin graft. He may have rather severe muscular pain from having to assume an unnatural fixed position and will need special muscle relaxing exercises while in this position and after he is released from it (Wood-Smith et al. 1967).

Facial hair is a problem for some men who have facial trauma. It makes them feel uncomfortable, and they feel it detracts from their appearance. Special instructions in shaving technique may be necessary. If the patient has been a wet shaver, he will need to learn to use an electric shaver, and may not be able to return to wet shaving for many weeks. The electric shaver must be used in a manner that does not stretch the skin against the grain of the whiskers.

When the patient leaves the protective atmosphere of the hospital, he may need some assistance in presenting a personal appearance to society that will add to his acceptability in spite of his facial scarring or disfigurement. He may need to be reminded that clean, brushed hair, manicured nails, and attractive becoming clothes are very important for acceptability. Instructions in the effective

use of special facial cosmetics may be one of his most urgent needs. An opaque cosmetic cream, tinted to match the patient's skin, and a matching face powder to cover it, are available on the market. Hair can cover scars on the forehead and side of the face of women, and perhaps some men. Beards, sideburns, and mustaches also may provide some relief from scarring for men. Beauty is frequently an illusion of highlights and shadows tastefully created with makeup. Dark colors can subtly shadow to create a hollowing effect. Light colors can highlight or offset recessed features (Simons 1975).

In meeting the needs of the facial trauma patient a therapeutic climate must be created that minimizes the patient's anxiety, depression, and hostility, and maximizes his ability to respond in adaptive realistic ways. Special communicative skill can assist the nurse in creating such a climate. For example, the nurse will not attempt to "cheer up" the facially scarred and disfigured patient by telling him he "will soon look as good as new", which is usually the inclination. This approach only postpones the time when the patient must face his problem realistically. If it is known that complete restoration is impossible, withholding the truth only delays rehabilitation and the goals of treatment (Wood-Smith et al. 1967).

The physical needs of the facial trauma patient seem to receive more attention while the patient is hospitalized than the psychological needs, and as a result, there have been notable medical advances in the physical healing process of facial trauma. Psychological needs, however, seem to be secondary to physical needs, and in most cases, they are largely ignored and neglected (Mattsson 1975).

The psychological goal for the facial trauma patient is to view him as a whole interacting with his environment through time and space. Bernstein (1976) writes that "authorities of all kinds on handicapping point out that patients seek to live normal lives, but most people planning for them arrogantly plan on a low expectations level, with restricted opportunities for the fulfillment of needs". The marginal status of the facially disfigured person must be vigorously opposed by professionals helping them plan for the future. These persons have a full life to live the same as anyone else.

Summary

A large portion of the literature discussed in this chapter was concerned with the emotional crisis of facial trauma and its devastating consequences. However, literature concerned with physical problems and related

considerations was presented and discussed also. The studies and works of many authorities were reported which described the problems created by serious facial trauma, and the role of the therapist and the patient in dealing with these problems. The intense feelings of anxiety, depression, and hostility of the seriously disfigured patient were explored. The literature indicated that the facial trauma patient suffers from genuine grief, in addition to other deeply felt emotions, and that he mourns not only for the loss of an attractive face, but possibly for the loss of a career and a former satisfactory life style.

Emphasis was placed on the fact that a facially traumatized patient has to accept and adapt to a radically new concept of himself, a concept that he may find society will not readily accept. Unfortunately, prejudice against the scarred and disfigured person whose face can never be completely restore to normal, even with the efforts of modern plastic surgery, is very discouraging. An attentive, supportive nurse can perhaps ease the physical and psychological trauma these patients experience.

CHAPTER III

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

The methodology utilized in this study included a two-group before-after quasi-experimental design. It was termed quasi-experimental because the researcher was not able to maintain complete control of the experimental setting as required for an experimental study. According to Issac and Michael (1974), such situations can be regarded as quasi-experimental designs. Control of variables is very difficult, and often impossible when dealing with human subjects and when experimenting outside a laboratory setting.

The quasi-experimental design had the same components as an experimental design, namely 1) a stated explicit hypothesis 2) dependent variables that were operationally defined so that measuring was possible 3) independent variables that were manipulated by the experimenter 4) a control group, and 5) ramdomization (Fox 1966). The independent variables were manipulated by conducting the experiment within a specific time period and by selecting adult patients, 18 years or over, with specific facial trauma. The dependent variables of body image perception and the presence of anxiety, depression,

and hostility were measured to determine the effect of the independent variables, supportive listening nursing intervention and routine nursing intervention.

This study was concerned with the physical and psychological impact of serious facial trauma, scarring and disfigurement. The purpose of the study was to determine the physical and psychological improvement in the facial trauma patient's body image perception and levels of anxiety, depression, and hostility from two days after admission to the hospital to two weeks after discharge.

Setting

A large city-county hospital was selected in which to conduct this study. It was located in a large progressive southern city in a medical center. It had a bed capacity of approximately 800 with an average of 40,000 patients admitted annually. Approximately 500 registered nurses and over 700 physicians served on its staff. The hospital areas utilized for the study were trauma, eye, ears, nose, and throat, orthopedic, and burn units.

Population

A total of twenty patients comprised the sample from the adult hospitalized facial trauma patient population, with ten patients in two groups, an experimental group and

a control group. The main criteria for selection of the sample was patients who had injuries of the face that detracted from the appearance of the individual. Additional criteria were lacerations and burns that caused scarring and disfigurement of the face, amputations of any part of the face, and displacement of any of the features of the face.

Instrument

Tools used to assess the behavior pattern of the selected patients included the Multiple Affect Adjective Check List developed by Zuckerman and Lubin (1965), and a questionnaire which was constructed by the investigator (see Appendices A and B). The MAACL was chosen to measure changes in anxiety, depression, and hostility levels from two days after admission to the hospital to two weeks after discharge. Patients were instructed to check only those adjectives on the MAACL that described exactly how they felt at the time of testing.

The Multiple Affect Adjective Check List was originally developed to meet the need for an instrument to measure changes in verbalized anxiety, according to Zuckerman and Lubin. It was later expanded to include scales for depression and hostility. The expanded Multiple Affect Adjective Check List is composed of 132 adjectives and is designed to provide valid measures of three of the clinically relevant negative affects, namely, anxiety,

depression and hostility. An average of five minutes is usually required to check the list.

Numerous laboratory and experimental studies have proven the validity and reliability of the MAACL as an effective indicator of anxiety, depression, and hostility. It correlates positively with the Taylor Manifest Anxiety Scale, the Welsh Anxiety Scale, and the various scales of the Institute of Personality and Ability Testing, states Zuckerman and Lubin (1965).

By the fact that the Multiple Affect Adjective Check List correlates with these scales and tests its accuracy and validity are proven. The MAACL also correlates with the Gough Adjective Check List, with the MMPI Anxiety Scales, and the MMPI Anxiety Questionnaires, as well as various physiological and biochemical measures, such as heart and breathing reactions to a cold-pressor stress test.

Reliability of the Multiple Affect Adjective Check List is based on a "today" or "immediate" time set as compared to a test with a "general" time set. The MAACL measures the patient's mood at the time of testing, whereas the Taylor Manifest Anxiety Scale, a test with a "general" time set, measures the patient's general mood, or how he usually feels. A different reliability pattern is obtained from each type of test. Both types show high

internal reliability on a single test occasion, but the "general" test yields high retest reliability, whereas the "today" test does not show this retest reliability and is not expected to be as reliable from day to day. Most subject's moods vary from day to day. Persons at the extremes, such as chronic depressives, may stay "reliably" depressed, while people in the normal population will fluctuate in mood. A "today" test measuring affect is not statistically reliable from day to day if it is truly sensitive to the subject's mood fluctuations.

The Patient Questionnaire used in this study was constructed by the investigator since no tool was found in the literature that seemed appropriate for measuring the body image perception of the facially injured patient. It consisted of eighteen questions with three possible answer choices. The questions were designed to measure changes in body image, whether favorable, neutral, or unfavorable. All questions were constructed to measure indirectly expressed feelings of the patient in regard to his self perception at the time of testing. It was also a "today" type of test.

The Patient Questionnaire was submitted to a panel of judges consisting of a trauma clinical nurse specialist, an EENT nursing supervisor, a professor of medical-surgical nursing, and a psychologist with expertise and experience in design and administration of testing

materials. It was submitted to the panel for clarification and appropriateness of its components for measuring body image changes. A pilot study was conducted on two patients after revisions. One patient, the experimental patient, was engaged in talking-listening sessions by the nurse-investigator for the required period of time, and the other patient, the control, was not engaged in talking-listening sessions. Each was tested at the appropriate times as required by the experiment. Results indicated a favorable change in perception of body image and a moderate reduction of anxiety, depression, and hostility in the experimental subject. In the control subject, results indicated a favorable change in body image and a slight reduction in anxiety, depression, and hostility. The raw scores on the MAACL for the experimental subject showed a twenty, twenty, and twenty-nine percent reduction in anxiety, depression, and hostility respectively. The raw scores of the control subject showed a seventeen, thirteen, and twenty percent reduction in anxiety, depression, and hostility respectively.

Data Collection

The selected patients were approached after obtaining permission for the study from the proper authorities of the institution in which the study was done. When rapport had been established, the purpose for the study and the

rights as a study subject were fully explained to the patient. A written consent form or an oral consent form with a witness present, whichever seemed to be more appropriate for a particular patient, was signed by the patient before testing began.

As new facially injured patients became available the fish bowl technique was used to place them in either the experimental group or the control group. No provisions were made to control for personality differences, sex, or cultural background.

After administration of the Patient Questionnaire and the Multiple Affect Adjective Check List, talking-listening sessions of 20-30 minutes biweekly began for the experimental group. The control group was not engaged in talking-listening sessions, but was given the two tests in the same time periods as the experimental group. The talking-listening sessions allowed the patients in the experimental group to express their emotions and feelings freely in regard to their facial injuries and the consequences of the injuries.

The sessions were based on supportive listening by the nurse-investigator that utilized cues to initiate patient verbal communication for therapeutic reasons. A climate was established that maintained an accepting, trusting and nonjudgmental attitude toward the patient's

feelings and his behavior. Reassurance was provided by assisting him to develop resources for managing his unusual feelings. The regular physical presence of the nurse also offered reassurnace by indicating to the patient, who had a special type of trauma, since it involved his appearance and all the ramifications of a spoiled identity, that he was receiving special attention and was not being treated in a routine manner.

As a noncritical, supportive listener, the nurse-investigator endeavored to provide a trusting relationship that conveyed the feeling that the patient could depend on him/her for professional assistance in clarifying feelings and developing solutions to problems. Efforts were directed toward the patient's recognition of the use of his conscious desires, motives, actions, and reactions for accepting and adapting to his particular situation, and for recognizing and using his other assets advantageously.

Treatment of Data

The Multiple Affect Adjective Check List and the Patient Questionnaire were administered two days after admission to the hospital unless the patient was unable to take the tests at that time. If the patient was unable to take the tests two days after admission they were delayed until his behavior indicated a readiness. The delay of

two days or more if necessary after admission was to allow the patient to become fully aware of the possible effects of facial trauma. Following administration of the tests, a body image crisis nursing intervention, either supportive listening or routine nursing care, was instituted and extended to two weeks after discharge. The control group receiving the routine nursing care took the two tests but was not engaged in talking-listening sessions with the nurse investigator.

The period of talking-listening sessions after discharge included in the study was to allow the patient a change of atmosphere to a more nearly real world and a chance to interact with family, friends, neighbors, and perhaps co-workers. It permitted him to evaluate how he really felt about himself in his everyday-world setting.

In regard to the method of data analysis, this study was concerned with the difference between the scores of each patient on both tests before and after the administration of the two nursing interventions, and with the difference between the scores of the two groups before and after administration of the two nursing interventions. The data from the MAACL were analyzed using the Wilcoxon Matched-Pairs Signed-Ranks Test to compare anxiety, depression, and hostility scores within the groups before and after administration of the MAACL. The Mann-Whitney

U Test was used to compare levels of anxiety, depression, and hostility between the groups. Data from the patient Questionnaire were analyzed in relation to favorable, neutral, or unfavorable changes in body image by summing the scores within the groups, assigning each of the three categories, favorable, neutral, and unfavorable, a weight, and obtaining the difference between the favorable scores and the unfavorable scores. The difference scores were then analyzed using the Mann-Whitney U Test.

Summary

This chapter presented the methodology utilized in the study. The design was described as quasi-experimental since it was impossible to control all the variables when working with people outside a laboratory setting. The setting for the study was in appropriate units of a city-county teaching hospital that had granted permission for the study to be conducted within the institution. Subjects from the facial trauma population in the hospital were randomly chosen and tested after consent forms were signed by the subjects.

The framework of talking-listening sessions for the experimental group of subjects, and the role of the nurse-investigator were delineated in this chapter. The activities incorporated in the role of the nurse

were described as being directed toward the provision of a climate that was conducive to the minimization of an unfavorable change in body image, and the minimization of the intensity of feelings of anxiety, depression, and hostility in facial trauma patients.

The tools used to assess the behavior of the study subjects, the procedure for collection of data, and the method of data analysis were described in this chapter. The specific data obtained for the study and the results of the study will be presented in Chapter IV.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

This quasi-experimental study was designed to investigate the relative effectiveness of two nursing interventions for facial trauma patients, namely, supportive listening intervention, and routine nursing intervention. The Multiple Affect Adjective Check List was the instrument used for measuring changes in levels of anxiety, depression, and hostility in these patients, and a patient questionnaire was the instrument used for measuring body image changes. These two instruments were utilized to identify a significant difference within and between two groups of facial trauma patients receiving one or the other of the nursing interventions. The presentation and analysis of data in this chapter includes a description of the sample and the two tests, the Patient Questionnaire and the Multiple Affect Adjective Check List used to compare differences within and between the experimental group and the control group. Tables to clarify the narrative are also presented.

A Description of the Sample

The sample was composed of sixteen males and four females between the ages of eighteen and seventy nine. The mean age was 41.1 years. Seventeen members of the white race including two Latin Americans, and three members of the black race composed the sample. A varied number of occupations and religions were represented in the sample.

The educational level of the subjects ranged from the 6th grade through college, with a mean of the 11th grade. In regard to medical diagnoses, the sample was composed of six victims of violence, with facial lacerations, facial fractures, and facial burns as a result of the violence. Nine subjects had been involved in motor vehicle accidents that had resulted in facial lacerations, facial fractures, and avulsed portions of the face. Five subjects had facial burns as a result of violence. Table 1 and table 2 summarize data related to sample characteristics.

The sample was composed of a victim of attempted murder by scalding water and hot grease poured over her face and body while she was sleeping. The attack was by a family member and was the result of many bitter disagreements. Several subjects were victims of facial burns by explosions. Ammonium nitrate, a fertilizer used by

TABLE 1

GROUP I EXPERIMENTAL GROUP SAMPLE CHARACTERISTICS

Patient	Race	Sex	Age	Marital Status	Occupation	Diagnosis
A	W	F	79	W	Retired housewife	Burns face, neck, 2°. Attempted murder. Scalding H_2O, hot grease.
B	W	M	75	W	Retired service station owner	Burns face, neck, shoulders, 2°. Ammonium nitrate explosion.
C	LA	M	28	M	Unemployed	Multiple lacerations face, mid-face fx*a, nasal fx. MVA*b.
D	B	M	49	M	Restaurant cook	Burns face and trunk, 2°. Aggravated assault.
E	W	M	24	M	Auto mechanic	Burns face, arms, hands, chest, 2°. Gasoline explosion.
F	LA	F	18	S	Domestic	Lacerations face, fx pelvis, MVA.
G	W	F	19	S	Store clerk	Lacerations face, avulsion teeth and portion chin, fx femur. MVA.
H	W	M	61	M	State road employee	Burns face, neck, shoulders. Hot asphalt.
I	W	M	35	M	Truck driver	Lacerations face, fx mandible, fx femur. Robbery victim.
J	W	M	50	D	Delivery man, pharmacy	Fx zygoma, hematomas eyes. Robbery victim.

*a - fracture
*b - motor vehicle accident

farmers, accounted for burns of the face, neck, and shoulders of one of the subjects. A gasoline explosion burned the face, as well as other parts of the body, of another subject, an auto mechanic who was working on an old motor vehicle at the time of the explosion. A charcoal dust flash explosion was the cause of the facial burns of a subject who was a masonite worker, and a gasoline explosion the cause of the facial burns of a subject who was an oil driller.

The motor vehicle accident victims who were subjects of the study suffered severe facial lacerations and fractures as the most frequent types of injury. Also among the injuries of the MVA subjects were two closed head injuries, a facial nerve injury, an avulsion of six teeth and a portion of the chin, and fractures of other parts of the body such as the pelvis and the femur.

One of the MVA subjects, a very young, attractive girl who had eighteen laceration of the face, was thrown through the windshield and back when the hood opened during impact. She was sitting by the driver and was wearing no seat belt. Another MVA subject had a severe laceration of the entire forehead and eyelid on the left side. During the talking-listening sessions, he insisted that he was not at all concerned about scarring. However, he proceeded to talk about the injury and possible scarring at almost every session. He also kept a mirror in his bedside drawer which he used to examine the healing process frequently when he thought he was alone.

TABLE 2

GROUP II CONTROL GROUP SAMPLE CHARACTERISTICS

Patient	Race	Sex	Age	Marital Status	Occupation	Diagnosis
A	W	M	30	M	Electrician	Blowout fx, zygomatic fx. Aggravated assault.
B	W	M	43	M	Bartender	Thermal burns face, neck, shoulders, hands, 2°.
C	W	M	25	M	Masonite Worker	Burns face, 2°. Charcoal dust flash explosion.
D	W	M	27	S	Unemployed	Trimalar facial fx. Amnesia. Motorcycle accident.
E	W	M	31	M	Farmer	Global laceration, bilateral fx mandible, fx femur. MVA.
F	B	M	38	M	Hotel waiter	Lacerations cheek, mouth to ear, rt. facial nerve severed, MVA.
G	W	M	63	S	Auto Mechanic	Laceration face. Closed head injury. MVA.
H	B	F	41	M	Day worker	Gunshot wound, rt. maxillary area. Aggravated assault.
I	W	M	69	M	Driller	Burns face, 2°. Gas explosion.
J	W	M	18	S	Student	Angle fx rt. mandible, closed head injury, laceration face. MVA.

One of the burned subjects felt that his injury was a result of his straying too far from God. Therefore, each talking-listening session was a talk with God. The subject adjusted well to the injury and resulting scarring, showing a favorable body image change and a marked reduction in anxiety, depression, and hostility.

Table 3 summarizes data related to the characteristics of the sample computed in percentages. Sixteen (80 percent) of the study subjects were male, and four (20 per cent) were female. Fifteen (25 percent) of the subjects were members of the white race, including two (10 percent) Latin Americans. Three (15 percent) of the study subjects were members of the black race. The majority of the sample were married as compared to five (25 percent) single, two (10 percent) widowed, and one (5 percent) divorced. Six (30 percent) of the study group were victims of violence, and eight (40 percent) were in automobile accidents. Eight (40 percent) had facial fractrues, and eight (40 percent) had facial burns. Four (20 percent) had facial lacerations.

Table 4 presents data related to the hospitalization period. The longest period a subject was hospitalized was thirty days. This patient was in the experimental group. The shortest period of hospitalization was five days. This patient was also in the experimental group. The mean of the hospitalization period for the experimental group was 17.5 days, while the mean for the control group was 16.1 days.

TABLE 3

CHARACTERISTICS OF SAMPLE COMPUTED IN PERCENTAGES

		Experimental Group	Control Group	Overall
Sex	F	3 or 30%	1 or 10%	4 or 20%
	M	7 or 60%	9 or 90%	16 or 80%
Race	W	7 or 70%	8 or 80%	15 or 75%
	B	1 or 10%	2 or 20%	3 or 15%
	LA	2 or 20%	0 or 0%	2 or 10%
Marital Status	M	5 or 50%	7 or 70%	12 or 60%
	S	2 or 20%	3 or 30%	5 or 25%
	D	1 or 10%	0 ir 0%	1 or 5%
	W	2 or 20%	0 or 0%	2 or 10%
Victims of Violence		4 or 40%	2 or 20%	6 or 30%
Motor Vehicle Accidents		3 or 30%	5 or 50%	8 or 40%
Facial Burns		5 or 50%	3 or 30%	8 or 40%
Facial Lacerations		2 or 20%	2 or 20%	4 or 20%
Facial Fractures		3 or 30%	5 or 50%	8 or 40%

TABLE 4

HOSPITALIZATION PERIOD IN DAYS

Patient	Experimental Group	Control Group
A	28	18
B	15	22
C	10	18
D	17	10
E	13	28
F	5	10
G	29	6
H	22	12
I	30	25
J	6	12
	Mean 17.5	Mean 16.1

The Patient Questionnaire

The Patient Questionnaire was constructed by the nurse-investigator to measure degrees of satisfaction or dissatisfaction with the body image of the study subjects. The questionnaire was composed of eighteen questions with three answer choices to each question. The first answer choice indicated a favorable body image perception, the second answer choice indicated a moderately favorable (neutral) body image perception, and the third choice indicated an unfavorable body image perception. Initial testing and final testing were compared as to changes in answer choices. On final testing, if more answer changes were made to a favorable body image than were made to a neutral or unfavorable body image as compared to the initial testing, the subject was classified as having a favorable body image change. If more changes to moderately favorable (neutral) were made, the subject was classified as having a neutral change, and if more changes to unfavorable were made, the subject was classified as having an unfavorable change. Eight subjects in the experimental group had a favorable body image change as compared to four in the control group. Two subjects had a neutral change in the experimental group as compared to five in the control group. One subject in the control group had an unfavorable change as compared to none in the experimental group (see table 5 for these results).

TABLE 5

BODY IMAGE CHANGES

Patient	Experimental Group	Patient	Control Group
A	Favorable	A	Neutral
B	Neutral	B	Neutral
C	Favorable	C	Unfavorable
D	Favorable	D	Neutral
E	Neutral	E	Neutral
F	Favorable	F	Favorable
G	Favorable	G	Favorable
H	Favorable	H	Favorable
I	Favorable	I	Favorable
J	Favorable	J	Favorable

For each patient in each group, body image changes were computed by determining the number of favorable, neutral, and unfavorable responses, and weighting the number of responses in each category to determine the weighted scores (Seigel 1956). A significant difference at the .05 probability level was found between the two groups under study. A weight of 1 was assigned to the favorable responses, a weight of 0 was assigned to the neutral responses, and a weight of -1 to the unfavorable responses. The

TABLE 6

WEIGHTED SCORES OF BODY IMAGE CHANGES

Favorable, Neutral, and Unfavorable Responses

Experimental Group	1 Favorable	0 Neutral	-1 Unfavorable	Weighted Score
Patient				
A	12	6	0	12
B	5	12	1	4
C	16	1	1	15
D	17	1	1	16
E	2	15	1	1
F	15	3	0	15
G	12	4	2	10
H	14	4	0	14
I	14	4	0	14
J	13	5	0	13

Control Group	1 Favorable	0 Neutral	-1 Unfavorable	Weighted Score
Patient				
A	2	15	1	1
B	7	11	0	7
C	5	6	0	-2
D	5	13	0	5
E	6	10	2	4
F	13	5	0	13
G	9	9	0	9
H	11	6	1	10
I	12	5	1	11
J	5	13	0	5

unfavorable responses scores listed in each group were subtracted from the favorable responses scores to obtain weighted scores to be analyzed by the Mann-Whitney U Test (see table 6). The following formula was used for this computation:

1 x (# favorable) + 0 x (# neutral) -1 x (# unfavorable)= Body Image Score

Multiple Affect Adjective Check List

The MAACL provided a numerical score giving quantitative data about the levels of anxiety, depression, and hostility. The list was made up of adjectives frequently used by anxious, depressed, and hostile patients to describe their subjective states. The score for each scale was obtained by counting the number of plus items checked on the scales, according to directions for scoring by Zuckerman and Lubin (1965). The raw scores on the MAACL for the groups are in table 7 and in table 8 of the study. In the experimental group, there was a decline in either anxiety, depression, or hostility in eight patients, and in the control group, there was a decline of either anxiety, depression, or hostility in three patients on final testing. The lower the score on anxiety, depression, and hostility, the less these emotions were evident in the results of the MAACL. The lowest score possible on

TABLE 7

MULTIPLE AFFECT ADJECTIVE CHECK LIST RAW SCORES

Group I Experimental Group

	Anxiety		Depression		Hostility	
Patient	Before	After	Before	After	Before	After
A	15	8	13	5	17	4
B	7	12	15	8	3	5
C	19	5	17	12	20	4
D	19	4	17	4	14	3
E	18	10	16	12	7	5
F	7	4	13	5	7	4
G	15	2	13	4	19	3
H	14	6	17	7	18	5
I	14	4	17	8	21	5
J	4	2	18	4	5	3

each of the emotions was 0. The highest possible score on anxiety was 21, the highest possible score on depression was 40, and the highest possible score on hostility was 28. None on the patients in the sample reached the lowest or the highest possible scores.

For computation purposes, the Wilcoxon Matched-Pairs Signed-Ranks Test was applied to the anxiety, depression, and hostility scores of each group separately to determine the levels of significance between the scores

TABLE 8

MULTIPLE AFFECT ADJECTIVE CHECK LIST RAW SCORES

Group II Control Group

	Anxiety		Depression		Hostility	
Patient	Before	After	Before	After	Before	After
A	14	17	18	12	14	13
B	6	3	18	13	3	3
C	10	14	18	11	8	18
D	16	16	19	16	18	14
E	15	14	15	13	11	7
F	17	15	19	20	17	16
G	5	5	3	5	6	5
H	13	15	21	21	12	16
I	8	5	6	6	9	11
J	7	11	16	19	15	19

before and after the two nursing interventions. The differences between the before-after scores on anxiety, depression, and hostility were obtained for each patient in each group, and these differences were signed either + or - . To compare before-after changes within each group, and to compare changes between the groups, these signed differences were analyzed. See table 9 and table 10 for signed values.

TABLE 9

MULTIPLE AFFECT ADJECTIVE CHECK LIST SIGNED RAW SCORES

Group I Experimental Group

	Anxiety			Depression			Hostility		
Patient	Before	After	Difference	Before	After	Difference	Before	After	Difference
A	15	8	7	13	5	8	17	4	13
B	7	12	-5	15	8	7	3	5	-2
C	19	5	14	17	12	5	20	4	16
D	19	4	15	17	4	13	14	3	11
E	8	10	-2	16	12	4	7	5	2
F	7	4	3	13	5	8	7	4	3
G	15	2	13	13	4	9	9	3	6
H	14	6	8	17	7	10	18	15	13
I	14	4	10	17	8	9	21	15	6
J	4	2	2	18	4	14	5	3	2

MAACL Comparison Within Groups

Comparisons within the groups were made on anxiety, depression, and hostility levels for initial and final testing. A T score of 5.5 was computed for changes in anxiety in the experimental group, with a significance of less than .05. A T score of 0.0 was computed for changes in depression, with a significance of less than .01, and a T score of 2, with a significance of less than .01 was computed for hostility. These computations were made by the use of the Wilcoxon Matched-Pairs Signed-Ranks Test. See table 11 for results.

Changes in anxiety, depression, and hostility levels in the control group were also computed by the Wilcoxon Matched-Pairs Signed-Ranks Test. Changes in this group were not significant in anxiety, depression or hostility. A T score of 13.5 was computed for anxiety and hostiluty, with a probability level greater than .10, and a T score of 19 was computed for hostility, with a significance greater than .10.

MAACL Comparison Between the Groups

To compare the two groups for a significant change in anxiety, depression, and hostility levels, the Mann-Whitney U Test was utilized. A U score of 20, with the probability level at .002 was obtained for depression

TABLE 10

MULTIPLE AFFECT ADJECTIVE CHECK LIST SIGNED RAW SCORES

Group II Control Group

	Anxiety			Depression			Hostility		
Patient	Before	After	Difference	Before	After	Difference	Before	After	Difference
A	14	17	-3	18	12	6	14	13	1
B	6	3	3	18	13	5	3	3	0
C	10	14	-4	18	21	-3	9	18	-9
D	16	16	0	19	16	3	18	14	4
E	15	14	1	15	13	2	11	7	4
F	17	15	2	19	20	-1	17	16	1
G	5	5	0	3	5	-2	6	5	1
H	13	15	-2	21	21	0	12	16	-4
I	8	5	3	6	6	0	9	11	-2
J	7	11	-4	16	19	-3	15	19	-4

TABLE 11

WILCOXON MATCHED-PAIRS SIGNED-RANKS TEST

Comparison Within Groups				
	Experimental Group		Control Group	
	T Score	Significance	T Score	Significance
Anxiety	T = 5.5	$p < .05$	T = 13.5	$p > .10$
Depression	T = 0.0	$p < .01$	T = 13.5	$p > .10$
Hostility	T = 2	$p < .01$	T = 19	$p > .10$

and a U score of 12.50, with the probability level at .02 was obtained for hostility. These results indicated a significant difference between the two groups. Scores on anxiety, depression, and hostility were lower in the experimental group; therefore the null hypothesis was rejected. See Table 12 below for results.

TABLE 12

MANN-WHITNEY U TEST

Comparison Between the Study Groups		
	U Score	Significance
Anxiety	U = 20	$p < .05$
Depression	U = 3.50	$p < .05$
Hostility	U = 12.50	$p < .002$

Summary

The Multiple Affect Adjective Check List was administered to twenty facially injured patients to determine changes in anxiety, depression, and hostility levels. An experimental group of ten patients and a control group of ten patients were given the test two days after admission to the hospital and two weeks after discharge. The experimental group was engaged in talking-listening sessions with a nurse-investigator and encouraged to express feelings in regard to facial injuries and the sequelae of the injuries. The control group was not engaged in talking-listening sessions and was not especially encouraged to express feelings in regard to facial injuries.

The Wilcoxon Matched-Pairs Signed-Ranks Test was used to compute the anxiety, depression, and hostility scores of each group separately to determine the levels of significance between the scores before and after the administration of the nursing interventions utilized in the study. The Mann-Whitney U Test was used to compare the two groups for a significant change in anxiety, depression, and hostility levels after the administration of the two nursing interventions.

The results indicated that reduction in anxiety, depression, and hostility in the experimental group was

significant, and that reduction in the control group was not significant. The null hypothesis that there would be no difference between the two groups was rejected when a significant difference was found.

A patient questionnaire to measure changes in body image perception was administered to the two groups of subjects in the same time periods as the MAACL. Changes were computed in regard to a favorable, neutral, or unfavorable change by the use of the Mann-Whitney U Test. The experimental group had a generally more favorable change in body image than the control group, and the results indicated a significant difference between the two groups. The analyses of the two tests provided conclusive evidence of the therapeutic effect of supportive listening for the ten facial trauma patients in the experimental group.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to determine the effectiveness of supportive listening as a nursing intervention for facial trauma patients. Serious trauma to the face causes a body image change and an emotional reaction with an increase in anxiety, depression, and hostility. It was theorized that supportive listening as therapy for these patients would affect a favorable change in body image, a decrease in anxiety, depression, and hostility, and a mitigation and amelioration of the sequelae of the injury.

Changes in the body image perception, and changes in the levels of anxiety, depression, and hostility in facial trauma patients were measured two days after admission to the hospital and two weeks after discharge. The changes were compared within and between two groups of patients, an experimental group, who received supportive listening therapy, and a control group, who received routine nursing care only. Each group was composed of ten patients chosen at random from the facial trauma population of a city-county hospital in a large southern

city medical center. The experimental group was engaged in talking-listening sessions of twenty to thirty minutes bi-weekly by a nurse-investigator to express feelings freely in regard to facial injuries and their consequences. The control group was not engaged in talking-listening sessions, and was not encouraged to express feelings in regard to facial injuries. A patient questionnaire developed by the nurse-investigator, and the Multiple Affect Adjective Check List developed by Zuckerman and Lubin (1965) were the instruments used to measure differences within the group and between the groups. The patient questionnaire measured changes in body image, and the MAACL measured changes in levels of anxiety, depression, and hostility.

The hypothesis was that there would be no difference in the effectiveness of supportive listening for facial trauma patients as compared to the effectiveness of routine nursing intervention for these patients. The total sample studied was comprised of patients selected according to specific types and degrees of facial trauma.

Conclusions

Eight subjects in Group I, the experimental group, showed a favorable body image change on final testing as compared to four in Group II, the control group. Two subjects showed a neutral change in Group I as compared

to five in Group II. One subject is Group II showed an unfavorable change as compared to none in Group I.

For each patient in each group, body image changes were computed by determining the number of favorable, neutral, and unfavorable responses, and by applying the Mann-Whitney U Test to obtain a significant difference between the two groups at the .05 probability level. In the experimental group there was a decline in either anxiety, depression, or hostility in eight of the patients on final testing as compared to three in the control group.

Changes in anxiety, depression, and hostility were computed by the Wilcoxon Matched-Pairs Signed-Ranks Test and were found to be significant in the experimental group and not significant in the control group. Changes in the experimental group in anxiety were significant at the .05 level of probability, and changes in depression and hostility were significant at the .01 level. Changes in the control group in anxiety, depression, and hostility were not significant, with a probability level of .10 in each case.

A significant difference in anxiety, depression, and hostility was also found between the groups. By use of the Mann-Whitney U Test, a U score of 20, with a probability level of .02 was obtained for hostility. The null hypothesis was rejected since there was a significant difference within and between the groups on both tests.

Implications

The results of this study point out relevant implications for trauma nursing practice. Patients who are traumatized and all persons who are hospitalized are anxious. Many trauma patients who are hospitalized undergo a body image crisis involving the distressful emotional syndrome of anxiety, depression, and hostility. Trauma patients who are hospitalized are in trouble and in need of assistance. Talking-listening sessions could very well prove to be therapeutic for anyone experiencing trauma not only of the face, but of any part of the body. The expert professional nursing care the patient receives through the interaction provided by the sessions allows him to deal with his overwhelming feelings and emotions, especially anxiety, at the appropriate time, thus circumventing a delayed emotional reaction that could be very intense and severe.

Nurses, physicians, and other health personnel involved in caring for facial trauma patients can become more perceptive in recognizing that this type of patient has special physical and psychological needs since he feels especially threatened socially and economically because of an injured, scarred, or disfigured face. Herein lies an implication for the need for more nursing specialists in trauma who are skilled at recognizing the needs of facial trauma patients, as well as patients with other types of

trauma, and who would be able to implement specific nursing procedures to promote optimal physical and psychological healing in these cases.

Perhaps one of the most important implications of this study for nursing is that the facially traumatized patient has a great need for emotional therapy as well as physical therapy. To minimize the psychological trauma the physically traumatized patient experiences, emotional care can assist him to focus on himself as a "person" rather than a "victim", thereby promoting recovery in a minimum of time.

A cogent implication derived from this study is that professional nurses need to incorporate the concept of supportive listening in their nursing practice with facial trauma patients. This type of nursing intervention establishes a climate conducive to open expression of feelings and minimizes an unfavorable body image change and the intensity of feelings of anxiety, depression, and hostility experienced by these patients.

Recommendations

Realizing that much can be gained from determining the most effective nursing intervention for the body image crisis of facial trauma patients, the following recommendations were made:

1. A case study approach whereby open-ended interviews and tape recordings would be used in talking-listening sessions to measure the effect of each session separately and as a whole.

2. A recognition on the part of all health personnel that the facial trauma patient is experiencing a body image change, and perhaps a body image crisis, and the disturbing emotional syndrome of anxiety, depression, and hostility.

3. A replication of the study involving patients who have had an amputation of a hand or a leg.

4. A similar study involving patients who have facial cancer.

5. A replication of the study conducted simultaneously by a group of investigators.

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APPENDIX A

MULTIPLE AFFECT ADJECTIVE CHECK LIST

Please check all words listed below that describe how you feel now - today. All answers will be confidential. Feel free to take as much time as you need.

1. ____Active
2. ____Adventurous
3. ____Affectionate
4. ____Afraid
5. ____Agitated
6. ____Agreeable
7. ____Aggressive
8. ____Alive
9. ____Alone
10. ____Amiable
11. ____Amused
12. ____Angry
13. ____Annoyed
14. ____Awful
15. ____Bashful
16. ____Bitter
17. ____Blue
18. ____Bored
19. ____Calm
20. ____Cautious
21. ____Cheerful
22. ____Clean
23. ____Complaining
24. ____Contented
25. ____Contrary
26. ____Cool
27. ____Co-operative
28. ____Critical
29. ____Cross
30. ____Cruel
31. ____Daring
32. ____Desperate
33. ____Destroyed
34. ____Devoted
35. ____Disagreeable
36. ____Discontented
37. ____Discouraged
38. ____Disgusted
39. ____Displeased
40. ____Energetic
41. ____Enraged
42. ____Enthusiastic
43. ____Fearful
44. ____Fine
45. ____Fit
46. ____Forlorn
47. ____Frank
48. ____Free
49. ____Friendly
50. ____Frightened
51. ____Furious
52. ____Gay
53. ____Gentle
54. ____Glad
55. ____Gloomy
56. ____Good
57. ____Good-natured
58. ____Grim
59. ____Happy
60. ____Healthy
61. ____Hopeless
62. ____Hostile
63. ____Impatient
64. ____Incensed
65. ____Indignant
66. ____Inspired
67. ____Interested
68. ____Irritated
69. ____Jealous
70. ____Joyful
71. ____Kindly
72. ____Lonely
73. ____Lost
74. ____Loving
75. ____Low
76. ____Lucky
77. ____Mad
78. ____Mean
79. ____Meek
80. ____Merry
81. ____Mild
82. ____Miserable
83. ____Nervous
84. ____Obliging
85. ____Offended
86. ____Outraged
87. ____Panicky
88. ____Patient
89. ____Peaceful
90. ____Pleasant
91. ____Pleased
92. ____Polite
93. ____Powerful
94. ____Quiet
95. ____Reckless
96. ____Rough
97. ____Sad
98. ____Safe
99. ____Satisfied
100. ____Rejected
101. ____Secure
102. ____Shaky
103. ____Shy
104. ____Soothed
105. ____Steady
106. ____Stubborn
107. ____Stormy
108. ____Strong
109. ____Suffering
110. ____Sullen
111. ____Sunk
112. ____Sympathetic
113. ____Tame
114. ____Tender
115. ____Tense
116. ____Terrible
117. ____Thoughtful
118. ____Timid
119. ____Tormented
120. ____Understanding

121.____Unhappy
122.____Unsociable
123.____Upset
124.____Vexed
125.____Warm
126.____Whole
127.____Wild
128.____Willful
129.____Wilted
130.____Worrying
131.____Young
132.____Terrified

APPENDIX B

PATIENT QUESTIONNAIRE

Please check the response that applies to you. Answers will be confidential.

1. When you began today did you think it would be

   1. Very satisfying
   2. Moderately satisfying
   3. Very unsatisfying

2. How optimistic and hopeful about life are you at this time?

   1. Very hopeful
   2. Moderately hopeful
   3. Not at all hopeful

3. Overall, how confident do you feel about your ability to cope with life?

   1. Very confident
   2. Moderately confident
   3. Not at all confident

4. How confident do you feel about your ability to cope with your facial injury?

   1. Very confident
   2. Moderately confident
   3. Not at all confident

5. How would you rate your physical appearance at this time?

   1. Very attractive
   2. Moderately attractive
   3. Not at all attractive

6. How satisfied are you with the way you look?

   1. Quite satisfied
   2. Somewhat satisfied
   3. Quite dissatisfied

7. How confident are you that continued success in your occupation is assured?

   1. Very confident
   2. Somewhat confident
   3. Not very confident

8. On a scale of 1 to 3, 1 represents happiness, and 3 represents unhappiness

   Where are you on this scale now?

   1 2 3

9. Do you think the results of this accident will affect your friends and social life?

   1. Not at all
   2. Moderately
   3. Very much so

10. How much do you think this accident will affect your relationship with your husband/wife/boy friend/ girl friend?

   1. Not at all
   2. Somewhat
   3. Greatly

11. How apprehensive and uneasy are you about the future?

   1. Not at all uneasy
   2. Moderately uneasy
   3. Very uneasy

12. How happy do you expect to be 6 months from now?

   1. Much happier than now
   2. About as happy as now
   3. Much less happy than now

13. In general, how would you rate your physical health at present?

   1. Good
   2. Fair
   3. Poor

14. Do you agree or disagree with the following statement? "My life has meaning and direction".

   1. Strongly agree
   2. Moderately agree
   3. Strongly disagree

15. Have you noticed a marked change in your disposition or mood in the last two days?

   1. No change
   2. Yes, but not a great change
   3. Yes, a definite change

16. Do you feel there has been a noticable change in your appearance since the injury?

   1. No noticeable change
   2. A slightly noticeable change
   3. Yes, a very noticeable change

17. How have you slept the last two nights?

   1. Very well
   2. Fairly well
   3. Not very well

18. How much do you feel your facial injury has affected your personality and behavior toward others?

    1. Not at all

    2. Somewhat

    3. A great deal

APPENDIX C

RATIONALE FOR SUPPORTIVE LISTENING NURSING INTERVENTION

Supportive listening nursing intervention is based on an interpersonal relationship between patient and nurse that:

1. Maintains an accepting attitude toward the patient's behavior and feelings.

2. Establishes a climate conducive to open expression of patient feelings.

3. Reflects the patient's feelings in a manner that offers him escape from the coping mechanism of denial in dealing with anxiety (Travelbee 1972).

4. Answers patient questions and gives accurate and appropriate information about the patient's physical and emotional condition and his progress.

5. Utilizes cues from the patient to initiate verbal and nonverbal communication by the therapist.

6. Provides a supportive and trusting relationship that minimizes an unfavorable change of body image.

7. Provides a climate that minimizes the intensity of feelings of anxiety, depression, and hostility.

8. Reassures the patient by assisting him to develop resources for managing his feelings (Bernstein et al. 1970).

9. Offers reassurance by the physical presence of a therapist who cares about the patient's feelings, someone who may only calmly touch or hold his hand at appropriate times, and utter a quiet statement that he/she is willing to assist when needed, and will be standing by (Bernstein 1970).

10. Utilizes the knowledge that hostile feelings may be manifested through criticism and angry demands by the patient that are expressions of fear and anxiety, and that hostility can be used to deny depression (Bernstein 1970).

11. Utilizes the knowledge that depression is a manifestation of anxiety that should receive early and adequate therapy to prevent anger from turning inward to self-punishment (Travelbee 1972).

12. Operates on the premise that depression is a cry for help, for the patient fears a loss of self-esteem, bodily integrity, and control of his life and destiny (Travelbee 1972).

13. Realizes it is important that the patient be able to cope with his anxiety at the appropriate time, since a delayed reaction can be very intense and severe (Travelbee 1972).

14. Has a therapist who is a noncritical listener, and who conveys the feeling that the patient can depend on him/her for professional assistance in clarifying feelings

in regard to an altered body image (Corbeil 1971).

15. Has therapeutic reasons to keep the patient talking and expressing feelings.

16. Maintains a broad interest in the patient, his psychological, physical, and social needs and welfare.

17. Allows the nurse to work towards acceptance of her role as a therapist by the patient and his family, and to prevent an interpretation of her care as merely interference (Burton 1975).

18. Promotes patient verbal activity that exceeds that of the therapist in the process of working through the crisis caused by serious facial trauma.

19. Utilizes a therapist who communicates in simple terms with short sentences and patterns of inflection and tones of voice that facilitate understanding (Dersal 1974).

20. Promotes an explanation of the nursing care plan to the patient's family for the purpose of securing their cooperation in the therapy process for the patient.

21. Answers the patient's questions promply, appropriately, and adequately, and promotes freedom for the therapist to ask and answer questions for the purpose of facilitating the patient's physical and mental progress.

22. Stimulates those ideas and attitudes that will help the patient adapt to his everyday world when he no longer has the security of a hospital atmosphere and the assistance of a health team.

TEXAS WOMAN'S UNIVERSITY
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PHONE (817) 387-5305

October 4, 1976

Ms. Sara Hernandez
Texas Woman's University
Dallas Campus
Dallas, Texas

Dear Ms. Hernandez:

The Human Research Review Committee has reviewed and approved your program plan, "Nursing intervention for facial trauma".

Sincerely yours,

George P. Vose, Chairman
Human Research Review Committee

cc Dr. Goosen
Dr. Bridges

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS

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HOUSTON CENTER
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Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

TO: _____

GRANTS TO Sara L. Hernandez, 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:

Nursing intervention for the physical and psychological impact of facial trauma, scarring, and disfigurement.

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: _____

Date _____

Signature of Agency Personnel

Signature of student

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.

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