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PATTERNS AND VARIATIONS IN DELUSIONS IN PATIENTS IN WESTERN NORTH CAROLINA PSYCHIATRIC SYSTEMS

A Thesis

Presented for the

Master of Science in Nursing

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Deborah Lynn R. Ross

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ABSTRACT

Delusions must be clearly understood by mental health professionals to therapeutically relate to the patient and effect change in the behaviors brought forth through altered thought processes. What factors affect the content and frequency of delusions manifested by patients in western North Carolina? This question was investigated at an inpatient psychiatric facility in western North Carolina. Data were collected from all patients exhibiting delusions who were admitted from September 10, 1985 through March 10, 1986. These patients resided in either Avery, Buncombe, Gaston, Haywood, Madison, Mecklenburg, or Watauga Counties. The sample was divided into two major groups: those patients residing in one of the three metropolitan counties and those residing in one of the four rural mountain counties.

The subjects in the study typically had at least a tenth grade education and had either never married, were divorced or separated. Most often they resided in metropolitan Buncombe or Mecklenburg counties. The content of the delusions most frequently manifested was of a persecutory nature and the subjects generally expressed a preference for the Baptist faith. Other findings and implications for further research are given.

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CHAPTER I

INTRODUCTION

In inpatient psychiatric settings, delusional patients frequently evoke feelings not only of consternation but also anxiety, misunderstanding, and discomfort in nurses who work with them. This may be the result of feelings of inadequacy in dealing with the patient's delusions, fear of the patient's behaviors prompted by the delusions, and the limited information available about the patient's delusions. A feeling of hopelessness often results which causes the nurse, and other mental health workers, to relate to the patient in a manner that indicates a lack of acceptance (Peplau, 1952). An increase in the knowledge level about delusions could help mental health nurses to more easily recognize different types of delusional systems. As a result, patient care would be improved because appropriate nursing interventions could be implemented more quickly.

A. PURPOSE OF THE STUDY

The purpose of this study was to examine delusional systems of patients from rural mountain counties of western North Carolina, and compare them to delusional systems in patients from the metropolitan counties of this same region. The study was conducted at a mental health facility in western North Carolina, and focused on those

patients from Haywood, Madison, Watauga, Avery, Buncombe, Mecklenburg and Gaston counties. All these patients were delusional on admission to the facility. Comparisons were made between the delusional systems and demographic data of the patients from rural counties as opposed to those patients from metropolitan counties. These data were collected from the patient charts.

B. DEFINITIONS AND ETIOLOGICAL THEORIES

1. Definitions and Major Concepts

In the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1980) a delusion is defined as a false, personal, firmly held belief based on inaccurate interpretations of external events. This belief is not usually accepted by other members of the person's culture and is firmly held despite irrefutable evidence to the contrary. Delusions are relative to the abilities, experiences, intelligence and education of the individual as well as the life situations from which they arise (Moor & Tucker, 1979).

It may be difficult to determine when an individual is experiencing delusions because not all false beliefs are delusions. Bemporad and Pinsker (1974), state false beliefs may be learned or be a result of faulty reasoning, distorted perceptions, a disturbance of identity, or giving only selective attention. The authors further state that the possibility of these alternatives should be ruled out

before the diagnosis of delusion is made. They feel it is imperative that a diagnosis of delusion be based on demonstrated arbitrary or idiosyncratic thinking.

Frequently, health professionals describe a patient as having delusional symptomatology simply because the belief system does not give one enough information to make a valid judgement concerning the presence or absence of a delusion. There must also be some knowledge of the patient's perceptions that validate the belief, as well as evidence of an ability to evaluate those perceptions (Moor & Tucker, 1979).

2. Origin and Development

There are many types of delusions but their origin and development differ, even when the content of the delusions is identical (Freeman, 1981). del Rio Coll and Catala (1979) cite two distinct phases in the development of a delusional system. The first phase includes two events known as ego destruction and the emergence of fantasies. During this phase sociocultural factors begin shaping the delusional content to compensate for social frustration and feelings of inadequacy. Emerging fears and fantasies also serve as compensatory mechanisms.

The second phase in the development of delusional systems is known as delusional ego reconstruction. In this phase, the delusions serve as defense mechanisms to shield the individual from anxiety provoking situations. Cultural

factors seem to be dominant in the progression of this phase (del Rio Coll & Catala, 1979). Delusions may in essence be a representation of the individual's beliefs at a given point in time (El Sendiony, 1976).

There is the potential for persons experiencing any type of mental illness to exhibit delusional symptomatology, but there are those who exhibit no symptoms other than the delusion itself. This syndrome is known as delusional disorder and is more frequent in men than women. Often these delusions involve thoughts about marriage, plots, and being unfairly treated (Winokur, 1977). In a review of data from hospital admissions in England, Canada, and the United States, Kendler (1982) found that delusional disorders were most often seen in middle to late adulthood. In contrast to Winokur's (1977) findings the patients were more likely to be married females who were both financially and socially deprived.

Most of the literature dealing with patients experiencing delusions, however, deals specifically with those who have a major psychiatric illness. Schizophrenia is a major psychiatric illness that affects the total personality. There are usually a series of exacerbations and remissions as the disease progresses. Delusions are a classic symptom of schizophrenia and are common when the early stages of the illness has fully developed (Bemporad and Pinsker, 1974). During the early stages of the illness the delusion is merely an attempt to explain things that

are not understood by the patient. The authors relate that as the disease progresses the patient seeks to explain everything as a consequence or result of one cause. The patient accepts this pathological view of his world. This systematization of delusions indicates a poor prognosis.

3. Theoretical Basis

A delusion usually indicates a psychotic process. The delusion is stimulated by events in the environment that cause the patient to feel that something unusual is happening over which he or she has no control (Berlyn, 1977). Because there is such a strong feeling of loss of control, goals of the patient are often frustrated. When a frustrated goal cannot be given up or lowered, feelings of insecurity develop because of a great ego need. Often the response to the frustrated ego need is a delusional thought process (Peplau, 1952). "There is always an anxiety pattern of long standing that accompanies repeated frustrations that require reorganization of the personality along pathological lines as relief from feelings of insecurity" (Peplau, 1952, p. 93).

In another theory Bleuler (1964) proposed that delusions frequently occur when the ability to logically reason is weakened. The individual's affect increases in strength and the safeguards normally preventing inappropriate wish fulfillment are removed. These safeguards are no longer connected to the wish and the real

value the wish holds. This altered logic serves the patient's affective needs which furthers the delusion.

In a later theory, Arieti (1974) states that delusions result from inner reality becoming more important than external reality. The internal and external reality become confused. As a result, anxiety increases and the individual begins to believe the future has no hope and that his or her self image is threatened. The environment becomes distorted and ultimately loneliness is experienced. The individual feels defeated and worthless. As the person struggles to deal with these troubling thoughts, the anxiety becomes overwhelming and an emotional need to believe that he or she is a special person or possesses special powers results.

Wright (1975) believes delusions originate from a lack of meaningful relationships. If one has few meaningful relationships in life, loneliness may occur. Loneliness then produces psychological changes in an effort to compensate. One form of compensation may be the formation of delusions.

Another view is expressed by Maher (1974) who believes there is a biological basis to some primary perceptual abnormalities. These perceptual abnormalities may fluctuate with stress and involve vivid and intense sensory stimuli such as hallucinations. The patient then develops some hypothesis to explain the unusual perceptions as a

normal part of the cognitive process and a delusion results.

An expanded view of the etiology of delusions is reflected in Peplau's belief that a delusion results from:

> an inference (conclusion, idea) drawn from inadequate data, under conditions of high anxiety or panic which is retained (becomes fixed) due to the relief of panic it afforded and to prevent further anxiety (H. E. Peplau, personal communication, April 5, 1986).

The inadequate data result from the greatly narrowed perception of the situation in which the details are incomplete. The delusional idea remains fixed because it was initially effective in relieving overwhelming panic.

Delusions are highly subjective but are adaptive in that they prevent total disintegration of the ego. Reality is perceived as dangerous; therefore, as a way of coping, the ego is altered to avoid facing reality. Delusions result (Doona, 1979).

It appears that several themes are prevalent in major theories regarding the etiology of delusions: anxiety, loneliness, and a blurred division between internal and external reality. There are diverse opinions as to the mechanisms which actually result in a delusional system but all theorists spoke of the difficulty in caring for and effecting change in delusional patients.

CHAPTER II

REVIEW OF THE LITERATURE

A review of research literature was done to determine the need for this study. Studies of delusional patients both in the United States and foreign countries were included, because most of the research dealing with delusional symptomatology was conducted in foreign countries. Not until recently have studies considering the causative factors of delusions been conducted in the United States. Special attention was given to those studies which sought to identify demographic variables associated with delusions.

A. STUDIES FROM FOREIGN COUNTRIES

Ahmed (1978) in a study of 51 delusional schizophrenic patients in Karachi, Pakistan found the most common types of delusions seen involved ideas of persecution (70.6%), religion (49%), magic (45%), reference (35.3%), and grandeur (25.5%). Kala and Wig (1982), in a study of 200 patients in India, had similar results but felt that the demographic profiles of the patients gave some evidence of the type of delusions that could be expected. In one profile was the rich, educated, and urbanized person. This person exhibited more delusions of grandeur and delusions of reference. In the second profile the person was poor, illiterate, and from a rural area. This person exhibited

delusions of bodily control with strong religious or magical content.

In a retrospective case note study in Edinburgh, Scotland, three groups containing 114 depressed patients each were studied. One group of patients was hospitalized in 1892, one from 1942-1943, and one from 1981-1982. The occurrence and content of the patients' delusional systems were recorded as well as their age, sex and diagnosis. In each of the groups it was discovered that the delusional content in women was usually of persecution and reference, and in men delusions of sinfulness and poverty were most prevalent. The changes that did occur in the delusional content were reflective of cultural change over time (Eagles, 1983).

One other foreign study, from Czechoslovakia (Cerna and Cerny, 1974) compared 287 schizophrenics treated from 1946-1947 with 146 schizophrenics treated from 1969-1970. In this study it was found that the incidence of delusions and hallucinations had not changed but the content of the delusions had. Religious and magical delusions had decreased in males but increased in females. Males were found to have more technologically oriented delusions whereas females had more erotic delusions. The authors suggested in this study that the life experiences of the patient had an influence on the content of his or her delusions.

A study conducted in a crosscultural hospital in Kenya

revealed cultural differences existed in the manifestation of delusions. African, Jamaican, and Caribbean patients had higher frequencies of persecutory delusions while delusions of a sexual and fantasy nature were more prevalent in Far Eastern patients (Ndetei & Vadher, 1984).

El Sendiony (1976) conducted a study of hospitalized psychiatric patients in Egypt. He discovered the content of the delusions was directly related to social class. Delusions presented by the middle and upper class patients were highly influenced by western values while those presented by patients from the lower class were more traditional in content. This difference seemed to be related to a difference in the cultural milieu. This is in direct contrast to a study done in Johannesburg, South Africa which indicated that the cultural content of the delusional patients showed no significant relationship to class, education, or income. In this study Hurst (1975) found that highly educated and socialized patients frequently reverted back to traditional beliefs of witchcraft when delusional. This is probably related to the tribal background of many professionals in Africa.

In a study of patients admitted over a five year period to a Greek psychiatric hospital, grandiose delusions were found more frequently in males than females. Kazamias (1970) believed that the "subjective culture" of the patient may be responsible. Menon, Cornelio, and Saraswathy (1980) found similar results in Madras. A

retrospective study was done which revealed that men experiencing delusions were younger, more often single, and more literate than their female counterparts. The primary delusions presented by the men were grandiose and persecutory in nature. The persecution involved deliberate interference, mistreatment and/or threats. The women exhibited more cultural and vague delusions. The cultural delusions involved the idea of someone performing black magic against them and the vague delusions involved ideas of someone performing some act against them.

In Jerusalem a study of 57 Jewish and 20 Arab patients revealed that the psychotic messianic patient believed that he or she was an envoy or interpreter of God. These patients did not actually identify with God or a Biblical prophet. It appeared that these delusions were based on cultural and religious factors and were a part of the patients' social and psychotic world. Often the delusions seemed to be an attempt by the patient to negate unbearable oppression or persecution (Perez, 1978).

B. STUDIES FROM THE UNITED STATES

In a study of 44 men and 44 women evaluated at the Payne Whitney Clinic of New York Hospital, women were found to have more frequent erotic and heterosexual delusions, while men had more homosexual delusions (Rudden, Sweeney, Frances, & Gilmore, 1983).

Karson (1980), in a retrospective study of 575

inpatients in Portland, Oregon, explored delusions of grandeur. He found that 76% of the manic patients and 40% of the schizophrenics studied exhibited this type of delusional system. Delusions of possessing grandiose abilities were present in all of the delusional manic patients and in 74% of the delusional schizophrenic patients studied. Karson feels that treatment modalities presently used should be reevaluated bearing in mind the large number of patients experiencing delusions of grandeur and delusions of possessing grandiose abilities.

Another study was conducted at Friends Hospital in Philadelphia. There the delusional systems of 115 patients were studied and 27.8% of these patients were found to have religious delusions. Of those patients 29% were of the Catholic faith, 28% were Protestant, and 26% were Jewish, indicating that persons of all faiths can have religious delusions (Clark, 1980). Perez (1977) in his study of Jewish and Arab delusional patients in Jerusalem, concluded that the focus of the religious delusional system does not cross religious or cultural boundaries unless the identity of the person has completely deteriorated.

At a Veterans Administration Hospital in Illinois six females and eight males were chosen as the experimental group out of sixty-eight delusional patients. Cognitive input was tested by "The Logical Consequences Test" which the authors adapted from "The Consequences Test" standardized by Guilford and Hoepfner (1971, as cited in

Forgus and DeWolfe, 1974). This test revealed that males perceived more negative interpersonal pressure and females more negative sexual pressure in their lives. The negative interpersonal, sexual, and environmental pressures experienced by the patients were significantly related to the dominant delusional themes they exhibited (Forgus & DeWolfe, 1974).

Roose (1983) conducted a retrospective study of all patients who committed suicide at the New York State Psychiatric Institute over a twenty-five year period. He found that depressed patients who exhibited delusions were five times more likely to commit suicide than were nondelusional individuals. Delusions emerged as a powerful predictor of suicide potential in patients experiencing endogenous depression. Delusionally depressed men appeared to be at greatest risk (Roose, Glassman, Walsh, Woodring, & Vital-Herne, 1983).

Demographic characteristics of three hundred twenty-eight nonforensic "White House Cases" were gathered in a retrospective study at St. Elizabeth's Hospital (Shore, et al., 1985) The purpose of the study was to discover if the patients were similar to those described in earlier research, and to determine which patients made threats against political figures before or after hospitalization. These patients had been admitted to the hospital because secret service agents considered them to be mentally ill and a potential danger to a public

official. Seventy-one had threatened some prominent political figure before or after their hospitalization. These patients expressed a variety of delusional content and were generally white males who were separated or divorced. None of the patients were known to have made an attempt on a prominent political figure's life but three actually did assault another person. The study revealed a decline in the age of the patients as well as the number of patients who were foreign born.

At present there have been no studies of delusional patients conducted in North Carolina. No studies have been found that correlated age, sex, and geographic location with the delusional system of the patient. Previous research has indicated many factors that contribute to delusions but none attempted to correlate demographic variables with delusional content. This study was an attempt to utilize demographic data to predict the content of delusions expressed by patients in western North Carolina.

CHAPTER III

METHODS

This researcher feels delusional patients are often given inadequate and inappropriate nursing care due to a lack of knowledge on the part of the caregiver. Nurses frequently ignore, encourage, or augment the patient's delusions through faulty therapeutic techniques or lack of knowledge regarding delusions. The researcher's intent was to obtain more knowledge of factors contributing to delusions, thereby greatly improving nursing care and perhaps decreasing the length of inpatient hospitalization.

A. THE RESEARCH QUESTION

It was the intent of this researcher to determine whether delusions exhibited by patients residing in the rural mountain counties of western North Carolina differed from those of patients from metropolitan counties of the same region in content and frequency.

B. SUBSIDIARY QUESTIONS

Subsidiary questions were:

1. Is age related to the content and frequency of delusions?

2. Is the patient's level of formal education related to the type of delusion manifested?

3. Is there a difference in the frequency of religious delusions between urban and rural patients?

4. Is there a relationship between the type of delusion and the number of previous hospital admissions?

5. Is there a relationship between the type of delusion and marital status?

6. Is religious preference related to the content of delusions?

C. DESCRIPTION OF DATA COLLECTION

The study was a descriptive study. The classification variables considered were the age, sex, education, religious preference, county of residence, type of admission, and number of previous admissions. The outcome measure was the type of delusion the patient exhibited.

D. PROCEDURE FOR DATA COLLECTION

1. Data Collection Form

A data collection form (see Appendix) was used to gather demographic data and data about the type of hospital admission and the type of delusional system present in each patient. These data were gathered from the patient records. If the data were found to be incomplete or inconsistent, the subject was excluded from the study.

2. Types of Delusions

The major area in which researcher bias could enter was in the designation of types of delusional systems. To lessen this possibility, the Diagnostic and Statistical Manual of Mental Disorders-III (1980) was used to define the types of delusions as follows:

Delusion of Being Controlled: This is a delusion that one's feelings, thoughts and impulses are not one's own. They are felt to be imposed by some external force and the person actually feels he or she is controlled by that force.

Bizarre Delusion: A bizarre delusion is a false belief that is totally absurd and has no possible factual basis.

Grandiose Delusion: The content of this delusion includes an exaggerated sense of self importance, power, identity, or knowledge.

Religious Delusion: Religious delusion is differentiated from grandiose delusion in this paper. Here religious delusions are grandiose delusions about one's self being a prominent Biblical character.

Delusional Jealousy: In delusional jealousy one feels the sexual partner is unfaithful.

Nihilistic Delusion: This type of delusion involves feelings of the non-existence of one's self, other, or the world.

Persecutory Delusion: The content of this delusion is

that a person or group is being persecuted, harassed, cheated, or attacked. Usually the patient feels that he or she, or some person or group close to them, is the object of the "persecution".

Delusion of Poverty: This delusion involves the feeling that one is now or will be deprived of all or almost all material possessions.

Somatic Delusion: A somatic delusion is one whose main content involves bodily functions.

Another method used to eliminate researcher bias was that of consulting the thesis committee chairperson if an accurate determination of the type of delusion exhibited could not be made. The information about the subject was given and the committee chairperson determined the type of delusion exhibited. This was done on four occasions.

E. PROCEDURE FOR SUBJECT SELECTION

1. Consent of the Facility

An official consent to gather information from patient records was obtained from the inpatient facility in a letter received by the researcher. A copy of this letter was sent with the Form A to the Office of Research Compliances at the University of Tennessee. Due to the request of confidentiality by the facility the approval letter does not appear in the appendix. The researcher, the major professor, and the Office of Research Compliances have copies of the letter on file. The nature of the study

was such that individual informed consents were not required by the institution. All patient names and record numbers were kept in the researcher's home under locked conditions. No information given in the results of this study will, in any way, implicate specific patients since demographic data were the primary focus of the data collection process.

2. Record Review

All records of adult patients on four admission units of a large inpatient psychiatric facility admitted from September 10, 1985 through March 10, 1986, who resided in either Haywood, Madison, Watauga, Avery, Buncombe, Mecklenburg, or Gaston counties, were reviewed to ascertain the presence of delusional symptomatology. The rural mountain counties used in this study were Haywood, Madison, Watauga, and Avery counties. The metropolitan counties designated were Buncombe, Mecklenburg, and Gaston counties. If a patient was admitted from a county in which he or she did not normally reside, this patient was excluded from the study. Also excluded were patients who resided in the counties designated in the study for an undetermined amount of time. This was done in an attempt to limit the possibility of various sociocultural influences affecting the delusion presented. If it was determined that the patient was a resident of the county from which he or she was admitted for less than one year, they were excluded

from the study. Documentation of delusions was unclear in many instances, therefore, patients were also excluded when the delusions were not clearly identified in the record. This procedure resulted in subjects who, for the most part, were admitted involuntarily to the facility. Only six of the 48 subjects were admitted voluntarily and one was allowed to change to a voluntary status following admission. The sample was also approximately equal in number of male and female subjects.

The records of those patients who exhibited delusions on admission were studied in depth to gather demographic data and information about the delusional system. This information was gathered from the notes of physicians, social workers, nurses, and intake workers. An identification number was given to each patient used in the study to ensure confidentiality. The researcher alone was able to match the identification number with the record number and the patient's name. All data collected were used.

CHAPTER IV

RESULTS

During the time period designated for data collection 356 patients were admitted to the inpatient facility from the seven counties specified. From this number only 52 met the criteria for inclusion in the study. The major reasons for exclusion were: insufficient data, inability to determine the county of residence, and insufficient documentation to determine the type of delusion exhibited. Only three persons were excluded from the study due to inability to locate their records. Four subjects studied displayed symptoms of two major types of delusions. Because both appeared to play a significant role in the subject's illness, these subjects were excluded from the study also. This resulted in a total of 48 delusional patients being studied. Only seven of the 48 patients were admitted from rural counties which prevented the researcher from making the comparisons that were originally intended.

A. RELATIONSHIP BETWEEN AGE AND DELUSIONS

From the clinical experience of the researcher it was felt that younger subjects would express more delusions of grandiosity and older subjects more religious and persecutory delusions. To determine the accuracy of this assumption the type of delusion manifested was considered simultaneously with the age of the subject (see Table 1).

Table 1. Relationship Between Age and Delusions

	Age			
Delusion	20-29	30-39	40-49	50-63
Being Controlled		1(7)	1(6)	
Bizarre	1(8)			
Grandiose	4(31)	7(50)	4(25)	1(20)
Religious	2(15)			
Somatic	1(8)		1(6)	1(20)
Persecutory	5(38)	6(43)	10(63)	3(60)
Total	13	14	16	5

In all tables the number in parentheses represents the percentage of the total number for that classification variable.

The age of the subjects ranged from 20 to 63; therefore, the subjects were divided into four age groupings to analyze the data.

Grandiose and persecutory delusions were the most frequently exhibited by the subjects studied. Twenty-four of the 48 subjects exhibited persecutory delusions and 16 exhibited grandiose delusions. Only one person in the age group of 30 to 39 presented any type of delusional content other than grandiose and persecutory. One example of a persecutory delusion was a subject who felt the Klu Klux Klan was depriving her of her rights. Another example was a woman who felt her husband was trying to kill her. An example of a grandiose delusion was a person who felt she was going to marry Elvis Pressley and was the heir of the Reynold's Tobacco Company.

It is interesting to note that all subjects having bizarre and religious delusions were between the ages of 20 and 29, and those experiencing delusions of being controlled were between the ages of 30 and 49. A belief that she was a boy inside of a girl was a bizarre delusion expressed by one subject and a belief that she was Jesus Christ was a religious delusion expressed by another. Subjects expressing somatic delusions were found in several age groupings. This type of delusion was expressed by a man who felt he had sustained a serious penile injury as a result of sexual intercourse.

The most significant results were reflected in the 40

to 49 and 50 to 63 age groupings. In the 40 to 49 age group 63% of the delusions exhibited were persecutory and 60% of those presented by the 50 to 63 age group were also persecutory.

It would seem feasible to expect older patients to present more somatic delusions because of the multiple bodily changes that occur in this population. This was not found to be true in the 50 to 63 age group. It is possible that the small number of subjects in this age group was not indicative of delusional content seen in the mentally ill elderly population.

Because of the limited number of subjects in each age grouping no predictable pattern can be established that can be used to determine the type of delusion manifested from the age of the patient.

B. RELATIONSHIP BETWEEN EDUCATION AND DELUSIONS

Education is frequently a strong deterrent to a decreased self-esteem. Because a decreased self-esteem can elicit anxiety and loneliness which are known to affect the formation of delusions, it seemed to the researcher that a lack of education could affect the manifestation of delusional symptoms.

When analyzing the relationship of the subject's educational level with the type of delusion exhibited, some interesting data were obtained (see Table 2). The only subject who exhibited bizarre delusions had a sixth to

Table 2. Relationship Between Education and Delusions

	Educational Level			
Delusion	6-9	10-12	college courses	college graduate
Being controlled		2(6)		
Bizarre	1(12.5)			
Grandiose	3(37.5)	11(33)	2(40)	
Religious		2(6)		
Somatic		3(9)		
Persecutory	4(50)	15(45)	3(60)	2(100)
Total	8	33	5	2

ninth grade level of education. Those presenting delusions of being controlled, religiousity or somaticism had tenth to twelfth grade levels of education. Subjects who had taken some college courses exhibited only grandiose and persecutory delusions with a 40% and 60% occurrence respectively. The only delusions exhibited by the college graduates in the study were persecutory. The data indicate that persecutory delusions are found in persons of all educational levels and occur more frequently than any other type of delusion.

Another significant type of delusional system distributed fairly equally across educational levels is grandiose delusions. It is probable that our present day society and world events play a role in the prominence of these two delusional systems across all age groups but it was beyond the scope of this study to explore this question.

C. RELATIONSHIP BETWEEN COUNTY OF RESIDENCE AND DELUSIONS

Subjects residing in the rural mountainous counties of western North Carolina frequently have few social activities other than those centered around the local church. In contrast, the subjects residing in the metropolitan counties, are exposed to a diverse lifestyle with opportunities for education, recreation, and social relationships more readily available. It was the

assumption of the researcher that the subjects from the rural mountain counties would exhibit more religious delusions than those from the metropolitan counties. In reality all of the patients presenting religious delusions were from the metropolitan counties (see Table 3). It is not known if these patients were influenced by residing previously in rural western North Carolina.

The adult populations of the counties included in the study are as follows (U.S. Department of Commerce, Bureau of the Census, 1983): Haywood 34,351; Madison 12,565; Watauga 24,969; Avery 10,429; Buncombe 119,340; Gaston 114,722; and Mecklenburg 291,883. Because only seven subjects were from the rural mountain counties no valid conclusions could be drawn from this population. It is interesting to note, however, that five of the seven subjects from the rural counties did exhibit persecutory delusions.

Other data gained from the study indicate that 56% of the subjects from Mecklenburg county presented grandiose delusions and 38% presented persecutory delusions. No religious delusions were exhibited which is surprising due to a large religious community located in close proximity to Mecklenburg county. Another interesting observation is the variety of delusional content expressed by subjects from Gaston county. The primary delusional content presented by the subjects from all counties in the study was persecutory with the exception of Gaston county. In

Table 3. Relationship Between County of Residence and Delusions

Delusion	County						
	Haywood	Madison	Watauga	Avery	Buncombe	Mecklenburg	Gaston
Being Controlled					1(7)		1(9)
Bizarre							1(9)
Grandiose			1(50)		4(29)	9(56)	2(18)
Religious					1(7)		1(9)
Somatic	1(33)					1(6)	1(9)
Persecutory	2(67)	1(100)	1(50)	1(100)	8(57)	6(38)	5(45)
Total	3	1	2	1	14	16	11

subjects from Gaston county grandiose delusions were most often seen. Of those subjects from Buncombe county 57% presented persecutory delusions and 29% presented grandiose delusions. Again no predictable pattern can be seen in relating the subject's county of residence to the delusional system presented. More subjects would be needed for a significant pattern to emerge.

D. RELATIONSHIP BETWEEN THE NUMBER OF PREVIOUS HOSPITAL ADMISSIONS AND DELUSIONS

It appeared to this researcher that subjects having a large number of hospital admissions would exhibit more bizarre and complex delusions than those who had no previous admissions (see Table 4). In reality 19 of the 48 subjects had never been admitted to the inpatient facility previously and 58% of those subjects presented persecutory delusions. The only delusions presented by those subjects admitted more than 13 times were grandiose and persecutory. There were no subjects in the category of 10 to 12 previous admissions.

It is interesting to note that delusions of being controlled, bizarre, and religious delusions were manifested only by subjects having less than five previous admissions. Approximately 40% of the subjects had no previous admissions. This was surprising to the researcher since a large number of admissions often indicates a worsening symptom of mental illness. This could be a

Table 4. Relationship Between the Number of Previous Hospital Admissions and Delusions

	Previous Hospital Admissions			
Delusion	0	2-5	6-9	13-32
Being Controlled	1(5)	1(7)		
Bizarre		1(7)		
Grandiose	5(26)	6(40)	3(33)	2(40)
Religious	1(5)	1(7)		
Somatic	1(5)	1(7)	1(11)	
Persecutory	11(58)	5(33)	5(56)	3(60)
Total	19	15	9	5

result of the increased focus on caring for the chronically mentally ill in the communities in recent years. The number of subjects again limits further analysis of emerging patterns between number of hospital admissions and delusional systems.

E. RELATIONSHIP BETWEEN MARITAL STATUS AND DELUSIONS

Delusions can be extremely difficult to tolerate and understand. In many instances the delusion presented seems to completely control the person's life. It is obvious that family and social relationships can become strained and even break under the stress of living with a delusional person. The expectation of this researcher was that the great majority of subjects in the study would be single (never married), divorced, widowed, or separated as a result of the stress of the subjects upon the family unit. This did appear to be true (see Table 5).

Subjects who had never been married comprised 35% of the research population. Only 21% of the subjects were currently married. Another 21% were divorced. The largest number of subjects exhibiting persecutory delusions (11) had never been married. There were 17 subjects in this category. None of the other marital status categories had more than 10 subjects.

These results may indicate lack of emotional support for the mentally ill patient. When few supports were

Table 5. Relationship Between Marital Status and Delusions

	Marital Status				
Delusion	Married	Single	Div.	Wid.	Sep.
Being Controlled	1(10)		1(10)		
Bizarre					1(12.5)
Grandiose	4(40)	5(29)	5(50)	1(33)	1(12.5)
Religious			1(10)		1(12.5)
Somatic		1(6)		1(33)	1(12.5)
Persecutory	5(50)	11(65)	3(30)	1(33)	4(50)
Total	10	17	10	3	8

available, loneliness and/or anxiety began to develop which possibly resulted in the formation of a delusional system. It does appear that delusional patients do have difficulty in maintaining stable family relationships.

F. RELATIONSHIP BETWEEN RELIGIOUS PREFERENCE AND DELUSIONS

There are many variations in worship patterns in western North Carolina ranging from traditional church denominations to worship of the occult. Each subject was asked, on admission to the hospital, his or her religious preference. A significant number indicated a preference other than that of a major denomination. A category of "other" was included on the data collection form to account for those persons who had no religious preference or a worship style vastly different from the major denominations (see Table 6).

It appears the relationship between religious preference and delusional content is highly predictable. The research population included 42% who expressed a preference for the Baptist denomination. This may have been a result of 131,018 Baptists residing in the counties studied (Baptist State Convention of N. C., 1986). It is interesting to note that 60% of subjects having persecutory delusions expressed a preference for the Baptist faith, and 61% of those having grandiose delusions were in the "other" religious category. Delusions of being controlled as well

Table 6. Relationship Between Religious Preference and Delusions

Delusion	Religious Preference							
	Cath.	Epis.	Presb.	Meth.	Bapt.	Pent.	Ch/God	Other
Being Controlled					2(10)			
Bizarre					1(5)			
Grandiose			2(100)	2(67)	1(5)			11(61)
Religious					2(10)			
Somatic		1(100)			2(10)			
Persecutory	1(100)	__	__	1(33)	12(60)	1(100)	2(100)	7(39)
Total	1	1	2	3	20	1	2	18

as bizarre, religious, and somatic delusions were only manifested by subjects who expressed a preference for the Baptist denomination. It would have been helpful to have conducted the study in an area where there is not such a strong influence from one denomination.

CHAPTER V

RESEARCH IMPLICATIONS

It was the purpose of this study to examine the relationship between certain demographic variables and delusional content exhibited by psychiatric patients in rural and metropolitan counties of western North Carolina. The demographic variables studied were age, formal education, county of residence, previous hospital admissions, marital status, and religious preference. The demographic data were considered to be classification variables and delusional content the outcome measure.

The major premise of the study was that knowing demographic information about a patient would make it possible to predict the content of that person's delusions with reasonable accuracy. This was not found to be true. Subjects who met the criteria for inclusion in the study did not exhibit the expected degree of variability in delusional content or in demographic characteristics. This caused much of the data obtained to be skewed. As a result no valid statistical tests could be performed on the existing data.

A. IMPLICATIONS OF THIS STUDY

Results derived from this study provided a descriptive picture of the patient from western North Carolina who was experiencing delusions upon admission to an inpatient

psychiatric facility. The typical age of the patient ranged from 20 to 49 and he or she had at least a tenth grade education. The individual resided in Mecklenburg or Buncombe counties and had less than six previous hospital admissions. Typically the patient had either never married, was divorced or separated. He or she stated a preference for the Baptist denomination or had no concrete religious preference. Religious preference and delusional content appeared strongly related, with the greatest relationship being among subjects of Baptist faith and persecutory delusions. As indicated previously this may be a result of the large number of Baptists in western North Carolina.

The results of this study were specific to western North Carolina but one aspect may be generalizable to other areas of the United States as well. It is highly improbable that delusions of patients from any area of the United States can be predicted solely from demographic data; however, variations in patterns of delusional systems may emerge. These variations will most likely depend on the geographic locale of the patients, and the cultural, religious, economic, and educational influences present in that locale.

B. IMPLICATIONS FOR FURTHER RESEARCH

The major limitation of this study was the small number of subjects who met the criteria for inclusion in

the study. Because the data were greatly skewed only descriptive statistics were appropriate. More conclusive results could be obtained if the study were conducted over a longer period of time or was conducted in several inpatient facilities simultaneously. Developing a study utilizing outpatient mental health centers might also reveal differences in manifestations of delusions and could possibly include a greater emphasis on the patient's support system.

This study was also limited in the availability of persons from varied cultural backgrounds. A similar study done in an area where many ethnic populations are present might produce vastly different results. Because of the preponderance of Baptists in western North Carolina a similar study conducted in an area with a less predominant religious denomination might produce different results.

An experimental study utilizing several treatment modalities with delusional patients might also yield interesting results. It is evident that treatment of delusional patients must be individualized, but there may be some common factors shared by all delusional patients which, if identified, could affect the outcome of treatment. Other potential areas of further research are the effect of socioeconomic status on delusions and the effect of a recent change in marital status on delusional content. A study utilizing collection of data through

patient interviews rather than accessing records would also be useful.

C. CONCLUSION

Delusions are phenomena frequently seen by nurses in the mental health field. They can be disconcerting not only for the patient but also for the nurses working with the patient. Any information that can be gained about the etiology and perpetuation of delusions will aid immensely in treatment of the patient experiencing this frustrating symptom. More careful documentation by mental health professionals is essential if the information is to yield maximum benefits.

It was the purpose of this study to describe the content of delusions exhibited by residents of one particular region of the United States. In spite of the limitations, hopefully the results obtained will guide other researchers in studying this difficult and frustrating symptom experienced by many individuals in our inpatient psychiatric facilities today.

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APPENDIX

APPENDIX

DATA COLLECTION FORM

Marital Status M__S__D__W__S__ ID#_____

AGE:_____ SEX: 1. M___ 2. F___

COUNTY:

1.Haywood_____ 5.Buncombe_____

2.Madison_____ 6.Mecklenburg_____

3.Watauga_____ 7.Gaston_____

4.Avery_____

EDUCATION COMPLETED:

1. 1-3_____ 6. College courses_____

2. 4-6_____ 7. Jr. or Community College_____

3. 7-9_____ 8. Four year degree_____

4. 10-12_____ 9. Graduate courses_____

5. Trade School_____ 10. Graduate degree_____

RELIGIOUS PREFERENCE:

1. Catholic_____ 6. Pentacostal_____

2. Episcopal_____ 7. Church of God_____

3. Presbyterian_____ 8. Non-denominational_____

4. Methodist_____ 9. Jewish_____

5. Baptist_____ 10. Other_____

DELUSIONAL SYSTEM:

1. Being controlled_____ 5. Jealousy_____

2. Bizarre_____ 6. Persecutory_____

3. Grandiose_____ 7. Poverty_____

4. Religious_____ 8. Somatic_____

9. Nihilistic_____

TYPE OF ADMISSION:

1. Voluntary_____ 2.Involuntary_____

PREVIOUS ADMISSIONS:

_____

DIAGNOSIS:

_____

VITA

Deborah Lynn Ross was born in Greenwood, South Carolina on September 21, 1954. She attended elementary and junior high schools in Greenwood and was graduated from Greenwood High School in June 1972. The following August she entered the Medical University of South Carolina in Charleston. In June 1976 she received a Bachelor of Science degree in Nursing. In June 1984 she began study toward a Master's of Science in Nursing degree at the University of Tennessee, Knoxville.

Mrs. Ross has been a staff nurse in various settings including a large general hospital, the maternal-child health division of a public health department, a private home health agency, and a mental health center. At present she is employed as a nursing instructor in the Associate Degree program of the Davis School of Nursing at Gardner-Webb College in Boiling Springs, North Carolina.

The author is a member of the Associate Degree Council of Nurse Educators in North Carolina and several church organizations. Mrs. Ross will continue her employment at Gardner-Webb College after graduation.