Title

Nursing care as a determinant in the development of self-care behavior by hospitalized adult schizophrenics

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Publication Date

1978

Peer reviewed|Thesis/dissertation

NURSING CARE AS A DETERMINANT IN THE DEVELOPMENT OF SELF-CARE BEHAVIOR BY HOSPITALIZED ADULT SCHIZOPHRENICS

by

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DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF NURSING SCIENCE

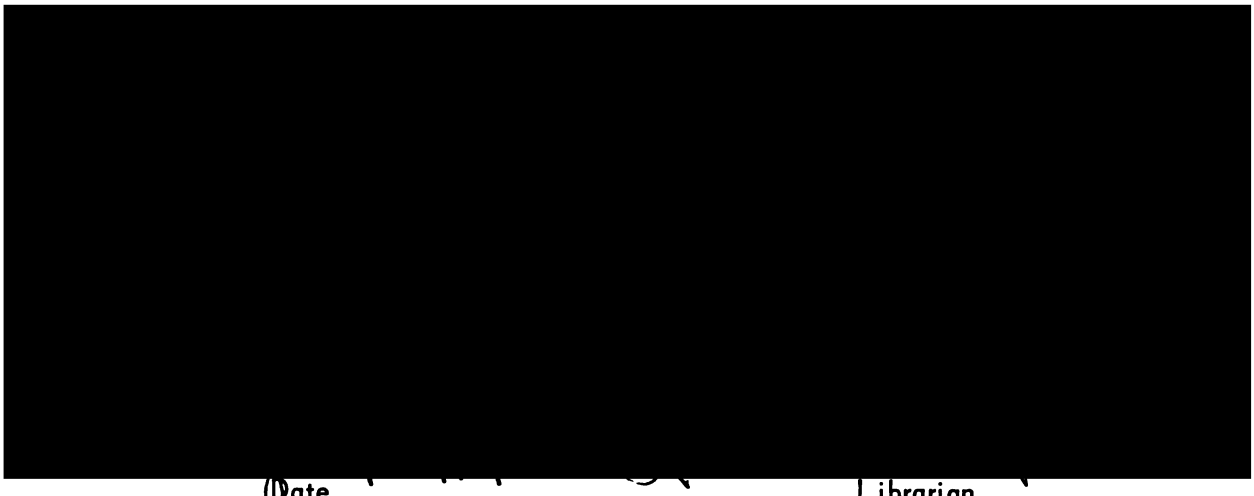
in the

GRADUATE DIVISION

(San Francisco)

of the

UNIVERSITY OF CALIFORNIA



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NURSING CARE AS A DETERMINANT IN THE DEVELOPMENT OF SELF-CARE BEHAVIOR BY HOSPITALIZED ADULT SCHIZOPHRENICS

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March, 1978

This research was designed to evaluate nursing practice through measuring patient outcome. Adult schizophrenics who received nursing care based on a self-care model of nursing practice were expected to develop self-care behavior more rapidly and at a higher level than patients who received "routine" nursing care.

Thirty adult schizophrenics were randomly assigned to a control and experimental group. The control group received nursing care routinely provided on an acute inpatient treatment unit. The experimental group received nursing care specialized for schizophrenic patients by the investigator and based on Orem's self-care model of nursing practice.

Each subject was rated on standard scales (Nurses' Observation Scale for Inpatient Evaluation, NOSIE; Global Rating Scale, GRS; and Functional Life Scale, FLS) every third day from admission to day 31 for a total of eleven ratings. A 2 X 11 two-way factor analysis of variance with repeated measure was used to test the hypotheses. Both groups showed significant increase in self-care behavior between admission and day 31 on the GRS and FLS, but the experimental group did not show significantly higher self-care behavior than the control group.

Both groups showed significant change on the Social Competence factor of the NOSIE but on no other factor of the NOSIE.

Several explanations of the findings were offered. Suggestions for further research were discussed.

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ACKNOWLEDGEMENT

The research reported here is the results of the knowledge and skill many persons shared with me. More importantly, it is the outcome of the opportunity for clinical research provided me by the Inpatient Treatment & Research Service, Langley Porter Institute, and the School of Nursing, Department of Mental Health & Community Nursing, University of California San Francisco.

My committee, Anne J. Davis, Ph.D., Marjorie Dunlap, Ed.D., and M.R. Harris, M.D., provided me with guidance and support essential to my work. Anna M. Shannon, DNS, and Paul Ekman, Ph.D. stimulated my interest in experimental design and provided me with the opportunity to learn research from researchers. Afaf Melais, Ph.D. opened avenues to nursing theory and research previously unknown or ignored by me. Marilyn Rajokovich, R.N., M.S. provided professional and personal support from the Department of Nursing, Langley Porter Institute. William A. Hargreaves, Ph.D. provided design consultation invaluable to the work. Mark Spitalny provided consultation on data analysis. Roberta O'Brien was a diligent research assistant. The faculty of the Department of Mental Health & Community Nursing were consultants and advisors and most importantly friends in this long process. Ira D. Glick, M.D., Chief of Service, and Helen Kircher, R.N., Supervising Nurse, supported the project on the Inpatient Treatment & Research Service at Langley Porter. Without their encouragement and active participation this project would not have been possible. Ms. Kircher's commitment to nursing research was demonstrated in both her close guidance and supervision of nursing staff involved in the project and her continual and never failing personal support of me. The nursing staff of the Inpatient

Treatment & Research Service implemented the research and collected the data with admirable skill.

Assistance with the research costs was provided by a grant from Langley Porter Institute.

Editorial and typing services was provided by Natasha Page Carroll with assistance from Jana Toutolmin, Barbara Lee, David Bell and Helen Rhoades.

During the project and the writing of the dissertation, special assistance was provided by Charlotte Ostergren, Reginal Ellis, Robert Leshem and Edward Walsh.

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CHAPTER 1 PURPOSE OF THE STUDY

This research will investigate the effects of goal-directed nursing care on the behavior of hospitalized adult schizophrenic patients. The investigation focuses on the patient and his ability to develop and maintain self-care behavior as a function of nursing action, designed to develop and maintain self-care behavior in patients.

The adult schizophrenic patient when hospitalized is often unable to care for himself. Medication and hospitalization are usually effective in relieving the acute symptoms of a schizophrenic break. However, even when symptoms have subsided, unless the patient can care for his basic biological needs, he can not cope outside a structured setting. While long term hospitalization in state institutions has decreased, patients who cannot demonstrate self-care behavior may still be discharged to structured environments such as three-quarter or halfway houses or board and care homes. If, during short term hospitalization, the patient can be assisted in developing, re-establishing and/or maintaining self-care behavior, his chances of living independently in the community are much better. This study seeks to determine if during short term hospitalization self-care can be developed and/or maintained as a result of nursing action designed to develop and maintain self-care behavior in patients.

QUESTION

This research asks the question: If nursing care is planned and implemented toward the specific goal of self-care behavior in the hospitalized adult schizophrenic, will the patient develop and maintain self-care behavior significantly superior to self-care behavior in patients not receiving nursing care planned and implemented toward the specific goal

of self care?

HYPOTHESES

The question may be hypothesized as:

1. The nursing process and the nurse-patient relationship focused on increasing patient's self-care behavior in daily living will significantly increase the adult schizophrenic's ability to develop self-care behavior in daily living as measured by Nurses' Observation Scale for Inpatient Evaluation (NOSIE), Global Rating Scale (GRS), and Functional Life Scale (FLS).
    a. The patient will develop self-care behavior more rapidly as measured by NOSIE, GRS, and FLS.
    b. The patient will develop self-care behavior at a higher level as measured by NOSIE, GRS, and FLS.
2. The nursing process and the nurse-patient relationship focused on increasing the patient's self-care behavior in daily living will significantly increase the adult schizophrenic's ability to maintain for an unspecified time self-care behavior in daily living as measured by NOSIE, GRS, and FLS.

DEFINITION OF TERMS

Nursing Process

The nursing process is the goal-directed problem-solving approach that includes assessment, planning, implementation, and evaluation. As Yura and Walsh state, "The nursing process is an orderly, systematic manner of determining the client's problems, making plans to solve them, initiating the plan or assigning others to implement it and evaluating the extent to which the plan was effective in solving the problems

identified." (3 p.23) Within this study the goal of the nursing process is the development and maintenance of self-care behavior.

Nurse-Patient Realtionship

The nurse-patient relationship is that rapport between professional and patient that is established to meet patient needs. It is a process occurring over time with stages or phases. It is therapeutic, that is, non-judgmental, non-punitive. It includes patient participation and demands that the patient be respected as a human being. It requires an understanding of behavior (self and others). It is goal-directed. Within this study, the goal of the nurse-patient relationship is developing and maintaining self-care behavior.

Adult Schizophrenic Patient

Within this study, adult schizophrenic patient is a patient admitted to an inpatient service with the primary diagnosis from the official nomenclature of 295. The general definition of schizophrenia from the nomenclature is:

> "This large category includes a group of disorders manifest by characteristic disturbance of thinking, mood and behavior. Disturbances in thinking are marked by alternations of concept formation which may lead to misinterpretation of reality and sometimes to delusions and hallucinations, which frequently appear psychologically self-protective. Corollary mood changes include ambivalence, constricted and inappropriate responses and loss of empathy with others. Behavior may be withdrawn, regressive and bizarre. The schizophrenia in which the mental state is attributed primarily to a thought disorder are to be distinguished from the major affective illnesses which are dominated by a mood disorder. The paranoid states are distinguished from schizophrenia by the narrowness of the distortion of reality and by the absence of other psychotic symptoms." (1 p.33)

Within the large category of schizophrenia are the categories of schizophrenia simple type, hebephrenic type, catatonic type, paranoid type, acute schizophrenic episode, latent type, residual type, schizo-

affective type, childhood type, chronic undifferentiated type, and others. For this study, only the category schizophrenia, childhood type (295.8) will not be used.

Self-Care Behavior

Self-care is defined:

> "Self-care refers to actions based on culturally and scientifically defined practices freely performed by individuals or their agent directed to themselves or to conditions or objects in the environment in the interest of their own life, health, or well being." (2 p.13)

Self-care categories are, (1) air, food and fluid intake; (2) elimination; (3) personal hygiene and maintenance of body temperature; (4) rest and activity; and (5) solitude and social interaction. Self-care is operationalized in four levels. (See Chapter 3)

REFERENCES-CHAPTER 1

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CHAPTER 2 SCHIZOPHRENIA: TRENDS IN CARE & TREATMENT

CONTEMPORARY UNDERSTANDING OF SCHIZOPHRENIA

Bleuler coined the term schizophrenia in 1911 to replace Kreaplin's term Dementia Praecox. Both terms identified what was belived to be an organically caused psychological deterioration. Bleuler's description of the symptoms of schizophrenia are remarkably like the description of symptoms found in the current official Diagnostic and Statistical Manual Second Edition. While extensive research has developed since Bleuler first studied schizophrenia, we actually know little more than Bleuler. The changes in the care and treatment of schizophrenia have been slow in coming and have been related to the discovery of psychoactive drugs and social reform rather than any specific scientific discovery about the etiology, symptomotology or outcome of schizophrenia (3).

Research has not yet succeeded in validating or invalidating theories of etiology, symptomotology, treatment or outcome of schizophrenia. Research is so poorly done that studies are ranked by quality of design in order to evaluate reported findings. Vague definitions, mobile subject populations, and experimental bias as well as lack of controlled designs make findings questionable and replication of studies almost impossible. Despite, or, perhaps because of, the problems with research, the scientific literature in schizophrenia is voluminous. A study by study comparison is next to useless because one set of findings tends to cancel another set. This writer will present well accepted generalizations about schizophrenia that represent published reports from both clinical observation and research studies.*

* The bibliography found on page 206 represents the literature reviewed by the writer. No specific documentation will be made in the following section.

Contemporary Approaching to Labeling in Schizophrenia

Psychoses have been defined and redefined overtime. The several psychotic conditions presently identified are often more alike than different. Many of the same behaviors are observed in schizophrenia and in the manic phase of manic-depression. The depressive responses in the depressive phase of manic-depression, in involutional melancholia, and in psychotic depressive reaction are very similar. Conditions diagnosed as schizophrenic in this country would be diagnosed as manic-depressive in England. This can have far reaching consequences. Research may lose value in terms of generalizability because there may not be agreement that all the subjects actually included in the sample met the criteria for only one diagnostic category. In an effort to overcome this condition, investigators and clinicians have attempted to refine diagnoses and/or categories for the psychotic conditions. Social and family history, as well as behavior, is influential in determining specific conditions.

Behavioral Influences in Labeling

Labels can be based exclusively on the behavior exhibited. When known organic conditions, i.e., pellagra, are ruled out, a person can be diagnosed schizophrenic based on his behavior. These descriptive approaches depend little on early history. Primarily attention is on the behavior of the present episode.

Bleuler's four A's are still used to identify schizophrenia. In order to be classified as schizoprenic, the individual must demonstrate the four symptoms; autism, ambivalence, inappropriate affect and loose associations. In a similar way, Schneider presents first rank and second rank symptoms. First rank symptoms are (1) hearing one's own thoughts

being spoken out loud, (2) auditory hallucinations that discuss the person's behavior, (3) somatic hallucinations, (4) having one's thoughts controlled, (5) having one's thoughts spread to others, (6) delusions focused on being controlled. Second rank symptoms include (1) other hallucinations, (2) perplexity, (3) depression and/or euphoric disorders of affect, (4) emotional blunting. Freedman identifies the key symptom in schizophrenia as loose associations and bizarre behavior. As is apparent, any and perhaps all of these symptoms might be present in one form or another in many conditions. All sources on diagnoses warn that recognizing schizophrenia for symptoms alone is difficult, if possible at all, and depends upon extensive clinical experience.

Social and Family History Influences in Labeling

Social and family history provide information beyond descriptive behavior. The social and family history identify other family members with psychiatric conditions, describe early growth and development, and provide insight into life adjustment prior to the onset of the disturbed behavior. Information from social and family history helps distinguish subtypes within the major disorders, as well as distinguish between the major disorders.

The inability to determine which individual labeled schizophrenic would recover, not change, or get worse prompted investigators and clinicians to look to social and family history for indicators of prognosis in schizophrenia. Clinical observations support two distinct pathways to the conditions. Some individuals have severe, sudden onset, while others show slow and insidious deterioration. Investigators began to believe that early, acute onset was better prognostically than a

slow, gradual deterioration. In 1939, Langfield developed the concepts of process and reactive schizophrenia to depict the two distinct pathways. The determination of process or reactive schizophrenia was based on both observable behavior and social and family history. Process and reactive schizophrenia were later refined by Kanton and Herron.

The process schizophrenic was identified as the potentially chronically ill. There is some speculation that process schizophrenia may indeed be organic in nature. Process schizophrenia presents a picture of a poorly adjusted, marginally functioning individual. Family and social history usually reveal that the individual has had difficulty in the family and was, and is, dominated by mother. He has had few, if any, friends and was never very successful in school. The person may present a picture of early asocial behavior and may have even been labeled a juvenile delinquent. It is difficult to pinpoint in the history the precipitating factor and it appears that help is sought by the family only after many years of unsuccessful attempts to cope with the individual's disintegrative behavior. Social skills are often severely limited.

The reactive schizophrenic is said to have a more helpful prognosis and seems to be related to social and psychological stresses rather than to be an organic process. Reactive schizophrenia presents a picture of an average to well adjusted individual with no history of abnormally difficult family or peer relationships. The person has been successful in school and/or work, and usually has not been considered to have any particular problems. The precipitating factor is clear, i.e., breaking up with the fiancee, death in the family, and the onset, acute and disruptive. Social skills are average or above.

Some investigators and clincians believe that only the process

type schizophrenia should be called schizophrenia, and that the reactive type should be called schizophreniform. Schizophreniform may look like, but is not "true" schizophrenia. The schizophreniform condition is neither long-term nor persistently disintegrative. The person will most likely recover fully from the condition and have no residual impairment. In true schizophrenia, the course is long-term and persistently disintegrative.

Process schizophrenia (true schizophrenia) and reactive schizophrenia (schizophreniform) labels can be used to determine treatment. Both conditions may improve with drugs and/or ECT. However, reactive schizophrenia will probably not require management or therapy after the episode is past and the symptoms have subsided. Process schizophrenia, on the other hand, may require lifelong management with drug therapy and repeated hospitalizations. In reactive schizophrenia, treatment must be rapid and all attempts to prevent institutionalization and chronicity must be made. In process schizophrenia, complete recovery may not be possible and chronicity is most often the outcome of the condition.

Contemporary Explanations of Schizophrenia

Most investigators and clinicians agree that schizophrenia has no single cause. In fact, the schizophrenias may be similar but separation conditions, as was presumed prior to Kreaplin's classification. While theory and research support the interactions of social, psychological, and biological factors, one factor is most often the focus. This has as much to do with the explosion of knowledge in each field as with the individual investigators' and clinicians' bias. This section will discuss only the best known and accepted theories and research in schizophrenia. Discussion will focus on biological, psychological and social factors separately.

Biological Factors

Biological theories and research in schizophrenia are at the same time the simplest and most complicated explanations. Biological factors are simple in that the cause and outcome of psychoses is thought to be the result of organic physical malfunction. Therefore, the process and outcome of the condition depend upon isolating and correcting the organic malfunction. Biological factors are the most complicated in that the human organism is complicated and the understanding of it quite primitive. All psychoses including schizophrenia, were originally believed to result from a brain lesion. The discovery that other physical malfunctions, i.e., metabolic, nutritional, and endocrinologic could produce aberrant behavior broadened the biological perspectives to include the total organism. Today genetic and biochemical research are the major areas of interest.

Genetic

Genetic research originally attempted to answer the question, is schizophrenia inherited or is it environmentally produced? If consistent genetic links could be found, it would have supported the contention that the conditions were not only biological but were inheritable as well. Genetics are explored primarily through family and twin studies.

Twin studies date from Kallmann's work in the 1930's. Twin studies have been conducted in most developed countries. Twin studies identify the prevalence of schizophrenia in twins of identified patients as compared to the prevalence in the population in general. Concordance varies widely and is greatly dependent on the caliber of the research design. However, monozygotic twin concordance is higher than dizygotic.

Concordance is three to six times greater for monozygotic twins. Concordance is the same for dizygotic twins as for non-twin siblings.

Studies also have focused on other family members and on adoptive families. Research design, again, has a substantial effect on findings. Findings suggest that (1) biological families of adoptives who develop chronic schizophrenia have higher rates of schizophrenia than biological families of adoptives who do not develop schizophrenia. (2) When biological parents diagnosed as schizophrenic gave children up for adoption, higher rates of pathological conditions were found in those children than in children adopted from non-schizophrenic parents. (3) Schizophrenia in one twin and manic-depression in another rarely ever occurs in monozygotic twins. Low birth weight and deafness at birth may predispose individuals to schizophrenia. Birth risks for children of schizophrenic parents are reported higher than for the general population. Although genetics are not the only factors to be considered when reviewing families, genetic research leaves little doubt that heredity plays some part in schizophrenia. Research has not yet been able to identify the way in which the condition is transmitted or what in fact is transmitted. In time, it is believed that genetic research will be able to more clearly define what factors are inherited, how they are inherited, and who will be affected.

Biochemical Studies

The understanding of biochemistry has developed slowly. In the case of schizophrenia, chemicals (psychoactive drugs) were effective in treatment before the biochemistry involved was understood. Brain chemistry is at present one of the major focuses of biochemical research. The intricate process of neurotransmission is not completely understood, but

there is general agreement that acetylcholin, catecholamines, norepinephrin, dihydroxypheytilhyliane (Dopamine), indoleamine serotnin are among the various amino acids that somehow are ffected by or ffect the psychotic process. As research in both normal and abnormal brain chemistry continues, the ever-increasing knowledge will have a profound effect on the understanding of schizophrenia.

Biological theories and research hold much promise for understanding normal and, therefore, disturbed functioning. As technology develops and research designs become more sophisticated, more about biological functioning, including genetics and brain chemistry, will be discovered. Few investigators believe the whole puzzle of schizophrenia is biological, but many do believe that biology may hold the key to understanding psychological and social influences as well as biological influences in the psychotic process.

Psychological Factors

Psychological factors in theory and research in schizophrenia have traditionally grown out of pathological settings. That is, individuals already labeled psychotic have been the focus of study. Personality theory has been the major result of such studies. General psychology has tended to study specific conditions in normals, i.e., cognition, perception, affection, decision-making, toward an understanding of universal phenomena for the population at large. Few understandings of human behavior developed in general psychology have had an influence on the understanding and treatment of psychoses. Behavior theory is an exception.

Personality Theory

Psychological personality theory dominates psychological understanding

of schizophrenia. Personality theory is concerned with the individual, his development and behavior. The personality theorist is concerned with understanding the motivation of the individual. Research into personality is predominantly clinical in nature and done with individuals identified as psychopathological. Psychological personality theory and research has two major focuses: (1) the development of the personality theory through case study, and (2) the testing of the effect of psychotherapy. Individuals with psychological conditions are studied by case study methods to develop understanding of interactions of psychological factors that produced the observable condition. When these are identified, normal personality development is described by omitting possible psychopathological factors. Personality theory tends to offer understandings of normal as well as neurotic or psychotic conditions. Personality theories are perhaps as much a reflection of the theorists's own philosophy of life as anything he studies. The effects of treatment are studied through the comparing of various psychotherapies with each other and with other forms of treatment. If the outcome is positive, it reinforces the personality theory on which the psychotherapy was based.

The schizophrenic process is assumed to start very early in life, usually during the first year. There is agreement that the mother-child relationship is in some way inadequate and impaired. The result is that the child has difficulty relating to other people. He may distort events, situations, and interactions. Freud assumed that the development of the ego was impaired and resulted in a weak ego. The ego psychologists are more specific in identifying impairment of certain ego functions, i.e., reality testing. Erickson, using an ego psychology base, states that

trust between mother and child is not developed and therefore the child's ability to trust himself and eventually others is impaired. Sullivan proposes that the mother is filled with anxiety and as a result the mother-child relationship is filled with anxiety. In this case the child has a poor personification of self. His self-esteem is low and his self system may be permanently impaired. Sullivan explains that the mother's anxiety may or may not be directly related to the child. With the exception of classical Freudian theory, even though the child has a poor start early in life, he has the opportunity as he faces other stages and phases of life, to strengthen his ego, increase his trust, or repair his self system. Most often, the individual does not recoup in future development but continues to have difficulty throughout life. There is some general agreement that the increased responsibility of adulthood precipitates the schizophrenic episode. Process and reactive types of schizophrenia are explained in terms of degree rather than kind of impairment. Symptoms and outcome are dependent on the degree of impairment.

Behavioral Theory

General psychology has been grounded in laboratory experimental research and focused on developing theory out of replication of studies. When psychoses have been a focus of study, it has been primarily to provide "an abnormal subject group" to compare with a "normal subject group" on a specific concept. The findings have often been replicated and our knowledge about specific aspects, for instance, abnormal and normal perception, has been increased, but little has been added to the overall understanding of the psychotic condition.

Behavioral theory that has grown out of the laboratory and general

psychological research into conditioning, is one of the few such theories used in clinical practice. The theory assumes that maladaptive behavior is learned through conditioning and can be corrected through conditioning. The maladaptive behavior is seen as the primary problem, rather than personality, character structure, or underlying conflict. As in dynamic formulations of personality theory, behavioral theory formulates the problem but does so in terms of maladaptive responses rather than psychodynamics. A plan is then devised to eradicate through conditioning the maladaptation or to teach through conditioning new behavior. One technique for implementing behavioral theory is behavioral modification.

Both personality theory and behavioral theory state that psychotic conditions are longstanding and can be traced to childhood. The childhood origin presents difficulty in validating the theories through research because research on origin would require experimental manipulation of children and families. Personality theories have tended to obtain validation through the case study method. Behavior theories have tended to obtain validation through laboratory study. Both personality theory and behavioral theory depend on retrospective studies for validation of maladaptation in humans. Therefore, research has shifted to the effects of treatment on the outcome of specific psychosis to verify etiology. If the treatment is effective, that is, seen as supporting the etiology proposed by the theory.

Social Factors

Social science theories focus on the individual and his relationship to his society. While social theories have highlighted the influence of social attitude and social stress on the psychotic process, the major contribution to the understanding of psychoses has come through the study

of family interactions and transactions. Biological theories have focused on the influence of family in personality development. But social theories have actually placed the origin of psychotic behavior in the family transactions. The family as a social system has offered several approaches to understanding schizophrenia.

Bateson's Double-Bind Communication

Bateson identified the double-bind phenomena. The phenomena is the old "damned if you do, and damned if you don't" situation. The mother gives the child a double-b-nd message which is really two messages at once. The mother tells the child, "come here and give mother a kiss to show her that you love her." But as the child approaches, mother pulls back from him, extends her arms almost blocking him, and offers a very small part of her cheek. Mother has asked for a kiss to show love, but at the same time her behavior (pulling back with her body and pushing away with her arms) tells the child she does not want him or his kiss. The father and other family members do not interrupt the process and appear to be as helpless with the mother as is the child. In rage, helplessness, and frustration, the child withdraws into the psychotic process.

Laing's Schizophrenigenic Family

R.D. Laing has proposed a theory that focuses almost exclusively on social factors in psychoses, especially as they arise and are played out in the schizophrenic family. Laing believes schizophrenia to be the response of the individual to an impossible situation. Laing further explains that the impossible situation is the continual social and cultural pressure on the individual to be like everyone else in society, and therefore, "normal." The pressure precipitates personal fragmentation,

confusion and loss. The individual realizes that there is a split between his inner and outer world. He is further fragmented and confused as the inner world leaks into the outer and the outer into the inner. Terror results as the individual uses every process at his disposal -- withdrawal, projection, denial to cope with the societal pressure and resulting psychotic process. Laing does not actually offer a treatment approach since he believes that the entering of the inner world from the outer world and the returning to the outer world is a normal, natural process. Laing offers the person guidance through his inner world. He believes that the individual must be allowed to go deeper and deeper into his inner world, and then be guided back in a kind of existential rebirth that provides the person with a new ego and new self.

The etiology of schizophrenia is still unknown. A major deterrent to a better understanding of the etiology is the lack of valid criteria for identifying schizophrenia. Despite the confusing state of the study of schizophrenia, there is a concensus that the disorder has biological, psychological, and social factors. While no single theory has been universally accepted, there are some specific points that can be made about schizophrenia. (1) There are some genetic and/or organic factors in the development of some schizophrenia. (2) The manifestations of schizophrenia is psychological and most likely originates in early childhood. (3) Family interactions play a prominent role in development of schizophrenia. (4) Social attitudes influence the identification, treatment, and outcome of schizophrenia.

Contemporary Treatment of Schizophrenia

What is and is not treatment for the individual labeled schizophrenic is a hotly debated issue. Since neither etiology nor outcome is completely

understood, treatment can hardly be called illness specific. However, the schizophrenic who enters the health care delivery system will most likely be offered somatic therapy or psychotherapy, or both.

Somatic approaches are based on the assumption that psychological conditions can be influenced by nonpsychological, i.e., somatic, methods. Somatic therapy may be used without assuming that the cause of psychoses is primarily organic. Chemical, hormones, and physical approaches that influence the brain directly or indirectly can change behavior and/or alter mood. Somatic approaches are rarely, if ever, believed to "cure" the condition but they do interrupt the psychotic process and alleviate symptoms. The major somatic approaches are electroconvulsive therapy and psychoactive drugs.

Most major psychosocial therapies have been used with schizophrenics with more or less reported success. Unlike the somatic therapies, the psychotherapy may be expected to "cure" the condition. However, realistically, psychotherapy does not cure the condition but can alleviate symptoms and improve social functioning.

Contemporary research into treatment emphasis is the specific effect of various treatments on schizophrenia. There is good evidence that the schizophrenic patient can improve with somatic therapies, psychotherapies and/or a combination. There is less evidence to indicate (1) when and with what individual a certain treatment will be effective, and (2) if one treatment approach is more effective than another in determining overall life outcome for the individual. The question is no longer can the schizophrenic respond to treatment, but rather what person to which treatment with what long-term outcome?

Effects of Somatic Therapies

Whether or not it is ethically or morally sound to use somatic approaches

with disorders which may not be somatic is an unresolved question. Nonetheless, in terms of interrupting the psychotic process, somatic therapies --especially psychoactive drugs--are by far the most effective single approach. Psychoactive drugs are also effective in promoting long-term social functioning. The National Institute of Mental Health reports that in chronic schizophrenia after one year, relapse rates are only ten percent when injectable medication is used, only thirty-five percent when oral medication is used, but sixty-five percent when placebo is used (5 p.335). Clinical studies, as well as empirical observation, show that psychoactive drugs decrease disturbance in perception, thought, affect, and motivation for the majority of schizophrenics. A common cause for readmission in schizophrenics is discontinuation by the patient of drug therapy. Psychoactive drugs have been widely used since 1955. However, that is barely twenty years. We are just now observing effects of lifetime ingestion. We may yet discover that long-term drug therapy has disadvantages similar to long-term hospitalization.

As with most research into psychoses, the major criticism of the positive findings for drug therapy is the lack of stable populations and controlled research designs. We know of readmission rates for patients who discontinue medication and are readmitted. We do not know how many individuals discontinue medications and do not come to the attention of the health care system. Both clinical research and empirical observation supports the effectiveness of psychoactive drugs in the majority of acutely disturbed schizophrenics. However, it is increasingly evident that drugs alone are not, and probably will not be, the total answer in schizophrenia.

Effects of Psychosocial Therapies

Every conceivable type of psychosocial therapy has been attempted

with schizophrenics. Research into the effects and outcome of these therapies is on the whole less well-controlled than somatic therapies research. Despite reports of "miraculous" recoveries from some studies, taken as a whole, the results of psychosocial treatment is inconclusive. For every study that validates the impact of a specific psychosocial treatment, there are similar studies that invalidate the impact of that same treatment. The vague definition of schizophrenia, the mobility of the subject group, and the lack of strict criteria for applying treatment approaches, make many findings questionable and the replication of many studies impossible.

Generalizations About the Effects of Therapy

When both somatic and psychosocial therapies are offered and the outcome evaluated, the results are somewhat better than for any single treatment, but strictly speaking studies are still inconclusive. The following points represent generalizations about the effectiveness of treatment with schizophrenics when the literature is taken as a whole.

(1) The majority of acutely disturbed persons respond to medication with decreases in symptoms even if no other therapy is offered. Most persons identified as chronic or process or true schizophrenics function with less disturbance if maintained on drugs. While long-term consequences of drug maintenance are presently unclear, short-term results support the use of drugs in interrupting the psychotic process. While statistics vary as to the exact number of schizophrenics who do not respond to medications, reports indicated that more do respond than do not respond.

(2) Acutely disturbed persons are generally hospitalized. Most authorities believe that the acutely disturbed are not amenable to psychotherapy. Even when patients have been in therapy for years, they

are as a rule hospitalized in acute exacerbation. Hospitalization and medication are the most common approaches to control of acuity. If for some reason medication is unacceptable, hospitalization is still ordered and hydrotherapy (in the form of wet sheet packs), seclusion and restraints provide time-limited external controls in acute periods.

(3) With rare exception, insight therapy is less than effective with individuals diagnosed as schizophrenic. The explanation for this can be found in various theories. For instance, the ego psychologists often believe the individual's ego to be too weak to withstand the pressures of insight therapy. On a more pragmatic basis, the schizophrenic will rarely accept the rigorous requirements of insight therapy and will drop out of the therapy or escape into a psychotic episode if pressures become too great. Intensive insight therapy, reported to have been successful, i.e., Sullivan, Laing, was and is undertaken in a residential treatment center that provides the patient with supervision and protection during the process.

(4) Supportive therapy can be helpful with the schizophrenic, and is often provided on a long-term basis. Many individuals maintain regular contact with therapists for ten to fifteen years. The goal of therapy is not to "cure" or to make dramatic changes in the individual but rather to provide continuous support to weather life's stresses and still maintain functioning. The schizophrenic seems better able to tolerate the low stress level of supportive therapy and often a relationship is established that enables the individual to trust the therapist and use his advice and guidance. Chronic schizophrenics often have limited, if any, family involvement and long-term supportive therapy can replace to some extent absent support systems.

(5) Family work when the family is available and not totally alienated offers two productive ways to work with the schizophrenic. First, if the family is committed to treatment, family therapy provides an opportunity to clear up communication and to increase consensual validation within the family. Family therapy assists in developing an atmosphere of change and recognizes the patient's problem as a family problem. This is reassuring in that the patient does not have to be totally responsible for family change. Second, if the family is not committed to treatment, family work will offer the opportunity to teach about the process of the individual's condition, to discuss treatment the individual is or may be having, and to assist the family and patient to cope with the patient's disturbing behavior. Unfortunately, not all schizophrenics have families or have families willing to work with their problems. Nonetheless, when possible, family work can be of enormous assistance to the patient and his family.

Research on treatment of the schizophrenic suggests that for the majority of patients psychoactive drugs can interrupt the acute psychotic process, and family and/or supportive individual or group psychotherapy can assist the individual to maintain social functioning. As yet, neither somatic therapy nor psychotherapy can cure an individual or guarantee against future episodes.

Contemporary Views of Prognosis and/or Outcome of Schizophrenia

Bleuler identified three major outcomes of the condition that are similar to present day understanding. Bleuler found patients who (1) improved; (2) remained static; and (3) deteriorated. Freedman states that at present there are five possible outcomes: (1) full recovery; (2) full remission with one or two future episodes; (3) social recovery with

self support, or social recovery with supervision and protection; (4) stable chronicity; and (5) terminal stages. Freedman further states that 60% of the patients diagnosed as schizophrenic will have at least social recovery. Thirty percent will be socially recovered but handicapped. Only 10% will be hospitalized (4). The above outcomes reflect what can be expected for schizophrenics as a group. It is still difficult to predict outcomes on an individual basis. At present the following generalizations can be made: (1) premorbid adjustment is one of the best predictions of post-episode recovery; (2) a stable support system is extremely important to post-episode function; and (3) the less functional the individual, the more likely he will need supervision and/or protection. NIMH reports that on a case by case basis the schizophrenic is more likely to be in the community today than ten years ago. However, there is still question as to the quality of life of the deinstitutionalized schizophrenic.

Alternative Views of Schizophrenia

Some medical and social scientists question the validity of schizophrenia as a disease process. Among the best known questioners are Thomas S. Szasz, M.D. and R.D. Laing, M.D. Both men agree schizophrenia is not a disease. They approach the discussion of thatviewpoint in different ways. Szasz states that if indeed schizophrenia is not a disease, it is not the business of medicine. Therefore, the behavior resulting from the condition we often label schizophrenic should be dealt with in the community by agencies designed to deal with behavior demonstrated by the individual person. Szasz is of the opinion that schizophrenia was developed and created by physicians. Physicians continue to support the notion that schizophrenia is an illness and a medical problem

because they have a vested interest in supporting the conditions as medical conditions. Laing contends that schizophrenia is not a disease. However, he believes that specially-trained individuals can assist the person to deal with the process labeled schizophrenia. He believes that schizophrenia is a normal process. Nonetheless, he proposes to offer assistance to insure the positive outcome of the schizophrenic experience. Neither man contends that behavior labeled schizophrenic does not exist. Rather they both offer approaches other than the traditional medical model. While both men have wide followings, neither viewpoint is universally accepted. However, both men raise issues and offer insight that must be addressed by all members of the mental health care delivery system.

MAJOR DEVELOPMENTS IN THE CARE AND TREATMENT OF SCHIZOPHRENIA: 1700 - PRESENT

Classifying Insanity

The bizarre behavior charactaristics of schizophrenia has been noted since inception of written records. The term insanity was used to describe all demented behavior including what we now call schizophrenia. For centuries insanity was assumed to have supernatural causes, e.g., gods, demons, spirits, etc. Therefore, religious groups were responsible for dealing with the insane. As civilization became more complex and large cities began to develop, the insane disturbed the community and laws were passed to confine them to asylums. Commitment laws were established in England in 1744 and asylums became hospitals in England in 1750 when St. Luke's was opened (4).

The changing of asylums to hospitals did little for the insane.

Hospitals were actually established to confine rather than treat because medicine had little treatment to offer. However, physicians began to observe insane behavior toward developing categories for classification and diagnosis of illness. Dementia Praecox, later schizophrenia, was one of the first conditions classified and labeled. When Kreaplin's 1893 publication was universally accepted, dementia praecox, a deteriorating mental disease, was differentiated from manic-depression, a non-deteriorating mental disorder. While both Dementia Praecox and manic-depression were thought to be incurable and organic, Dementia Praecox was singled out as the chronic, irreversible condition. In large part, Kreaplin's label with the focus on irreversible deterioration determined for many years the fate of those labeled schizophrenic.

While Freud and his followers developed the psychological approach to all mental conditions, they determined schizophrenia could not be treated by the psychoanalytic technique. Thus, while medical schools studied psychological approaches and treated neurotics, the schizophrenic remained confined to hospitals where their chronic condition went largely untreated. Despite Freud and others proposing that psychosis as well as neurosis was psychologically based, most in the psychiatric establishment continued to believe schizophrenia was organically based. Thus, while neurosis was increasingly seen as a psychologically treatable disorder, schizophrenia remained an organic, chronic, incurable and untreatable disease.

Somatic Therapies

In the '20's and '30's, medicine was able to identify organic causes and cures for some conditions manifest as psychological disorders. The

causes and cures for syphilis, myxedema and pellagra lead the way to the development of somatic therapy for schizophrenia. A variety of methods, chemical and surgical, had been used to control behavior, but none were considered disease specific until Sahel developed insulin coma therapy; Maduna, convulsive therapy; and Moniz, prefrontal lobotomies. These therapies were believed to be schizophrenic specific; that is, the treatment not only controlled behavior, but could actually cure the disease. None of these produced the promised cure and schizophrenia was again viewed as organic, chronic and incurable.

Psychotherapies

The Freudian influence was strong in American schools of medicine and eventually physicians attempted to explain and treat schizophrenia from a psychological model. In the '40's and '50's, Sullivan, Rosen, Fromm-Reichman and others, reported cases where a schizophrenic was "cured" with psychotherapy techniques. Unfortunately, the psychotherapy of the '40's and '50's was actually no more effective than the somatic therapies of the '20's and '30's. Schizophrenia seemed resistant to any treatment. While the psychotherapy approach did make the organic nature of the condition questionable, schizophrenia continued to be chronic and incurable.

Social Influences

Since schizophrenia was rarely treatable and believed to be chronic and incurable, patients who were thought to have the condition were hospitalized. Even if symptoms subsided, patients were not "cured" and therefore often remained in the hospital. Custodial care was offered in place of treatment. Patients who refused such care could be committed to hospitals by the courts and many were. The diagnosis of schizophrenia

was applied to the majority of patients confined to hospitals. Since schizophrenia was chronic, incurable and untreatable, hospitals were designed to provide care for the chronically ill rather than treatment for the acutely ill. Hospitals continued to admit patients but rarely discharged them, and by 1955 there were over 550,000 hospitalized patients in the United States and one-half or more were schizophrenic.

The hospital confinement of schizophrenics reflected not only the limited resources of medicine available to such patients, but public attitude as well. Persons who were disturbing to the community could and should be locked away. Since schizophrenics were incurable, untreatable and chronic, patients should be provided for but not allowed freedom to disturb others. This attitude was not uniquely American, but it was rigidly supported and maintained in this country.

In the mid-50's, sociologists began to comment on the effects on patients of long-term hospitalization. Perhaps the most famous statement is Goffman's Asylums. Meanwhile, European countries began to experiment with open doors, therapeutic communities, family involvement and reported patient improvement. In this country, Greenblatt introduced a more "therapeutic" approach at a Massachusetts mental institution and published the results in a book entitled, From Custodial to Therapeutic Care. The psychiatric establishment, through the prodding of social scientists, was recognizing what would eventually be called institutionalization.

Institutionalization

Institutionalization is the result of long-term confinement to an institution. Institutionalization results from both the place of confinement and the kind of confinement. Schizophrenics were viewed a "poor

crazy person" who could not make decisions, who were unpredictable, and who could not care for themselves. Since they were chronic, they would not get better but would probably get worse. Highly structured routines and close observation were essential. Staff of large mental institutions believed that patients' social skills, self-determination and self-care declined as a result of the disease schizophrenia. Only in the late 50's was it recognized that chronicity was as much a result of institutionalization as of schizophrenia. In essence, the care and treatment of schizophrenia was as likely to produce chronicity as the disease itself.

Psychoactive Drugs

In the long history of schizophrenia, psychoactive drugs have made the most significant changes in the care and treatment of condition. Phenothiazines, introduced in 1954, produced such miraculous improvement in the schizophrenic that it was believed that the long-sought "cure" had been found. Interestingly, the exact effect of the chemical on the brain and/or the rest of the body was not and still is not understood. Nonetheless, schizophrenics got better. The disturbances in perception, thought, affect and motivation lessened and in some cases disappeared completely. As a result, phenothiazines proved more effective than the social scientist in pointing out the effects of long-term confinement. Many schizophrenic individuals were now symptom free and in one sense "cured," but they could not function independently.

Community Mental Health and Deinstitutionalization

The Mental Health Association, armed with sociologists' exposé of mental institutions and the results of psychoactive drugs, called public attention to the plight of the mentally ill. The public, through

federal and state legislation, demanded changes in the care and treatment of the mentally ill. (See Table 1, page 36) Each citizen was to have access to psychiatric care and treatment in his own community. Further, he would have this access without fear of loss of rights or of long-term, involuntary confinement in a mental institution. Persons, no matter what their diagnosis, were not to be viewed as chronic, incurable or untreatable and were not to be relegated to long-term custodial care. The public and the psychiatric establishment believed that psychoactive drugs and community care could produce the long-sought answer to the care and treatment of the schizophrenic.

While community mental health and deinstitutionalization are related concepts, they are not identical. The concept of community mental health was introduced formally in 1963 to provide mental health services to all people. Community mental health centers were to provide at least five essential services: (1) inpatient services; (2) outpatient services; (3) partial hospitalization; (4) emergency services; and (5) consultation to and education for community personnel. The CMH movement was committed not only to providing service to new and already identified patients, but to preventing mental illness as well.

Deinstitutionalization was much more specific. Deinstitutionalization returned hospitalized patients to their communities and attempted to prevent hospitalization of persons who might be candidates for long-term care. At first glance, deinstitutionalization would seem focused on place of treatment only. However, as Bachrach points out, deinstitutionalization is not only the place but the process of treatment and it is the process that has made deinstitutionalization such a controversial issue (1).

If deinstitutionalization referred to place alone, it would presently

be quite successful. The state hospital population has decreased 45% since 1973 (from 504,604 to 275,995) (1). However, about one-half the hospital population continues to be diagnosed as schizophrenic. The process of deinstitutionalization unfortunately is far from successful. The literature of the early'70's is full of stories of institutionalized patients being "dumped" into communities not prepared to serve them. Board and care homes were often different from back wards only in location. Some patients entered a never ending revolving door from Crisis Unit to community. If patients were hospitalized five days or less, they were not actually counted in the statistics. This did not change the fact that some were hospitalized ten or more times in one year (3).

Bachrach presents an excellent condensation of the controversy over deinstitutionalization in eight major issues. (1) They are issues related to (1) selection of patients for community care; (2) treatment course of the patient in the community; (3) quality of life of patients in the community; (4) the greater community; (5) financial and fiscal issues; (6) legal and quasi-legal questions; (7) information and accountability; and (8) the process of deinstitutionalization itself. Bachrach's report may be summarized as follows.

I. Issues related to the selection of patients for community care.

(a) The diverse mission of the CMH as well as the professional bias that chronically ill schizophrenic patients are undesirable has resulted in schizophrenics receiving less attention.

(b) Patients who have been institutionalized rarely receive adequate assistance prior to discharge and usually have no resources in the community to help them regain lost social skills.

(c) Lack of aggressive outreach in CMH programs result in disadvantaged and minority groups' under-utilization of facilities.

II. Issues related to the treatment course of patients in the community.

(a) Community programs other than medication rarely meet treatment needs for formerly hospitalized patients.

(b) Community programs rarely allow one person to provide care and therefore the patient and his care are fragmented.

(c) Community programs may be geographically, financially and psychologically inaccessible to deinstitutionalized patients and therefore are under-utilized.

(d) The above considerations (II a,b,c,) raise questions about the quality of community programs.

III. Issues related to quality of life of patients in the community.

(a) Community support systems may be lacking or may not meet basic support needs of patients, e.g. friendly intervention or a helping hand.

(b) Patients may not be able to live at home. Other residential facilities, i.e., board and care homes, halfway houses, may not provide humane environments.

IV. Issues related to the greater community.

(a) Communities do not readily accept mental patients in their midst in halfway houses, etc.

(b) Concentration of released mental patients may de-value communities.

(c) Closing of large state hospitals have an adverse economic effect on communities that are dependent for jobs in such

institutions.

(d) The return of patients to their families has produced severe emotional and social strain on families and the full impact has not yet been assessed.

V. Financial and fiscal issues.

There is consensus that the fiscal benefits of community care is probably far less than originally predicted.

VI. Legal and quasi-legal issues.

(a) The patients' rights must be protected.

(b) The community's right to be safe from "dangerousness" of mental patients must be protected.

VII. Informational issues and accountability.

(a) There is little research focused on deinstitutionalization.

(b) Patients are difficult to locate in the community for follow-up of either research or treatment.

(c) The lack of sophisticated follow-up studies leave the question of the fate of deinstitutionalized patients largely unanswered.

VIII. Additional issues resulting from the process of deinstitutionalization itself.

(a) Rapid development of deinstitutionalization programs in the community often negates careful planning and evaluations of the effects of programs.

(b) Little effort has been made to assess patient satisfaction with the programs.

(c) Hospitals that are phasing out may not provide adequate services during the phase out.

(d) There is lack of communication between hospital and community that influences patients receiving care in the community.

(e) Role blaming of staff and patients may add to patient difficulties in community treatment.

(f) Deinstitutionalization, in attempting to provide for social as well as psychological needs, may have provided inadequately for both, and discourage staff and patients alike.

Deinstitutionalization dehumanized patients. Deinstitutionalization was to reverse that process and provide services that did not dehumanize. Deinstitutionalization now has a ten year history; however, dehumanization is still a part of mental health care delivery. The original target group of deinstitutionalization, the psychotic and more specifically, the schizophrenic, may not be better off than before the movement began. The present state of the deinstitutionalization process has demonstrated that a wide range of services, including long-term hospitalization, is probably necessary and even essential to meet mental health needs of the population. (See Table 2, page 37) We also know that institutionalization can occur outside as well as inside an institution. Deinstitutionalization is the process of assuring the patients humane treatment that includes self-care and self-determination. Deinstitutionalization is not community care and institutionalization is not hospital care. The outcome of ten years of deinstitutionalization requires that mental health care professionals reassess the process, not just the place, of delivery of mental health care.

The process of deinstitutionalization requires that mental health care be provided in such a way that the individual is not in danger of losing his ability to care for himself. The most basic level of self-care

involves getting through life on a day-to-day basis and recent history has shown that if the psychiatric patient is unable to do this he will be relegated to continual protective and/or supervised environments. Many schizophrenic patients are hospitalized because they cannot or will not care for themselves in even the most basic ways. The major role of health care professions for the schizophrenic is less focused on cure of the disorder than on function of the patient. Deinstitutionalization in the most simple sense is really assisting the patient to regain basic autonomy or preventing the patient from ever having to relinquish basic autonomy. After acute symptoms have subsided, the patient's future in large part will depend on how well he can take care of himself rather than on how much residual psychosis is evident. Deinstitutionalization requires that some segment of the mental health care delivery system focus on the patient as a functioning, rather than a sick, human being and make concentrated effort to insure that he maintains and, if possible, develops increasing ability to care for himself and meet his own basic needs.

Summary

While schizophrenia continues to be a puzzling disorder, persons labeled schizophrenic continue to be a part of the mental health care delivery system. No single understanding or approach to treating or interrupting the schizophrenic process has proved successful with all patients. Nonetheless, schizophrenics are still assigned to the mental health care delivery system for care and/or treatment. While the mental health care delivery system has advanced in humane treatment from asylums toward deinstitutionalized community care, the system cannot yet insure that all schizophrenics will maintain rights to self-care and self-determination.

TABLE 1

Major Changes in Hospitalization and Treatment of the Schizophrenic Patient: 1950, 1960, and 1970

	1950	1960	1970
Hospitalization	Long-term custodial care, several years to a lifetime.	Long-term custodial care and some treatment, months to years.	Short-term, active treatment; long-term, very limited.
Treatment	1. ECT 2. Insulin Coma 3. Limited psychotherapy (1:1)	1. Phenothiazines introduced in 1954. 2. ECT 3. Resocialization activities (1:1 and groups). 4. Supportive psychotherapy (1:1 and groups).	1. Many major tranquilizers. 2. Supportive psychotherapy (1:1, group and family). 3. Socialization activities. 4. Vocational rehabilitation.

TABLE 2

Contemporary Services Available for the Schizophrenic Patient

Type of Facility	Length of Stay	Primary Service	Goal
INPATIENT			
Crisis Service	Short-term, 7 days to 2 weeks.	1. Evaluation 2. Rapid interruption of the psychotic process. 3. Referral	1. Rapid return to community living situation. 2. Referral to hospital or residential treatment facility.
Hospital	Moderate stay, 2 weeks to 2 months.	1. Evaluation 2. Interruption of the psychotic process. 3. Beginning treatment 4. Referral	Establish treatment of choice, i.e., medication, or medication and psychotherapy.
Hospital or Residential Treatment	Long stay, indefinite	1. Evaluation 2. Treatment 3. Social rehabilitation if needed.	Recovery and/or social rehabilitation.
Three-quarter or half-way house	Depends on patient and program but usually 1 to 6 months.	1. Rehabilitation 2. Socialization	1. Social recovery 2. Vocational rehabilitation.
Board & Care Home	Indefinite, 6 months to a lifetime.	1. Socialization 2. Supervision	1. Social recovery with protection. 2. Stabilization of chronicity.

(TABLE 2 - continued)

TABLE 2 (continuation)

TABLE 2 (continuation)

Type of Facility	Length of Stay	Primary Service	Goal
OUTPATIENT			
Day Care	Indefinite	1. Socialization activity 2. Supportive therapy	1. Maintain social recovery 2. Stabilize chronicity
Emergency Service	Short-term, 1 to 6 visits.	1. Evaluation 2. Referral for further treatment	1. Time limited treatment 2. Referral
Outpatient Clinic	Indefinite	1. Evaluation 2. Psychotherapy 3. Medication follow-up	1. Coordinate treatment 2. Maintain at present level of function
Private Practitioner	Indefinite	1. Evaluation 2. Psychotherapy 3. Medical follow-up	1. Coordinate treatment 2. Maintain at present level of function

CHAPTER 2

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* A more complete listing of literature related to schizophrenia is found on pages 206-209.

CHAPTER 3 THE PRACTICE OF PSYCHIATRIC NURSING

TRENDS IN PSYCHIATRIC NURSING

The "nurse" is as old as mankind, but nursing as an organized activity did not emerge until the 1800's. Florence Nightingale attempted to define and formalize nursing in her Notes on Nursing: What It is and What It is Not, published in 1859 (8). Since then, much has been written about what nursing is and is not and still there are not universally accepted conceptualizations or definitions of nursing. Despite, or perhaps because of, the lack of universally accepted conceptualizations in nursing, nurses have continued to plan basic and advanced education and have developed speicalization within the practice of nursing. Psychiatric nursing is one of the oldest specializations.

The nurse who joined the physicians attendant team in the late 1800's was not a psychiatric nurse. The nurse provided physical care to the physically ill mental patients. She was not expected to and did not participate in psychiatric care. Private duty nurses were probably the first psychiatric nurses. Their long-term involvement with individual mental patients prompted them to meet the patient's psychological as well as physical needs. However, psychiatric nursing as a specialty was yet to come.

In the '30's, nurses were recruited for psychiatric hospitals by psychiatrists but many institutions had no registered nurses at all. By 1940 attempts were being made to determine the role and function of nurses in psychiatry. By 1950, individual nurses, as well as nursing organizations, were publishing papers on psychiatric nursing. The leaders in psychiatric nursing emerged in the '50's and each began to define the

role of the psychiatric nurse. Marian Kalkman, Dorothy Gregg, Hildegard Peplau and Dorothy Mareness all produced books or papers on psychiatric nursing.

Nursing, like all disciplines working with psychiatric patients, was influenced by the psychological theories and techniques of the '30's, '40's, and '50's. The introduction of these theories into nursing began the long and still unsettled issues of whether the nurse is "therapeutic" or provides "therapy." In either case the major focus of psychiatric nursing as described by the nursing leaders and as taught in schools of nursing became the nurse-patient relationship. This relationship was based on individual therapy models that grew out of various psychological theories of human behavior.

By the mid-fifties nurses could receive graduate as well as undergraduate education in psychiatric nursing. The major approach to learning was the one-to-one relationship. The nurse developed an individual relationship with a patient and received individual supervision about this relationship. What was and is an excellent teaching approach for understanding human behavior eventually became not only a teaching approach but the nursing approach for work with psychiatric patients (5).

While leaders in psychiatric nursing education focused on the nurse-patient relationship, that relationship had little to do with the actual practice of psychiatric nursing. Increasing numbers of nuses, supported by the 1946 Health Manpower Training Act, were practicing in psychiatric settings, primarily large mental institutions, and by 1950 nursing had succeeded in gaining control over nursing care of patients in inpatient psychiatric settings. Nurses provided administrative direction and staff supervision for the attendants that were still providing the majority of direct patient care. Because nurses were responsible for many patients

and many staff the individual approach to care and supervision was rather unrealistic and produced long-range consequences for both nurse and patient. In retrospect the 2 major consequences were: (1) the already limited number of R.N.'s could not possibly provide individual or even group therapeutic interactions with all patients assigned to her care. As a result, the nurse accepted that untrained or minimally trained attendants would continue to provide the major part of patient care while the registered nurse concentrated on selected individual nursing-patient relationships. (2) Schizophrenic patients, especially those regarded as chronic, had never been very responsive to any treatment approach and were not very responsive to individual therapy. As a result, those patients lost access to registered nurses, if they had ever had it. Further, it was concluded that long-term individual therapy would be essential for those schizophrenics who could respond to therapy and therefore they were subject to the institutionalizing effects of long-term hospitalization. In retrospect, nursing, the one discipline that was large enough in numbers and well trained enough to actually initiate change in the overall care of patients in mental institutions, joined other professionals in the movement away from patients by focusing on single patients or small groups of patients for time-limited interaction rather than developing approaches for many patients confined to inpatient units. Nursing personnel outnumbered all other disciplines and actually provided the majority of any care or treatment received by patients. Physicians were in overall control of hospital programs, but actual implementation, in large part, rested with nursing staff. As a result, while all disciplines, as well as the public, had to take some responsibility for the effect of institutionalization, nurses were the actual supervisors or implementors of the care that produced institutional chronicity.

Psychiatric nursing had selected, consciously or unconsciously, to identify with psychiatry and/or psychology (therapy) rather than with nursing. Like those disciplines, nursing began to focus more therapy on fewer patients. While the individual nurse and patient were more intimately involved, nursing actually moved away from patients. Concepts related to psychological theories of therapy became concepts of nursing practice. The following reviews components of psychiatric nursing to illustrate how psychiatric nursing, as a discipline, changed from nursing, as a focus of practice, to psychotherapy, as a focus of practice.

THE COMPONENTS OF PSYCHIATRIC NURSING

In the observation of psychiatric nursing practice, one can immediately identify that the nurse preforms a variety of functions and duties that through tradition, law, and sometimes ignorance, have fallen to nursing. However, this alone cannot make up nursing practice. Whatever nurses do is not necessarily nursing. Toward a clearer understanding of psychiatric nursing the following will discuss the nursing process, the nurse-patient relationship, and the content of psychiatric nursing as component parts of psychiatric nursing.

The Nursing Process

The nursing process is a relatively (ten years) new name for what has previously been called the problem-solving approach, the inquiry stance, the hypotheses development approach, the decision-making model, and a number of other equally vague and imprecise names. The title, nursing process, is perhaps most misleading as it implies that the process belongs to nursing. In reality, the process belongs to humanity and if one were to look for the originator of the process it would necessitate exploring antiquity and the person, if it were a single person, would have existed long before nursing

was an organized activity.

The nursing process is a scientific process. Presently the parts in the nursing process are identified as assessment, planning, implementation and evaluation (14). In medicine it's called history, physical and diagnosis, treatment and follow-up. It is quite simply the process of observation and data collection, interpretation of the observations and/or data to make statements that one then investigates or acts upon and the process and the statements are evaluated. However, the nursing process is stressed continually as the definition of nursing. For example, the University of California, San Francisco, Department of Nursing Service uses the following definition: "Nursing is defined as a problem-solving, decision-making interpersonal process directed toward promotion, maintenance, and restoration of health. Problem-solving involves application of principles derived from physical, biological and behavioral sciences to the nursing care of patients. Nursing practice utilizes the problem-solving skills of assessment, planning, implementation and evaluation to provide both episodic and distributive care according to the needs of individuals and groups of patients and their family."

Travelbee (13), Orlando (10), and Wiedenbach (14) have developed nursing conceptualizations that are primarily conseptualization of process. Each focus in a slightly different way on the problem-solving process. Tavelbee focused on an interpersonal process that includes observation, development, decision and evaluation. Wiedenbach and Orlando also focus on interpersonal relationship as part of the nursing process. All three take a problem-solving approach and focus primarily on how one can assist patients by using problem-solving.

The nursing process as such is unique to nursing only because it is

called by nurses the nursing process. It is the process used by all pure and applied sciences to identify and solve problems and to evaluate the results.

The Nurse-Patient Relationship

Genevieve K. Bixler, in the editorial introduction of Peplau's Interpersonal Relationships in Nursing published in 1952 states, "There is something new in nursing. It cannot be said that the concept of interrelationships among nurses, doctors, patients and others is new, for though the emphasis has in recent years become much greater, one has sensed some awareness of the importance of this interplay even in nursing's earliest teaching" (11 p. VII). Nurses and patients have always been involved in an interpersonal relationship, but this relationship did not become a focus of teaching and practice until the early '50's. Since then interpersonal relationships have been the major process and content area of the field. The following is a brief review of the nurse-patient relationship as described in several leading psychiatric nursing textbooks.

Hildegard Peplau (12) included the interpersonal approach to patient care in all of nursing and all of life. She proposed that patient care is influenced by the kind of person each nurse becomes and therefore nursing has the responsibility to foster personality development of nurses toward maturity. Utilizing Sullivan's interpersonal theory of psychiatry, Peplau attempted to identify the nurse-patient relationship as a significant therapeutic interpersonal process. She further proposed that the process is goal-directed and assists in the development of personality by helping individuals to use experience for maximum productivity. Peplau influenced the place of interpersonal process in nursing. She helped establish the legitimate nature of that process. However, her theory is a grand theory and while it has attempted to direct practice and research,

it has produced little concrete evidence of the use or value to the patient of the interpersonal relationship in nursing care.

Matheney and Topalis in Psychiatric Nursing (7) point out that interpersonal relationships with patients is a therapeutic tool and has real effect on the course of a patient's illness. They conclude that the interpersonal relationships, the give and take between patient and nurse, are tools of nursing care to be used to promote the patient's health. Matheney and Topalis presume that nursing care, including the interpersonal process, is goal-directed and based on patient needs.

Hofling and Leininger, in discussing new trends in nursing in Basic Psychiatric Concepts in Nursing (3), identify as the third new trend in nursing the recognition of the importance and value of therapeutic nurse-patient relationships. Hofling and Leininger also imply goal-directed relationships. Again, goals are related to specific patient needs.

Johnston, in Mental Health and Mental Illness (4), states specifically that the nurse-patient relationship is a therapeutic one-to-one relationship. The goal of the relationship is to have the patient give up unproductive behavior. Jonston also includes stages and phases of the relationship.

Brown and Fowler in Psychodynamic Nursing (2) describes the nurse-patient relationship as a process between two people. The goal of the relationship in nursing is to have the nurse and the patient find a common ground and respond to one another. They go on to say that the positive motive which is essential for any therapeutic nurse-patient relationship is a sincere interest in the patient and a genuine desire to help him. Brown and Fowler describe stages and phases and also identify types of relationships.

The nurse-patient relationship as described above includes the

following: (1) It is a process, occurs over time and has stages, phases, steps, etc. (2) It is therapeutic. (3) It includes patient input and participation. (4) It requires an understanding of behavior (self and others). (5) It is goal-directed and based on meeting human needs. The therapeutic nurse-patient relationship described above is really no different from the therapeutic doctor-patient relationship, the therapeutic social worker-patient relationship, or the therapeutic relationship of any two people when one seeks or is offered help by another; for example, Towle described social worker-patient relationship in The Learner in Education for the Professions, and Fromm-Reichman describes the doctor-patient relationship in Principals of Intensive Psychotherapy.

The Content of Psychiatric Nursing

Psychiatric nursing has increasingly focused on psychiatric personality theories. As these theories were accepted into nursing, so were the treatment models proposed by the theories. In education between 1950 and present, the process, content and practice of psychiatric nursing developed and grew to be almost identical to the process, content and practice of psychiatry for physicians, social workers, and psychologists. All disciplines were being trained in different periods of time and under different circumstances to use the professional-patient relationship in the practice of psychotherapy. Clinical practice was more closely related to goals of the selected personality theory than to a discipline. The use of professional-patient relationship was determined by the theory of the practitioner and not by his or her discipline and his or her practice was set by the theory and not by the disciplines. The nurse was becoming a psychotherapist and not a nurse. She practiced more psychotherapy and less nursing. This is blatantly clear in S. Lego's article, "Nurse Psychotherapist: How Are We Different" in Perspective of Psychiatric Care (6).

Here she attempts to justify the nurse's unique role in psychotherapy. She succeeds in describing the role of the psychotherapist as practiced by a Sullivanian, be that person nurse, doctor, psychologist, or social worker.

THE PRACTICE OF PSYCHIATRIC NURSING

Despite educational programs that follow the psychotherapy model, the practice of psychiatric nursing is actually more closely related to the practice of nursing than to the practice of psychotherapy. The majority of nurses in psychiatry, as in nursing, in general provide 24-hour, 7 days a week care. Even in CMH centers, nurses tend to be assigned to crisis units and day care programs where they assume shift-to-shift responsibility for many patients. In the twenty-five years that psychiatric nurses have attempted to be accepted as psychotherapists, as well as or rather than nurses, limited numbers of nurses have succeeded in this aim in the health care delivery system. The majority of persons who call themselves psychiatric nurses still have a B.S. or less degree and are expected to provide shift-to-shift care for patients. This fact seems to be largely ignored by psychiatric nursing leaders as well as educators in undergraduate and graduate programs.

A review of schools of nursing curricula, as well as nursing inservice programs, indicates heavy influence of one or more psychiatric personality theories. This is both wise and reasonable as these theories are essential to the understanding of psychodynamic psychiatry. Personality theory and theory from social and behavioral sciences are necessary to provide a framework for developing assumptions about man and his needs. However, the inclusion of personality theory often means the inclusion of a psychotherapy model of practice. As this happens, psychotherapy under the rubric

of nursing one-to-one or group leadership or, more recently, family counseling, becomes the focus of nursing practice.

In the psychotherapy model based on the physician-patient model, the therapist provides regular consultation times to the patient or patients. The expected outcome of the therapeutic session is dependent upon the theoretical frame that the therapist uses to assess the patient and upon the patient's willingness to become involved with the therapist. The therapist determines, based on his theoretical frame of reference, to what extent he will be involved with the patient in and out of the therapy session. Generally, the therapist limits his contact with the patient to the therapy session. This is obviously a practice that can best be accomodated in an office or an outpatient setting. However, this practice is similar with hospitalized patients. On the whole, the model is based on one therapist seeing a number of patients in individual, group or family sessions for a specified time on a regular basis. The therapist focuses on the patient's problem as he understands it from his frame of reference, and while the therapist is concerned, he is rarely involved (even on an inpatient basis) with the patient beyond the regularly scheduled times, except in extreme emergencies, i.e., suicide attempts.

The majority of psychiatric nurses are still employed on inpatient services and are involved with the hospitalized patient over a 24-hour period, seven days a week. This nurse may <u>not</u> limit her practice to regularly scheduled time limited encounters with patients. She may assume as one function the psychotherapy relationship with certain patients, but on the whole she is responsible for and accountable to all patients hospitalized on the unit on which she practices. However, the nurse may view psychotherapy (individual, group or family) as the major, if not only,

influence on patient behavior and negate her own nursing practice. This commonly held attitude tends to devalue nursing care and nurse-patient interaction that accounts for the majority of nurse's and patient's time. When the focus of psychiatric nursing education and practice is psychotherapy, it is readily apparent what Altshul means when she states that there seems to be little relationship between psychiatric nurse education and the realities of unit (hospital) practice in the United States (1).

The nurse who knows only the practice of psychotherapy is often immobilized when she is expected to broaden her care. She is unable to be responsible and accountable to many patients. She may be able to perform adequately in "psychotherapy," but she is often unable to provide care to patients in any other situation. It is as if patients exist only when engaged in psychotherapy. The nurse may be able to work with a patient when she meets with him individually or in a group within the limits of the psychotherapy contract, but she is unable to act as a psychotherapeutic agent day in and day out as she meets the patient in his living environment. She is often unable to transfer learning from psychotherapy to nursing care. Nurses do complain of not knowing what to do with patients and may encourage every patient to be assigned to a nurse for a nursing one-to-one relationship. Only within the nursing one-to-one does the nurse seem comfortable. Nowhere is this more apparent than in the nursing input to the total treatment plan of the patient. Often nurses are unable to articulate nursing goals and interventions for patients beyond providing a nursing one-to-one. Even the goals and interventions of that one-to-one, when explored, are often identical to the goals and interventions of psychotherapy, i.e., "help patient to improve his IPR skills," "assist patient in accepting alternative action." Nursing care plans are filled with nursing orders such as "allow patient to ventilate," "encourage patient to

express his feelings," "encourage patient to develop trust." When we have discussed patient care with practitioners we are often told that the most important aspect of nursing care is the individual nurse-patient relationship (and this relationship is defined as psychotherapy). When asked to what end, there is no answer. The frustrating and unsuccessful attempts to provide continued nursing care on the psychotherapy model leads many nurses to reject the practice of nursing altogether or else attempt to have nurses recognized as psychotherapists and limit their practice to psychotherapy and leave the rest of patient care to aides, attendants or technicians. This rarely improves the total patient care. When there are adequate physicians, psychologists and social workers to provide psychotherapy, and nurses insist on psychotherapy roles, it tends to overload the patient with psychotherapy and deprive him of nursing care. To prevent this, both education and service must review the components and practice of psychiatric nursing.

THE PSYCHOTHERAPY MODEL IN THE PRACTICE OF PSYCHIATRIC NURSING

Psychiatric nursing has and continues to be more closely identified with school of psychiatric thought than with nursing. While we have continued to focus on skills in a variety of psychotherapy models, the majority of nurses working with psychiatric patients have not and probably will not be able to legitimately use these skills exclusively as therapists. In large part, we have relegated other patient care to aides, attendants, and/or orderlies, and most recently to board and care and halfway house operators. While we focus on research in psychotherapy, others, primarily sociologists, have researched nurses and nursing care. The single largest group of patients with which the majority of nurses do and will work, schizophrenics, have been institutionalized and deinstitutionalized while

nursing has added little to the nursing knowledge of care of schizophrenic patients except as therapist.

Nurses or aides, attendants, orderlies or technicians, working under the supervision of nurses, participated in creating a milieu that produced institutional chronicity. Nurses allowed, often out of good intentions, an environment that reduced the patients' lives to a series of staff-determined acts. In the name of patient care nurses allowed people to become inmates by removing personal identity and subjecting patients to a never changing routine. Nurses assumed responsibility for patients' behavior and therefore authority for controlling behavior that was unacceptable to them. By focusing on the individual's illness, pathology, symptoms or psychodynamics nurses lost sight of individual health, strength, and often humanness. When psychiatry accepted that the major help for patients was through psychotherapy, nurses focused more on psychotherapy and less on the patient in day-to-day living. It seemed that how the patient lived and was cared for throughout the day was less important than what happened to him in the psychotherapy experience. Nurses, as well as other disciplines, attempted to bring the knowledge and skill gained from the study of psychotherapy to the milieu, but nurses and others did, and apparently still, devalue that aspect of care as the less-trained staff were, and are still, given the major role in patients' day-to-day life. Additional education at the master's level usually means that the nurse moved still further from the patient's daily living as a clinical specialist (therapist) or an educator who most often does no clinical practice but supervises the practice of nursing students using the psychotherapy model.

There is no doubt that the large numbers of patients in hospitals and the shortage of nurses in some way determined the use of non-professional

staff for nursing care, but the continual focus of nursing leaders in both practice and education on the psychotherapy model helped to devalue nursing care. Nurses became so accustomed to viewing themselves and patients from the psychotherapy model that the nursing model was not readily apparent. The move of the most highly-educated and best-trained nurses into clinical specialist roles that focused on psychotherapy has been, and often still is, interpreted to mean that psychotherapy required more knowledge and skill than nursing and, therefore nursing care can be provided by lesser prepared nurses or non-professional staff. Psychotherapy provided a clear and distinct role for advanced preparation in nursing when nursing care alone did not. Nurses are now beginning to recognize that nursing practice requires as extensive a knowledge and skill base as any other discipline's clinical practice. The real difference is often in the focus of knowledge and skill, not in the knowledge and skill per se.

The National Joint Practice Commission's statement on Nursing Staff in Hospitals offer a clear example of a different focus rather than a different knowledge base for nursing.

> "Although both nurses and physicians concern themselves with diagnosis, treatment, disease prevention and maintenance of health, physicians tend to bring a diagnostic therapeutic perspective to the medical needs of patients, while nurses tend increasingly to bring health-oriented and educational perspectives to the physical, emotional and social needs of patients."

The remainder of this chapter provides a nursing model for the practice of psychiatric nursing.

A NURSING MODEL FOR THE PRACTICE OF PSYCHIATRIC NURSING

This investigator, utilizing Sullivan's (13) theory of human behavior and interpersonal relationships and Yura and Walsh's (16) conceptualization of the nursing process, has refined the self-care nursing model created

by Orem (10) to develop a nursing model of practice for nursing care of the adult schizophrenic patient. The components of psychiatric nursing have been brought together by this investigator in a nursing model that identifies the expected patient outcomes and then determines the appropriate nursing action. Nursing care has been developed for the patient from the acute phase (level 1) to the discharge phase (level 3 or 4).*

Self-Care Behaviors

Dorothea E. Orem in Nursing: Concepts of Practice identifies the concept of universal self care. She states, " . . . self-care includes all those demands and actions which are referred to variously in the health and health-related literature as 'meeting basic human needs,' 'activities of daily living,' and 'personal hygiene--physical and mental." Orem identifies the following categories: (1) Demand for air, water and food; (2) Excretements; (3) Activity and rest; (4) Solitude and social interaction; (5) Hazards to life and well-being. Self-care was later defined by the Nursing Conference Work Group as "Self-care refers to actions based on culturally and scientifically defined practices, freely performed by individuals directed to themselves or to conditions or objects in the environment in the interest of their own life, health, or well being" (9, p. 87).

This investigator, utilizing Orem's broad framework, has reorganized the categories. Self-care behavior categories within this study will be: (1) Air, food and fluid; (2) Elimination; (3) Body temperature and personal hygiene; (4) Activity and rest; and (5) Solitude and social interaction.

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*After data collection for the research reported here was completed the nursing staff of the unit asked that the self-care model become the model for all nursing practice on the unit. The model at the time of this writing has been in operation for three years.

This new categorization represents a blending of Orem and Sullivan.

(1) Air, Food, and Fluid

The demand for air will rarely be a problem with psychiatric patients. The demand for air includes the ability to breathe without difficulty. Unless patients are physically handicapped, they are not likely to be unable to do this. However, with the severely psychiatrically disturbed patient, nursing staff must determine whether or not the patient can eat without aspiration and sleep without accidentally suffocating. Any patient in restraints must be protected from accidental aspiration or suffocation. Food and fluid intake are responses to the impulses to drink when thirsty and eat when hungry. The psychiatric patient often has difficulties with both these impulses and intake of food and fluid. This difficulty may be expressed either in excessive food or fluid intake or diminished food and fluid intake. Psychiatric patients may not be aware of either hunger or thirst. Orem states self-care in the demand for food, fluid, and air includes:

" . . . (1) Consuming the quality of each resource which is required for normal functioning with adjustments to internal and external factors which may effect the requirements or under conditions of scarcity adjusting consumption to bring the most advantageous return to integrated functioning; (2) preserving integrity of anatomic structures and physiologic mechanisms involved in their consumption and use; and (3) enjoying the pleasurable experience of breathing, drinking, and eating but without abuse which leads to ill health or absence of well-being" (10, pp.22-23).

(2) Elimination

Elimination focuses on the ability to control bowel and bladder which would include the ability to report diarrhea or constipation, urinary frequency or retention, and to eliminate in accord with social and cultural

norms. Orem states, "Self-care behavior related to elimination includes (1) adjustment activities and providing internal and external conditions to regulate elimination processes; (2) management of the processes (including protection of the structure and mechanism involved and disposal of elimination); (3) subsequent hygiene care of body surfaces and parts; and (4) care of environment as needed to maintain healthful condition" (10, p.23). As with intake of food and fluid, elimination is often a predominant problem in psychiatric illness.

(3) Body Temperature and Personal Hygiene

Maintaining body temperature includes the ability to dress appropriately to the environmental conditions. This involves the ability to judge accurately environmental conditions. Personal hygiene includes the ability to judge conditions of person and personal belongings with regard to cleanliness. This also includes the ability to care for one's own person and one's own belongings. Involved in this is the ability to dress in accord with environmental needs and social and cultural norms. Orem has no such category.

(4) Activity and Rest

Activity and rest implies the ability to regulate sleep and activity in accord with age, weight, physical condition, and social and cultural norms. Orem states, "Self-care in this area includes (1) selecting activities which stimulate, involve, and keep in balance physical movements, effective response, intellectual effort, and social interaction; (2) recognizing and attending to manifestations of needs for rest and for activity; and (3) using personal capacities, interests, and values, as well as culturally prescribed norms and values, as a basis for development of an activity-rest pattern" (10, pp.24-25). Rest and activity are often a problem

with psychiatrically ill patients.

(5) Solitude and Social Interaction

This includes the ability to determine when solitude is needed and to seek it without withdrawal and the ability to interact with others, singly and in groups, in accord with social and cultural norms. Orem states that solitude and social interactions must balance and " . . . (1) provide social warmth and closeness essential for development as well as conditions which permit development and use of individual talents; (2) stimulate the continuing development and adjustment of the person by a realistic concept of himself which will be expressed in what he strives for, what he expects, and in what he values; (3) promote both individual autonomy and group membership; and (4) prevent personality impairment, for example, autism, the condition of being dominated by subjective self-centered twine of thought or behavior" (10, pp.25-26). This area is always impaired in psychiatrically ill patients.

In viewing individual functioning of the adult psychiatric patient, self-care behavior can be divided into four levels, Level I being the most basic with patients needing assistance in all his basic biological needs, and Level IV being a higher level of performance but not quite what would be expected of a normally non-psychiatrically ill individual. Orem states that in modern society three standards guide the individual in his effort to conform with the norm. These include, "(1) what is currently in--the fashion of the moment for achieving the human potential; (2) standards for promoting human growth and development, mature behavior, and physical, emotional, and mental health based on facts and theories in health and health-related sciences; and (3) culturally established beliefs and practices about health, disease, and normal human structure and behavior at various stages of the life cycle which have questionable functions"

(10, p.27). Adult psychotic hospitalized patients often have difficulty in one or more of the above three areas and as a result are unable to demonstrate the ability to perform self-care behavior within normal limits.

The following defines each level of self-care behavior as it is reflected in the basic needs of (1) air, food, and fluid; (2) elimination; (3) body temperature and personal hygiene; (4) activity and rest; and (5) solitude and social interaction.

LEVELS OF SELF-CARE BEHAVIOR IN ADULT SCHIZOPHRENIC PATIENTS

Level I

The patient is severely limited in his ability to demonstrate self-care behavior. He is unable to meet all his basic biological needs without assistance. The patient at Level I will be acutely psychotic and will need constant assistance from nursing staff.

Overall Expected Patient Outcome

The patient will accept nursing assistance with his basic biological needs to insure physical survival and to protect against internal and external harm. Level I behavior will usually pass as patients are appropriately medicated.

Major Nursing Action

Nursing staff will provide environmental protection for the patient. Nursing staff will talk with patient and attempt to elicit his participation but will not expect a response from him. This will probably not be the time to do teaching. The emphasis is on physical survival in a sheltered environment.

(1) Air, Food, Fluid

The patient, unless physically handicapped, will have no problem meeting his need for air; however, if as part of treatment, he

must be restrained or tube fed, staff must perform these treatments in a safe way to avoid difficulty with breathing. The ability to meet for himself the demands for air will never be a problem for patients beyond Level I.

At Level I, the patient is unable to control food or fluid intake and may eat or drink too much or too little. The decreased eating may be a function of the patient being unaware of the impulse to eat or drink or the inability to go to the dining room or the inability to sit with others or the fear of being poisoned. Increased eating and drinking may be a function of anxiety or inability to remember when and what he ate or increased appetite due to medication. No matter what the behavior of the patient or the cause of behavior, the patient is unable to control intake and needs assistance. At Level I, the patient cannot be expected to report hunger, thirst, or lack of it. He may need to be spoon-fed or tube-fed.

Expected Patient Outcome

Food and fluid intake will be sufficient to sustain life.

Major Nursing Action

Staff will insure that the patient eats and drinks in whatever way possible to prevent physical deterioration.

(2) Elimination

At Level I, the patient may be unaware of the impulse to urinate or defecate and therefore develop urinary retention or constipation. He may also act on the impulse immediately and therefore be incontinent. His behavior may be a result of his

inability to find the bathroom or to go to the bathroom or to respond to bodily needs. No matter what the cause of the behavior, the patient is unable to control his bowel and bladder. At Level I, the patient cannot be expected to report bowel or bladder function.

Expected Patient Outcome

The patient will maintain reasonably normal bowel and bladder functions.

Major Nursing Action

Staff will insure that the patient maintains reasonably normal bowel and bladder function. The intervention will also include appropriate disposal of elimination and maintenance of minimal patient cleanliness. The nursing care may include observation of urination and defecation.

(3) Body Temperature and Personal Hygiene

At Level I, the patient is unable to protect his bodily temperature by dressing in accord with environmental conditions. He may be unable to dress at all or dresses with either too many or too few clothes. He is unable to take care of his own person and his personal belongings. Females are unable to care for their menstrual periods. He, the patient, cannot be responsible for any maintenance of his environment.

Expected Patient Outcome

The patient will maintain body temperature and will be clean enough to prevent disease.

Major Nursing Action

Staff will protect the patient from excessive heat or cold, from inappropriate dressing, and assist patient in

his person and personal belongings care and maintenance.

(4) Activity and Rest

At Level I, the patient is unable to control the rest-activity cycle. He may be unable to sleep or sleeps continually. His routine daily activity and night sleep may be disrupted. He may be too excited to sleep or even to sit still. The patient is often unable to comply with restrictions on his activities.

Expected Patient Outcome

The patient will have enough sleep to prevent exhaustion and enough activity to prevent physical deterioration.

Major Nursing Action

Staff will protect the patient against accidents in his over-activity or assist him in obtaining rest or to provide essential external controls (seclusion and/or restraints).

(5) Solitude and Social Interaction

The patient at Level I is unable to control his need for solitude or social interaction. He may be totally withdrawn or mute or excited and intrusive or physically or verbally abusive. He is unable to verbalize needs or verbalizes needs inappropriately. He is restrained to the unit or able to leave only with staff. He is not able to manage mail, phone or visitors.

Expected Patient Outcome

The patient will be able to accept nursing staff's assistance to meet his basic biological needs for physical survival in a sheltered environment.

Major Nursing Action

Staff will protect the patient from abuse, physical

or verbal, from other patients. Staff or family will provide external controls as needed.

Level II

The patient is able to demonstrate minimal self-care behavior. He is able to meet his own basic biological needs with verbal and/or physical assistance from the nursing personnel. The Level II patient is coming out of the acute psychotic phase. He is increasingly aware of himself and his environment. He is in the process of re-establishing self-care behavior and, in some cases, learning new self-care behavior. At this point, the demand for air is no longer a problem and maintenance of body temperature has fused with personal hygiene.

Overall Expected Patient Outcome

The patient can care for his own basic biological needs with verbal assistance.

Major Nursing Action

Staff will encourage and support the patient during this period and allow essential time for the patient to do for himself. During this phase the nurse will assist the patient in re-establishing his self-care behavior and/or learning new self-care behavior. The patient is now able to participate in his own care but may not do so willingly or at the level expected by the nurse.

(1) Air, Food and Fluid

The patient will be able to exert some control over eating and intake but will still need assistance with food and fluids. He may be able to eat but will need assistance selecting food or staying with people for meals. He may not remember when mealtime is. He may not take fluids unless reminded. He should not have to be spoon-fed or tube-fed.

Expected Patient Outcome

With reminders, patient will be able to manage his own fluid and food intake.

Major Nursing Action

Staff will observe the patient carefully and provide what he is unable to provide for himself. The patient may be slow. Staff must now work with the patient to do for himself and allow him ample time. It may be necessary to have the patient first in the dining room or to extend his eating period. He will need to be reminded to take fluids. Fluids should be accessible to him and he should not have to depend on staff to get them for him.

(2) Elimination

The patient will no longer be incontinent and he is able to report urinary retention and/or constipation. He will need to be observed at regular intervals to see that he has bowel movements. When the personnel is satisfied that the patient reports accurately, then the patient should be asked at regular intervals about bowel movements. The patient may or may not be able to include personal hygiene in elimination at this time and should be assisted.

Expected Patient Outcome

The patient will be able to manage his own elimination needs with minimal verbal and/or physical assistance.

Major Nursing Action

Staff will observe bowel and bladder functions to insure regularity and must give the patient reminders of needs for personal hygiene in relation to these.

(3) Personal Hygiene

The patient is aware of the environmental condition and is able to wear the appropriate clothing for the environment. The patient can dress and undress himself but may need assistance finding clothes and putting them away. He can bathe and shampoo alone but will need assistance with preparation for both or shampoo and observation to validate cleanliness. Men are able to shave with a locked safety razor or an electric razor. Women can manage their own menstrual periods. The patient will not be able to determine what clothing needs to be cleaned. He will need assistance in keeping his personal belongings clean and repaired but can, at this point, be assisted in hand washing or using the washing machine. Women will still probably have difficulty with cosmetics if they use them. The patient can assume responsibility for his own immediate hospital environment (bed, nightstand, etc.) and limited ward jobs.

Expected Patient Outcome

The patient will be able to care for his own person and personal belongings with minimal assistance.

Major Nursing Action

Staff will assist the patient in preparing for dressing, bathing, shampooing, etc., and allow the patient to do as much as possible for himself. This may take more time and care must be planned to allow time and teaching.

(4) Activity and Rest

The patient is no longer extremely withdrawn or excited; however, he is not yet able to establish a routine of rest and activity. He will need assistance, usually only verbal, in getting up

and going to bed. He may need to be reminded to walk around to get exercise or to sit down if he is pacing too much. The patient is able to comply with reminders. The patient is now able to participate in scheduled unit activities. He may need assistance to participate in these activities. He cannot yet be expected to enjoy or be completely aware of all the activities.

Expected Patient Outcome

The patient will rest and exercise appropriately for physical condition and life style with reminders.

Major Nursing Action

Staff, with verbal and rarely physical reminders, will assist the patient in regulating his activity and rest cycle. This will include encouraging him and directing him in scheduled unit activity.

(5) Solitude and Social Interaction

The patient is able to join other patients in the dayroom and/or dining room with minimal assistance from staff. He may be able to initiate the interaction on his own. He is now able to manage mail, phone, and visitors and can leave the unit with staff for outings and/or unit activities.

Expected Patient Outcome

The patient will be able to tolerate limited social interaction with selected staff, patients, family members, or friends without excitement or withdrawal.

Major Nursing Action

Staff will assist patients in joining individual and group activities without demanding more than the patient

is able to give. The patient must be allowed time to be alone but must not be allowed with withdraw. Staff can begin re-establishing or teaching social skills, i.e., how to say hello, small talk, discussion of world affairs, sports, or other topical subjects. The patient may be slower than expected or so rapid he misses things. This period takes time if the patient is to respond.

Level III

The patient will demonstrate self-care behavior. The psychotic process has been brought under control and the patient is able to meet his own basic biological needs in accord with social and cultural norms. The patient is able to participate in planning his own care but may have limited resources, input, or action. The nurse-patient relationship is used by the nurse to facilitate further improvement by helping the patient increase his alternatives through teaching him and acting as a role model. The nurse-patient relationship is vital in this phase so that the patient is allowed to develop his own potential and not be forced to adjust to the nurse's or the unit's standards.

Overall Expected Patient Outcome

At this point, the demand for air, maintenance of body temperature and elimination are usually no longer problems. The patient is able to breathe, eliminate, and maintain body temperature with no assistance and to do so in accord with social and cultural norms.

With staff and environmental support, the patient can manage all his own basic biological needs in accord with social and cultural norms. In addition, he may begin to gain some satisfaction in interaction with his fellow man.

Major Nursing Action

Using the nurse-patient relationship, role modeling, and teaching, the staff will facilitate further self-care behavior by increasingly involving the patient in decisions about managing self-care.

(1) Food and Fluid Intake

The patient is now able to follow a meal schedule and stay with other patients in the dining room. At this point he may need assistance with selection of food, both type and amount. He may also need assistance or reminder to re-establish or learn social and cultural norms for eating (table manners).

Expected Patient Outcome

The patient will be able to maintain his own food and fluid intake in accord with social and cultural norms with only verbal assistance from nursing staff.

Major Nursing Action

Staff will continue to support patient's management of food and fluid intake within the patient's social and cultural norms. Nursing staff will sit with patients and encourage pleasant conversation and attempt to have patient participate in the meal as a pleasurable experience.

(2) Personal Hygiene

The patient is able to take care of essential personal hygiene but will probably continue to need assistance with selection and cleaning of clothing and for use of cosmetics by women. The patient is able to care for his own personal environment but may need to be taught to make beds or dust or put away clothing. He is now able to take responsibility for unit environment and jobs

with minimal supervision.

Expected Patient Outcome

The patient will identify areas of competence and personal hygiene and areas where further assistance is needed.

Major Nursing Action

Staff will assist the patient to do what he can and help him learn what he doesn't know. The nurse-patient relationship that has been developed is vital here so that the patient may learn social and cultural norms about personal hygiene, dressing, cosmetics, and environmental order without being forced to adjust to the nurse's norms. The patient will provide the majority of his own care and must willingly participate with the nurse if she is to facilitate his learning.

(3) Activity and Rest

The patient is now able to establish a rest-activity cycle. He is able to determine his own retiring and arising time. He is able to exercise and rest during the day in an appropriate way. The patient may still have difficulty sleeping but will be able to verbalize this and handle with assistance of nursing personnel. The patient will need assistance in developing leisure time activities and/or in establishing leisure activities. The patient is able to participate in all scheduled ward activities and to initiate individual activities on his own.

Expected Patient Outcome

The patient will be able to develop a rest-activity cycle and begin to re-establish old ways or learn new ways

of filling his time.

Major Nursing Action

Staff will validate patient's ability to regulate his own rest and activity cycle. The nurse, with the assistance of the OT and RT, and with the patient's participation, will assist the patient in learning new activities alone and in groups or assist him to re-establish activities disrupted by illness. Using the nurse-patient relationship, the nursing personnel work with the patient individually and in groups to increase his scope of activities as is appropriate for his life style.

(4) Solitude and Social Interaction

The patient is now able to initiate social interaction with selected staff and patients. He is able to use the nurse-patient relationship to problem-solve and work out alternative solutions to self-care needs. He also uses the nurse-patient relationship to validate his feelings about himself and others. He participates in individual and group activities with little, if any, difficulty. He is able to leave the unit alone or with other patients and to participate in the planning of his own passes.

Expected Patient Outcome

The patient will be able to regulate solitude and social interaction and with assistance in a structured environment, gain some pleasure in interactions with his fellow man.

Major Nursing Action

Staff will use the nurse-patient relationship to help

the patient learn alternative ways to participate in life and meet his self-care needs. The nurse is a role model for social interaction and uses both individual and group experiences to help the patient increase his social skills in accord with both social and cultural norms.

Level IV

The patient will demonstrate self-care in meeting all his own basic biological needs and with no assistance from staff in accord with social and cultural norms, the patient will need continued family and/or community support and/or medication and/or therapy to maintain self-care behavior.

At this point, the patient will be able to manage all five self-care needs. However, the patient may be limited in high level social interactions such as taking care of children, returning to work, or being a responsible spouse. At this point, the patient will most likely be discharged. If not, the major nursing intervention is to support the patient's self-care behavior and continue to encourage the patient in taking care of his own needs.

For this investigator nursing's responsibility and goal is maintaining, developing, and promoting self-care behavior essential for day-to-day living. Through the use of scientific process of assessment, planning, implementation, and evaluation focused on patient self-care behavior, the nurse identifies and validates with the patient his level of self-care behavior and his goal in self-care. This all occurs within the nurse-patient relationship. That relationship is developed toward the end of working with the patient to develop, maintain or promote his self-care behavior essential for day-to-day living. Patient self-care behavior

essential for activities of dailing living can be maintained, developed, or promoted primarily by nurses through the nursing pattern of practice. That is, the content essential for understanding the patient, the process and relationship within which the nurse works, and self-care behavior per se are not unique unto nursing. But the minute-to-minute, day-to-day, week-to-week contact with the patient in his daily living is a unique and distinctive nursing role. When we use this unique contact as our pattern of practice, then the goal of the process and relationship used by nurses can be identified as maintaining, developing, and promoting self-care behavior essential for day-to-day living. We will continue to collaborate, facilitate, share, and coordinate the practice of others. But we no longer need imitate. By using our traditional and legal avenues of access to patients, nurses can have influence and impact on the overall goal of optimal health by making use of our social saction role of being involved with patients' most private and intimate daily functions. We can utilize the nursing process, the nurse-patient relationship, and an understanding of human behavior to meet basic needs toward self-care behavior in patients in daily living. Nursing practice includes content focused on process, relationship, and self-care behavior that is drawn primarily from other pure and applied sciences which is brought together in a unique way in nursing where practice with the patient is on a day-to-day, minute-to-minute basis and the focus is on the patient's self-care behavior in his daily living rather than on the patient and his disease, the patient and his social needs and/or the patient and his psychological needs. For what advantage is it to have the disease process arrested, the social needs met, or the psychological needs resolved if the individual cannot care for himself in a day-to-day existence?

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CHAPTER 4 METHODOLOGY

RESEARCH SETTING AND STAFF

This study was conducted on an open 24-bed adult inpatient unit in a university psychiatric hospital. The unit provided long (approximately 90 to 120 days) and short (approximately 21 to 30 days) term hospitalization for acutely ill adult psychiatric patients. While most of the patients were acutely disturbed on admission, the unit accepted only voluntary patients.

The unit had both male and female patients in approximately equal numbers. Most patients were psychotic and the predominate diagnostic category was schizophrenia. The unit also specialized in treating patients with anorexia nervosa. The age range was 14 (anorexia) to 70 (involutional depression) years of age. While the majority of patients were young (18 to 30 years of age) schizophrenics, they were considered "treatment failures" because they had been treated prior to admission with limited, if any, improvement. The unit was based on a therapeutic milieu model and both staff and patients were responsible for maintaining the milieu.

The unit was established May 1, 1975, by combining two adult inpatient services. The goals of the unit were research, teaching and treatment. At the time of this study there were two research projects underway on the service, neither of which had any bearing on this research. The unit provided training experience for resident physicians, medical, nursing, clinical psychology, social work and rehabilitation students. In addition to nursing care, patients were provided a wide range of treatment, including medication, individual, group, family, milieu, and activity therapy.

Treatment was provided on an interdisciplinary model with all staff participating as one large team. However, to facilitate the study, nursing

staff and patients were assigned to two teams. Other personnel, i.e., residents, social workers, psychologists, provided services for both teams. The study was discussed with all staff. Non-nursing personnel knew that the nursing care would be congruent with the overall treatment plan but they did not know the particulars of care on either team.

The investigator had been employed in the research setting since 1972 in a variety of nursing positions and knew and had worked with all the nursing staff involved. In collaboration with the Supervising Nurse from the unit, and the Director of Nursing Service, the staff members were assigned to the two teams in an effort to equally distribute clinical skill and expertise. Assignments were based on level of education and years of clinical experience. The teams had the following composition. Team One: Clinical Nurse III, one; Clinical Nurse II, four; Clinical Nurse I, five; Psychiatric Technicians, five. Team Two: Clinical Nurse III, one; Clinical Nurse II, five; Clinical Nurse I, five; Psychiatric Technicians, four. The above staff were used to provide 24-hour, 7-day-a week care. Each shift was staffed as nearly as possible by both Team I and Team II personnel. Staff decreased slightly on weekends and holidays. Team One was designated the Experimental Team and Team Two was the Control Team. Only the Supervising Nurse, the Chief of Service and the investigator knew the designations (see appendix C).

The research project was discussed with all nursing personnel on the unit as a group. The staff knew each team would have a different nursing approach and that patient behavior would be rated. Each member of the nursing staff was then asked to sign a consent form. Upon receipt of all consent forms (see appendix D), all nursing staff were taught to use the behavioral rating scales.

All staff on Team One were taught to plan and implement nursing care based on the self-care model. All staff on Team Two were given the same number of class hours as Team One, but the focus was on nursing care routinely planned by this group of nursing staff. (see appendix E).

TREATMENT CONDITIONS: DEVELOPING AND MAINTAINING THE CARE PLAN

The investigator developed nursing care and actions and outcomes for schizophrenic patients (see Chapter 2, pp.6-39). This was submitted to a panel of skilled psychiatric nurses for evaluation and validation of the approaches. Panel members agreed that the approaches were appropriate for schizophrenic patients and was clear enough for even beginning nurses to work with. A similar approach with less detail was developed for the control group. Each approach was written up with examples to be used by the experimental and control groups. (see appendix F).

The team model, self-care or routine, was used in developing care for all patients on the team. The nursing staff began three weeks prior to the admission of the first subject to utilize the model for the team. The investigator or her research assistant worked with nursing staff to develop nursing care plans based on the goals of either Team One or Team Two. We also attended weekly nursing care conferences where planning and implementation were discussed. We were both available to staff or discussion of planning and implementation of care at times other than nursing conference. We periodically reviewed both models with the respective staff.

New nursing staff and students were given extensive orientation to the model they would be using. As the nursing staff on each team became more knowledgeable about the model of their team and more skilled in planning and implementing care, they assumed responsibility for orientation of

new staff. The investigator and her research assistant continued to make periodic review of care plans and charting and to attend nursing conferences.

SUBJECT SELECTION

Criteria was developed to select subjects and to control factors that would influence ability to develop and/or maintain self-care.

Criteria I: Diagnosis of Schizophrenia, any type.

The subjects within this study were any adult admitted to the inpatient service with the primary diagnosis of schizophrenia from the official nomenclature (295.0 to 295.9 with the exception of 295.8), as found in the Diagnostic and Statistical Manual of Mental Disorders, Second Edition (1).

There is wide disagreement as to the effectiveness of clinical diagnosis. Several studies dispute the validity of the use of clinical diagnosis in schizophrenia, particularly and especially among newly admitted patients (2 p.22). Nonetheless, the WHO and APA official nomenclature (DSM-II) remains the predominant classification system for psychiatric disorders. Chapman and Chapman suggest that the extent to which agreement varies will be influenced by the background and training of the diagnosticians. However, they point out that,

> "Perhaps most important of all [is] the extent to which they [psychiatrists] discuss and agree on the criteria of schizophrenia in advance of making a diagnosis." (2 p.20)

The setting for this study was a research unit concerned primarily with schizophrenics as subjects. There was agreement among the Chief of Service and other admitting personnel as to the criteria for a diagnosis of schizophrenia. Therefore, for this study, patients diagnosed on admission as schizophrenic were potential study subjects.

Criteria II: No physical deformities, physical injuries, serious and/or chronic physical illnesses or organic brain syndromes (including ECT patients) or mental retardation.

The ability to develop and/or maintain self-care behavior could be reduced and/or eliminated by any of the above conditions.

Criteria III: No history of long (one year or more) residential care before 1965.

This selected out patients who might have suffered institutionalization by long hospitalization but were returned to the community after the advent of community mental health legislation and decrease in state hospital facilities. Patients hospitalized long-term prior to 1965 could have been so institutionalized that self-care behavior might no longer be a realistic possibility for them during short-term hospitalization.

Other factors, such as age, sex, marital status, education, family and other support systems, socioeconomic status and ethnic background may influence self-care behavior. Randomization of the sample and the statistical manipulation were used to control these variables rather than attempting to match or eliminate subjects for certain characteristics.

MEASUREMENT TOOL

FLS - The Functional Life Scale (see appendix G).

This instrument was developed specifically to qualitatively rate an individual's ability to participate in all the basic daily activities which are customary for most human beings. While this scale was developed for physically handicapped and used primarily on an outpatient basis, the author (Dr. Sarno) suggests that it is just as effective for psychological disabilities as for physical disabilities since the cause of the disability is not taken into consideration. This scale has forty-four

items that constitute five major categories and each item may be rated on four qualities. The items were applicable to the inpatient psychiatric setting because of the activities described, with rare exception, are expected in the inpatient psychiatric setting. Minor changes were made in the scale to adapt it to inpatient use in psychiatry. The category Home Activity was changed to Unit Activity as all the areas are expected of patients on the unit. Within categories, some examples were deleted to provide a wider range of possibilities and to eliminate those examples that were for physically disabled only. Item 16 under Activities of Daily Living was always rated non-applicable as it referred to the ability to move from bed to wheelchair and back; otherwise the tool did not change (4).

NOSIE-30 - Nursing Observation Scale for Inpatient Evaluation (see appendix H).

The scale was originally developed in 1960 to meet the need for a behavioral rating scale sensitive enough to measure therapeutic changes in older schizophrenic patients. It originally consisted of 80 items that had been trimmed to 30 with the same validity and reliability. The 30 items make up 6 factors -- three positive: social competence, social interaction and personal neatness; and three negative: irritability, manifest psychosis and retardation. This scale has been widely used to evaluate the effects of treatment including drugs in various studies with male and female psychiatric patients of all ages and has performed reliably and validly as the sensitive index of therapeutic affect (3).

The NOSIE was used in two ways in this study: (1) the NOSIE in its entirety was used to evaluate the effects of overall treatment received by all subjects, and (2) selected items similar to the items on the FSL

were used to evaluate self-care behavior in the patient.

GRS - The Global Rating Scale (see appendix I)

This instrument is used to evaluate overall patient improvement. These scales are sometimes more sensitive to different treatment effects than more specific rating scales.* The GRS, along with the NOSIE, evaluated change in subjects over time.

IML - Index of Medication Level (see appendix J)

Medication has a profound effect on most patients regardless of other treatment. In an effort to account for improvement due to medication, all patients were rated as to the level of medication intake (none, mild, moderate, high), at the time the FSL, NOSIE, and GRS were done.

DATA COLLECTION

Using a table of random numbers and preadmission patient data, patients who met the criteria were randomly assigned to Team One or Team Two by the investigator. Randomization was done prior to the first contact with unit nursing personnel. All non-subject patients were assigned by the investigator to either Team One or Team Two to maintain an equal number of patients on each team. This was an attempt to keep staff blind to actual subjects.

During the admission procedure, the study was discussed with all patients and they were asked to sign a consent form. (See appendix K) All patients signed whether or not they were to be subjects in an effort to keep the staff blind to the study population.

At admission, and every three days until discharge, all patients were rated on the NOSIE, the FLS, GRS, and IML. Even though the investigator

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*Personal communication with William Hargreaves, Ph.D., design consultant.

was interested only in subjects for a total of eleven ratings, the above procedure was an attempt to keep the staff blind to the number of ratings for the subject population.

The unit on which the research was carried out was a research unit and all staff were familiar with data collecting procedures. In order to maintain morale and a sense of participation, all nursing staff were assigned rating responsibilities. However, those staff who were less consistent in rating were assigned non-study patients. Staff did, on occasion, cross teams for providing nursing care or for completing scales. Staff and patients were assigned so that staff worked with patients for three days prior to the completion of rating scales, thus attempting to assure that ratings were based on patient observations and interactions. During the pilot period for the study the staff ratings were compared for discrepencies. Based on the staff's experience and ability to use rating scales, inter-rater reliability was not tested as there was no reason to believe that there was a systematic bias between the two teams. The research assistant rated patients and compared her ratings to the staff's. There was so little difference on examination that we continued with no formal inter-rater reliability testing. Had there been discrepencies at any time, we could have tested inter-rater reliability using the research assistant as a constant. That did not occur.

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CHAPTER 5 DATA ANALYSIS: RESULTS AND DISCUSSION

Research results are presented in four sections. The first section discusses the nature of the sample; the second, the effects of treatment other than nursing care; the third, the testing of the hypothesis; and last, other findings.

NATURE OF THE SAMPLE

Results Randomization

Sixty-seven patients were admitted between July 1, 1974 and July 1, 1975. Of these, thirty-four met the criteria for subject selection. Four subjects were lost when they terminated treatment Against Medical Advice prior to the eleventh rating. Patients classified as schizophrenic, any type in the DSM-II, were randomly assigned to the control or experimental group. A Chi-square between experimental and control groups showed no significant difference in groups at the .05 level of reliability. Randomization was effective in equalizing the two groups (see Table 3, page 105).

The sample, as a whole, is representative of the schizophrenic population for the most part. The subjects were young, unmarried, unemployed, or of low income status. Subjects in this sample differ from the general population of schizophrenics in that there are more whites than non-whites and there is a higher level of family involvement. Family involvement was rated as high if the subject lived with or visited family more than two times per week; moderate, if subject visited bi-monthly with daily to weekly phone calls; low, if less than monthly visits and less than weekly calls. Family involvement is influenced by age and both groups had several subjects under 21 years of age. The two

groups also had a somewhat higher educational level than most schizophrenics in that all but two of the total thirty graduated from high school. Inclusion of paranoids may have skewed the educational level. In this sample, paranoids from each group had beyond baccalaureate degrees. However, there is no reason to believe from the data analysis that one group would be better able to develop and maintain self-care than the other.

Discussion of Results of Randomization

Although Chi-square did not show the groups to be significantly different at the .05 level, it is possible that this constitutes a type two error. Although the literature varies, it would seem better to err on the side of a type one error than a type two error in comparing groups and therefore significance could be set at .10. If significance had been set at .10 age, and income would have been significantly different.

The experimental group had six subjects in the $5,000 to $15,000 range with two subjects in the $15,000 and above range. The control group had only four subjects in the $5,000 to $15,000 range and none in the $15,000 and above range. Socioeconomic status is never easy to obtain from patients labeled as schizophrenic and income is not a good measure. The present criteria for obtaining Medicare, MediCal and third party payments are such that many patients who have income declare themselves indigent. The person, 18 or over, even if his family has considerable funds, can declare himself unemployed and indigent and qualify for third party payment. The investigator worked with the study subjects and has first-hand knowledge that the income quoted by some subjects was not reflective of the person's socioeconomic status or

actual earning power. The investigator would not use income to determine socioecomonic status in future studies with other schizophrenic populations.

In schizophrenia, age is closely related to sub-type diagnosis. Paranoia is generally found in older individuals. It might have been better to eliminate from the study the paranoid diagnosis. Many researchers do eliminate the paranoid diagnosis. However, the general reasons for excluding those patients did not seem to have direct effect on self-care behavior so they were included. The paranoid diagnosis accounts for the age difference. Although there was not a significant difference in the groups for diagnosis (Experimental Group 7, Control Group 5, paranoids), the additional paranoid diagnosis in the experimental group skewed the age higher. On the whole, age did not seem a relevant factor in self-care functioning as long as the individual was not too old or too young to care for himself. Self-care is an expectation for all people, adolescence through old age.

EFFECTS OF TREATMENT OTHER THAN NURSING CARE

In an effort to isolate effects of medication, a correlation coefficient was used to determine if there was a systematic relationship between level of drug and instrument measurements. No such relationship was found.

The design for data analysis of medication effects was faulty. There was an assumption that the effects of medication are related to the amount of medication. This is unfortunately not true. Psychoactive drugs affect each individual differently and while as a rule of thumb, the drugs can be classified high, moderate, low, based on the number of milligrams prescribed, there is no consistent relationship between the

amount given and the effects on patient behavior. The appropriate measure must address the effects of medication on behavior rather than the amount of medication taken. In retrospect, all treatment, other than nursing care, should have been addressed. Each subject received individual, group and/or family therapy as well as occupational and vocational therapies. While there is no reason to believe that any single subject or either group of subjects received significantly more or different treatment, to actually isolate nursing care all treatments including medication need to be controlled. This was and is a major problem in nursing research where the nurse does not have control over treatment.

Fortunately, the NOSIE and the GRS are sensitive measures of total treatment effect. Therefore, a mean effect for Group would be expected for the NOSIE and the Global Rating Scale if there were a significant difference in effect of all treatments including medication and nursing care for the two groups. There was no main effect for Group. This suggests no significant difference in the groups for effect of overall treatment. Table 4,page 107 shows ANOVA for Group on the NOSIE and the GRS. Even though medication data collected seemed ineffective an ANOCOVS was run using medication level as a covariant. There was no change in the findings. Table 5, page 108 shows the ANOCOVS for Group on the NOSIE total and the GRS level of illness and change. Findings indicate that one group did not respond with more improvement to overall treatment than the other group.

TESTING THE HYPOTHESIS

A 2 x 11, two way factor analysis of variance with repeated measures was used to test the hypotheses. Time and treatment were fixed factors and subjects were treated as a random variable. Subjects were nested in

groups. A main effect was predicted for Group by Time, Group, and Time. That is, there would be (1) a varying difference existing between means of the experimental and control Group depending on the particular Time; (2) a significant difference between the means of the experimental and control groups; and (3) a significant difference in both groups attributed to Time. As Table 6, page 109 shows, there was no main effect for Group by Time. There was a main effect for Group on the Cognitive category of the Functional Life Scale. Both the experimental and control groups showed a main effect for Time on the GRS, the NOSIE Social Competence Scale, and all categories of the Functional Life Scale. Findings will be discussed for Group by Time, Group, and Time separately.

Group by Time: The experimental group will develop self-care behavior more rapidly and at a higher level than the control group.

Findings

There was no mean effect for Group by Time. That is, goal directed nursing care aimed at developing self-care behavior is not significantly more effective than routine nursing care when measured by patient outcome and the null hypothesis is tenable.

Discussion

There are two major alternative hypotheses that could explain the lack of main effect for Group by Time and Group. These are the design of the study and the assumptions about nursing care.

Design of the Study

The study was designed to rate subjects for only the first thirty days of hospitalization. This was based on the setting policy of admitting patients for both short (30 to 60 days) and long (90 to 120 days) treatment. All patients were expected to stay at least 30 days.

In an attempt to obtain a sample in a reasonable time, the design called for thirty days of rating only and no follow-up. In retrospect, this is more than likely inadequate time to observe effects of nursing care in the two groups. Of the thirty subjects in the study, only four were discharged in thirty days. Based on findings from this study, future studies would include a longer rating period in the hospital as well as a follow-up period after discharge.

Another design problem was the lack of tools to evaluate nursing care. The lack of such tools is addressed by most nursing researchers. Nursing care tends to get lumped into "others" when evaluating overall treatment effects and is extremely difficult to separate out.

Assumptions About Nursing Care

Perhaps more than design or lack of appropriate tools is the actual performance of the nursing role. Within this study, nursing care for the experimental group was focused on increasing self-care behavior and therefore the patient's ability to function in day-to-day living while the control group was focused on "routine nursing" which was aimed at descreasing symptoms and returning the patient to level of functioning prior to hospitalization. In reality, no matter what the stated goal or lack of goal is, nurses by education, tradition, and work assignment on an inpatient unit focus on the patient's day-to-day functioning. In observing clinical practice in inpatient settings, nurses tend to focus on day-to-day functioning either by (1) assisting the patient to increase functioning or (2) controlling his behavior and environment which then gives the appearance of increased functioning. The individual nurse works with her patient or patient groups to accomplish the day-to-day tasks of living, i.e., getting up, cleaning up, eating, participating in

activities, going to appointments. The nurse may accomplish this through working with the patient to overcome fear, anxiety, and confusion. She may act as an external ego, run interference, support the patient through problem solving. Her focus is primarily supporting the patient's ability to function and maintaining the patient until he can do for himself. The self-care model is this approach formalized.

The nurse can also assist the patient in accomplishing day-to-day tasks by controlling the patient and his environment. The nurse provides external controls in the form of a highly structured day and if this is unsuccessful, backs it up with seclusion, restraints and/or p.r.n. medication. The nurse and the patient do accomplish day-to-day tasks under this model. However, this model is more reflective of nursing function than of patient function. Through use of external control, it appears that the patient is functioning. In reality the patient's ability to function has increased very little. In a highly structured and controlled environment the patient need only to follow directions to demonstrate increased functioning.

If the emperical observation that nurses can influence patient's functioning through both staff control of patient behavior and environment, and patient participation in self-care is true, the question then becomes how, not if, the nurse influences development of self-care by patients. However, what nurses and patient actually did cannot be determined from this research.

Group: The experimental group will develop self-care at a higher level than the control group.

Findings

There is a main effect for group on one category of the FLS only.

As data in Table 7, page 110 shows, the rates for the experimental group were higher on this variable at admission and remain consistently higher through eleven ratings. There was no other main effect for Group.

Discussion

The cognitive category of the FLS includes items that could be influenced by education (See Appendix G). The experimental group had a slightly higher educational level even though this was not significant on the Chi-square used to test the effects of randomization. It seemed, however, most probable that the individuals in the experimental group entered the study significantly higher on the cognitive items than the control group and were therefore higher at all other ratings. This does not appear to be a significant or meaningful finding. The lack of a main effect for Group on all other scales would be the same as discussed under the Group by Time.

Time: Both the experimental group and the control group will increase self-care behavior over time but the experimental group will do so more rapidly. An analysis of variants showed a main effect for Time for both the experimental and control groups on the GRS, NOSIE Social Competence, and all categories of the FLS. The experimental group did not develop self-care more rapidly. Findings for the total subject population, control and experimental, will be reported and then all findings for Time discussed.

Findings

Global Rating Scale

Table 8, page 111 shows the ANOVA for the level of illness and the level of change of the GRS (See Appendix I). Findings support the

expectation of significant change over time in the majority of hospitalized patients. The findings suggest that patients demonstrate decreased signs of illness and increased signs of change in the first thirty days of hospitalization. The hypothesis of change over time is tenable.

NOSIE - Social Competence

Table 9, p.112 contains behavior rated and ANOVA for all subjects for each NOSIE factor. A main effect for time is shown on Positive Factor Social Competence and no main effect for time on the two other Positive Factors; Social Interest, Personal Hygiene or any Negative Factor; Irritability, Psychosis, Retardation or Depression-dejection. There is no main effect or total positive, total negative or total NOSIE. Based on behavior described in the items, the subjects were better able to follow routine and do for themselves at the end of thirty days. However, the majority of behavior had not changed at a significant level. Subjects were still sloppy, impatient, irritable, hearing and seeing things and resistant to activities.

The hypothesis of change over time is tenable on one factor and untenable on the remaining six factors and overall scales.

Functional Life Scale

Table 10, p.115 contains behavior rated, means and ANOVA for all subjects on all categories of FLS first through eleventh ratings. There was a main effect for time on actual (Cognitive, Activities of Daily Living, Unit, Outside and Social Activity), quality (Frequency, Speed and Self Initiative) and overall performance. As the data on Table 11, p. 121 show, while there was significant change over time on all categories, some showed more percentage points changed and had higher

F scores than others. Table 11, page 121 shows categories from the most percentage points to the least percentage points change on actual and quality of performance.

As Table 12, page 122 shows, subjects improved in some areas more than others. Unit activity, which is similar to the NOSIE Social Competence, showed the most gained over time but was the second highest at the eleventh rating behind activities of daily living.

Outside activity made the second most gains. However, at the eleventh rating, outside activity was second lowest behind social activity. This score would undoubtedly be higher at the time of discharge.

Social activity shows the third largest gain but the lowest level of functioning at the eleventh rating. Like outside activity, social activity includes areas such as school or work that are not performed in early hospitalization. This score, like outside activity, could be expected to increase as discharge approaches.

Activities of daily living show the second lowest gain but was the category with the highest score at the eleventh rating. This finding is in conflict with the NOSIE Personal Neatness finding.

The cognitive category made the least overall gains and rated third highest on the eleventh rating. Schizophrenia is a cognitive disorder and that improvement would perhaps be more closely related to manifest illness than other categories of FLS and smaller changes would be expected in the initial phase of hospitalization.

Frequency, speed and self-initiation were all within two points of each other in gains (Table 11, page 121). Frequency showed the most gain but was the least high at the eleventh rating. Frequency had a very low

admission rating. Speed showed the second most gain but was the second highest or lowest at the eleventh rating. Speed is the least relevant item on the scale and would be dropped from future studies. Self Initiative showed the least gained and lowest scored at the eleventh rating. Self Initiative can be reflective of motivation. Schizophrenics as a group have severe disturbance in motivation. Self initiative, like cognition, may be more closely related to level of illness than other functions and would not be expected to improve in the initial phase of hospitalization.

Overall Scores on NOSIE, FLS, and GRS

Overall Score and Overall Efficiency of the FLS both gained and reflect the total gain of the subjects as well as overall functioning at the eleventh rating. During the first thirty days, the subjects doubled their Overall Scores. They did slightly less well in Overall Efficiency. Like the GRS level of illness-level of change scores, both Overall Function and Overall Efficiency showed significant change while total NOSIE did not. This may indicate that subjects can function significantly differently at the eleventh rating even if negative behavior or manifest illness, as observed by staff, has not significantly changed. The hypothesis of change over time is tenable on the FLS and the GRS, but untenable on the NOSIE with the exception of Social Competency.

Discussion

The FLS and GRS support the basic assumption of change over time for hospitalized adults. It is generally expected that patients will be more acutely ill and less functional at admission, but as symptoms subside, functioning will increase. However, within this study while some scales (FLS, GRS and NOSIE Social Competence) follow expectations and show

significant increased functioning over time, other scales (all NOSIE except Social Competence) do not follow expectations. There are at least two explanations for this: (1) inaccurate ratings; or (2) scales did not measure what investigator wanted to measure.

Inaccurate Ratings

The ratings were done by many staff (see Data Collection, Chapter 4). However, all staff were familiar with data collection techniques, and the instruments were reviewed frequently with staff. During the data collection phase, systematic bias was not obvious for raters of either the control or experimental group. Nonetheless, the more raters involved in data collection, the greater the chances for discrepancies to occur. In future studies, the investigator will plan for a small consistent rating team.

Scales Did Not Measure What Investigator Wanted To Measure

The purpose of this study was to evaluate nursing care through patient's behavior. While the scales selected were to measure change in behavior, all scales may not have measured the behavior that the investigator wanted to measure. Patient self-care behavior is related to day-to-day basic functioning, i.e., eating, elimination, etc. The investigator was interested in behavior that directly reflected ability to function and not in behavior that indicated levels of illness, pathology and/or negativism. In retrospect, it appears that only the Functional Life Scale actually measured daily functions. The GRS measured overall change, but was not function specific and the NOSIE measured positive and negative behavior and was not function specific. The GRS and the NOSIE really measures presence/absence; and/or change in illness, pathology and/or negative behavior, not presence/absence; and/or changes in function.

The investigator assumed at the time that this study was designed that there was a direct relationship between pathology, illness and/or negative behavior and the ability to function in day-to-day living. This assumption obviously reflected the investigator's attitude about psychosis when the study was developed. However, as the study progressed and the investigator reviewed data and finally began formal data analysis, the investigator realized that her basic assumption about the relationship of pathology and function might be (and, based on this study probably was) faulty. Despite the fact that the investigator believed that the inability to function day-to-day, rather than levels of illness was the primary cause of hospitalization, she obviously still believed that pathology and function were directly related. That is, as pathology decreased, function would increase. The investigator only clearly identified her assumption when reviewing what appeared to be conflicting findings. She then asked: (1) Did the scales actually measure ability to function day-to-day or did they really measure presence/absence of illness, pathology and/or negative behavior? and (2) within this study, how did ability to function day-to-day and presence/absence of illness pathology and/or negative behavior relate? The next section on Patterns of Change addresses these two questions.

OTHER FINDINGS

Patterns of Change Over Time

The pattern of change over time was obtained by plotting the mean of the means of the two groups on graphs. The rating scales were divided into those that appeared to measure illness, pathology and/or negative behavior and those that appeared to measure change, function or positive behavior. The GRS measures illness and measures change. The

illness rating is on a normal to mentally ill continuum. The change rating is on a no change to maximum change. The scale asks how mentally ill is the subject at present and how much has he changed since the last rating. The NOSIE 30 has seven factors plus a total positive, total negative and total measures. Positive behaviors are Social Competence, Social Interest and Personal Neatness. Negative behaviors are Irritability, Manifest Psychosis, Retardation and Depression-dejection. All categories of the FLS measure day-to-day function.

Scales that measure change, function and/or positive behavior will be called "Function Scales" and scales that measure illness, pathology and/or negative behavior will be called "Illness Scales."

SCALES

Function Scales	Illness Scales
GRS - Change Scale	GRS - Illness Scale
NOSIE - Social Competence	NOSIE - Irritability
Social Interest	Manifest Psychosis
Personal Neatness	Depression-dejection
Total Positive	Retardation
	Total Negative
FLS - Activities of Daily Living	FLS - Cognitive*
Unit Activity	
Outside Activity	*Since Cognition is a major
Social Activity	impairment in schizophrenia,
Self Initiative	the scale is included in
Frequency	illness scales.
Speed	Total NOSIE is not included
Overall Score	in either category.
Overall Efficiency	

Findings - Illness Scales

All scales rated subjects as more ill the second rating (day 6) than at the first rating (day 3). All, except the FLS Cognitive, showed improvement until rating six (day 18), then, illness increased again (See Figure 1). The GRS illness scale dropped again on the seventh rating (day 21) and then showed improvement at rating eight (day 24), nine (day 27), down again on ten (day 30) and up on the eleven (day 31). The GRS illness scale showed a significant change from rating one (day 3) to rating eleven (day 31) (See Figure 2). The pattern was similar for the NOSIE Illness Scales, however, the NOSIE scale shows improvement on the eighth rating (day 24), a drop and a plateauing for the ninth (day 27) and tenth (day 30) and then an improvement for the eleventh (day 31). The total negative NOSIE showed a drop on the tenth (day 30) but a regain on the eleventh (day 31). However, the negative NOSIE did not show significant change for admission to eleventh rating (day 31) (See Figure 3). The FLS Cognitive improved through rating six (day 18) and drops on the seventh (day 21), improves on the eighth (day 24), drops on the ninth (day 27) and improves on the tenth (day 30) and eleventh (day 31). There is a significant change in ognitive from admission (day 0) to the eleventh rating (day 31).

Overall, from admission (day 0) to the fourth rating (day 12), there was a slow improvement. After the fourth rating (day 12), there is a drop and the NOSIE scales indicate a slow decrease in illness but do not show a significant change from admission. The FLS Cognitive does indicate an increase in performance at a significant level from admission (day 0) to eleventh rating (day 31).

Findings - Function Scales

The functional scales give us a somewhat different picture. The GRS

change scale, the NOSIE Social Competence and Total Positive all show lower rating on the second rating (day 6). The NOSIE Social Interest shows slight improvement, and Personal Neatness, no change. All Functional Life Scales show considerable improvement on the second rating (day 6). The GRS-change scale shows improvement on the third (day 9), fourth (day 12) and sixth rating (day 18). There is no change on the seventh but there is improvement on the eighth (day 24) that does not change until the eleventh (day 31). The GRS-change scale shows a slow steady gain from rating two (day 6) through eleven (day 31) that is significant. The NOSIE follows a similar pattern but is not steady. That is, there is improvement on all positive NOSIE scales the third rating (day 9) and then a drop in all but Social Interest. Social interest maintains the gain made at the third rating (day 9) until eighth (day 24) when there is another gain that is stable for the ninth (day 27) and tenth rating (day 30). There is a drop at the eleventh (day 31) and change from admission to eleventh rating is not significant. The Personal Neatness scale drops on the fourth rating (day 12), is stable on the fifth (day 15), increases on the sixth (day 18), drops on the seventh (day 21), increases on the eighth (day 24), drops and stabilizes on the ninth (day 27), tenth (day 30) and eleventh (day 31) and change is not significant. The Social Competence scale is similar to the Personal Neatness but stabilizes at the ninth (day 27) higher than Personal Neatness and does show significant change from admission to eleventh rating. The total positive NOSIE follows the pattern of the Personal Neatness and Social Competency scale but does not show a significant change.

The FLS all show a steady gain until rating seven (day 21), then there was an up-and-down pattern for eighth, ninth, tenth and eleventh

rating. All scales drop on the seventh (day 21) and all gain on the eighth (day 24) and drop again on the ninth (day 27) but are the same or higher than the seventh (day 21) rating except Outside Activities. Outside Activities drop below the seventh (day 21) rating on the ninth (day 27) but continues to gain through the eleventh rating (day 31). Social Activity, Frequency, Self Initiative and Overall Score also gain through eleventh (day 31) rating. However, Unit Activity, Cognitive, Speed, Overall Efficiency dropped on the ninth rating (day 27), improved on the tenth (day 30) and dropped again on the eleventh (day 31). Activities of Daily Living has a steady drop from the ninth (day 27) through the eleventh (day 31).

FLS overall score shows significant change from admission (day 0) to rating seven (day 21). The GRS-change scale shows steady gain and a significant change from admission (day 0) to rating eleven (day 31). The NOSIE scales all drop and only social competence shows a significant change from admission (day 0) to rating eleven (day 31). The total NOSIE includes both the positive and negative NOSIE scores. The instrument, as a total, measures response to treatment. The total NOSIE follows a see-saw pattern of gains but does not show significant change for admission (day 0) to eleventh rating (day 31).

When all scales are taken together and only major changes viewed, there is a contradictory picture. Function gains and illness declines until the fifth rating (day 15). Then the sixth rating (day 18) shows an increase in illness but no decrease in function. Decline in both function and illness is shown on the seventh rating (day 21). Illness then levels off with little change from rating seven (day 21) through eleven (day 31). However, function still see-saws with a big gain on the

eighth (day 24), drops on the ninth (day 27), and another gain on the tenth (day 30) and a drop on the eleventh (day 31). From admission through sixth (day 18) rating, illness and function are directly related. That is as illness levels off, function gains. But after the sixth day (day 18) rating, function and illness do not appear to be directly related to each other. Function declines even as illness declines and illness increases even as function gains.

Discussion

All scales showed a similar pattern whether or not they showed significant change from admission to rating eleven (day 31). If only scales showing significant change (GRS, FLS) are viewed, the pattern is still the same. Even though nine of the ten NOSIE scales showed no significant change from admission to rating eleven (day 31), they follow the same pattern of change as the scales that did show a significant change. Does this pattern actually reflect the relationship between "illness" and "function," or does it reflect (1) errors in data collection or analysis, or (2) staff attitudes?

Error in Data Collection and Analysis

The pattern of change from admission to the eleventh rating is so odd that the immediate answer would seem to be a data collection or data analysis error. This was not the case. There was no computer error. In review of raw data, no single subject or rater could be found to account for the pattern of change.

Rating Staff Bias

The illness/function pattern may be a reflection of rating staff's bias rather than actual patient behavior. The results could have occurred from the following common attitudes, expectations and values of the nursing

staff doing the rating.

Patients are rated as markedly to severely ill at the time of admission because patients are expected to be extremely ill at admission. The use of hospitalization has changed over the last ten years and hospital staff expect only the most severely ill to receive inpatient treatment. As a result, staff assume severe pathology is present and interpret behavior based on that bias. Since staff do not know patients prior to hospitalization, they often prefer to err on the side of making patients too sick rather than too well. The unit on which this research was conducted routinely admits "treatment failures," that is, patients who have failed to respond to other forms of treatment, including hospital care, and are often considered chronically ill. The illness viewpoint is further reinforced by the inpatient tradition of restricting outside activities during the first few days to facilitate an "observation period." Depending on the patient, the unit and the staff, the observation period can be from twenty-four hours to seven days. The unit on which this research was conducted tends to observe patients two to six days prior to initiating "active" treatment programs. All of these expectations, traditions and/or biases may interact within the nursing staff and result in a false rating of illness.

In addition, the staff may confuse orientation with increase functioning. That is, as the patient learns where things are in his new environment and what schedule he must follow, he will require less assistance in these matters from staff. Staff could then rate him as functioning at a higher level when in fact his functioning hasn't changed, he only know his way around better.

This investigator believes that most nursing staff hold the same basic assumption that she did; that is, staff assume illness and functioning are directly related and attempt to bring functioning in line with illness. As the staff begins to see the individual demonstrate more pathology, the staff assume the patient's functioning will be impaired and move in to assist the patient. That would in some way account for the see-saw effect in functioning and illness. For example, illness increases at the sixth rating, but so does function. During the next three days, the staff may increase their assistance to the patient so that on the seventh rating, function is down but so is illness. Staff may be attuned to viewing patients through an illness model that they directly influence ability to function by assisting the patient based on his degree of illness rather than on his degree of function. This is further supported by a medical regime that focuses on treatment of illness.

The illness/function pattern may also be influenced by the staff's view of the role of hospitalization. Staff may inadvertantly discourage patients who attempt to function at a near normal level. Patients tend to be admitted to hospitals not only because of level of illness but because of inability to function. Patients come to the hospital because they need "help" and staff may interpret help to mean "taking care of the patient" and "doing things for him." If the staff believes help means "taking care of the patient" and "doing things for him," they are not likely to encourage, support or, perhaps even, allow functioning to approach normal. The thinking may be, "if the patient could do everything for himself, he would not need hospitalization, therefore I must assist him as long as he is in the hospital." Within the medical model-hospital model, nursing staff most often view themselves and are viewed by others

as the group that "takes care of" patients. It may be that nursing staff's interpretation that "helping" is "taking care of" is the root of institutionalization and may result in nursing staff actually decreasing functioning in the name of helping the patient.

It may be that the ability to function in day-to-day living is less closely related to illness than is usually expected. It has long been recognized that the inability to function results from long-term hospitalization. Institutionalization has been identified as the major stumbling block to the schizophrenic's social functioning and thus to living independently. Institutionalization has been assumed to occur primarily with long-term hospitalization and is rarely an issue in present day short-term active treatment programs such as the one used in this study. However, if the patients are judged on the level of illness rather than the ability to function even for a short time, can hospital programs and nursing staff inadvertantly stall the patient's development and maintenance of his ability to function unassisted? As mentioned previously, the see-saw illness/function pattern looks as if function declines based on the previous three day rating rather than the present rating. That is, in rating six, illness increases but so does function, but on rating seven, function decreases and so does illness, but on rating eight, they both increase. It appears as if the patient looks more ill but his functioning is not impaired. However, if the staff believes it should be, then the staff will move in and "take care of" the patient. The staff then rates the patient as less functional based on their intervention. When the patient "becomes" less ill, the investigator would speculate that the staff would take responsibility for the change in that staff interventions had decreased the patient's

illness. The staff have "taken care of" the patient. What the staff may not realize is that they may have also decreased the patient's independent functioning.

Summary

Both the experimental and control groups showed significant change in self-care from admission to rating eleven. The experimental group did not show significantly more self-care behavior than the control group at rating eleven. Findings were reported and discussed.

TABLE 3

Diagnostic and Demographic Characteristics of Subject Groups (actual number in each group)

Category	Experimental Number of Subjects	Control Number of Subjects
Diagnosis		
Schizophrenic (295)		
Paranoid (.3)	7	12.8
Acute (.4)	3	1
Latent (.5)	0	1
Chronic (.6)	5	8
Sex		
Male	10	8
Female	5	7
Marital Status		
Single	12	13
Married	1	1
Separated	0	1
Divorced	2	0
Race		
Latino	1	0
Oriental	1	1
White	13	14
Age		
Mean	26.9	22.7
Minimum	16.0	16.0
Maximum	40.0	32.0
Education		
Mean	13.5	12.8
Minimum	8.0	10.0
Maximum	17.0	17.0

(TABLE 3 - continued)

TABLE 3 (continuation)

Diagnostic and Demographic Characteristics of Subject Groups (actual number in each group)

Category	Experimental Number of Subjects	Control Number of Subjects
Occupation		
Student	5	6
Unemployed	3	2
Housewife	1	2
Blue Collar	5	3
White Collar	0	1
Professional	1	1
Income		
-0-	1	7
1,000-4,999	8	4
5,000-9,999	3	2
10,000-14,999	1	2
15,000-up	2	0
Residence		
Parent	5	9
Spouse and children	1	2
Alone	6	1
Custodial setting	2	3
Other	1	0
Family Involvement		
High	6	11
Moderate	4	2
Low	5	2
		$p < .05$ on all categories

TABLE 4

Analysis of Variance for Group - NOSIE

Source	SS	df	MS	F	P
Mean	20547.73	1	20547.74	135.07	0.000
Group	254.84	1	254.84	1.67	0.206
Error	4259.37	28	152.11		
					$p > .05$

Analysis of Variance for Group - GRS

Source	SS	df	MS	F	P
Level of Illness					
Mean	6927.64	1	6927.64	1388.17	0.000
Group	0.19	1	0.19	0.03	0.845
Error	139.73	28	4.99		
					$p > .05$
Level of Change					
Mean	3177.47	1	3177.47	1248.08	0.000
Group	1.21	1	1.21	0.47	0.496
Error	71.28	28	2.54		
					$p > .05$

TABLE 5

Analysis of Covariance with Medication as First Covariant for Group

NOSIE - 30 Total

Source	SS	df	MS	F	P
Mean	56243.03	1	56243.03	59.89	0.000
Group	1820.09	1	1820.09	1.93	0.175
First Covariant	2428.06	1	2428.06	2.58	0.119
Error	25352.02	27	938.96		
					p > .05

Analysis of Covariance with Medication as First Covariant for Group

GRS - Level of Illness and Change

Source	SS	df	MS	F	P
Mean - illness	755.00	1	755.00	188.34	0.000
Group	0.06	1	0.06	0.01	0.902
First Covariant	31.50	1	7.85	7.85	0.009
Error	108.23	27			
					p > .05
Mean - change	458.95	1	2.50	3.64	0.000
Group	1.15	1	0.49	0.71	0.708
First Covariant	0.55	1	0.49	0.72	0.395
Error	70.74	27	0.68		
					> .05

TABLE 6

Analysis of Variance Group By Time

	Rating Scales																
	GRS illness	change	NOSIE Social competence	Social interest	Personal neatness	Total positive	Irritability	Manifest psychosis	Retardation	Depression	Total negative	Total NOSIE	FLS Cognitive	Activities of Daily Living	Unit activities	Outside activities	Social interaction	Overall
Group	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	.019	NS	NS	NS	NS	NS
Time	.000	.000	.007	NS	NS	NS	NS	NS	NS	NS	NS	NS	.1006	.1000	.000	.000	.000	.000
Group By Time	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

NS = Not Significant

TABLE 7

Cognitive Scale Means

	Experimental		Control	
Time	Mean	SD	Mean	SD
1	61.20	27.99	41.00	16.00
2	53.79	18.12	43.73	16.44
3	60.66	26.07	50.33	21.21
4	59.59	19.06	45.33	20.80
5	60.93	23.72	46.33	18.78
6	64.66	21.09	51.13	25.11
7	60.93	23.58	46.06	27.44
8	71.00	22.99	61.20	23.22
9	64.00	27.83	56.46	21.02
10	69.37	22.17	57.13	19.96
11	65.39	26.12	59.66	23.24

Group Means

62.87 50.76

TABLE 8

Analysis of Variance for Time - GRS

Level of Illness

Source	SS	df	MS	F	P
Mean	6927.64	1	6927.64	1388.17	0.000
Group	0.19	1	0.19	0.03	0.845
					≥.05
Error	139.73	28	4.99		
Time	29.89	10	2.98	3.56	0.000
					≤.05

Level of Change

Source	SS	df	MS	F	P
Mean	3177.47	1	3177.47	1248.08	0.000
Group	1.21	1	1.21	6.47	0.496
					≥.05
Error	71.28	28	2.54		
Time	28.69	1	2.86	4.17	0.000
					≤.05

TABLE 9

Analysis of Variance for Time - NOSIE

Positive

Social Competence

(13) Has trouble remembering.
(11) Refuses to do the ordinary things expected of him.
(21) Has to be reminded what to do.
(24) Has to be told to follow hospital routine.
(25) Has difficulty completing simple tasks on his own.

Social Competence

Source	SOS	df	MS	F	P
Time	288.62	10	28.86	2.4	.007

Social Interest

(4) Shows interest in activities around him.
(9) Tries to be friendly with others.
(14) Refuses to speak.
(15) Laughs or smiles at funny comments or events.
(17) Starts a conversation with others.
(19) Talks about his interests.

Social Interest

Source	SOS	df	MS	F	P
Time	233.65	10	22.36	1.91	.043

Personal Neatness

(1) Is sloppy.
(8) Keeps his clothes neat.
(16) Is messy in his eating habits.
(30) Keeps himself clean.

Personal Neatness

Source	SOS	df	MS	F	P
Time	437.52	10	4.32	.629	.788

(TABLE 9 - continued)

TABLE 9 (continuation)

Negative

Irritability

(2) Is impatient.
(6) Gets angry or annoyed easily.
(10) Becomes upset easily if something doesn't suit him.
(12) Is irritable or grouchy.
(29) Is quick to fly off the handle.

Irritability

Source	SOS	df	MS	F	P
Time	171.73	10	17.17	1.40	.177

Manifest Psychosis

(7) Hears things that are not there.
(20) Sees things that are not there.
(26) Talks, mutters, or mumbles to himself.
(28) Giggles or smiles to himself for no apparent reason.

Manifest Psychosis

Source	SOS	df	MS	F	P
Time	437.52	10	43.75	1.11	.351

Retardation

(5) Sits, unless directed into activity.
(22) Sleeps, unless directed into activity.
(27) Is slow-moving or sluggish.

Retardation

Source	SOS	df	MS	F	P
Time	465.52	10	46.55	1.09	0.368

Depressive Dejection

(3) Cries.
(18) Says he feels blue or depressed.
(23) Says that he's no good.

Depressive Dejection

Source	SOS	df	MS	F	P
Time	30.41	10	3.04	1.78	.063

TABLE 9 Analysis of Variance for Time - NOSIE

Factor	Source	Sum of Sq.	df	Msq.	F	Prob F
Social competence	Time	288.62	10	28.62	2.485	0.007 ≤.05
Social interest	Time	223.65	10	22.36	1.918	0.043 ≤.05
Personal neatness	Time	43.29	10	4.32	0.629	0.788 ≥.05
Total positive	Time	740.59	10	74.05	1.366	0.195 ≥.05
Irritability	Time	171.73	10	17.17	1.406	0.177 ≥.05
Manifest psychosis	Time	437.52	10	43.75	1.114	0.351 ≥.05
Retardation	Time	465.52	10	46.55	1.091	0.368 ≥.05
Depression	Time	30.41	10	3.04	1.78	0.063 ≥.05
Total negative	Time	430.39	10	43.03	1.474	0.148 ≥.05
Total NOSIE	Time	1528.4	10	152.8	1.12	0.344 ≥.05

TABLE 10

Analysis of Variance for Time - FLS

Cognition

1. Is oriented for time (e.g., hour, day, week).
2. Uses "yes" and "no" appropriately.
3. Understands speech (e.g., simple commands, directions, television.
4. Calculates change (money).
5. Does higher calculation (balance checkbook, etc.).
6. Uses appropriate gestures in lieu of speech (not applicable for patients without speech impairment).
7. Uses speech for communication.
8. Reads.
9. Writes.
10. Social behavior is appropriate.
11. Able to shift from one task to another with relative ease.
12. Aware of self (e.g., of mistakes, inappropriate behavior, poor judgment, etc.).
13. Attempts to correct own errors (e.g., of judgment, mistakes, etc.).
14. Has good memory (e.g., names of people, recent events, etc.).

Mean of Mean of E & C

1st rating	51.09
11th rating	62.53

Cognition

Source	SOS	df	MS	F	P
Time	9377.12	10	937.71	2.54	.006

(TABLE 10 - continued)

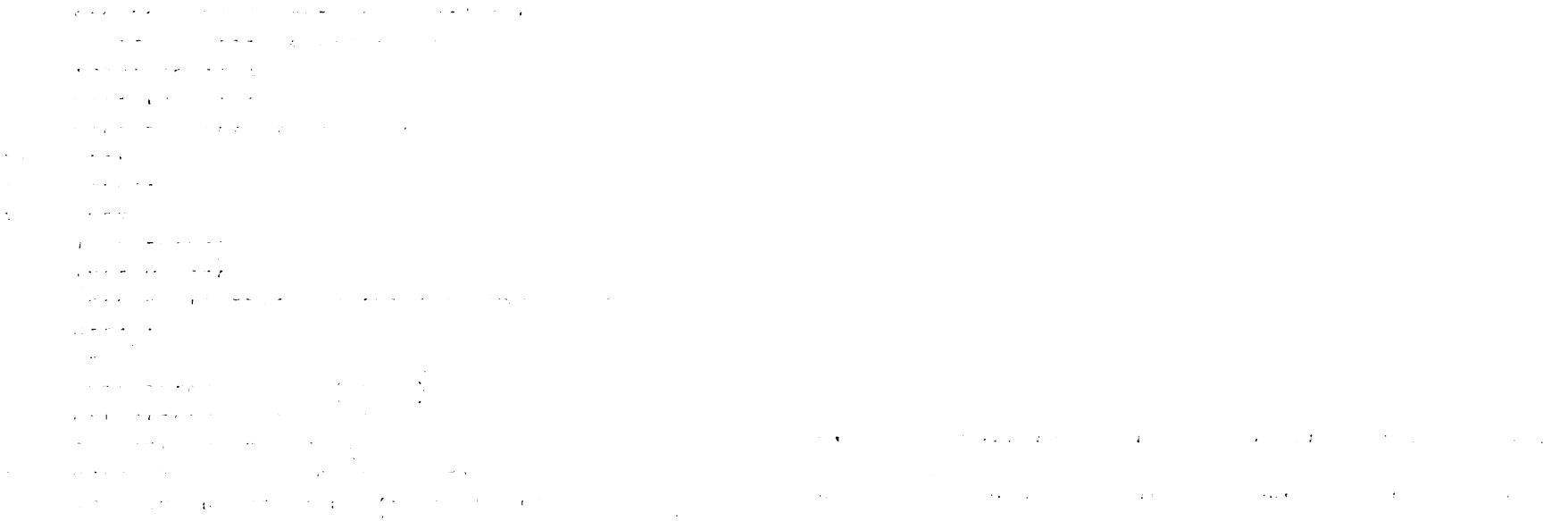


TABLE 10 (continuation)

Activities of Daily Living

15. Able to get about.
16. Does transfers.
17. Feed self.
18. Uses toilet.
19. Grooms self (e.g., wash, brush teeth, shave, etc.).
20. Dresses self.
21. Bathes self (including getting in and out of tub or stall).

Mean of Mean of E & C

1st rating	62.23
11th rating	85.59

Activities of Daily Living

Source	SOS	df	MS	F	P
Time	18705.25	10	1870.52	6.53	.000

Unit Activities

22. Prepares simple food or drink (e.g., snacks, light breakfast).
23. Performs light housekeeping chores (e.g., meals, dishes, dusting).
24. Performs heavy housekeeping chores (e.g., floor or window washing, etc.).
25. Performs odd jobs in or around unit (e.g., gardening, electrical, auto, mending, sewing).
26. Engages in solo pleasure activities (e.g., puzzles, painting, reading, stamps).
27. Uses telephone (e.g., dialing, handling).
28. Uses television set (e.g., changing channel, etc.)

Unit Activities

Source	SOS	df		F	P
Time	80342.31	10	8034.23	19.30	.000

(TABLE 10 - continued)

TABLE 10 (continuation)

Unit Activities (continuation)

29. Uses record player or tape recorder.

Mean of Mean of E & C

1st rating	12.90
11th rating	65.89

Outside Activities

30. Engages in simple pleasure activities (e.g., walk, car rides, etc.).
31. Goes shopping for food.
32. Does general shopping (e.g., clothes, gifts, etc.).
33. Performs errands (e.g., post office, cleaner, bank, pick up newspaper, etc.).
34. Attends spectator events (e.g., theatre, concert, sports, movies).
35. Uses public transportation accompanied (mass transportation).
36. Uses public transportation alone (rate NA if item 35 is 0).
37. Takes longer trips accompanied (plane, train, boat, car).
38. Takes longer trips alone (rate NA if item 37 is 0).

Mean of Mean of E & C

1st rating	1.60
11th rating	39.20

Outside Activities

Source	SOS	df	MS	F	P
Time	52052.81	10	5205.28	13.60	.000

(TABLE 10 - continued)

TABLE 10 (continuation)

Social Interaction

39. Participates in games with other people (e.g., cards, chess, checkers).
40 Participates in home social activities (e.g., family gathering, party, dancing).
41. Attends social functions outside of home (e.g., home of friend, dining at restaurant, dance).
42. Participates in organizational activities (e.g., religious, union, service club, professional).
43. Goes to work or school at comparable premorbid level (not housekeeping at home). (Do not rate if item 44 is to be rated).
44. Goes to work or school at lower than premorbid level. (Do not rate if item 43 has been rated.)

	Mean of Mean of E & C
1st rating	2.93
11th rating	36.42

Social Interaction

Source	SOS	df	MS	F	P
Time	27170.62	10	2717.06	10.16	.000

Speed

This category is used to determine not just rapidity with which behavior is demonstrated but the subject's degree of alertness as well.

	Mean of Mean of E & C
1st rating	35.50
11th rating	69.70

Speed

Source	SOS	df	MS	F	P
Time	33000.18	10	3300.01	12.45	.000

(TABLE 10 - continued)

TABLE 10 (continuation)

Frequency

This category reflects the rating of the actual number of times a behavior is demonstrated.

Mean of Mean of E & C

1st rating	15.86
11th rating	38.74

Frequency

Source	SOS	df	MS	F	P
Time	36860.56	10	3686.05	14.89	.000

Self initiation

This category reflects whether or not the subject is making an attempt to demonstrate the behavior.

Mean of Mean of E & C

1st rating	22.96
11th rating	56.46

Self initiation

Source	SOS	df	MS	F	P
Time	31061.66	10	3106.16	15.19	.000

Overall

The overall is the overall rating of all behavior in each category (Cognitive, Activities of Daily Living, Unit Activity, Outside Activity, and Social Interaction) and represents the overall % of normal at which the individual functions.

Mean of Mean of E & C

1st rating	28.53 = 28% of normal
11th rating	60.53 = 60% of normal

Overall

Source	SOS	df	MS	F	P
Time	28843.93	10	2884.39	14.17	.000

(TABLE 10 - continued)

TABLE 10 (continuation)

Overall Efficiency

The overall efficiency is the overall rating on speed, frequency and self initiation and represents the % of normal for the subject in overall efficiency.

Mean of Mean of E & C

1st rating	38.79 = 38% of normal
11th rating	64.39 = 64% of normal

Overall Efficiency

Source	SOS	df	MS	F	P
Time	20193.89	10	2019.38	10.59	.000

E = Experimental

C = Control

TABLE 11

Percentage of Change and F Score - FLS

Category	% point change between 1st and 11th rating			F Score	
				F	P
Actual Performance	1st rating	11th rating	Amt of Change		
Unit activity	12.90	65.89	53.01	19.30	.000
Outside activity	1.60	39.20	37.60	13.60	.000
Social activity	2.93	36.56	33.49	10.16	.000
Activity of Daily Living	61.23	85.59	22.64	6.53	.000
Cognitive	51.09	62.53	11.44	2.54	.006
Overall	28.53	60.50	31.97	14.17	.000
Quality of Performance					
Frequency	15.86	51.53	35.67	14.89	.000
Speed	33.50	69.70	34.20	12.45	.000
Self initiation	22.96	56.46	33.50	15.19	.000
Overall efficiency	38.79	64.39	25.60	10.59	.000

TABLE 12

FLS Group Mean Admission (0) and 11th Rating

	0	11
Cognitive	51.0%	62.5%
Activities of Daily Living	61.2	85.5
Unit Activity	12.9	54.2
Outside Activity	1.6	39.2
Social Interaction	2.9	36.5
Overall	28.5	60.6

FIGURE 1 FLS Change Over Time

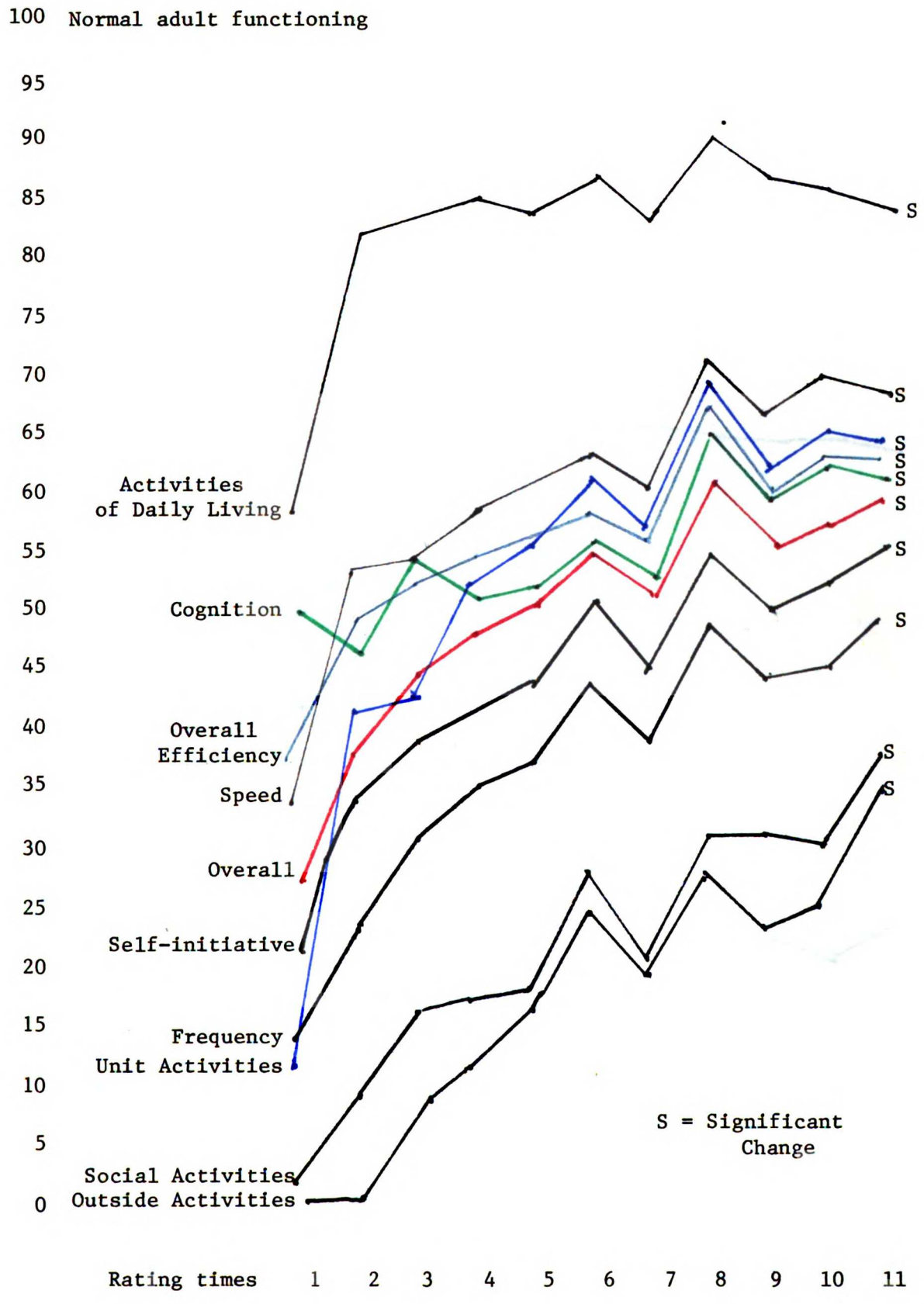


FIGURE 2 Global Rating Scale Change Over Time

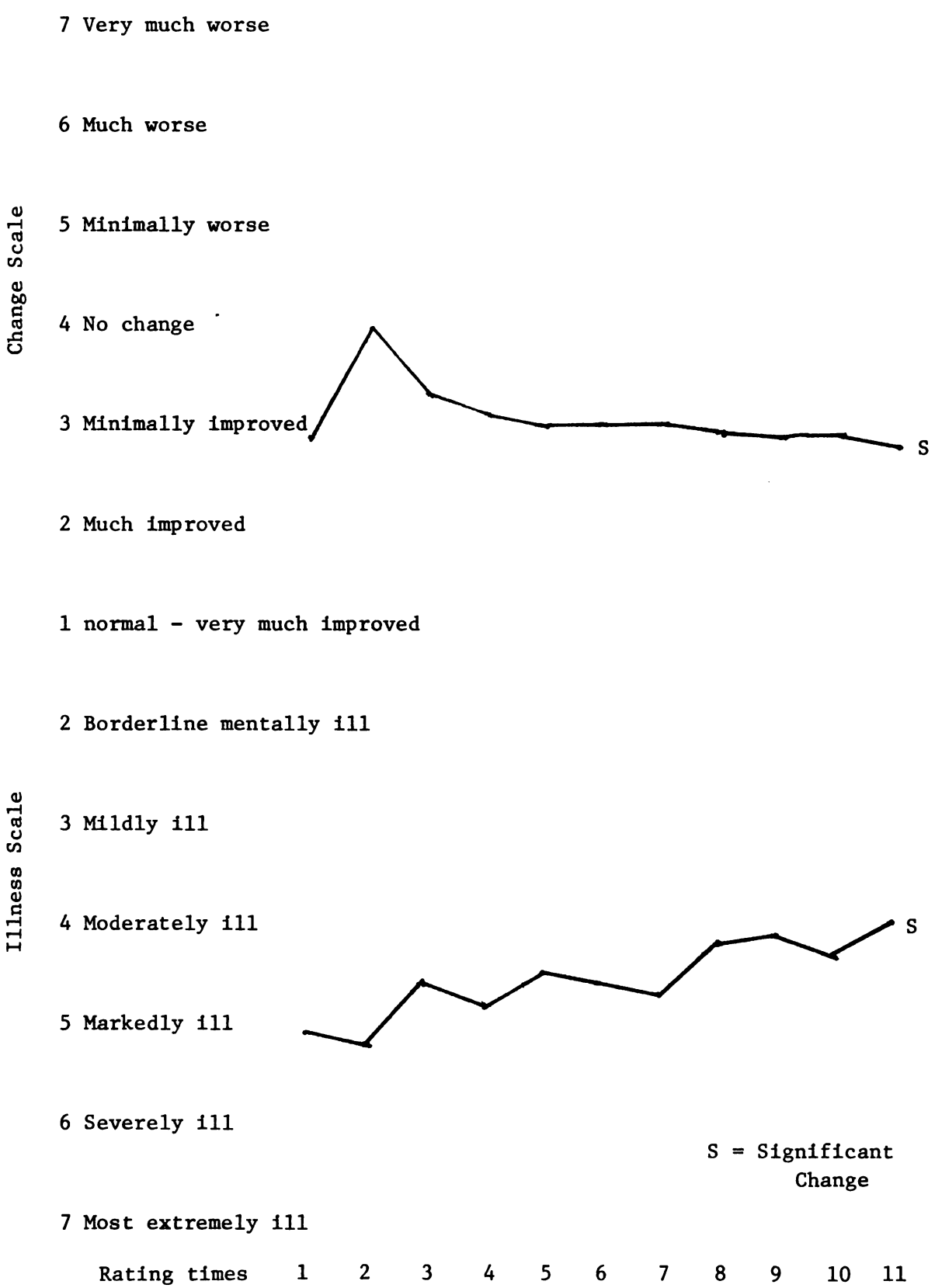
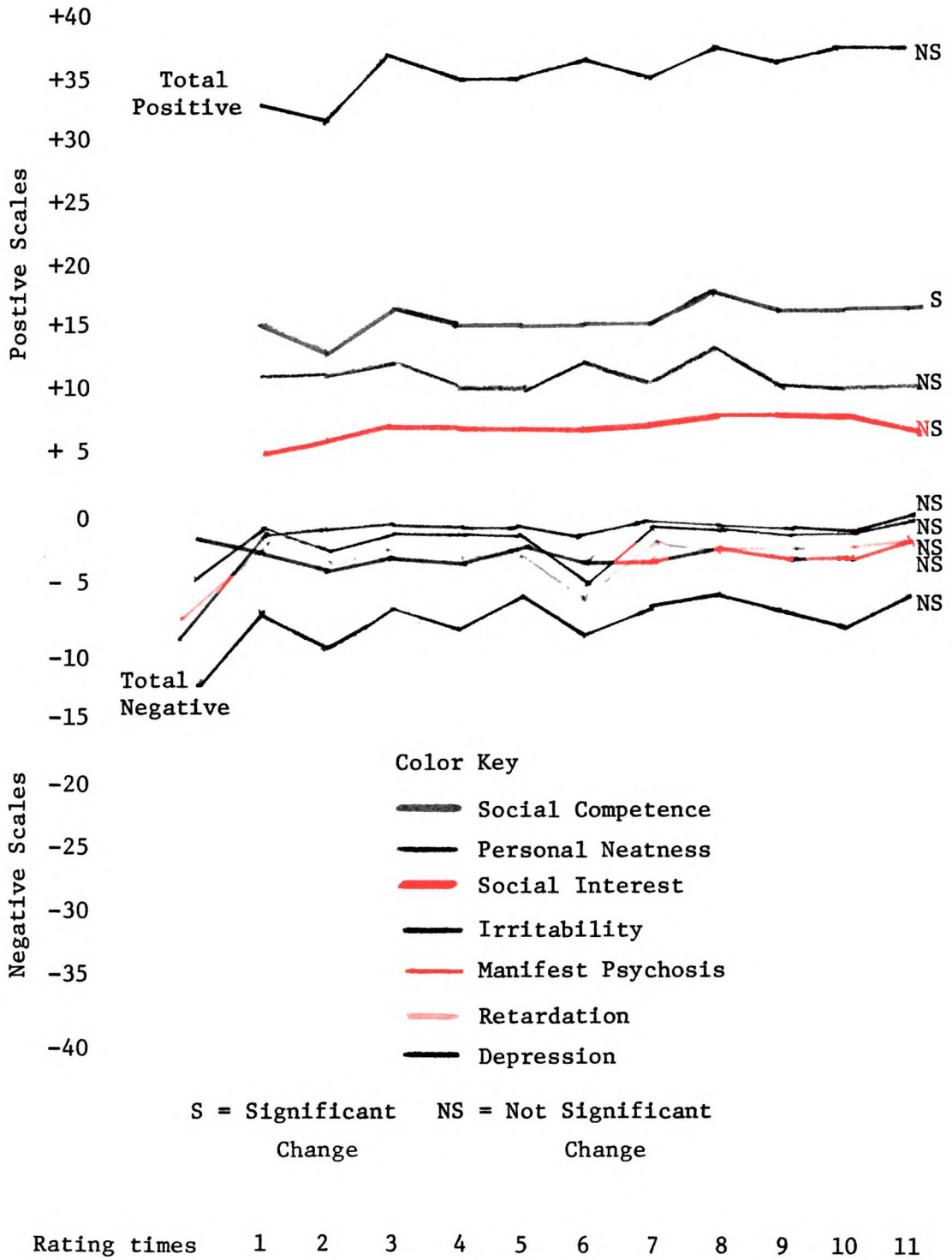


FIGURE 3 NOSIE Change Over Time



CHAPTER 6 CONCLUSION

While the study is to small to generalize, the research reported here did attempt to evaluate nursing practice through patient outcome. It was hypothesized that patients exposed to goal directed nursing care aimed at developing self-care behavior would indeed develop self-care behavior as measured by scales designed to rate such behavior.

The research was a quasi-experimental design that included a control and experimental group. Thirty schizophrenics were randomly assigned for a total of 15 subjects in each group. The experimental group received "self-care nursing care" and the control group "routine nursing care" and each subject was rated every three days (admission to day 31) for a total of eleven ratings.

The investigation predicted that (1) both the experimental group and the control group would increase self-care behavior from rating 1 to rating 11; (2) the experimental group would show significantly more self-care behavior at rating 11 than the control group and would show it at an earlier rating than the control group. Only the prediction of increased self-care behavior from rating 1 to rating 11 was validated by the study.

No significant difference in the self-care behavior of the experimental and control group might be attributed to any one of the following:

A. Inadequate research design

1. The lack of tools to measure nursing care is a continual problem in nursing research and the tool used in this study may not have measured what the investigation intended.
2. The inability of nurses to control all treatment in clinical research can and does inhibit ability to isolate nursing care.

3. Even when there is consistency among and between raters, utilizing nursing staff who are involved in delivery of care has the advantage and disadvantage in the study. Even though there was consistency among and between rater and no reason to believe there was systematic bias, many raters increase the change of multiple interpretation of the behavior being rated.

B. An accurate appraisal of care

1. Nursing staff may actually increase lack of functioning by evaluating the patient's ability to function on his pathological condition rather than his actual function. Staff may assume that being schizophrenic may indicate the patient is unable to care for himself and therefore provide care for him. As long as the patient demonstrates symptoms, staff may assume he needs assistance and do not actually evaluate how well he functions and thus take care of the patient after the patient could take care of himself.

2. Nursing staff seem to be able to produce change in the patients ability to function by two methods.

(a) One is through control of the environment and of the patient's life in the environment so that he appears to function at an "acceptable" level. Nursing staff through external control of the patient and his environment can create the illusion that the patient participates in caring for himself. This may be the basis of institutionalization.

(b) Nursing staff seem to be able to produce changes in the patients by actually allowing and encouraging him to

to participate in his own care and eventually take responsibility for his care. Nursing staff through teaching and support assist the patient to develop self-care behavior not dependent on the nursing staff's external control of the patient or his environment. This may be the beginning of deinstitutionalized institutional care. It would appear that which ever method is used the observable results are the same. The patient appears to be caring for himself. The only way to determine if the behavior results from internal or external controls would be to observe the patient where his/her environment are not controlled by nursing staff.

Recommendations for further study

A. The research reported here again reaffirms the need for nursing measurement tool and clinical research designs that answer the problem of limited control of medical regimes by nurses. It is difficult to control important variables unless medical staff agrees to standardize medical regimes for research subjects.

B. An important content area to be investigated in future work would be how (not if) nurse can develop self-care behavior in patients. This investigation is planning a study that will evaluate the patient's participation in self-care as measured by Goal Attainment Scaling while hospitalized and his ability to maintain self-care in non-hospital settings. The new study will attempt through active patient participation to develop self-care behavior in patients by internal patient control rather than external staff control.

C. While this study was designed with the chronic patient in mind, with some changes it could be repeated with other psychiatric patients.

APPENDIX A

Memo To: University of California San Francisco Committee on Human Research

FROM: Dr. Ira Glick, Medical Director Inpatient Treatment and Research Service

RE: Attached Protocol

Ms. Underwood has discussed the proposed research with me. I am in full support of the project. The research should not be influenced by or influence any other project presently underway on the service. As Medical Director of the Inpatient Treatment and Research Service, I will provide what support I can to facilitate the completion of the project.

IG:pc

THE PURPOSE OF THE STUDY

This research will investigate the significance of goal-directed nursing care on the behavior of hospitalized adult psychotic patients. The investigation focuses on the patient and his ability to develop and maintain self-care behavior as a function of nursing action, designed to develop and maintain self-care behavior in patients.

The adult psychotic patient when hospitalized is often unable to care for himself. Medication and hospitalization are usually effective in relieving acute symptoms of the psychotic break. However, even when symptoms have subsided unless the patient can care for his basic needs, he cannot cope outside of a structured setting. While long-term hospitalization in state institutions has decreased, patients who cannot demonstrate self-care behavior must still be discharged to a structured environment, most likely a half-way house, a three-quarter-way house, or a board and care home. If, during short-term acute hospitalization, the patient can be assisted in developing, re-establishing and/or maintaining self-care behavior, his chances of living independently in the community are much better. In recent years, self-care rehabilitation of chronic institutionalized psychotics has been very successful. (1, 2, 3,) This study seeks to determine if during short-term hospitalization self-care can be developed and/or maintained as a result of nursing action designed to develop and maintain self-care behavior in patients.

QUESTION

This research asks the question: If nursing care is planned and implemented toward the specific goal of self-care behavior in the hospitalized adult psychotic, will the patient develop and maintain self-care behavior significantly superior to self-care behavior in the patients

not receiving nursing care planned and implemented toward the specific goal of self-care?

HYPOTHESIS

The question may be hypothesized as:

1. The nursing process and the nurse-patient relationship focused on increasing patient's self-care behavior in daily living will significantly increase the adult psychotic's ability to develop self-care behavior in daily living as measured by the NOSIE and FLS scales.

   (a) The patient will develop self-care behavior more rapidly as measured by NOSIE and FLS scales.

   (b) The patient will develop self-care behavior at a higher level as measured by NOSIE and FLS scales.

2. The nursing process and the nurse-patient relationship focused on increasing the patient's self-care behavior in daily living will significantly increase the adult psychotic's ability to maintain self-care behavior in daily living as measured by the NOSIE and FLS scales.

DEFINITION OF TERMS

Psychotic Patient. Within this study, the psychotic patient is any adult patient admitted to the Inpatient Treatment and Research Service (ITRS) at Langley Porter Institute with a primary diagnosis from the official nomenclature of 295 to 298. The general definition of psychoses from Ulett's A Synopsis of Contemporary Psychiatry is:

> "Among those mental disorders classified as 'of psychogenic origin or without clearly defined physical cause,' the ones labeled as psychoses cause the most catastrophic interference with normal patterns of behavior. They are characterized by a varying degree of personality disintegration and failure to correctly evaluate external reality. Individuals with such disorders show defect in their ability

> to relate themselves effectively to other people or to their own work. Although outbursts of antisocial, dangerous, or self-destructive behavior may be important symptoms, the special features of most psychotic behavior are its bizarre, withdrawn, or asocial qualities" (4, p.130).

In the official nomenclature (DSM II) "Psychoses not attributed to physical condition include Major Affective Disorder 296-296.8, Schizophrenia 295-295.99, Paranoid States 297-297.1, Other Psychoses 298" (5).

Self-Care Behavior. Within this study self-care demands are air, food, fluid, elimination, rest and activity, personal hygiene and maintenance of body temperature, and solitude and social interaction. Self-care is defined by the Nursing Development Conference Group as:

> "Self-care behavior refers to actions based on culturally and scientifically defined practices freely performed by individuals (or their agents), directed to themselves or to conditions or objects in the environment in the interest of their own life, health, or well-being" (6, p.87).

RELATED WORK

The research proposed here is grounded in the conceptualization of nursing developed by Orem and extended by The Nursing Development Conference Group. While this conceptualization has served as a basis for curriculum development and clinical practice, with the exception of some uncompleted Masters Theses, it has not to my knowledge been a subject of clinical research (6, 7). The conceptualization outlined by Orem and The Nursing Development Conference Group and operationalized by this investigator identifies the goal and focus of nursing as self-care behavior in patients.

A few nursing studies have been reported that attempt to evaluate the effects of nursing care on patient welfare (8, 9). The studies are generally concerned with nursing care of the physically ill hospitalized patient. In the WICHEN publication, Newly Initiated and Completed

Projects and Research for 1972-1974, 340 studies are abstracted (10). Less than a dozen deal with goal-directed nursing, psychiatric nursing, or psychotic patients.

Research studies related to self-care have focused primarily on the elderly, the physically handicapped and the mentally retarded. Those groups so obviously affected in day-to-day living (11, 12, 13). The studies are not related to goal-directed nursing care.

There is a large body of literature on rehabilitation of the chronic institutionalized psychotic patient which includes studies using behavior modification techniques (14). Few studies are related to psychotic patients in acute care setting.

Nursing literature related to self-care psychotic patients and/or goal-directed nursing care is primarily subjective reporting of individual nurses' experiences with individual patients and patient groups. A number of articles and reports have been published on self-care and activities of daily living with selected patient groups; however, none involved goal-directed nursing care. While self-care behavior in activities of daily living is discussed in nursing literature, it has not for the most part served as the basis for systematic research (1, 2).

THE SIGNIFICANCE OF THE STUDY

The proposed research could be useful in the care of the adult psychotic, in the practice of nursing, and in nursing research.

The adult psychotic patient is often hospitalized when he is no longer able to care for himself day-to-day. If during short-term hospitalization, self-care behavior can be developed and/or maintained, the patient could more readily be placed in the community. Even though state hospital use is down, the patient cannot live independently because

he cannot demonstrate self-care behavior must still be placed in a structured environment, i.e., board and care home. This study could help determine if self-care is a reasonable goal for short-term hospitalization.

Nursing has long been asked to identify and articulate nursing practice. We have often failed. This study could assist in validating the effects of goal-directed nursing with a specific patient population in a specific setting and could assist in identifying as one focus of nursing the development and maintenance of self-care behavior in patients. Thus this study could be useful in developing a clearer statement about the practice of nursing and the educational experiences essential to that practice.

Clinical research in nursing is in its infancy. We have just begun to concentrate on research in the clinical area. This study will outline one design that can be replicated by other nurse researchers. The study will, in addition to any findings in the substantive area, allow the trial and evaluation of one clinical research design toward a more sophisticated basis for clinical research in nursing.

In summary, while this is a small study in a complicated difficult area to control, it could provide beginning data to improve nursing care of hospitalized adult psychotics and to influence nursing practice and research. At the very least, it will provide data that is essential to design a tighter better controlled study in the same area.

METHOD

Research Setting. This investigation will take place on the Inpatient Treatment and Research Service at Langley Porter Institute. This 24 bed unit provides long (90-120 days) and short (21-30 days) term care for acutely ill psychiatric patients. There are presently two re-

search projects underway on this service, neither of which will have any bearing on this study. The unit has two treatment teams of approximately 12 patients, each staffed by two residents and 10 nursing personnel. Patients receive a wide range of therapy, including medication, psychotherapy, and milieu therapy.

Subjects-Patients. For this study, thirty patients will be selected over a six month period. Patients admitted to the unit have a working diagnosis, a treatment plan, and a nursing plan within the first 24 hours. Clinical disciplines vary in opinion as to the validity of diagnosis; nonetheless, the WHO and APA nomenclature remain the predominate guide for classification of patients. There is a greater agreement among diagnosticians when distinguishing large categories, i.e., psychoses from neuroses, than when defining diagnoses, i.e., a specific psychoses or neuroses (15, 16). This investigation will use diagnoses in selecting patients as subjects. Subjects will be limited to patients that are classified as 295 to 298 in the official nomenclature. This is the classification of Psychoses Not Attributed to Physical Conditions. Subjects will be limited to patients who meet the following criteria:

1. Male or Female. The use of both male and female patients will allow for a larger sample size and more closely represent hospital populations. Depending on the background of the individual subjects, women may have a higher level of self-care behavior.

2. Ages 18 to 50. This age range allows for both the thinking and affective disorders. Thinking disorders occur at a younger age than affective disorders. No matter what age, the investigator will expect the depressives to be somewhat better able to function on a day-to-day basis than the schizophrenics. Depressives tend to have better premorbid

adjustments.

3. No physical deformities, physical injuries, serious and/or chronic physical illness or organic brain syndromes including ECT patient. Any of these conditions could eliminate or reduce the ability to develop or maintain self-care behavior.

4. No history of long (one year or more) residential care before 1965. This will select out patients who may have suffered institutionalization in long hospitalization but nonetheless, were returned to the community after the advent of community mental health legislation and decrease in state hospital facilities. These patients can no longer realistically be expected to develop self-care during short term hospitalization.

Other factors such as marital status, education and family and other support systems, socio-economic status and ethnic background may influence self-care behavior but randomization of the sample and statistical manipulation will be used to control these variables rather than attempting to match or eliminate subjects with certain characteristics.

As patients who meet the above criteria are admitted, they will be assigned randomly to Team I or Team II by the investigator. Other patients will be assigned to Team I and II to balance the patient load. Only those patients previously described will make up the Experimental Group on Team I and the Control Group on Team II. At admission, all patients will be asked to participate in research and asked to sign a consent form.

Risk. The risk to patients participating in this study is the same risk that they would encounter in usual care during hospitalization. It is not anticipated that the nursing care given via the Experimental Team will create undue or specific risk. The nursing care of all patients

will be congruent with the overall treatment plan designed for the patient by the primary therapist. At no time will nursing care be at odds with treatment philosophy. The nursing care of any patient can be discontinued at any time the Medical Director has reason to believe that it is detrimental to the overall treatment of a specific patient. All patients will receive as much nursing care as they would under non-research conditions. No patient will be interviewed specifically for this study. All data will be collected by observation.

If the hypothesis is supported, patients in the Experimental Group should demonstrate a higher level of self-care behavior. Patients in the Control Group should demonstrate no less self-care behavior than under non-research conditions. Findings could help to identify nursing care that is most beneficial to the patient during short-term hospitalization, or nursing care that while not harmful is not helpful. That is, the care does not produce the desired patient response. Either way the study could benefit future psychotic patients who may be hospitalized.

Subjects-Staff. The unit has 30 full-time nursing personnel, 21 Registered Nurses and 9 Psychiatric Technicians. Using clinical experience and educational background as criteria, staff were equally distributed between Team I and Team II when the unit was created May 1, 1975. The research project will be discussed with all nursing personnel on the unit as a group. Each staff will then be asked to sign a consent form. Upon receipt of all consent forms all nursing staff will be taught to use the NOSIE and FLS scales. All staff on Team I will be taught to plan and implement nursing care based on the goal of self-care behavior in patients. All staff on Team II will be given the same number of class hours as Team I, but the focus will be discussion of nursing care

routinely planned by this group. Staff on either team will be blind to the teaching of the other team.

Risk. The risk to nursing staff participating in this study is the same risk they encounter daily working with psychotic patients. It is not anticipated that providing goal-directed nursing to develop and maintain self-care behavior in patients will create any more risk than providing nursing care routinely available to psychotic patients. No nursing staff will be requested to participate in a more physically or emotionally dangerous situation than is usual in an acute inpatient psychiatric unit. The staff on the Experimental Team will have a better understanding of goal-directed nursing and self-care behavior in patients. The staff on the Control Team will have no less understanding than under non-research conditions. Findings could help identify more clearly the role and goal of nursing with adult hospitalized psychotics.

Measurement Tools. While neither the NOSIE or the FLS are exclusively designed to rate self-care behavior, both scales include all those activities defined in this study as self-care. The NOSIE-30 (Nurses' Observation Scale for Inpatient Evaluation) measures 6 factors; social competence, social interaction, social neatness, irritability, manifest psychosis and retardation. This scale has been found sensitive to treatment effect in a wide range of studies with adult psychiatric patients (17). The FLS (Functional Life Scale) measures an individual ability, regardless of diagnoses, to participate in all the basic daily activities which are customary for most human beings. The five category scale, cognitive, ADL, unit activity, social activity, and socialization, includes the behaviors identified in this study as self-care (18). The NOSIE aims at subtle changes while the FLS aims at actual rather than

potential ability to function day-to-day. The NOSIE should measure subtle self-care changes when the patient is first admitted and acutely psychotic and the FLS should measure self-care ability as the patient prepares for discharge. Psychotic patients often show a marked improvement in all behavior between the third and fifth day of hospitalization due to medication regardless of other treatments or nursing care. In an effort to account for improvement due to medication, all patients will be rated as to the level of medication intake (low, mild, moderate, high) at the time of the scale ratings.

Data Collection. Team I prior to staff or patient assignment was designated as the team for Experimental Subjects and Team II as the team for Control Subjects. As patients who meet the criteria are admitted, they will be randomly assigned to Team I or Team II. After the admission interview, the admitting nurse will rate the patient on the FLS and NOSIE. At admission, the investigator or her research assistant will rate a randomly selected number of Experimental and Control Subjects. The research assistant is blind to the study. All patients will then be rated every third day until discharge by the nursing personnel responsible for the patient's care on the rating day and by the investigator or her research assistant. Team I nursing personnel will rate randomly selected Experimental Subjects at random intervals. The investigator will rate both randomly selected Experimental and Control Subjects at random intervals. These ratings will provide a basis for inter-rater reliability and hopefully will protect against experimental bias.

Data Analysis. Preliminary analysis of data will be done to validate the random assignment of subjects to the two conditions. In order to test that randomization was successful in equalizing the two

subject groups, a chi-square will be used.

In an effort to isolate the effects of medication a correlation coefficient will be used to determine if there is a systematic relationship between levels of drugs and instrument measurement. If a significant relationship is obtained, drug levels will be treated as a co-variant in testing the hypotheses.

A 2 by 10 two-factor analysis of variants with repeated measure will be used to test the hypotheses. Time and Treatment are fixed factors and Subjects are treated as a random variable. Subjects will be nested in Group. A main effect is predicted for Group, Time, and Group by Time. That is, using ANOVA to partition subject variance, time variance, error and experimental effect, there will be (1) a significant difference between the means of the Experimental Group and the Control Group, (2) a significant difference attributable to Time, and (3) varying difference existing between the means of the Group depending on the particular Time. Since so much variance can be directly related to time in a study of this design, if there is a main effect for Group by Time, then an analysis of co-variants will be done for each Time point 1-9 with Time 0 (baseline) the co-variant.

If there is a significant F for Group, Time, and Group by Time the data will then be analyzed using the Scheffe Post-Hoc Test of Cell Mean Difference to determine where the significant difference occurs.

The investigator predicts that the Experimental Group and the Control Group will be similar on baseline and first rating but that at some point after that, the Experimental Group will develop and maintain self-care behavior at a higher level than the Control Group. The investigator is unable to predict with any certainty at what point the difference will

occur and be maintained. If the difference occurs at the ninth rating, only the development hypothesis (1, 1(a), 1(b)) can be tested and not the maintenance hypothesis (2). The level of significance will be set at 0.10 but results will be reported even if the 0.10 is not achieved.

Time Frame. Staff will receive six hours of training during the month preceding the introduction of data collection. Each patient group will have at least 15 patients. Given the other projects on the unit and the admission-discharge rate, it will take five to six months to obtain a sample of 30 patients. The projected time is July 1, 1975 to December 31, 1975.

QUALIFICATIONS OF THE INVESTIGATOR

I am a doctoral student in the School of Nursing, Department of Mental Health and Community Nursing. I received my B.S.R.N. from the University of Colorado and my M.A. from New York University. Since graduating from my baccalaureate program in 1962, I have been continually involved with nursing care of the psychiatrically ill adolescent and/or adult. I have been employed as a staff nurse, head nurse, supervisor, assistant director of nursing, and as an instructor in undergraduate and graduate education. I have consulted other nursing staff in service and educational settings in New York, Idaho, and California. I have delivered papers at the invitation of international, national, state, and local organizations. Since 1970 I have initiated and/or participated in three research projects focused on nursing in and nursing care of psychiatrically ill adolescents and/or adults.

In addition to doctoral study, I have been employed at Langley Porter Institute since 1972. I am presently Acting Director of Nursing Service Education and Research. In addition to the other usual duties of such a position, I also supervise registered nurses and graduate nursing students who are primary therapists with individuals and families. I have also been instrumental in implementing the Clinical Series for Nursing at Langley Porter Institute and will myself be reclassified as a Clinical IV nurse in July.

Throughout my career, my major focus has been nursing care of the hospitalized psychiatrically ill adolescent and/or adult. This study represents to me the culmination of years of knowledge and experience and the beginning of a more systematic approach to nursing care of the hospitalized psychiatric patient.

INFORMATION ABOUT PROJECT FOR
REFERRING PHYSICIANS AND AGENCIES

All patients referred to ITRS Langley Porter are screened by one of the admitting officers, Dr. Ira Glick, Dr. Ames Fischer, or Dr. David Braff. At the time of screening, the admitting officer discusses with the referring physician or agency any research project that would involve the prospective patient. At that time the admitting officer will give the name and phone number of the principal investigator on any project so that the referring physician or agency may seek further information if necessary. Reports of projects will be available to referring physicians and agencies on request as studies are completed.

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APPENDIX B

University of California
San Francisco
Academic Senate

June 19, 1975

Dr. Anne J. Davis
School of Nursing
N 505n

Dear Dr. Davis:

The Committee on Human Research approved the application submitted by Patricia Underwood titled, "Goal-Directed Nursing Care and the Behavior of Hospitalized Adult Psychotic Patients," with the addition of your revised consent form. This approval was based on the Committee's previous review of June 12, 1975.

The number assigned this approval is 930105. This number should be included on all correspondence concerning this protocol. It must appear on all patient consent forms to be signed and on all patient charts involved.

The expiration date of this approval is June 19, 1976. If this project is to continue beyond that date, please submit an updated protocol in advance for the Committee's re-appraisal. If this protocol is used in conjunction with any other human experimentation or if it is modified in any way, it must be re-approved for those special circumstances. In addition, the Committee requests prompt notification of any complications which occur during any experimental procedure.

Sincerely,

Lewis B. Sheiner, M.D.
Chairman
Committee on Human Research

py

cc: Contracts and Grants
Dr. G. McCart
Ms. Patricia Underwood

APPENDIX C

JOB DESCRIPTIONS

Clinical Series

Clinical Nurse IV

The Clinical Nurse IV performs and supervises all areas of clinical nursing practice. This includes participation in interdisciplinary teaching, research and patient care; developing and implementing nursing education and research projects; and providing consultation about and/or direct nursing care for patients with complex problems. In addition, provides individual, group, and/or family therapy.

The professional performance of the Clinical Nurse IV is supervised and evaluated collaboratively by the Associate Director of Nursing Service: Clinical Practice, Chief of Service, with input from other nursing staff.

Clinical Nurse III

The Clinical Nurse III performs and supervises all areas of clinical nursing practice. This includes direct patient care for patients with complicated problems, teaching of nursing staff and students, and utilization of research in clinical practice. In addition, may provide individual, group and/or family therapy.

The professional performance of the Clinical Nurse III is supervised and evaluated by the Clinical Nurse IV with input from other appropriate nursing staff.

Clinical Nurse II

The Clinical Nurse II performs basic nursing care and supervises nursing care delivered by Clinical I's and Psychiatric Technicians. This includes direct care to patients with common problems and less predict-

able outcomes. Limited teaching and research responsibilities. In addition, may, under the direct supervision of a qualified therapist, provide psychotherapy, diagnostic interviews and crisis intervention for selected patients.

The professional performance of the Clinical Nurse II is supervised and evaluated by the Clinical Nurse III with input from other appropriate nursing staff.

Clinical Nurse I

The Clinical Nurse I performs basic nursing care under supervision. This includes direct care of patients with common problems and predictable outcomes.

The professional performance of the Clinical Nurse I is supervised and evaluated by the Clinical Nurse III with input from other appropriate nursing staff.

Senior Psychiatric Technicians

Under general supervision of a licensed professional nurse, a Senior Psychiatric Technician performs advanced operational psychiatric technician duties on a regular basis. They are generally assigned the more difficult cases requiring a level of skill and a sound background of experience and educational training.

A Senior Psychiatric Technician must have successfully completed a training program and possess a valid license issued by the California Board of Vocational Nurse and Psychiatric Technician Examiners. Additionally, a Senior Psychiatric Technician must have successfully completed a 6-month probationary period and possess 15 semester units of collegiate level, job-related courses.

Psychiatric Technician

Under the direct supervision of a licensed professional nurse, a Psychiatric Technician provides a basic level of general and psychiatric nursing care to mentally ill/emotionally disturbed patients in the overall psychiatric treatment program.

A Psychiatric Technician must have successfully completed a training program and possess a valid license issued by the California Board of Vocational Nurse and Psychiatric Technician Examiners.

APPENDIX D

STAFF INFORMATION AND CONSENT FORM

As we all know, there are a variety of ways to assess, plan, implement, and evaluate nursing care. During the next several months, I would like to compare two approaches to nursing care and attempt to determine if one approach is more effective than another with psychiatric patients. As patients are admitted, they will be randomly assigned to Team I or Team II and then rated every third day to determine their level of function. I will work with Team I on one approach and Team II on another approach. But all patients will be evaluated on the same criteria. In order to make the research as valid as possible, I will not tell Team I what Team II is doing or vice versa. I will also ask that Team I staff do not exchange ideas with Team II staff and visa versa. We will still continue to be responsible for all patients on the unit and no essential patient data will be withheld from one team or the other. Medical treatment will be prescribed and carried out as usual and all staff will be aware of medical treatment, psychopathology, medications, possible suicide or elopment or any other information essential for safe, high-quality care. Nursing care plans will be different and the focus of nursing care will be different. I will randomly prepare care plans for both teams and will randomly rate patients on both teams. The medical staff and the Clinical III's approve and support this research; however, only the Medical Director will know fully the nursing care approach on each team. The research will be discussed with each patient and each patient will sign a consent form prior to admission. All possible risk will be outlined for the patient. The research has been approved by the Human Subjects Committee.

I am now asking each of you to sign a consent form. Each person's

confidentiality will be protected, no names will be used and the results will be reported statistically with no individual singled out. There is no risk, physical or mental, to any patient or staff. The committment by staff will be to:

1. Carry out as nearly as possible the nursing care designed for the patients on your team. This will include six hours of training time on duty.
2. Rate when asked as honestly as possible the patient on the FLS and NOSIE scale. This will include learning to use those scales.
3. Avoid discussing the specifics of the care designed for patients on your team, either on or off duty. I will answer any questions you have and except those related to the specific approaches to be used by the team.

I will pass out the consent form and read it out loud. If you prefer to see me individually before signing, I will be available at your convenience. You may reach me at 7-360 or through the Langley Porter Operator.

PERMIT, VOLUNTARY CONSENT FOR PARTICIPATION IN RESEARCH

EVALUATION OF NURSING CARE

DATE:_____, 19____

I, _____, agree to participate in a research project directed by Patricia R. Underwood, doctoral student in nursing. I have been told by Ms. Underwood that I will receive instruction from her on specific nursing care and the rating of patients' response to that care and I understand what I am expected to do. I understand that this is for the purpose of research and I agree to participate without any pay. I further understand that the result of the research will be handled in a confidential manner, that my name will not be associated with the findings, that this will have no bearing on my present or future employment and that no finding will be used in any way to influence my annual performance evaluation or any promotion or salary increase that I may be entitled to. I understand I may call Ms. Underwood at 7-360 or through the Langley Porter Operator if I have further questions.

WITNESS _____

SIGNED _____

APPENDIX E

STAFF TEACHING PROTOCOL

Staff on Team I and Team II will receive six hours of training prior to beginning the project. The training will be identical except that Team I will be focused on self-care behavior as the goal and Team II will focus on any goal selected.

Outline

Session I. One hour with both teams at separate times--nurse-patient relationship. This hour will focus on the five components of the nurse-patient relationship and how it is used with patients.

Session II. One hour with both teams separately. Basic assumptions about man and health and illness. This hour will be used to briefly explain the Sullivanian approach to understanding man and how that can be used by nursing.

Session III. One hour, both teams separately. The nursing process. This hour will focus on planning nursing care with a goal in mind. That is, to plan care towards some expected outcome in the patient. This will include a discussion of assessment, planning, implementation, and evaluation.

Session IV, V, and VI. Planning nursing care. Team I: The goal of self-care will be introduced and the remaining three hours spent on using that goal in assessing, planning, implementing, and evaluating nurse care. Team II: We will discuss assessing, planning, implementing, and evaluating of care based on whatever goal is identified by the group, except self-care. For instance, relief of symptoms, increase ego function, increase ability to function.

All sessions will be taped and members of the teams not present will listen to the tapes of the appropriate team. Any new staff employed will have as part of the orientation the requirement of listneing to the tapes for the team to which they are assigned.

TEAM I

The goal of nursing care is the development and maintenance of self-care behavior in patients. The goal will be accomplished by continually assessing the patient as to his level of self care on all 5 basic self care needs and preparing care plans that reflect patient level and appropriate nursing care. A patient may be at different levels on different self-care needs, i.e., the anorexic will probably always be at Level I on food and fluid intake.

In writing care plans: Problem #1 will always be food and fluid,
Problem #2 will always be elimination,
and so on.

Eventually all Clinical I and Clinical II nurses will be able to write the care plans based on the goal of self-care. Patients may have other problems and these will be included in the plan but self-care will be the major focus.

TEAM II

The goals of nursing for Team II are to:

1. control of acute symptoms
2. assist patients to reintegrate the previous level of function
3. to provide health teaching

The goals will be accomplished by continually assessing the patient and preparing care plans that reflect the above goals with appropriate

nursing intervention. A patient may meet one goal and not another, i.e., acute symptoms may subside but the patient may not have reintegrated to previous level of functioning.

In writing nursing care plans, problem -

#1 will always reflect acute symptom control

#2 reintegration work

#3 health teaching

Eventually all Clinical I and Clinical II nurses will be able to write nursing care plans based on these goals.

Nursing care need not be limited to these goals only, but these are to be the major focus of care.

APPENDIX F

SAMPLE - Level I Patient

LANGLEY PORTER INSTITUTE NURSING SERVICE

ADMISSION ASSESSMENT

T P R BP. HT. WT. KNOWN ALLERGIES:

I. PHYSICAL APPEARANCE:

A. Observation: How is the patient dressed? e.g., neat, clean disheveled, style of clothes (conventional, hip bizarre).

Dressed clean, neat; hair neatly groomed, pulled back, tied with ribbon.

B. Interpretation: What is your description of the patient's physical appearance? e.g., build, appearance in relation to age, skin, hair, posture, artifical prothesis, etc.

She's very thin, very under-nourished looking; head slumped down with eyes half closed; appears to need physical assistance from place to place; she doesn't respond to verbal questioning.

II. PATIENT'S VIEW OF HOSPITALIZATION:

A. Observation:

1. Why did you come to the hospital?

Below and above facts were reported by stepsister for the patient was nonverbal or non-responsive, totally withdrawn; staying in bed all day and not eating, except for odd snacks.

2. What do you think your problem is?

Doesn't speak.

3. What do you think will happen to you while you're in the hospital?

Doesn't speak.

ADMISSION ASSESSMENT (continued)

B. Interpretation: What is the level of the patient's understanding the reason for hospitalization?

Doesn't speak.

III. GENERAL ATTITUDE AND BEHAVIOR:

A. Observation:

1. Level of functioing at admission:

a. What was the patient's initial response as you approached him?

Totally non-responsive; needed physical assistance to move.

b. How does he respond to the admission procedure and ward orientation? e.g., cooperative, attentive, curious, frightened, oblivious, etc.

Frightened.

c. Is he oriented to person, place, and time?

Hard to tell.

d. How does he respond to other patients on the unit?

Non-responsive.

e. What do you observe about the patient's level/pattern of communication? e.g., non-verbal, talkative, reticent, free-flowing, whines, etc.

Non-verbal.

2. Level of Functioning Prior to Illness:

a. When you were feeling your best, how did you do at work, school, home, with friends?

Taking pictures, read, T.V., listening to classical music,

ADMISSION ASSESSMENT (continued)

opera; attended few opera performances. Three years ago held photographer's job.

b. What do you do when you feel uptight or angry? Do others help? If so, who are they?

Withdraws and becomes verbally non-responsive.

c. Have you ever thought of hurting yourself? Tell me about it.

One year ago, before hospitalization in Napa, thought of doing it - didn't follow through though.

d. Do you drink? A pint a day?

Wine occasionally.

e. Do you take medicine prescribed by an M.D.? Do you ever take medicine you buy without a prescription? e.g., ASA, MOM, etc. Have you ever used street drugs?

Prescribed drugs - Yes. Street drugs - No. Occasionally has smoked pot.

B. Interpretation of patient's past and present Level of Functioning: What is your assessment of the patient's ability to deal with stress at the present time? Prior to hospitalization?

Difficult to assess at present. In the past, withdraws.

IV. ACTIVITIES OF DAILY LIVING:

A. Observation:

1. Tell me about what you do all day.

Talks a lot about working on projects; has difficulty in following through. Sketches and paints prints. Very good in black & white photo.

ADMISSION ASSESSMENT (continued)

2. What and when do you eat? Do you have problems with eating? What do you do about the problems?

   High protein diet - lots of meat.

3. Do you have regular BM's? How often? What do you do when you have problems with BM? Do you have any problem with urination. What do you do if you have problems?

   Constipation which lasts for several days; she hasn't had a B.M. in several days at present.

4. Do you sleep well at night? How many hours? What do you do if you have problems sleeping?

   No sleep in several days.

5. Personal hygiene: How often do you bathe or shower? How often do you brush your teeth? Do you have necessary toilet articles with you?

   Ordinarily showers regularly and also normal oral hygiene. At present hasn't brushed teeth or showered for several days. Has toilet articles with her.

   Female's Menstrual Cycle: Do you menstruate? Tell me about your periods. e.g., When started? How long? Any problems? Quantity of flow.

   Never had mensus. Would like to be a man.

6. Do you smoke? How many packs a day? Do you have cigarettes with you now? Do you have enough money to buy the amount you need?

   Doesn't smoke.

ADMISSION ASSESSMENT (continued)

7. What do you enjoy doing in your spare time? What is your favorite activity? Who do you do it with?

Read, writes, classical music, opera, take pictures.

B. Interpretation: How well is the patient able to care for his own physical needs? e.g., needs total help, with supervision, needs reminder, needs no help. Has patient been able to use spare time effectively prior to illness?

During physical,taking her time, she was able to undress herself slowly; dresses up rather quickly without any assistance. She may need help with hygiene, meals, and at bedtime.

V. SUPPORT SYSTEM:

A. Observation:

1. How does the patient relate to the family members who accompanied him to the hospital? How do the family members relate to him?

Non-responsive; stepsister concerned.

2. Who do you expect to have visit you?

Close relatives and perhaps girl friend, Janice.

3. Who are you closest to in your family?

One older brother (step), Butch.

4. Do you have any close friends?

One female, Janice.

5. Who has been most helpful to you lately?

Stepsister, Vivian.

6. Who do you contact for spending money?

Sis, Vivian.

ADMISSION ASSESSMENT (continued)

7. Who have you lived with in the past two years?

Herself and close relatives.

B. Interpretation: Who or what is patient's present support system? Are they reliable? Have they been effective prior to hospitalization? Will patient turn to them? Does patient need additional or alternative resources?

Mother, stepfather, stepsister

VI. OVERALL ASSESSMENT: Statement of the major nursing problems as can be determined by above assessment.

1. Physical assistance with: oral and body hygiene; help her to prepare for bed and on arising in A.M.; assist her to meals.

DATE _____ SIGNATURE _____

LPI NURSING SERVICE - NURSING CARE PLAN
EXPANDED CARE PLAN

SAMPLE SELF CARE PLAN

LEVEL 1

T *98.6* P *80* R *20* BP *130/80* HT *5'4"* WT *109* Known Allergies *None*

Assessment: *Extremely regressed, withdrawn, non-verbal, 22-year-old, white female. Unable to care for basic biological needs (LI).*

Long Term Goal: *Reestablish level of self care prior to illness.*

Short Term Goal: *Meet Level I needs.*

Signature and Title

Name

DATE	PROBLEM	OUTCOME	NURSING ORDERS	REVIEW & EVALUATION DATE & CONDITION
	1. Patient is unable to regulate food and fluid intake. She is not eating.	*a. Patient will take enough food and fluid to sustain life.*	*a. Accompany to meals and assist in selecting food. Provide juices q. 2-3 hours. Provide H.S. snack.*	
	2. Patient is unable to control elimination. She is constipated.	*a. Patient will have regular B.M.*	*a. Push fluids.* *b. Encourage intake of ruffage at meals.* *c. Accompany patient to bathroom and encourage B.M.* *d. Ask patient not to flush toilet & check B.M. if she reports.* *e. Observe for signs of impaction.* *f. Provide & record results of medication (colace).*	

SAMPLE SELF CARE PLAN

LEVEL 1

(continuation)

DATE	PROBLEM	OUTCOME	NURSING ORDERS	REVIEW & EVALUATION DATE & CONDITION
	3. *Patient unable to control activity. Has been staying in bed all day.*	a. *Patient will have adequate rest and exercise.*	a. *Wake patient in A.M. and stay with her until she is up and dressed.* b. *Walk with her length of hall X2/A.M. and P.M. shift.* c. *Keep patient up until 9 P.M.* d. *Patient may be on bed only 3 hrs. during 8 A.M. - 9 P.M. and not all at once.*	
	4. *Patient is unable to provide her own personal hygiene or select clothes.*	a. *Patient will maintain body temperature.* b. *Patient will be clean enough to prevent disease.*	a. *Assist patient in selecting clothes and dressing.* b. *Assist patient to bathe and shampoo Tuesday & Saturday.* c. *Provide soap, lotion, etc.* d. *Observe to see that she is able to bathe & shampoo alone.*	

SAMPLE SELF CARE PLAN

LEVEL 1

(continuation)

DATE	PROBLEM	OUTCOME	NURSING ORDERS	REVIEW & EVALUATION DATE & CONDITION
			e. *Assist patient to collect & wash clothing every week.*	
	5. *Patient is totally mute and withdrawn.*	a. *Patient will accept nursing assistance in self care.*	a. *Assist patient as indicated above with biological needs.* b. *Spend at least 15 min. 2X with her a. A.M. & P.M. shift.* c. *Allow her to be alone in room as per #3d.* d. *Accompany to all unit activities and allow to leave if becomes increasingly withdrawn.*	

LPI NURSING SERVICE - NURSING CARE PLAN
EXPANDED CARE PLAN

ROUTINE CARE PLAN

LEVEL 1

T *98.6* P *80* R *20* BP *130/80* HT *5'4"* WT *109* Known Allergies *None*

Assessment: *Extremely regressed, withdrawn, non-verbal, 22-year-old, white female. Needs lots of assistance to eat and participate.*

Long Term Goal: *Alleviate symptoms.*

Short Term Goal: *Adjust to hospital.*

Signature and Title

Name

DATE	PROBLEM	OUTCOME	NURSING ORDERS	REVIEW & EVALUATION DATE & CONDITION
	1. Patient is mute and withdrawn. *Patient refuses to eat or drink.*	*1. Patient will talk and participate in activities.* *Patient will eat and drink.*	*1a. Get patient up in A.M.* *b. Encourage her to participate in activity.* *c. Discourage staying in her room.* *d. Sit with patient and feed if necessary.* *e. Give at least 1000 cc fluids per shift.*	
	2. Patient unable to participate with other patients or with staff.	*2. Patient will regain previous level of participation.*	*2a. Develop nursing 1:1 relationship.* *b. Encourage patient to go to group.* *c. When ready start volunteer job.*	
	3. Patient doesn't understand her illness or her medication.	*3. Patient will know what her illness is and will take her medications regularly.*	*3a. Meet with patient & family at visits to talk about patient's progress.*	

ROUTINE CARE PLAN

LEVEL 1

(continuation)

DATE	PROBLEM	OUTCOME	NURSING ORDERS	REVIEW & EVALUATION DATE & CONDITION
			3b. Teach patient about her drugs.	

APPENDIX G

INSTITUTE OF REHABILITATION MEDICINE
400 East 34th Street
New York, N. Y. 10016

John E. Sarno, M.D.
Director, Outpatient Services

February 7, 1975

Ms. Patricia R. Underwood
4380 25th Street
San Francisco, California 94114

Dear Ms. Underwood:

I have reveived your letter of January 31, 1975 and am enclosing copies of the Functional Life Scale and our preliminary instruction manual.

I hope you will find these helpful in your studies.

Very truly yours,

John E. Sarno, M.D.
Director
Outpatient Services

JES/jhb
Enclosure

THE FUNCTIONAL LIFE SCALE (FLS)

Please rate what this patient has ACTUALLY done in in the LAST THREE DAYS, by filling in each open block (DO NOT RATE TOTAL COLUMN) using this key: 0 = does not perform activity at all; 1 = performs activity very poorly; 2 = performs activity moderately well; 3 = approaches normal performance, 4 = normal.

X = NOT APPLICABLE

COGNITION	Not Applicable	Self-initiation	Frequency	Speed	Overall Efficiency
1. Is oriented for time (e.g., hour, day week).	X	X	X	X	
2. Uses "yes" and "no" appropriately.	X	X	X	X	
3. Understands speech (e.g., simple commands, directions, television.	X	X	X	X	
4. Calculates change (money).	X	X	X	X	
5. Does higher calculation (balance checkbooks, etc.).	X	X	X	X	
6. Uses appropriate gestures in lieu of speech (not applicable for patients without speech impairment).					
7. Uses speech for communication.	X				
8. Reads.	X				
9. Writes.	X				
10. Social behavior is appropriate.	X	X	X	X	
11. Able to shift from one task to another with relative ease and speed.	X	X	X	X	
12. Aware of self (e.g., of mistakes, inappropriate behavior, poor judgment, etc.).	X	X	X	X	
13. Attempts to correct own errors (e.g., of judgment, mistakes, etc.).	X	X	X	X	
14. Has good memory (e.g., names of people, recent events, etc.	X	X	X	X	
ACTIVITIES OF DAILY LIVING					
15. Able to get about.	X		X		
16. Does transfers.	X		X		

THE FUNCTIONAL LIFE SCALE (continuation)	Not Applicable	Self-initiation	Frequency	Speed	Overall Efficiency
17. Feeds self.	X		X		
18. Uses toilet	X		X		
19. Grooms self (e.g., wash, brush teeth, shave, etc.).	X				
20. Dresses self.	X		X		
21. Bathes self (including getting in and out of tub or stall).	X				
UNIT ACTIVITIES					
22. Prepares simple food or drink (e.g., snacks, light breakfast).					
23. Performs light housekeeping chores (e.g., meals, dishes, dusting).					
24. Performs heavy housekeeping chores (e.g., floor or window washing, etc.).	X				
25. Performs odd jobs in or around unit (e.g., gardening, electrical, auto, mending, sewing).	X				
26. Engages in solo pleasure activities (e.g., puzzles, painting, reading, stamps).			X	X	
27. Uses telephone (e.g., dialing, handling).	X				
28. Uses television set (e.g., changing channel, etc.).			X		
29. Uses record player or tape recorder.			X		
OUTSIDE ACTIVITIES					
30. Engages in simple pleasure activities (e.g., walk, car rides, etc.).	X			X	X
31. Goes shopping for food.					X
32. Does general shopping (e.g., clothes, gifts, etc.).					X

THE FUNCTIONAL LIFE SCALE (continuation)	Not Applicable	Self-initiation	Frequency	Speed	Overall Efficiency
33. Performs errands (e.g., post office, cleaner, bank, pick up newspaper, etc.).	X				
34. Attends spectator events (e.g., theatre, concert, sports, movies).	X			X	X
35. Uses public transportation accompanied (mass transportation).				X	
36. Uses public transportation alone (rate NA if item 35 is 0).				X	
37. Takes longer trips accompanied (plane, train, boat, car).				X	X
38. Takes longer trips alone (rate NA if itme 37 is 0).				X	X
SOCIAL INTERACTION					
39. Participates in games with other people (e.g., cards, chess, checkers).				X	
40. Participates in home social activities (e.g., family gathering, party, dancing).				X	X
41. Attends social functions outside of home (e.g., home of friend, dining at restaurant, dance).				X	X
42. Participates in organizational activities (e.g., religious, union, service club, professional).				X	X
43. Goes to work or school at comparable premorbid level (not housekeeping at home). (Do not rate if item 44 is to be rated).				X	
44. Goes to work or school at lower than premorbid level. (Do not rate if item 43 has been rated)				X	

Rater's Name _____

Title _____

Date _____ Time _____ of rating

THE FUNCTIONAL LIFE SCALE

Name _____ Date _____ Examiner _____

Diagnosis _____ Date of Onset _____

Age _____ M F IP OP Education (in years) _____

Chart # _____ Previous Occupation _____

Proficiency in English: Good Average Below Average

Examiner's Profession _____

	Total Score	Max. Score	NA	Adjust. Max. (Max.-NA)	Total Score / Adjust. Max.	Proportion
Cognition						
ADL						
Home Activities						
Outside Activities						
Social Interaction						
Overall Score						
Self-initiation Score						
Frequency Score						
Speed Score						
Overall Efficiency Score						

THE FUNCTIONAL LIFE SCALE

Instructions

1. This is a rating scale and the examiner is expected to make the necessary judgments and assign appropriate ratings. The examiner's ratings should reflect what the patient actually does, rather than what he can do -- actuality not potentiality. This is the essence of this scale and must be clearly understood. The scale does not ask what the patient's disability or potential is.
2. The rating values are as follows:

   0 - does not perform the activity at all

   1 - performs the activity very poorly

   2 - performs the activity moderately well

   3 - approaches normal in performance

   4 - normal
3. The standard for a normal rating (4) refers to the performance of healthy people in the population at large. In other words, the patient is to be measured against generally accepted standards for non-disabled people.
4. On all items, such as reading, where multiple examples are given, a patient's overall function in that behavior must be rated. The examples are of increasing complexity but the rating is not to be used solely on the examples.
5. The examiner must rate every open box in the categories of self-initiation, frequency, speed and overall efficiency.
6. When it is clear that a given item does not pertain to the person being rated, the Not Applicable box is to be checked. For example, a millionaire would not be likely to ride the subway nor would a man

whose wife was well be expected to do food shopping.

7. When the Not Applicable box is blocked out, it is mandatory to rate all the open boxes on that line.
8. When an activity is not performed at all, zeros must be entered in every open box on that line.
9. Because of the importance of school or work, items 43 and 44 receive heavier weight. Only one of the two is to be rated and the usual scores on whichever is rated should be doubled. The unrated item is to be left blank; it is not to be marked Not Applicable. In the case of a retired individual or housewife, check only item 43 Not Applicable and do not rate item 44 at all. Multiply by 2 as usual.
10. Scoring is simply a matter of finding the proportion (percentage) of the patient's score with respect to the maximum possible score, after adjustment for Not Applicable items. Note that qualities, like self-initiation, frequency, etc. can be scored by adding the vertical columns.

FLS INSTRUCTIONS

Please remember this is a rating of actual function, not potential function. Ratings may be made on: (1) actual observation, (2) reports from other staff, or (3) patient reports. Do not set up artificial situations to test patients.

Cognition

1 - 3 Self explanatory

4 & 5 If patient is not allowed money, he receives 0. If he does not have money he receives 0. If he does not manage his own financial affairs while in hospital he receives 0. If patient has limited money and handles with assistance he rates 1. If he has limited money but handles it well with no assistance he rates 4. If patient talks with family or agent about financial affairs he is rated 1-3, depending on his involvement. If he takes care of all his financial affairs no matter how limited he rates 4.

6 Self explanatory

7 If the patient is mute or uses only bizarre language rate 0. If he attempts to communicate but is slow or responds only to others questions, i.e. speaks only when spoken to, he rates 1. If he speaks so fast and so often he is confusing also rates 1. If he responds and makes sense and communicates appropriately but infrequently then rate 3. If no disturbance in communication rate 4.

8 & 9 If patient reads or writes at what would be expected of "average person" rate 4. If he can read or write but does not then rate

0. Rating 1, 2, 3 will be used to identify that patient reads and writes and to what extent. If patient must have MMPI read to him that is 0.

10 Appropriate - ward norms

11 Self explanatory

12 If the patient can distinquish self from others and environment he may receive 1, 2, 3, 4, depending on how "normal." If patient is out of contact rate 0. If patient is so aware of self that he is obsessing and ruminating that would be 1 or 2. He is not functioning at "normal."

13 If this is observable or reportable rate patient accordingly. If you are unable to determine rate patient 2, which will equal out over patients.

14 Self explanatory

ADL

15, 17, 18, 19, 20 & 21 Self explanatory

16 NA unless patient is in wheelchair

Unit Activities

22 If patient is able to go to refrigerator or assist with snack that is 1-4 depending on level of function. 0 if patient is unable to use refrigerator or snack time without staff telling him.

23 If patient takes care of own environment, bed, nite stand, etc. rate 1-4 depending on level. 0 only if unable to do anything without staff telling or doing for him.

24 Usually NA

25 0 unless assigned ward job. 1-4 depending on level of function in performing ward job.

26 Self explanatory

27 If patient is not allowed to use phone rate 0. If he does anyway, rate according to ability to manage the instrument not according to "content." Rate "content" under #7

28 & 29 Self explanatory

Outside Activity

30 If goes alone rate 4. If goes with other patient, family, or friends rate 2-3. If goes only with staff rate 0-1. If restricted to unit rate 0.

31 NA if not assigned as part of program or if it would not be regular activity if well. 0 if too ill to be assigned. 1-4 if goes depending on level.

32 This is shopping for self or family. May be paper, books, cigarettes, etc. 0 is he does not. 1-4 on how well.

33 This relates to what he can do for self and others. If he picks up candy at canteen or cigarettes, etc. 0 if he does not. 1-4 depending on level.

34 Same as 30. If a staff goes because of tickets but patient could have gone just as well alone - 4.

35 & 36 NA if patient has never used public transportation or is from out of town and would have no reason to use. 0-4 on ability. If 35 is NA 36 is NA. If 35 is 0, 36 is NA.

37 & 38 Same as 35, 36

Social Interaction

39 & 42 Self explanatory

40 & 41 Should read unit not home. Self explanatory

43 & 44 If housewife or never employed or out of school 2 or more years- NA. Rate only 1 - draw a line through the other.

PRELIMINARY MANUAL OF INSTRUCTIONS FOR THE FUNCTIONAL LIFE SCALE

As indicated in the journal article in the Archives of Physical Medicine and Rehabilitation, Vol. 54, May, 1973, The Functional Life Scale (FLS) was designed in order to provide a quantitative estimate of an individual's ability to participate in all of the basic daily activities which are customary for most human beings. Therefore, it can be used for such a measurement with any kind of disability, whether it is physical or psychological. The basic diagnosis is not germane, the cause of the disability is not to be taken into consideration. One is only concerned about what the patient can do. In this respect, it is extremely important to rate performance on the basis of what is actually done and not what the patient says he might be able to do. For example, many patients or their families will say that a patient can perform a particular activity but when asked specifically whether he does or not, they may indicate that he does not because he is too slow at it or will only do it if urged by someone else, etc. This is the first and most important rule, then, that actual activity only be rated, never potential activity.

Now as we look at the Scale it will be noted that there are five sub-groups: Cognition, Activities of Daily Living, Home Activities, Outside Activities and Social Interaction. Further note that four parameters must be rated, where applicable, on each of these activities; that is, Self Initiation, Frequency, Speed and Overall Efficiency. There is also a box headed "Not Applicable." We have blacked out boxes that are not to be rated. Where a Not Applicable box has been blacked out it means that the rater has no choice and that he must rate the remaining open boxes. For example, 13 of the 14 items in the first group, Cognition, are blacked out in the Not Applicable box. That means that the rater must rate each

of those categories. No. 6 in that first group has an open Not Applicable box and that means that the rater may check Not Applicable if the patient does not have aphasia. He would then not have to rate those items.

Further studying the cognition sub-group, it will be noted that for the first five items, Self-Initiation, Frequency and Speed have been blacked out. Therefore, these are not to be rated. The only one that is left is Overall Efficiency which means that if you are judging time orientation, yes-no usage, understanding of speech, calculation of change and doing higher calculation, you will just make one overall estimate of the patient's ability. If the patient is aphasic or dysarthric, you will want to rate him on category six in order to see how well he uses gestures in substitution for speech. In that case he is rated in all four boxes. Items 7, 8, and 9 generally apply to patients with aphasia or dysarthria but they might equally well apply to someone who had schizophrenia or who communicated very little for other reasons. In any case, all of the boxes in these categories must be rated. Items 10 through 14 have to do with various other cognitive functions and must be rated, although only overall, in order to give one an idea of the patient's ability to function in these spheres.

Bear in mind that unless the Not Applicable box has been blacked out, each item must be rated in all the open boxes. Note that in the Activities of Daily Living section we have blacked out Frequency for such things as getting about, transfers, feeding, use of the toilet and dressing since these are things that are performed routinely by everyone with roughly the same frequency. However, self-initiation, speed and overall efficiency must be rated. Looking at items 22, 23, and 24 under Home Activities, we have left the rater the option of declaring these not applicable since,

for example, most of these have to do with female activities, though not always. Hence they may not be applicable if we are rating a male. However, if the man has switched roles with his wife and she is out working, then all of these things are applicable and must be rated. Conversely, item 25 applies to just about everyone in society, although perhaps a very wealthy man might never do any of these things, and therefore this item must always be rated.

A word about the categories and items selected for the FLS. The final form of this Scale represents a great deal of experimentation, additions, subtractions, etc. The idea was to sample enough everyday activities to make this valid and yet not too many to make it cumbersome. No doubt one could think of many more items which would be valuable. However, we feel that these are a representative sample and should give us a good idea of how the patient is making out in everyday life.

It should be clear that the Scale can only be given to someone who is not hospitalized or institutionalized. If a patient is admitted to the hospital it can certainly be given to determine what he was doing before he came in. If one wishes to measure his progress after an inpatient program of rehabilitation, one will have to wait for a few weeks until he has lived outside for awhile, at which point the FLS may be given. Once more, remember that it is not measuring physical disability, it is measuring life ability. For example, it is entirely conceivable that a patient with aphasia but with no physical problem might have an extremely low score while a quadriplegic who was totally rehabilitated, married, working at a job outside, leading a full social life, would come out with an extremely high score.

Let us now deal with the always difficult problem of how one rates

the patient. In general we have found that the process takes no longer than 15 or 20 minutes. One should, of course, be completely familiar with the Scale so that questions can be asked in a more or less random fashion and a conversational tone maintained. Family members may certainly be present during the interview since they may have good information to contribute. The rater must be highly critical of responses and be sure that the patient is not expressing wishful thinking.

Rating is on a five-point scale, as follows:

0 - does not perform the activity at all

1 - performs it, but very poorly

2 - performs the activity but is substantially deficient

3 - performance approaches normal

4 - normal

Until one has gained experience with the rating scale, one should frequently refer back to these and try to develop at the beginning a satisfactory modus operandi. One cannot expect mathematical precision with this but the five categories are sufficiently distinct from each other so that one should be able to learn to rate accurately, as pointed out in the paper, reliability amongst a great variety of professionals was excellent.

Now let us look at some of the specific items and the various ratings which might be applied. In item 1, in the great majority of patients this will be normal. It is easy to estimate and rate between 0 and 4 if the patient is having some difficulty. The same goes for item 2. In item 3, this is a rough estimate of language comprehension, which is often impaired in aphasics. Your own observations during the interview and information from family members can help with this one. Whereas formal testing might reveal a rather substantial comprehension deficit, some of these patients

are very clever at piecing together what is said from understanding just a few words. This, however, is functionally excellent and therefore the patient should be appropriately rated. To answer item 4 you may give them a few simple tests and for item 5 it may be necessary to check with the patient or his spouse.

The point of item 6 is to find out how intact the patient is and whether he is making an attempt to communicate despite the fact that he has a speech disturbance. Self-initiation would be rated on the basis of whether he was making an attempt at all; Frequency is obvious and Speed might reflect his degree of alertness. Overall Efficiency would measure all of these and in a sense indicate how successful he was in using gestures to communicate. Item 7 is rated to indicate how successful he is in using speech for communication. If his wife urges him to speak, obviously he would get a very low score on Self-initiation. In item 8 we have indicated some different levels of reading ability as a guide. Reading his own name would be the lowest level, single words would be somewhat better, street signs higher yet, etc. Item 9 would pertain to problems produced both by aphasia and a motor disability. The point is to find out what the patient's functional writing level is. Items 10 and 14 have to do with the individual's general alertness, awareness of himself and his environment and then memory which is a very specific cognitive function which is fairly easy to rate.

Do not base ratings only on the basis of examples given. They have been included simply to give one an idea of what we have in mind. You may want to develop your own hierarchy as a basis for rating.

The ADL section is familiar to all workers in rehabilitation fields. In item 15 we have used the phrase "to get about" since we are not

specifically interested in whether a patient walks or not. Recall the previously quoted example of a quadriplegic in a wheelchair who may be given top scores on that line if he leads a normal existence despite the fact that he is in a wheelchair. If he goes to work, goes to the theatre, goes to religious services, etc., he is getting about as well as his neighbor who walks normally. All but the most severely involved patients can do transfers without difficulty. The last five items in that section are almost always impaired in patients with severe disabilities such as stroke, paraplegia or quadriplegia. Again, the patient with a great deal of ambition and motivation will do more than the passive, dependent or depressed patient. Frequency has been blacked out in a number of ADL items but is rated in grooming and bathing since a person may choose to do these things less than he normally would because of the difficulty in performing them. This one wishes to know and to rate.

Moving to the next category, Home Activities, we usually consider that both males and females would be expected to perform item 22. Does the patient go to a refrigerator for a soft drink or a snack, can he make his own toast in the morning, etc.? Items 23 and 24 are clearly homemaking chores and generally refer to a woman. Item 25 was included since it is applicable to everyone except the very rare individual. We have often found rating item 26 difficult, although everyone engages in activities by himself. Very few do puzzles or paint but many people read, knit, etc. This is the type of thing we are attempting to sample. Items 27, 28, and 29 are relatively low level measurements of very mundane activities. The question relates to the patient's ability to manipulate the devices noted. Using a record player or tape recorder requires a good deal more dexterity than handling the telephone or managing the television set.

The items dealing with outside activities are very important, give a great deal of information and are easy to rate. In item 30 we are interested only in whether the patient is a self-starter in this activity and how often he engages in it. Obviously, speed and efficiency are not applicable here. The same thing applies to food shopping except that speed is a factor. If a patient takes all afternoon to do a small shopping he obviously must be rated down for this. We have left open the Not Applicable box since men often do not shop for food. However, everyone should do general shopping at some time or another in his life and therefore item 32 must be rated for everyone. Items 33 and 34 are quite clear. In item 35 we are attempting to find out whether the patient can use bus, subway, etc. and whether he does so accompanied or alone. If the patient cannot use a bus accompanied, he most certainly will not be able to use it alone and therefore item 36 is rated Not Applicable. Similarly if the patient does not take long trips accompanied, he probably does not do so by himself and 38 would be rated Not Applicable. However, if the patient either uses mass transportation or takes long trips accompanied, you will then want to inquire whether he does so alone and if not he must be rated 0 on items 36 and 38.

The final category attempts to rate the patient's ability to interact with others. They are all rather obvious and in general one rates only whether the patient initiates the activity and how frequently he engages in it. Since items 43 and 44, dealing with attending school or going to work, are very important, they receive heavier rating. Only one of these two items can be rated since the patient will have returned to work or school at a comparable premorbid level or at a lower than premorbid level. One then rates whether he has initiated it himself and how often he goes

to work as well as his overall ability to do the job. If an individual has not returned to work and he is in the age group in which he would be expected to do so, one would rate item 43 0 across the board. If the patient is being pushed to go to work by his wife, he would be rated down on Self-Initiation and if he attended only two or three days a week he would get a lower score on frequency, for example. In order to give this category heavier weight, as noted above, the scorer will multiply the final score by 2. If the patient was a housewife prior to the onset of illness, item 43 will be marked Not Applicable

It should be pointed out, as it has been in the Journal article, that the Scale will give information about specific activities, an overall idea of function in certain groups, as in ADL and Cognition and it will also provide information on such specific characteristics as the patient's motivation and his speed.

Scoring the FLS is a matter of finding the proportion (percentage) of the patient's scores with respect to his maximum possible score. Scores are obtained both for each category (i.e. Cognition, ADL, etc.) and for each quality of performance (Self-Initiation, Frequency, etc.) being measured. An Overall Score is also obtained; it is the proportion (percentage) of the patient's total score in all of the five categories as compared to his maximum possible total.

To find the proportion in the patient's Cognition section, for example, the scorer first totals each item in the sixth box under the Total column. Items checked Not Applicable are not totaled; their boxes under the Total column are, for the moment, left blank. Then all of the scores in the Total column are added together and this total is transferred to the Scoring Sheet and placed in the Total Score box. The scorer then refers

back to the rating section to check whether any item(s) in the Cognition section has been marked Not Applicable. If item 6, for instance, has been marked Not Applicable, a 4 is placed in each of the four boxes following it, and a total of 16 is placed in the sixth box under the Total column. This procedure is followed for each item marked Not Applicable, the total scores of each Not Applicable item are added, and this total is transferred to the NA box on the Scoring Sheet. (It will be noted that the Maximum Score box has already been filled in because its total cannot change.) It then remains for the scorer to subtract the number in the NA box from the number in the Maximum Score box. This results in the Adjusted Maximum score--the maximum possible total score that the patient could achieve were he to receive the highest possible rating on each item in the Cognition section. The patient's Total Score is then placed over his Adjusted Maximum score in the next box in fractional form, and this fraction is then converted to a percentage in the final box. If the patient has received the highest possible score (4) in each box of each applicable item in the Cognition section, he will, of course, receive a final proportional score of 1.00 or 100%.

The proportional scores for each of the other categories are arrived at in the same manner--with one exception. In the final Social Interaction category, either item 43 or item 44 is to be rated. Both items should not be rated, nor should the unrated item be marked Not Applicable. If it were marked Not Applicable, the Adjusted Maximum score for this entire section would be decreased and the patient would receive an unrealistically high proportional score. The rater may find it useful to draw a line through the unrated item in order to avoid confusion in scoring. Note, of course, that the total for this rated item is multiplied by 2.

To determine the Overall Score, the columns under the Total Score and NA headings of the Scoring Sheet are totaled, and the same procedure described previously is followed to determine the overall proportional score for the entire five categories.

To find the score for each of the patient's four qualities of performance (i.e. Self-Initiation, Frequency, etc.), the same procedures are followed that were used to determine the scores for the categories, as described previously--only now the scorer is working vertically rather than horizontally on the rating section. For instance, all of the 43 boxes under the Self-Initiation column are totaled together regardless of category. Items not applicable are treated just as they were when the scorer was working in a horizontal fashion--their totals being found and entered on the Scoring Sheet after the applicable items have been totaled and entered, and the same procedures described previously are followed to determine the overall proportional scores in each of the four categories.

APPENDIX H

NURSES' OBSERVATION SCALE FOR INPATIENT EVALUATION (NOSIE-30)

Please rate this patient's behavior as you observed it during the LAST THREE DAYS. Indicate your choice by filling in one block for each item, using this key: 0 = Never, 1 = Sometimes, 2 = Often, 3 = Usually, 4 = Always.

0...1...2...3...4... (1) Is sloppy.
0...1...2...3...4... (2) Is impatient.
0...1...2...3...4... (3) Cries.
0...1...2...3...4... (4) Shows interest in activities around him.
0...1...2...3...4... (5) Sits, unless directed into activity.
0...1...2...3...4... (6) Gets angry or annoyed easily.
0...1...2...3...4... (7) Hears things that are not there.
0...1...2...3...4... (8) Keeps his clothes neat.
0...1...2...3...4... (9) Tries to be friendly with others.
0...1...2...3...4... (10) Becomes upset easily if something doesn't suit him.
0...1...2...3...4... (11) Refuses to do the ordinary things expected of him.
0...1...2...3...4... (12) Is irritable or grouchy.
0...1...2...3...4... (13) Has trouble remembering.
0...1...2...3...4... (14) Refuses to speak.
0...1...2...3...4... (15) Laughs or smiles at funny comments or events.
0...1...2...3...4... (16) Is messy in his eating habits.
0...1...2...3...4... (17) Starts a conversation with others.
0...1...2...3...4... (18) Says he feels blue or depressed.
0...1...2...3...4... (19) Talks about his interests.
0...1...2...3...4... (20) Sees things that are not there.
0...1...2...3...4... (21) Has to be reminded what to do.
0...1...2...3...4... (22) Sleeps, unless directed into activity.
0...1...2...3...4... (23) Says that he's no good.
0...1...2...3...4... (24) Has to be told to follow hospital routine.
0...1...2...3...4... (25) Has difficulty competing simple tasks on his own.
0...1...2...3...4... (26) Talks, mutters, or mumbles to himself.
0...1...2...3...4... (27) Is slow-moving or sluggish.
0...1...2...3...4... (28) Giggles or smiles to himself for no apparent reason.
0...1...2...3...4... (29) Is quick to fly off the handle.
0...1...2...3...4... (30) Keeps himself clean.

Rater's name _____

Title _____

Date _____ Time _____ of rating

APPENDIX I

GLOBAL RATING SCALE (GRS)

Please rate this patient's behavior as you observed it during the LAST THREE DAYS. Indicate your choice by checking in ONE category for each question.

1. Considering your total clinical experience how mentally ill is this patient at this time?

   Normal, not at all _____

   Borderline mentally ill _____

   Mildly ill _____

   Moderately ill _____

   Markedly ill _____

   Severely ill _____

   Among the most extremely ill patients _____

2. Compared to his/her condition at admission to the unit, how much has he/she changed? (At the first evaluation on admission, answer this question according to your prediction of the patient's response to treatment).

   Very much improved _____

   Much improved _____

   Minimally improved _____

   No change _____

   Minimally worse _____

   Much worse _____

   Very much worse _____

Rater's Name _____

Title _____

Date _____ Time _____ of rating

APPENDIX J

INDEX OF MEDICATION LEVEL (IML)

Please indicate the amount of medication this patient has been taking in the LAST THREE DAYS.

NONE _____ The patient is taking NO psychoactive drugs

MILD _____ The patient is taking
THORAZINE
0-400 mgm. in 24 hours
PROLIXIN
0-30 mgm. in 24 hours
PROLIXIN DECANOATE
0-50 mgm. per WEEK
STELAZINE
0-20 mgm. in 24 hours

MODERATE _____ The patient is taking
THORAZINE
425-1200 mgm. in 24 hours
PROLIXIN
35-50 mgm. in 24 hours
PROLIXIN DECANOATE
55-100 mgm. per WEEK
STELAZINE
25-60 mgm. in 24 hours.

HIGH _____ The patient is taking
THORAZINE
1200 mgm. in 24 hours
PROLIXIN
50 mgm. in 24 hours
PROLIXIN DECANOATE
100 mgm. per WEEK
STELAZINE
60 mgm. in 24 hours

OTHER _____
Please indicate the name and amount in mgm. in 24 hours of any other psychoactive drug, i.e., AVENTYL, ELAVIL, MELLARIL, LITHIUM.

Rater's Name _____

Title _____

Date _____ Time _____ of rating.

APPENDIX K

PATIENT INFORMATION AND CONSENT FORM

"Patients admitted to this unit are often asked to participate in selected research projects. At this time, we are conducting a project to evaluate two approaches to nursing care as they assist patients in recovery from illness. You will receive specifically planned nursing care and your response to that care will be rated every three days during your hospitalization by nursing staff. There is no physical or emotional risk involved and this will in no way interfere with any other treatment you are to receive. All material collected will be confidential and at no time will your name be used. This will have no bearing on any future treatment you may request here or elsewhere. You may call me at 681-8080 if you have further questions about the research."

PERMIT, VOLUNTARY FOR PARTICIPATION IN RESEARCH

EVALUATION OF NURSING CARE

DATE _____19 _____

I _____

agree to participate in a research project directed by Patricia R. Underwood, doctoral student in nursing. I have been told by Ms. Underwood that I will be receiving specifically planned nursing care and that my response to that care will be rated every three days by nursing personnel and that neither the care nor the rating will in any way interfere with my overall treatment or hospital stay. I understand that this will entail no physical risk to me. I also understand that any emotional risk would be the same as those which might occur during my hospitalization. I understand that this is for the purpose of research and I agree to participate without pay. I further understand that the result of the research will be handled in a confidential manner and that my name will not be used. I understand that the research will have no bearing on any future treatment I may request here or elsewhere. I understand that I may call Ms. Underwood at 7-360 or 681-8080 if I have questions about the research.

WITNESS _____

SIGNED _____

PERMIT, VOLUNTARY FOR PARTICIPATION IN RESEARCH

EVALUATION OF NURSING CARE (MINOR)

DATE _____ 19 _____

I _____

agree to have _____

my _____ participate in a research project directed by Patricia R. Underwood, doctoral student in nursing. I have been told by Ms. Underwood that this patient will be receiving specifically planned nursing care and that his/her response to that care will be rated every three days by nursing personnel and that neither the care nor the rating will in any way interfere with overall treatment or hospital stay. I understand that this will entail no physical risk to this patient. I also understand that any emotional risk would be the same as those which might occur during hospitalization. I understand that this is for the purpose of research and I agree that this patient will participate without pay. I further understand that the result of the research will be handled in a confidential manner and that names will not be used. I understand that the research will have no bearing on any future treatment that may be requested here or elsewhere.

WITNESS _____

SIGNED _____

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