Utilization of Selected Characteristics in the Labeling of Elderly Nursing Home Patients as Confused

Patriciann F. Brady
South Dakota State University

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UTILIZATION OF SELECTED CHARACTERISTICS IN
THE LABELING OF ELDERLY NURSING HOME
PATIENTS AS CONFUSED

BY
PATRICIANN FURNARI BRADY, R.N., M.A.

A research thesis submitted
in partial fulfillment of the requirements for the
degree Master of Science
Major in Nursing
South Dakota State University
1985
UTILIZATION OF SELECTED CHARACTERISTICS IN
THE LABELING OF CONFUSION IN THE ELDERLY

This research project is approved as creditable and independent investigation by a candidate for the degree, Master of Science, and is acceptable for meeting the research thesis requirements for this degree. Acceptance of this research thesis does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.
ACKNOWLEDGEMENTS

The writer expresses appreciation to the following who assisted, advised, and encouraged the writer in this study:

Phyllis Meyer, M.S.
Dr. Sharon Leech-Hofland
Dr. William Lee Tucker

A special acknowledgement to four special individuals, without whose faith and support this study would have been impossible:

Frank Owen Brady, Ph.D.
Sean Anthony Brady
David Owen Brady
Danielle Rose Brady

This project was partially supported by:

Sigma Theta Tau, Research Award
Professional Nurse Traineeship
United States Department of Health and Human Services
Public Health Services
Health Resource Administration
Bureau of Health Professionals
Division of Nursing
UTILIZATION OF SELECTED CHARACTERISTICS IN
THE LABELING OF CONFUSION IN THE ELDERLY

Abstract
PATRICIANN FURNARI BRADY

The term confusion is often used as a nursing diagnosis. Yet, there is no consistent definition that indicates a systematic process is used in the labeling of elderly patients as confused. The research question for this descriptive association study was: "To what extent are selected characteristics utilized among nursing home staff in the labeling of elderly as confused?"

The objectives of this study were as follows:
1) Identify the frequency of use of each of the selected characteristics in the clinical determination of confusion in the elderly by nursing home staff.
2) Determine the relationship between nursing home staffs' identification of selected characteristics present and the labeling of an elderly nursing home resident viewed on video as confused.
3) Determine if there is a relationship between the demographic characteristics of nursing home staff and:
   a. Utilization of selected characteristics
   b. Identification of selected characteristics presented by a nursing home resident on video.
c. Determination of confusion for a nursing home resident presented on video.

The setting for this research study was a 113 bed intermediate/skilled level of care nursing home adjacent to a religious teaching hospital in a midwestern town with a population of 30,000. The sample for this study was 26 individual staff members of the nursing home including registered nurses, licensed practical nurses, medication aides and nursing aides.

The tool, developed by the investigator based on nursing literature, was comprised of four sections 1) demographic information; 2) list of selected characteristics: subjects were asked to indicate the degree of utilization of these characteristics in the labeling of confusion; 3) video response: the subjects were asked to indicate the presence or absence of the selected characteristic in response to a video and then indicate if the patient was confused; 4) definition of confusion.

The most frequently used defining characteristics were: disorientation to time, disorientation to place, disorientation about people and hallucinations. The least frequently used defining characteristics were: sleep disturbance, restlessness, fear, anxiety, apathy, change in behavior and change in communications. Change in ability to problem solve showed the most variability in the utilization by the sample in labeling of elderly patients as confused.

The association of the nursing home staff's six main demographic variables and frequency of selected characteristics was
analyzed through use of ANOVA. There was no significant relationship
noted in the utilization of selected characteristics in the labeling
of an elderly individual viewed on video as confused and the demo-
graphic data of the nursing home staff. Of the 26 respondents, only
one subject correctly listed the characteristics of the nursing home
resident viewed on video as predetermined by the investigator.

Regardless of the position, education, age, employment length,
or amount of time working with the elderly, there was no significant
difference in the utilization of selected characteristics by nursing
home staff in labeling elderly nursing home patients as confused. No
selected characteristic is utilized primarily by nursing home staff
in labeling an elderly nursing home individual as confused. Thus,
the investigator proposed a conceptual framework for the process of
diagnosing an elderly nursing home patient as confused.
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CHAPTER I
DIMENSIONS OF THE PROBLEM

In this chapter, the introduction of the problem will be followed by the statement of the problem, significance of the study, definition of terms and the organization of the study.

INTRODUCTION TO THE PROBLEM

The term confusion is often used as a nursing diagnosis. Yet, there is no consistent definition that indicates an elderly process is used in the labeling of elderly patients as confused. Interpretation as to the meaning and the subsequent communication of confusion as a nursing diagnosis is often made on a subjective basis, rather than on an objective basis, and differing from one health professional to another (Rameizl, 1984).

Confusion in the elderly has been attributed to a variety of patient characteristics and does not provide a scientific basis for nursing interventions. Elderly patients are frequently labeled confused as a result of behavior that is disturbing to the nursing staff caring for them or because they are difficult to manage (Chisholm, Deniston, Igreson and Barbus, 1982). There is an inherent danger among health care providers using non-specific language and the absence of common understanding of terms with regard to cognitive, affective, and self-care functions of the elderly (Rameizl, 1984). There has been concern that this labeling contributed to sustained states, which staff members then anticipate as the behavior norm of
the elderly patient (Chisholm, Deniston, Igreson and Barbus, 1982).

There are a variety of nursing health providers caring for the elderly residents in nursing homes. Nursing assistants, licensed practical nurses and various educational levels of registered nurses provide care and all are involved in the labeling of elderly nursing home patients as confused and subsequent decisions regarding nursing care. When staff believe the confusion to be reversible, actions are taken to prevent further deterioration. When confusion is considered irreversible, the individual is labeled senile, thus perpetuating the confusion (Lincoln, 1984).

STATEMENT OF THE PROBLEM

The problem investigated for this study was: To what extent are selected characteristics utilized among nursing home staff in the labeling of elderly as confused.

SIGNIFICANCE OF THE STUDY

The nursing diagnosis Sensory Perceptual Alterations: related to factors associated with aging (SPAFA) was accepted by the National Group for the Classification of Nursing Diagnosis to provide a common framework to minimize the subjective interpretation of the term confusion. Nursing diagnoses are developed as a classification system or taxonomy in order to develop a sound scientific foundation for nursing (Carpenito, 1983).

The major reasons for standardization of nomenclature and classification of nursing diagnosis are: 1) facilitation of communication; 2) computer stores and access of information; 3) political
and legal needs; 4) advancement of nursing theory and science; and, 
5) education (Kim, McFarland and McLane, 1984). Carpenito (1983)
describes the application of the classification of nursing diagnosis 
in the clinical/practice area in the following manner:

Using a classification system to identify nursing's 
independent domain provides nurses with a common 
frame of reference. A unified system of terminology 
will establish a common denominator in helping direct 
nurses to assess selected data and identify a potential 
or actual client problem. Nurses can then refer to 
the list of terms to assist them in describing the 
problem. Consistent terminology facilitates oral 
and written communications by making it more effi- 
cient.

Nursing care for patients should be based on careful assessment of 
data about the patient. From this assessment appropriate nursing 
diagnoses and interventions can be made. Determining what specific 
characteristics of confusion are utilized in the labeling of the 
elderly as confused can validate the nursing diagnosis SPAFA.

Presently, the National Group for the Classification of 
Nursing Diagnosis has been using the inductive method to generate 
nursing diagnosis (Carpenito, 1983). Nurses, who are part of this 
group, recall from their experience and from related literature 
clinical phenomena that describe varied states of health. Signs and
symptoms (the selected characteristics) are identified to describe these states (Carpenito, 1983). This research study will attempt to validate the nursing diagnosis SPAFA.

OBJECTIVES OF THIS STUDY

1) Identify the frequency of use of each of the selected characteristics in the clinical determination of confusion in the elderly by nursing home staff.

2) Determine the relationship between nursing staffs' identification of selected characteristics present and their labeling of an elderly nursing home patient viewed on video.

3) Determine if there is a relationship between the demographic characteristics of nursing home staff and: a. utilization of selected characteristics; b. identification of selected characteristics presented by a nursing home resident on video; c. determination of confusion in a nursing home resident presented on video.

DEFINITION OF TERMS

The subsequent terms were defined as follows for the purpose of this study:

1) Nursing diagnosis: a statement that describes a health state or potential alteration in one's life process (physiological, psychological, socio-cultural, development and spiritual) (Carpentio, 1983).

2) Labeling: term used in describing a patient.

3) Defining Characteristics: a cluster of signs and symptoms that are observed in the person with a specific nursing diagnosis.
All the defining characteristics need not be present in a person with a specific nursing diagnosis (Carpenito, 1983).

4) **Sensory Perceptual Alterations:** a state in which the individual experiences or is at risk of experiencing a change in the amount, pattern or interpretation of incoming stimuli; physiological, sensory, motor or environmental disruption which results in a change in usual response to stimuli (Carpenito, 1983).

5) **Confusion:** the nursing category of Sensory Perceptual Alteration as stated by the classification of Nursing Diagnosis Association. This study will use the characteristics as stated by this group. They are identified as (Carpenito, 1983):
   a) Disoriented in time or place
   b) Disoriented about people
   c) Altered ability to problem-solve
   d) Altered behavior or communication pattern
   e) Sleep pattern disturbance
   f) Restlessness
   g) Reports auditory or visual hallucinations
   h) Fear
   i) Anxiety
   j) Apathy

6) **Nursing Home Staff:** individual employed, part-time or full-time, in direct patient care including Registered Nurses, Licensed Practical Nurses and nursing assistants on all three shifts.
7) **Nursing Home**: residential facilities in which nursing services are provided to 50% or more of the residents (Eustis, Greenberg and Patten, 1984).

8) **Level of Care**: the degree of functional impairment of residents and amount of skilled service provided. Level of care is defined by Medicaid or Medicare regulations (Eustis, Greenberg and Patten, 1984).

   a) **Skilled Nursing Facility**: provides those services furnished pursuant to physician's orders which require the skill of technical or professional personnel e.g., registered nurse, licensed practical nurse, physical therapist, speech pathologist, audiologist (Vladeck, 1980, cited by Eustis, Greenberg and Patten, 1984).

   b) **Intermediate Care Facility**: provides health related care and services to individuals who do not require the degree of care and treatment which a hospital or skilled nursing facility is designed to provide, but who because of their mental or physical condition, require care and service (above the level of room and board) which can be made available to them only through institutional facilities (Vladeck, 1980 cited by Eustis, Greenberg and Patten, 1984).

**ORGANIZATION OF THE STUDY**

1) Chapter 2 will be a review of the literature and include the conceptual framework.
2) Chapter 3 will present the research design and methodology.

3) Chapter 4 will report the analysis of the research data.

4) Chapter 5 will include a summary of the study, major findings and conclusions of the study, implications of the findings, limitations of the study and recommendations for further study.
CHAPTER II
REVIEW OF THE LITERATURE

The review of the literature will be divided into four major sections. The first section will address the use of the label confusion. The second section will address the assessment of confusion in nursing literature. The third section will address the consequence of labeling. This chapter will conclude with the conceptual framework utilized for this study.

USE OF THE LABEL CONFUSION

Confusion is a label often applied when describing the elderly. Elderly patients are frequently labeled confused as a result of behavior that is disturbing to the nursing staff caring for them or because they are "difficult to manage" (Chisholm, Deniston, Igerson and Barbus, 1982). The incidence of confusion in the elderly has been estimated as high as 15% in the community elderly and 62% in the institutional elderly (Hahn, 1983). The proportion of the elderly in institutions who suffer some form of cognitive or affective impairment is estimated as high as 50 to 70% (Lincoln, 1984).

Many nurses dismiss confusion in the elderly as an outcome of aging and fail to treat it as a symptom or signal (Carpenito, 1983). In nursing homes, little distinction is made between those elderly with reversible forms of confusion and those with irreversible brain disease (Lincoln, 1984). Wolanin and Phillips (1981) take the position that confusion is a nursing diagnosis, made by nurses and treated
by nurses, with interdisciplinary assistance from other persons. The term confusion is often used as a nursing diagnosis. Yet, there is no consistent definition that indicates a systematic process is used in the labeling of the elderly as confused.

In a selected review of the literature, various definitions of confusion can be seen. Bartal (1978) describes confusion as an amorphous group of symptoms generalized as confusion. This definition does not indicate what these symptoms are and provides the nurse with no information for assessment.

Williams et al (1949) and Forman (1984) describe confusion as a decline of mental functioning. Both of these authors list those changes of mental functioning as varying degrees of one or several disorders of consciousness, memory, attention, comprehension, judgment, mood and interpretation of stimuli. Forman (1985) adds impairment of learning and calculation to the definition of confusion and notes these declines in mental functioning are often accompanied by emotional or behavioral disturbances. Chisholm, Deniston, Igreson, Barbus (1982) list the behavioral disturbances in the definition of confusion as wondering behavior, talking incoherently, withdrawal, breaking off relationships, reduced perceptiveness and inability to identify with all aspects of the immediate situation. It is worthy to note these behaviors are also symptoms of psychotic behavior and no method is presented to differentiate psychotic behavior from confusion or reversible brain impairment from irreversible brain impairment.

The National Group for the Classification of Nursing Diagnosis
has accepted the Nursing Diagnosis of Sensory Perceptual Alteration related to Factors Associated with Aging (SPAFA) to provide a common frame of reference to minimize the subjective basis for the utilization of the diagnosis confusion. The nursing diagnosis SPAFA represents a state in which the individual experiences or is at risk of experiencing a change in the amount, pattern or interpretation of incoming stimuli (Carpenito, 1983). The definition of the diagnosis SPAFA is similar to the definition of confusion of Wolanin and Phillips (1981) who are frequently cited for their work in the area of confusion. These authors define confusion as a condition characterized by the client's disorientation to time and place, incongruous conceptual boundaries, paranormal awareness, and seemingly inappropriate verbal statements that indicate deficits (Wolanin and Phillips, 1982).

SPAFA has ten defining characteristics and in the first level of sequential nursing diagnosis of confusion as proposed by Wolanin and Phillips (1981) seventeen patient behaviors are identified. The patient behaviors and characteristics are to be utilized in the diagnostic process in the clinical determination of confusion. The diagnostic process is a special form of problem identification consisting of an interaction between cues and information from or about a patient and his situation and the diagnostician's perspective, observations and critical thinking skills in the process involved in processing observed data (Carpenito, 1983).

ASSESSMENT OF CONFUSION

In order to complete the sequential development of the nursing
diagnosis of confusion, a complete screening assessment is necessary (Wolanin and Phillips, 1981). Carpenito (1983) states nurses must utilize the nursing process to identify and synthesize clinical data.

The Mental Status Examination, which includes the areas of consciousness, appearance, orientation, memory and judgement, is often used in research studies in assessing confusion (Goldenberg and Chiverton, 1984; Chisholm, Deniston, Igreson and Barbus, 1982; Roslanic and Fitzpatrick, 1979).

Roslanic and Fitzpatrick (1979) found statistically significant changes in three components of the Mental Status Examination; increased disorientation, decline in level of consciousness and memory in older adults after four days of hospitalization. The disorientation that occurred following four days of hospital confinement is the most significant finding of this research study for clinical studies.

Chisholm, Deniston, Igreson and Barbus (1982) modified the Mental Status Examination and used this tool along with two other tools to determine the prevalence of confusion in hospitalized patients. This study, as reported, shows that scores on the "Assessment of Mental Status" correlates very highly with the clinical impression of confusion by both the clinical nurse research and the unit nurses.

A case presentation and the Mental Status Examination was used by Goldenberg and Chiverton (1984) to describe patients' behavior and to organize clinical data to plan nursing intervention. Supported by the literature cited, the Mental Status Examination can provide an assessment tool for the determination of confusion and can provide a
framework for determining the necessity of nursing intervention.

In order to make an accurate assessment, knowledge of the sources of confusion is necessary. Therefore, Lincoln (1984), attempted to ascertain the knowledge of licensed and non-licensed nursing staff about the sources of confusion. This research study indicated that nursing assistants generally had lower scores than the licensed staff; that nursing personnel who were older and had less education tended to have lower scores; and that the total sample had high percentages of incorrect responses in the area of irreversible sources of confusion (Lincoln, 1984). Such lack of clarity affects accurate nursing diagnosis.

**CONSEQUENCE OF LABELING**

Each person deserves a careful medical and social evaluation before any diagnostic label is attached, for labels tend to stick, permanently stereotyping human being and obscuring their need to know each individual's personality (Wolanin, 1983). Various authors have hypothesized as to the consequences of the misdiagnosis of confusion. Informal diagnosis can lead to a self-fulfilling prophecy whereby the individual is suspected of being demented and then is treated as incompetent. Ramiezl (1984) stated the possible outcome from the phenomena, be it self-fulfilling prophecy or self-sabotage, is often costly to the elderly individual's abilities and competencies. There has been concern that this misdiagnosis can contribute to sustain states, which staff members then anticipate as the behavior norm of the elderly patient (Chisholm, Deniston, Igreson and Barbus, 1982).
The elderly patient who exhibits disorientation may be labeled confused and the patient may be subjected to inappropriate nursing intervention (Roslaniec and Fitzpatrick, 1979). In the health care setting, perceptions may be influenced by characteristics of the patient, the interaction, situation and the nurse (Larson, 1977). It is important to distinguish the cause of the disturbance in the elderly in order to avoid misdiagnosis and stereotypic judgement of that person (Goldenburg and Chiverton, 1984).

Diagnosis is a mechanism for identifying the domain of nursing and planning care is the mechanism for accountability (Carpenito, 1983). The elderly institutionalized client is dependent on the nurse not only for physical care but also for the satisfaction of such needs as socialization, affection, information and security against feelings of being lost and abandoned (Longland and Panicucci, 1982). Nursing action should compensate for the deficit and simultaneously reduce the associated fear, anxiety and frustration (Bartal, 1983).

A study by Williams et al (1979) was completed to determine what nursing activities were under control or monitored by nurses and which appear to prevent acute confusional states in the elderly hospitalized who had undergone surgical repair of a hip fracture. The most consistent predictors of post-operative confusion were the presence of confusion on admission to the hospital or during the pre-operative period. Therefore, the assessment of confusion of an elderly individual should be completed on admission to the hospital. Patients who had a timepiece, watched television, and were in private
rooms had a higher level of clarity and memory testing (Williams et al, 1979).

Wolanin and Phillips (1983) have stated: nursing focus is not on a disease and its treatment, but rather on the elderly person who has a life to live, a death to die and a need to be sustained at his highest level of functioning during both processes. In general, the nursing activities stressed as being helpful in preventing or ameliorating confusion states are: measures to prevent diminished oxygenation of the brain; measures to maintain hydration; measures to avoid extremes to sensory input; provisions of a safe, ordered and orienting environment with familiar objects, making certain circumstances are clear, non-complicated, heard and understood; and judicious administration of drugs (Williams et al, 1979).

SUMMARY OF LITERATURE REVIEW

The review of the literature can be summarized as follows:
1. Elderly patients are frequently labeled confused as a result of behavior that is disturbing to the nursing staff caring for them or because they are difficult to manage.
2. In nursing homes little distinction is made between those elderly with reversible forms of confusion and those with irreversible brain disease.
3. There is no consistent definition that indicates a systematic process is used in the labeling of elderly as confused.
4. The National Group for the Classification of Nursing Diagnosis has accepted the Nursing Diagnosis of Sensory Perceptual Alterations
related to Factors Associated with Aging to provide a common frame of reference to minimize the subjective basis for the utilization of the diagnosis of confusion.

5. Patient behavior and characteristics are to be utilized in the diagnostic process in the clinical determination of confusion.

6. The Mental Status Examination can provide an effective assessment tool for the determination of confusion and can provide a framework for determining the necessity of nursing intervention.

7. Each person deserves a careful medical and social evaluation before any diagnostic label is attached.

CONCEPTUAL FRAMEWORK

The conceptual framework for utilization of this study was adopted from Wolanin and Phillips (1981) which is based on a sequential four-level nursing diagnosis (Figure I). A Holistic-deliberative approach is identified by these authors.

Wolanin and Phillips (1981) describe a sequential four-level nursing diagnosis as essential in order to determine the appropriate nursing diagnosis and also a means of evaluation of nursing intervention. The first level of nursing diagnosis gives no clues to nursing intervention and provides no knowledge or skill to observe. The first level is the subjective reaction to behaviors, which consensus of others deem inappropriate (Wolanin and Phillips, 1981).

Through assessment of memory, remote and recent, ability to follow instructions, and ability to use a thinking process and make
Fourth-level nursing diagnosis of confusion secondary to [specific problem statement]

Highly specific assessment of salient areas of basis screening assessment findings of deviance from expected norms.

Third-level nursing diagnosis of confusion secondary to [general area]

Basic Nursing Assessment

<table>
<thead>
<tr>
<th>Interactional Factors</th>
<th>Perceptual Problems</th>
<th>Compromised Brain Support</th>
<th>Brain Damage Infections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Environmental</td>
<td>Physiological States</td>
<td></td>
</tr>
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</table>

Second-level nursing diagnosis of confusion or nonconfused.

<table>
<thead>
<tr>
<th>Romate Memory</th>
<th>Recent Memory</th>
<th>Mental Alertness screening test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to follow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructions</td>
<td>History</td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judgement</td>
<td>Life-Style</td>
<td></td>
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</table>

First-level nursing diagnosis of confusion

<table>
<thead>
<tr>
<th>Disorientation</th>
<th>Impaired Attention</th>
<th>Distractability</th>
<th>Purposeless Activity</th>
<th>Anxiety, Apprehension</th>
<th>Fright, fear, agitation</th>
<th>Verbosity</th>
<th>Confabulation</th>
<th>Dependent behaviors</th>
<th>Attention-seeking behaviors</th>
<th>Withdrawal</th>
<th>Belligerence</th>
<th>Combativeness</th>
<th>Statement of Confusion</th>
<th>Memory Loss</th>
</tr>
</thead>
</table>

Client behaviors observed by nurse.

Figure I: Four Level Nursing Diagnosis
(Wolanin and Phillips, 1981)
judgement, the second level of nursing diagnosis, can be determined. These factors are important in determining confusion from non-confusion. Confusion or non-confusion, at this level of nursing diagnosis, is a general symptom that lacks identified causes; therefore, it cannot be treated (Wolanin and Phillips, 1981).

The third level nursing diagnosis of confusion is never attempted without a complete general screening assessment. These areas of assessment must include: 1) Sensory perceptual problems; 2) Compromised brain support; 3) Other physiologic causes; 4) Brain damage; and 5) Exogenous causes. At the conclusion of this level, a general direction for the next assessment, then leads to the problem statement on which nursing care can be planned.

The fourth level is the specific area of diagnosis. The primary problem is no longer confusion but the specific diagnosis which leads to specific nursing interventions.

VARIABLES

The independent variables are the demographic characteristic of the nursing staff. These variables include: position, education, age, length of employment in the facility and length of employment in care of the elderly. The dependent variable was the diagnosis of confusion related to the utilization of the defining characteristics of the nursing diagnosis SPAFA.

HYPOTHESES

The statistical hypotheses under investigation for this study were as follows: 1) There will be no significant difference between
the demographic characteristics of the nursing home staff and utilization of selected characteristics. 2) There will be no significant difference between the demographic characteristics of nursing home staff and identification of selected characteristics presented by a nursing home resident on video. 3) There will be no significant difference between the demographic characteristics of nursing home staff and the determination of confusion for a nursing home resident presented on video.
CHAPTER III
METHODOLOGY

This chapter will present the research design and methodology of the study which includes the approach, sample, research tool and method of collecting data.

APPROACH

A descriptive relationship study, using a purposeful sample, was used to determine the utilization of selected characteristics among nursing home staff in the labeling of the elderly as confused.

SAMPLE

The accessible population consisted of nursing home staff employed in a 113 bed intermediate/skilled level of care facility adjacent to a religious teaching hospital in a midwestern town with a population of 30,000. The accessible population included 66 individuals; 6 registered nurses, 10 licensed practical nurses and 50 nurses aides. The criteria for the selections of the subjects were as follows: 1) individuals employed as nursing home staff who met to attend an inservice education program, 2) individuals following written and verbal explanation of the study completed the research tool. Following written and verbal explanation, one individual refused to complete the research tool.

From this accessible population, 26 individuals met the criteria. The analysis of data reflects the utilization of selected characteristics in the labeling of elderly as confused by the 26
individuals who comprised the sample for this study.

RESEARCH TOOL

An information letter (Appendix A) was developed by the researcher. The subjects were given written and verbal explanation of study and consent to participate was considered by completion of the research tool. This letter included information related to the purpose and nature of the investigation, the procedure to be used, the course of action open to the subject and the method of reporting the data.

All subjects received the research tool (Appendix B), developed by the investigator, based on the nursing literature. The tool included four sections: 1) Demographic information sheet, 2) List of selected characteristics - subjects were asked to indicate the degree of utilization of these characteristics in the labeling of confusion, 3) Video-response - subjects were asked to indicate the presence or absence of the selected characteristics in response to a video and indicate if the patient was confused, 4) Subjects were asked to define the term confusion. Content validity of the twelve defining characteristics is based on the work of recognized authorities on nursing diagnosis.

METHOD OF COLLECTING DATA

The researcher met with the Director of Nurses of the nursing home to explain the research study and obtain permission to ask the staff to participate in the research study. The researcher agreed to provide an inservice education program for the staff following the
research study. It was recommended a letter be sent to the Administrator of the Nursing Home with an explanation of the research study. An approval letter was received from the Administrator of the Nursing Home to complete the research study (Appendix C).

The researcher met with the staff members during a time arranged by the Director of Nurses in the activity/dining room of each unit and the purpose of the study was explained. The staff was informed how the data would be utilized and were assured of anonymity through the data analysis procedure. The subjects were given written and verbal explanation of the study and consent to participate was considered by completion of the research tool.

Subjects were asked to complete Section I, a demographic information sheet. Following the completion of Section I, Section II was completed. Subjects were asked to estimate the percentage of time, in their clinical practice, they utilize the listed selected characteristics in the labeling elderly nursing home patients as confused. The subjects were then asked to view a two-minute segment of the film Code Gray: Ethical Dilemmas in Nursing (Mitchell, 1984). The two-minute segment included a discussion of the use of physical restraints between a nurse and an elderly female individual. All editorial comments not included as dialogue between the elderly individual and nurse were deleted. In Section III, subjects were asked to indicate the presence or absence of the selected characteristic in response to the elderly female in the video and indicate if the patient was confused. In Section IV the subjects were asked to
provide their definition of confusion.

**ANALYSIS OF DATA**

Objective one of this study was to identify the frequency of use of each of the selected characteristics in the clinical determination of confusion in the elderly by nursing home staff. This was determined by measures of central tendency.

Objective two of this study was to determine the relationship between nursing staffs' identification of selected characteristics present and their labeling of an elderly nursing home resident viewed on video as confused. This objective was determined by measures of central tendency.

Objective three of this study was to determine if there is a relationship between demographic characteristics of nursing home staff and a) utilization of selected characteristics, b) identification of selected characteristics presented by a nursing home resident on video, c) determination of confusion for a nursing home resident presented on video. This objective was fulfilled by testing statistical hypotheses 1, 2, and 3 using analysis of variance.
CHAPTER IV
ANALYSIS OF RESEARCH DATA

This chapter reports the results of the data analysis obtained from this study to determine the utilization of selected characteristics among nursing home staff in the labeling of confusion in the elderly. Analysis will be reported under the following sections:

1. Descriptive analysis of the general characteristics of the sample.

2. Descriptive analysis of the utilization of selected characteristics.

3. Descriptive analysis of selected characteristics and the labeling of an elderly nursing home resident as confused as viewed on video.

4. Statistical analysis of the hypothesis.

GENERAL CHARACTERISTICS OF THE SAMPLE

This section will describe the characteristics of the 26 subjects of the study. The characteristics included are position, education, age, length of employment in the facility and length of employment with the elderly.

POSITION: The subjects in this study were asked to select one of five categories to indicate their present position of employment. Table 1 illustrates the distribution of position of employment of the 26 subjects in the sample. The most frequently cited position was nurse aide with eleven subjects (42.3%) indicating this category. One subject indicated other, but did not specify present position.
EDUCATION: Seven categories were listed for subjects to indicate their educational preparation. Table 2 indicates the distribution of the educational level of the sample. The distribution of the subject's educational level is reflected in the present position distribution. The largest group (N=6) 23% was in the high school category.

Table 1

Present Position of Employment of Subjects by Number and Percent

<table>
<thead>
<tr>
<th>Present Position</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Nurse</td>
<td>4</td>
<td>15.39</td>
</tr>
<tr>
<td>Licensed Practical Nurse</td>
<td>5</td>
<td>19.23</td>
</tr>
<tr>
<td>Nursing Aide</td>
<td>11</td>
<td>42.30</td>
</tr>
<tr>
<td>Medication Aide</td>
<td>5</td>
<td>19.23</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>3.84</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 2.

Education of Sample by Number and Percent

<table>
<thead>
<tr>
<th>Education</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor Degree (Nursing)</td>
<td>3</td>
<td>11.5</td>
</tr>
<tr>
<td>Bachelor Degree (Other)</td>
<td>2</td>
<td>7.7</td>
</tr>
<tr>
<td>Associate Degree (Nursing)</td>
<td>1</td>
<td>3.9</td>
</tr>
<tr>
<td>Diploma (Nursing)</td>
<td>1</td>
<td>3.9</td>
</tr>
<tr>
<td>Licensed Practical Nurse</td>
<td>5</td>
<td>19.2</td>
</tr>
<tr>
<td>Other Health Care Technical Training</td>
<td>5</td>
<td>19.2</td>
</tr>
<tr>
<td>High School</td>
<td>6</td>
<td>23.0</td>
</tr>
<tr>
<td>No Response Indicated</td>
<td>3</td>
<td>11.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
<td>100.0</td>
</tr>
</tbody>
</table>
AGE: The age of the subjects in this study ranged from 21-55 years. The most frequently cited age was in the category of 41-55 years (26.9%) with the majority of the subjects (N=15) 41 years and older. Table 3 illustrates the age distribution of the sample.

Table 3
Age Distribution of Sample by Number and Percent

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-25 years</td>
<td>5</td>
<td>19.2</td>
</tr>
<tr>
<td>26-30 years</td>
<td>3</td>
<td>11.5</td>
</tr>
<tr>
<td>31-35 years</td>
<td>1</td>
<td>3.8</td>
</tr>
<tr>
<td>36-40 years</td>
<td>2</td>
<td>7.7</td>
</tr>
<tr>
<td>41-45 years</td>
<td>7</td>
<td>26.9</td>
</tr>
<tr>
<td>46-50 years</td>
<td>6</td>
<td>23.0</td>
</tr>
<tr>
<td>51-55 years</td>
<td>2</td>
<td>7.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
<td>100.0</td>
</tr>
</tbody>
</table>

LENGTH OF EMPLOYMENT IN THIS FACILITY: The nursing home used in this research study includes three individually staffed units which represent the consolidation of three separate nursing homes. One unit was the original nursing home and the other two units were consolidated with the original facility within the last year. Therefore, the distribution reflects the consolidation of three nursing homes. Table 4 illustrates the length of employment in this facility.
Table 4
Length of Employment in Participating Facility by Numbers and Percent

<table>
<thead>
<tr>
<th>Length of Employment</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>18</td>
<td>69.2</td>
</tr>
<tr>
<td>1-5 years</td>
<td>2</td>
<td>7.7</td>
</tr>
<tr>
<td>6-10 years</td>
<td>4</td>
<td>15.4</td>
</tr>
<tr>
<td>16-20 years*</td>
<td>1</td>
<td>3.9</td>
</tr>
<tr>
<td>36-40 years*</td>
<td>1</td>
<td>3.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Gap in years indicate no response given

LENGTH OF EMPLOYMENT WORKING WITH ELDERLY: Since the participating nursing home reflected the consolidation of three nursing homes, it was anticipated it would be beneficial to determine the total amount of time the subjects were employed working with the elderly. The most frequently cited response was 1-5 years indicated by 12 subjects (46.1%). Eight subjects (30.8%) indicated they had employment working with the elderly for 6-10 years. Refer to Table 5 for the distribution of subjects in length of time working with elderly.
Table 5
Length of Employment Working With Elderly
Regardless of Title or Setting by Number and Percent

<table>
<thead>
<tr>
<th>Length Working With Elderly</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>12</td>
<td>46.1</td>
</tr>
<tr>
<td>6-10 years</td>
<td>8</td>
<td>30.8</td>
</tr>
<tr>
<td>11-15 years</td>
<td>3</td>
<td>11.5</td>
</tr>
<tr>
<td>16-20 years</td>
<td>2</td>
<td>7.7</td>
</tr>
<tr>
<td>21-25 years</td>
<td>1</td>
<td>3.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
<td>100.0</td>
</tr>
</tbody>
</table>

DESCRIPTIVE ANALYSIS OF UTILIZATION OF SELECTED CHARACTERISTICS

Analysis of Table 6 shows that the characteristic utilized most frequently in the labeling of confusion is disorientation to time with 7 subjects utilizing it 91-100% of the time. The median for this characteristic was the category of 61-70%. As demonstrated on the table, this was the highest median among the characteristics.

The mode of each characteristic is indicated on Table 6. A distinct pattern is identified. One characteristic, disorientation to time, has the mode at 91-100%. Three characteristics are bimodal. Disorientation to place and disorientation about people have the same bimodal pattern of 5 subjects each at 41-50% and 91-100%. The third bimodal characteristic is represented at both ends of the continuum, with 4 subjects at 0-10% and at 91-100%. The mode of the remaining characteristics is 0-10%.
### Table 6
Utilization of Selected Characteristics by Subjects

<table>
<thead>
<tr>
<th>Variables</th>
<th>Percent of Utilization</th>
<th>Total</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-10</td>
<td>11-20</td>
<td>21-30</td>
</tr>
<tr>
<td>Disorientation to Time</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Disorientation to Place</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Disorientation about People</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Change in Ability to Problem Solve</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Sleep Disturbance</td>
<td>10</td>
<td>3*</td>
<td>5</td>
</tr>
<tr>
<td>Restlessness</td>
<td>10</td>
<td>5*</td>
<td>3</td>
</tr>
<tr>
<td>Hallucination</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Fear</td>
<td>9</td>
<td>3</td>
<td>1*</td>
</tr>
<tr>
<td>Anxiety</td>
<td>8</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Apathy</td>
<td>7</td>
<td>2</td>
<td>3*</td>
</tr>
<tr>
<td>Change in Behavior</td>
<td>8</td>
<td>4*</td>
<td>2</td>
</tr>
<tr>
<td>Change in Communication</td>
<td>8</td>
<td>3</td>
<td>2*</td>
</tr>
</tbody>
</table>

* = median  
Total N = number of respondents for each variable  
Shaded area = the mode of each variable
DESCRIPTIVE ANALYSIS OF SELECTED CHARACTERISTICS AND THE LABELING
OF AN ELDERLY NURSING HOME RESIDENT AS CONFUSED VIEWED ON VIDEO

There was no significant association between nursing home
staffs' identification of selected characteristics present and
the labeling of confusion of an elderly nursing home resident
viewed on video. Table 7 indicates the number of traits identi-
fied by the sample. Analysis of Table 8 identified only one sub-
ject correctly identified the traits and the labeling of confusion
vs. not confused as predetermined by the investigator. Interest-
ingly, only 3 of the 27 subjects incorrectly labeled the patient
as confused.

STATISTICAL ANALYSIS OF HYPOTHESIS

Statistical Analysis will be presented in the following
format:

1) The statistical hypothesis will be stated.
2) The statistical test used to test the hypothesis will be
   stated.
3) The statistical results will be discussed.

Hypothesis 1. There will be no significant difference
between the demographic characteristics of nursing
home staff and the utilization of selected character-
istics.

Hypothesis 1 was tested using analysis of variance. Hy-
pothesis 1 was not rejected. There was no significant difference
between the demographic characteristics of nursing home staff and
the utilization of selected characteristics in the labeling of
Table 7
Number of Traits Identified as Presented by
the Elderly Female in the Video

<table>
<thead>
<tr>
<th>Traits Identified by Staff</th>
<th>Number of Subjects</th>
<th>Percent of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>19.23</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>26.92</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>15.38</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>15.38</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>15.38</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>7.69</td>
</tr>
</tbody>
</table>

Table 8
Correctly Identified Traits by Number and Percent

<table>
<thead>
<tr>
<th>Correctly Identified Traits</th>
<th>Number of Subjects</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>3.84</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>3.84</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>3.84</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>11.53</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>19.23</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>30.76</td>
</tr>
<tr>
<td>11</td>
<td>6</td>
<td>23.07</td>
</tr>
<tr>
<td>*12</td>
<td>1</td>
<td>3.84</td>
</tr>
</tbody>
</table>

*Correct # responses predetermined by the investigator
elderly patients as confused. The F ratio and the probability of
F are summarized in Appendix D.

**Hypothesis 2.** There will be significant difference
between the demographic characteristics of nursing
home staff and the identification of selected
characteristics presented by a nursing home resident
on video.

Hypothesis 2 was tested using analysis of variance.

Hypothesis 2 was not rejected. There was no significant difference
between the demographic characteristics of nursing home staff and
the identification of selected characteristics presented by a nursing
home resident on video. The results including F value and probability
of F are presented in Appendix E.

**Hypothesis 3.** There will be no significant difference
between the demographic characteristics of nursing
home staff and the determination of confusion for a
nursing home resident viewed on video.

Hypothesis 3 was tested using analysis of variance.

Hypothesis 3 was not rejected. There was no significant difference
between the demographic characteristics of nursing home staff and
the determination of confusion for a nursing home resident viewed on
video. (See Table 8 and Appendix D and E.)
CHAPTER V

SUMMARY, MAJOR FINDINGS AND CONCLUSIONS,
IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

The purpose of this chapter is to present the following:
1. A summary of the research problems, objectives and design.
2. A summary of the major findings and conclusions as related to the three objectives of the study.
3. Implications of the findings.
4. Statements of limitations to the study, and;
5. Statements of recommendations for further study.

SUMMARY OF THE RESEARCH PROBLEMS, OBJECTIVES AND DESIGN

The term confusion is often used as a nursing diagnosis. Yet, there is no consistent definition that indicates a systematic process is used in the labeling of elderly as confused. Therefore, the problem under investigation was as follows: To what extent are selected characteristics utilized among nursing home staff in the labeling of elderly as confused?

The objectives of the study were as follows:
1. Identify the frequency of use of each of the selected characteristics in the clinical determination of confusion in the elderly by nursing home staff.
2. Determine the relationship between nursing home staffs' identification of selected characteristics present and the labeling of confusion of an elderly nursing home resident viewed on video.
3. Determine if there is a relationship between the demographic characteristics of nursing home staff and:
   a) Utilization of selected characteristics
   b) Identification of selected characteristics presented by a nursing home resident on video.
   c) Determination of confusion for a nursing home resident presented on video.

A descriptive relationship approach using a non-random sample was used for 26 subjects to test to what extent selected characteristics are utilized among nursing home staff in the labeling of confusion in the elderly.

Statistical analysis was done on the frequency of utilization of selected characteristics and their relationship to the demographic variables of the sample.

MAJOR FINDINGS AND CONCLUSIONS

The summary of major findings and conclusions as related to the three objectives is discussed in this section.

OBJECTIVE ONE: MAJOR FINDINGS AND CONCLUSIONS

Objective one of this study was to identify the frequency of use of each of the selected characteristics in the clinical determination of confusion in the elderly by nursing home staff.

MAJOR FINDINGS: OBJECTIVE ONE

The general findings to Objective One, summarized in Chapter IV were as follows:

1. The most frequently utilized defining characteristics
were: disorientation to time, disorientation to place, disorientation about people and hallucinations.

2. The least frequently used defining characteristics were: sleep disturbance, restlessness, fear, anxiety, apathy, change in behavior and change in communication.

3. Change in ability to problem solve showed the most variability in the utilization by the sample in the labeling of the elderly patient as confused.

4. The least frequently utilized characteristics reflect a larger percentage of congruence within the sample that those listed as utilized more frequently.

5. None of the utilized characteristics reflect above 41 percent congruence within the sample.

CONCLUSION: OBJECTIVE ONE

The most frequently and least frequently utilized characteristics for this sample in labeling of elderly patients as confused was determined. The least frequently utilized characteristics reflect a larger percentage of congruence within the sample than those listed as utilized more frequently. None of the utilized characteristics reflect above 41 percent congruence within the sample.

OBJECTIVE TWO: MAJOR FINDINGS AND CONCLUSIONS

Objective Two of this study was to determine the relationship between nursing home staffs' identification of selected characteristics present and the labeling of an elderly nursing home resident viewed on video as confused.
MAJOR FINDINGS: OBJECTIVE TWO

The general findings related to Objective Two, summarized in Chapter IV, were as follows:

1. There was no relationship between nursing staffs' identification of selected characteristics present and the labeling of an elderly nursing home resident viewed on video as confused.

2. One individual correctly identified the traits and the label of confusion vs. non-confusion as predetermined by the investigator.

CONCLUSION: OBJECTIVE TWO

There was no significant relationship between nursing home staffs' identification of selected characteristics present and the labeling of confusion of an elderly nursing home resident viewed on video. Only one individual correctly identified the traits and the label of confusion vs. not confused as predetermined by the investigation.

OBJECTIVE THREE: MAJOR FINDINGS AND CONCLUSIONS

Objective Three of this study was to determine if there was a relationship between the demographic characteristics of nursing home staff and:

a. Utilization of selected characteristics
b. Identification of selected characteristics presented by a nursing home resident on video
c. Determination of confusion for a nursing home resident presented on video
MAJOR FINDINGS: OBJECTIVE THREE

The general findings related to Objective Three, summarized in Chapter IV were as follows:

1. Hypothesis 1 states that there will be no significant difference between the demographic characteristics of nursing home staff and the utilization of selected characteristics. This hypothesis was not rejected.

2. Hypothesis 2 states there will be no significant difference between the demographic characteristics of nursing home staff and the identification of selected characteristics presented by a nursing home resident on video. Hypothesis 3 was not rejected.

3. Hypothesis 3 states there will be no significant difference between the demographic characteristics of nursing home staff and the determination of confusion for a nursing home resident viewed on video. Hypothesis 3 was not rejected.

CONCLUSION: OBJECTIVE THREE

There was no significant relationship noted in the utilization of selected characteristics in the labeling of an elderly individual viewed on video as confused and the demographic characteristics of the nursing home staff. Regardless of the position, education, age, employment length or length of time working with the elderly, there was no significant difference in the utilization of selected characteristics by nursing home staff in labeling an elderly nursing home resident as confused.
IMPLICATIONS

Implications are generated from an analysis of data. Some major implications may be as follows:

1. Regardless of the position, education, age, employment length or time working with the elderly, nursing home staff utilize a variety of characteristics in labeling of elderly patients as confused.

2. Selected characteristics of disorientation to time, place, about people and hallucinations were used more frequently by all staff regardless of demographic characteristics of staff in the labeling of elderly patients as confused.

3. In a forced-choice situation, there was a minimal ability in nursing home staffs' ability to assess correctly characteristics presented by an elderly person in video and to identify confusion.

4. Regardless of the demographic variables, there were no significant difference in the utilization of selected characteristics by nursing home staff in labeling elderly nursing home residents as confused. Therefore, all nursing home staff utilize selected characteristics in the same manner in labeling elderly nursing home patients as confused.

5. All nursing home staff utilize selected characteristics in the same manner. Thus, the finding of this study support a conceptual framework that attempts to differentiate the roles of the individual nursing home staff in the labeling of an elderly nursing home resident as confused.
Conceptual Framework
For Labeling Elderly Nursing Home Patients
As Confused

FIRST LEVEL OF ASSESSMENT (Patient characteristics observed by total
nursing home staff)

Essential
Disorientation to Time
Disorientation to Place
Disorientation about People
Hallucinations

Change in Ability to Problem Solve

Related
Sleep Disturbances
Fear, Anxiety
Apathy, Restlessness
Change in Behavior
Change in Communication

SECOND LEVEL OF ASSESSMENT (Collaborative assessment, staff profes-
sional, family and others, of patients behavior to determine confusion
vs. nonconfusion)

Remote Memory
Recent Memory
Ability to Follow Instruction
Orientation
Judgement

Validation Methods:
Mental Alertness Screening
History
Life Style

THIRD LEVEL OF ASSESSMENT (Registered Nurse's Comprehensive Assessment)

Interactional Factors
Social
Environmental
Brain Damage

Physiological States
Perceptual Problems
Infection
Compromised Brain Support

Nursing Diagnosis
(Analysis of Three Levels of Assessment)

Nursing Diagnosis of confusion secondary to _________________________
(specific problem statement.)

Figure II
CONCEPTUAL FRAMEWORK

Nursing assessment is dependent on gathering subjective and objective data about the patient. This process includes validation of the assessed data. A conceptual framework is proposed, adapted from Wolanin and Phillips work (1981) which included four levels of nursing diagnosis (Figure I). The proposed framework (Figure II) includes three levels of assessment and validation of assessment based on the analysis of the data from this study.

First level of assessment. The total nursing staff is involved with the assessment of the patient at this level. During this level, the total staff observe and collect data about the patient's behavior during their daily interactions.

Generated by the analysis of the data of this study, various characteristics are utilized to different degrees in the labeling of elderly patients as confused. Therefore selected characteristics of the nursing diagnosis are listed as Essential and Related factors to be assessed. Change in the ability to problem solve, showing the most variability in utilization, is to be used in combination with either essential or related characteristics. Confusion at this level is a general symptom that calls attention to the need for further assessment.

Second level of assessment. Once the presence of essential and related characteristics are observed, the total staff should collaboratively assess the factors listed in the second level of assessment. Family and other health care professionals can also be
included at this level of assessment. The Validation Methods of Mental Alertness Screening, History and Life Style are utilized to support the assessment data. Roslanic and Fitzpatrick (1979), have reported that the Mental Status Examination is an effective tool for the assessment of confusion.

**Third level of assessment.** This level of assessment requires the skills of a registered nurse. Through the utilization of the registered nurse's assessment skills, scientific knowledge and technical skills, the remainder of the assessment of the elderly patient is to be completed. Lincoln (1984) states in order to make an accurate assessment of confusion, knowledge of the sources of confusion is necessary. Only when this level of assessment is completed can a nursing diagnosis be identified. These three levels of assessment assist the nurse to identify a nursing diagnosis which would then direct the planning of appropriate nursing interventions to meet the needs of the individual patient. The registered nurse should then implement this patient's care through guidance and supervision of the care provided by the remainder of the nursing home staff caring for an elderly confused nursing home patient.

**LIMITATIONS OF STUDY**

This study had the following limitations:

1. A non-random sample was used

2. The sample was small (N=26) with limited number of registered nurses.

3. There were variables that were not measured, such as
attendance at workshops on care of the elderly prior to this research study.

4. There was no mechanism to determine if the selected characteristics were utilized in combination groups in labeling elderly patients as confused.

5. There was no opportunity for the subjects to include other characteristics or methods of assessment they may utilize in labeling elderly patients as confused.

**RECOMMENDATION FOR FURTHER STUDY**

The author recommends the following for further research:

1. A replication of this study using a large random sample would enable one to generalize the findings.

2. A study be completed to measure the utilization of selected characteristics in combinations in the labeling of elderly nursing home patients as confused.

3. A study of assessment tools utilized in the labeling of elderly nursing home patients as confused.

4. A study which would incorporate the proposed conceptual framework and analyze its utilization by nursing home staff in the labeling of elderly nursing home patients as confused.

5. A study which would incorporate the proposed conceptual framework and analyze its effectiveness in labeling elderly patients as confused and outcomes of nursing interventions.

6. Further study of each of the selected characteristics and their definitions as utilized by nursing home staff.
REFERENCES


Film

APPENDIX A

INFORMATION LETTER
Dear Staff Member,

My name is Patriciann "Pat" Brady; I am a graduate student in nursing at South Dakota State University and reside in Vermillion. I would like to ask you to participate in my research project for the completion of my education.

This research study has been designed to determine your use of described residents' characteristics in your design of labeling confusion. Any identifying characteristics and your participation will be held confidential and information will be reported as a group. Your participation will include responding to a short questionnaire before and after a two-minute video tape.

Through your participation in the study, this information can assist you in the care of elderly and their being labeled "confused".

If you complete the questionnaire, it will indicate your consent to participate. The time involved is approximately 15 minutes. Following the completion of these questionnaires, I will be giving a presentation.

Thank you.

Sincerely,

Patriciann F. Brady, R.N.
APPENDIX B

RESEARCH TOOL
CODE

Demographic Sheet

In order to assist with the analysis of the data, please provide the following information:

1. Unit Employed
   1
   2
   3

2. Present Position
   ___ Registered Nurse
   ___ Licensed Practical Nurse
   ___ Nursing (aides)
   ___ Other, Specify

3. Please check all that apply:
   ___ Masters Degree in Nursing
   ___ Masters Degree (non-nursing)
   ___ Bachelor Degree in Nursing
   ___ Bachelor Degree (non-nursing)
   ___ Associate Degree in Nursing
   ___ Diploma in Nursing
   ___ Licensed Practical Training
   ___ Other Health Care Technical Training, Specify
   ___ High School
4. Age:

<table>
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<tr>
<th></th>
<th>16-20</th>
<th>36-40</th>
<th>56-60</th>
</tr>
</thead>
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<td>41-45</td>
<td>61-65</td>
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<td></td>
<td>26-30</td>
<td>46-50</td>
<td>66-70</td>
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<tr>
<td></td>
<td>31-35</td>
<td>51-55</td>
<td>above 70</td>
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5. Length of Employment in this Facility part-time or full-time:

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<th>Less than 1 year</th>
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<td>21-25</td>
<td>36-40</td>
</tr>
<tr>
<td></td>
<td>6-10</td>
<td>26-30</td>
<td>above 40</td>
</tr>
<tr>
<td></td>
<td>11-15</td>
<td></td>
<td></td>
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</table>

6. Length of Employment working with Elderly (regardless of title or setting)

<table>
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<tr>
<th></th>
<th>1-5</th>
<th>16-20</th>
<th>31-35</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6-10</td>
<td>21-25</td>
<td>36-40</td>
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<tr>
<td></td>
<td>11-15</td>
<td>26-30</td>
<td>above 40</td>
</tr>
</tbody>
</table>
UTILIZATION OF DEFINING CHARACTERISTICS

The list of characteristics below have been identified as being used in the labeling of residents confused. For each characteristic listed, estimate the percentage of time in your clinical practice you have used that characteristic for deciding if a resident is confused. Please indicate a percentage for each characteristic using the following scale. Circle the correct response on the right.

1 = 0-10%  6 = 51-60%
2 = 11-20%  7 = 61-70%
3 = 21-30%  8 = 71-80%
4 = 31-40%  9 = 81-90%
5 = 41-50%  10 = 91-100%

I have said a resident is confused if she/he has?

1. Disorientation to time  1 2 3 4 5 6 7 8 9 10
2. Disorientation to place  1 2 3 4 5 6 7 8 9 10
3. Disoriented about people  1 2 3 4 5 6 7 8 9 10
4. Change in ability to problem solve  1 2 3 4 5 6 7 8 9 10
5. Sleep disturbance  1 2 3 4 5 6 7 8 9 10
6. Restlessness  1 2 3 4 5 6 7 8 9 10
7. Reported hallucinations (auditory or visual)  1 2 3 4 5 6 7 8 9 10
8. Has fear  1 2 3 4 5 6 7 8 9 10
9. Has anxiety  1 2 3 4 5 6 7 8 9 10
10. Apathetic
11. Change in behavior
12. Change in communication
From the video you just viewed of the elderly female, please indicate if you observed the following characteristics. Check (v) yes if observed; check (v) no if did not observe.

1. Disoriented to time
   _____Yes _____No

2. Disoriented to place
   _____Yes _____No

3. Disoriented about people
   _____Yes _____No

4. Altered ability to problem solve
   _____Yes _____No

5. Altered behavior
   _____Yes _____No

6. Altered communication problem
   _____Yes _____No

7. Sleep pattern disturbances
   _____Yes _____No

8. Restlessness
   _____Yes _____No

9. Fear
   _____Yes _____No
10. Anxiety  
   ____Yes  ____No  

11. Reports hallucinations (auditory or visual)  
   ____Yes  ____No  

12. Apathy  
   ____Yes  ____No  

13. Do you consider this patient in the video confused?  
   ____Yes  ____No  

14. State your definition of confusion:
APPENDIX C

ADMINISTRATOR INFORMATION LETTER
AND LETTER OF APPROVAL
Dear

June 6, 1985

One and a half weeks ago, I discussed with her at Nursing Home the possibility of asking permission of her staff to participate in a research project for my thesis work at SDSU for my Masters in Nursing.

gave her consent, and I have agreed to also provide an inservice presentation to her staff. However, I would like to also receive your consent. Due to misinformation, I would have contacted you first; and I apologize for this.
suggested, after she spoke to you, I send you a brief explanation of my project to receive your consent. Please find this information enclosed.

If you have any questions, please feel free to contact me. If you agree could you please return the enclosed form or a similar letter.

Sincerely,

Patriciann F. Brady, R.N.
201 N. Yale
Vermillion, SD 57069
(605) 624-4839

Enclosure
The goal of this study is to determine the utilization of the ten defining characteristics of the nursing diagnosis, Sensory Perceptual Alterations; related to Factors Associated with aging among nursing home staff in the clinical determination of confusion. Sensory Perceptual Alteration; related to Factors Associated with Aging, for the purpose of this study, will be referred to as APAFA.

**Instrument.** Three tools, developed by the investigator, will be utilized for this study. A demographic sheet, including individual characteristics pertinent to the study, will provide information on the subjects. The Utilization of Defining Characteristics Sheet will include the twelve individual defining characteristics of the nursing diagnosis, SPAFA. Subjects will be asked to estimate the percentage of time, in their clinical practice, they utilize the specific defining characteristic for the clinical determination of confusion. The third tool was developed for the purpose of obtaining the subjects response to a videotape presented. The subjects will be asked to indicate the presence or absence of the defining characteristics in the video presented. They will also be asked to respond to the following questions: 1) Do you consider this individual confused? 2) State your definition of confusion.

Content validity of the twelve defining characteristics is based on the work of recognized authorities on nursing diagnosis. The video tape, to be utilized for this research study is a two minute segment of the film *Code Gray: Ethical Dilemmas in Nursing* (Mitchell, 1984). The two minute segment includes a discussion of the use of physical restraints between a nurse and an elderly fe-
male individual. All editorial comments not included as dialogue between the elderly individual and the nurse will be deleted.
Patriciann F. Brady has my permission to ask permission of the Staff of Sister James Nursing Home to participate in her research study.

(AVAILABLE FROM AUTHOR)
APPENDIX D

DEMOGRAPHIC VARIABLES AND TRAITS UTILIZED TO LABEL PATIENTS AS CONFUSED F RATIO AND PROBABILITY OF F
<table>
<thead>
<tr>
<th>Variable</th>
<th>Total F</th>
<th>PR&gt;F</th>
<th>Unit F</th>
<th>PR&gt;F</th>
<th>Position F</th>
<th>PR&gt;F</th>
<th>Education F</th>
<th>PR&gt;F</th>
<th>Age F</th>
<th>PR&gt;F</th>
<th>Employment F</th>
<th>PR&gt;F</th>
<th>Length F</th>
<th>PR&gt;F</th>
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</thead>
<tbody>
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<td>0.54</td>
<td>1.45</td>
<td>0.29</td>
<td>1.89</td>
<td>0.21</td>
<td>1.39</td>
<td>0.32</td>
<td>0.81</td>
<td>0.52</td>
<td>0.04</td>
<td>0.84</td>
<td>0.51</td>
<td>0.49</td>
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<tr>
<td>Disorientation To Place</td>
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<td>0.34</td>
<td>1.30</td>
<td>0.32</td>
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<td>0.15</td>
<td>0.77</td>
<td>0.57</td>
<td>2.73</td>
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<td>0.37</td>
<td>0.55</td>
<td>0.18</td>
<td>0.68</td>
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<tr>
<td>Disorientation About People</td>
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<td>0.90</td>
<td>0.31</td>
<td>0.74</td>
<td>0.20</td>
<td>0.89</td>
<td>0.21</td>
<td>0.92</td>
<td>1.30</td>
<td>0.33</td>
<td>0.03</td>
<td>0.86</td>
<td>0.04</td>
<td>0.84</td>
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<td>Change in Ability To Problem Solve</td>
<td>0.28</td>
<td>0.98</td>
<td>0.06</td>
<td>0.93</td>
<td>0.46</td>
<td>0.70</td>
<td>0.45</td>
<td>0.76</td>
<td>0.16</td>
<td>0.91</td>
<td>0.02</td>
<td>0.88</td>
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<td>Sleep Disturbance</td>
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<td>0.51</td>
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<td>0.81</td>
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<td>Restlessness</td>
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<td>0.23</td>
<td>0.91</td>
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<tr>
<td>Hallucination</td>
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<td>0.74</td>
<td>0.99</td>
<td>0.41</td>
<td>0.06</td>
<td>0.98</td>
<td>0.91</td>
<td>0.50</td>
<td>0.21</td>
<td>0.88</td>
<td>0.09</td>
<td>0.77</td>
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<tr>
<td>Fear</td>
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<td>0.21</td>
<td>0.97</td>
<td>0.43</td>
<td>1.83</td>
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<td>1.76</td>
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<td>4.60</td>
<td>0.07</td>
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<td>Anxiety</td>
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<td>0.72</td>
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<td>0.37</td>
<td>0.96</td>
<td>0.49</td>
<td>0.48</td>
<td>0.70</td>
<td>0.58</td>
<td>0.47</td>
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<td>0.26</td>
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<tr>
<td>Apathy</td>
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<td>0.15</td>
<td>0.92</td>
<td>0.44</td>
<td>1.66</td>
<td>0.27</td>
<td>2.11</td>
<td>0.19</td>
<td>0.96</td>
<td>0.47</td>
<td>4.59</td>
<td>0.07</td>
<td>1.07</td>
<td>0.34</td>
</tr>
<tr>
<td>Change in Behavior</td>
<td>0.44</td>
<td>0.91</td>
<td>0.09</td>
<td>0.91</td>
<td>0.43</td>
<td>0.73</td>
<td>0.35</td>
<td>0.83</td>
<td>0.39</td>
<td>0.76</td>
<td>0.02</td>
<td>0.89</td>
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<td>0.31</td>
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<tr>
<td>Change in Communication</td>
<td>0.41</td>
<td>0.93</td>
<td>0.08</td>
<td>0.92</td>
<td>0.34</td>
<td>0.79</td>
<td>0.32</td>
<td>0.85</td>
<td>0.30</td>
<td>0.82</td>
<td>0.01</td>
<td>0.91</td>
<td>0.81</td>
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APPENDIX E
### Analysis of Variables by Traits and 6 Main Demographic Variables

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<th>Source</th>
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<td>1.28</td>
<td>0.37</td>
</tr>
<tr>
<td>Unit</td>
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<td>1.36</td>
<td>0.30</td>
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<tr>
<td>Position</td>
<td>3</td>
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<tr>
<td>Education</td>
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<td>1.37</td>
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<tr>
<td>Age</td>
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<td>1.83</td>
<td>0.21</td>
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<tr>
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<tr>
<td>Length</td>
<td>1</td>
<td>1.99</td>
<td>0.19</td>
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</tbody>
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APPENDIX F

DEFINITIONS OF CONFUSION GIVEN BY SUBJECTS
1. Unable to distinguish person, time and place.

2. Acts very nervous when they are confused and want to be left alone and sometimes want to talk or do something they know they shouldn't.

3. Someone who does not know where they are, what day it is or what they are doing. Not being able to cope with daily living.

4. No knowing time, place, whereabouts in varying degrees.

5. Someone with a distorted view of reality.

6. Not knowing where, when and how or what's going on around you.

7. A person that doesn't know person, place or time at all 24 hours.

8. A person's inability to be able to communicate their feelings to you.

9. Not oriented to the reality of a given time, place and/or event.

10. Not aware of time, place, self, situation.

11. Disorientation to time, place and people.

12. A person who doesn't relate to reality.

13. Not aware of place, time or whom they are. May be violent and mean.

14. Does not recognize family members, repeats same questions and sentences over and over - do not know where they are or why they're here 100% of the time.

15. Disoriented as to time, place and people. Necessarily mean all the time.

16. A person who is not oriented to person, place and time at least 75% of the time.

17. Someone who doesn't understand sometimes and get things mixed up.

18. Unaware of time, place, persons. No longer able to fully take care of needs. Such as dressings, hygiene.
19. A person who doesn't know time, place or person. A person not capable of making certain decisions for their own welfare and the good of that person's health.

20. Confusion: not relating to here and now of daily life.

21. Inability to identify person/time/place or follow through instructions. Inability to organize thoughts.

22. Maybe she cannot remember what they explain to her at all times. Seems to try and understand, seems to be cooperative with her nurses.

*Four individuals did not provide their definition of confusion.*