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CURRICULUM ANALYSIS OF CONTENT RELATED TO RURAL
NURSING IN BACCALAUREATE AND ASSOCIATE
DEGREE NURSING PROGRAMS IN TEXAS

DISSERTATION

Presented to the Graduate Council of the
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By

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The purpose of this study is to determine the extent to which rural nursing content is included in the curricula of baccalaureate and associate degree nursing programs in Texas. Additional purposes include determining the association between the emphasis on rural nursing content perceived by curricular chairpersons as ideal and current content emphasis, examining the difference in rural nursing emphasis between the two program levels, determining variables predictive of rural nursing emphasis and determining efforts to recruit students from rural areas.

Data were collected by means of a mailed questionnaire developed by the investigator. Statistical analyses of these data were then conducted.

Major findings include the determination of current and perceived ideal emphasis of rural nursing content, the difference in rural nursing emphasis between baccalaureate and associate degree nursing schools in Texas, the association between perceived ideal and actual content emphasis, those

variables which are predictive of rural nursing emphasis in undergraduate curricula in Texas and the recruitment efforts from rural areas made by each level of program.

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CHAPTER I

INTRODUCTION

One of the principle functions of higher education is to "put its results at the service of the public" (2, p. 92). Rhodes (16, p. 1) asserts that "American higher education is consumer oriented." Mooney (12) observes that as financial stakes for states have increased, so have states raised their expectations for higher education. "Increasingly, those expectations have to do with addressing a particular state's problems. . ." (12, p. 82).

A growing problem related to health care across the continental United States is the current shortage of registered nurses. This shortage has been described by the Federal Commission on Nursing as "real, widespread and of significant magnitude" (15, p. 1). The current nursing shortage only compounds an already existing maldistribution of health care professionals, particularly in rural populations (20, 23). This problem is of particular importance in Texas. The rural population of Texas is larger than the combined population of Alaska, Delaware, Nevada, Vermont, and Wyoming. The problems of rural Texans often equal or surpass those of urban Texans, yet rural

Texans have fewer available resources and services to deal with their problems (27).

Of the 69,454 registered nurses actively employed state-wide in 1986, only 7,640 or eleven percent, were providing care in nonmetropolitan areas (27). A 1988 survey conducted by the Texas Hospital Association reported a 13.81 percent vacancy rate for budgeted registered nurse positions in rural hospitals versus a 12.1 percent vacancy rate in urban hospitals (24). Reasons cited for nurses choosing urban versus rural practice settings include a) technologically inferior rural facilities, b) less competitive salaries, c) limited collegial relationships and support services, and d) limited cultural opportunities (14, 19, 20).

Most health education programs are in urban centers. These are based on the metropolitan health care model of high volume, technological complexity, and a variety of easily accessible resources. Students educated in these settings become accustomed to the urban life style and adopt the values of the large urban medical complex (2). This creates an "urban bias" to health education programs which is a contributor to an individual's choice of urban over rural practice settings (1, 4, 19, 20).

The urban bias to educational preparation for health care is not a concern limited to nursing. Educators in

medicine (3) psychology (8) and public health (7) are in agreement that there is a need for educational experiences which sensitize students to rural practice issues. Walker (26) notes a tie between problems in recruitment to rural areas and the professional's unfamiliarity with rural life and limited educational preparation for such.

Education is only one piece of the problem of maldistribution of nurses in rural areas. Therefore, it is not the sole answer to the problem. Yet, because education is a factor in the maldistribution of nurses to rural areas in Texas, it deserves the attention of administrators of educational programs in nursing. Curricular exposure of nursing students to roles peculiar to practice in rural settings is one consideration. Such exposure could be achieved through didactic content as well as clinical practice experience conducted in rural health care facilities. The latter would introduce students experientially to the working and living environment of rural communities.

Another consideration for educational administrators of programs in nursing is recruitment of students from rural areas. Hosowaka (7), and Richard and Ostwald (17) address the desirability of recruiting students from rural areas in the hopes that they will more likely return there to practice.

This study seeks to identify ways in which undergraduate educational programs for nursing in Texas are addressing the need for nurses in rural areas.

Statement of the Problem

The problem of this study is the extent to which institutions of higher education in Texas are addressing the need for nursing in rural areas.

Purposes of the Study

The purposes of this study are to:

1. Determine the ways in which undergraduate nursing curricula have been modified to be more responsive to needs of nurses in rural practice sites.
2. Identify information regarding efforts to recruit students from rural areas into undergraduate nursing programs in Texas.
3. Evaluate the importance placed by curricular chairpersons on preparation of undergraduate students for rural nursing.
4. Evaluate the association of selected variables with curricular emphasis on rural nursing roles.
5. Determine differences in emphasis on curricular preparation for rural nursing between baccalaureate and associate degree nursing programs in Texas.

Research Questions

These questions have been formulated in order to achieve the purposes of this study.

1. To what extent are identified content topics related to nursing in rural settings currently included in undergraduate nursing curricula in Texas?
2. In which courses is content relating to rural nursing currently taught in undergraduate nursing curricula in Texas?
3. Is there an association between the emphasis placed by curricular chair persons on undergraduate preparation for rural nursing and current curricular emphasis on this preparation in undergraduate nursing curricula in Texas?
4. Is there a difference in the extent to which emphasis is placed on curricular content relating to rural nursing by baccalaureate and associate degree nursing programs in Texas?
5. To what extent are clinical practice experiences in rural settings currently offered in undergraduate nursing curricula in Texas?
6. In which courses does clinical practice experience in rural settings occur?
7. What are the effects of selected variables on the

extent to which undergraduate nursing curricula in Texas are addressing nursing in rural areas?

8. Are efforts being made to recruit students from rural areas into undergraduate nursing programs in Texas?

Background and Significance of the Study

Rural Texas

During the past decade, the nonmetropolitan population in the United States has increased 15.1 percent while that of metropolitan areas has increased only 10.2 percent (11). This growing rural population is generally poorer, older and less likely to have health insurance than its urban counterpart. Health services are less available in rural areas, and available care tends to cost more (19).

Naisbitt (13) describes Texas as one of the three megastates in the north to south megatrend movement. The population in Texas is projected to grow at twice the national rate between 1980 and 2000, from 14.2 to over 20.7 million people (25). It is expected that Texas will surpass New York and become the second most populace state behind California (27). In 1986, Walker noted that the U.S. Department of Health and Human Services designated 165 (80 percent) of the nonmetropolitan counties in Texas as medically underserved (27). Of the 72,711 hospital beds in Texas, 13,993 (19 percent) were in nonmetropolitan counties.

Forty-three counties in Texas were without a hospital; all but one of these was nonmetropolitan (27).

This same year, there were fifty-eight licensed and certified ambulatory surgical centers in Texas. None of these was located in a nonmetropolitan county. One hundred fifty-seven nonmetropolitan counties had no habilitation and rehabilitation services at all. There were twenty-eight counties in Texas without a licensed nursing facility. All of these counties were nonmetropolitan (27).

In 1986 only eleven percent of the 69,454 actively employed registered nurses in Texas were providing care in nonmetropolitan areas. Statistics for 1986 showed two counties, both nonmetropolitan, without a registered nurse at all (27). Statistics for this same year identified the person to nurse ratio in Texas to be 241 people for each employed registered nurse. The ratio increased in nonmetropolitan areas to 438 persons for each employed registered nurse. In metropolitan areas the ratio decreased to 217 persons for each employed registered nurse (27).

Part of the nursing problem is in maldistribution of resources (2). Most allied health education programs are in urban centers. Students thus become accustomed to the urban life style, adopt the values of the large urban medical complex and tend to live and establish their careers in these settings (20). The current widespread shortage of

nursing resources exacerbates the problem of maldistribution. Because of the severe shortage of nurses, a reported 9.5 percent of rural hospitals were forced to reduce the number of available beds in 1987 (9).

Education for Rural Practice

The Special Interest Group for Nurses of the American Rural Health Association has identified fourteen areas of concern regarding rural health issues (21). One of these is a lack of educational focus on rural nursing.

There is a core of basic knowledge and skills which are essential to the safe practice of nursing in any setting. Beyond this, nurses in rural communities need an understanding of social, cultural and economic factors of rural life and of rural health needs, many of which are distinct from those in urban communities (1, 10). Some needs particular to rural communities stem from the unavailability and unacceptability of health services, the geographic isolation and the transportation hardships (10).

Rural isolation fosters the development of strong family, community and kin groups (1, 10). Hassinger (6) notes that primary groups and social networks are considered relatively more important in rural than in urban areas. These groups, along with others such as churches and rural cooperatives provide support to individuals, guide members

in decisions and provide sanctions for behavior. These groups also influence members' definition of health as well as solutions to health related problems. "Rural nurses must understand such groups and how to work with them . . ." (10, p. 25).

Because rural practice settings are geographically isolated with fewer available referral and consultation resources, nursing in rural settings is more diversified than it is in urban settings (1, 10, 20). "Urban nursing does not require of one person such diverse functions as emergency care, management of a primary health care center, community health assessment, leading health promotion groups and health care with migrant workers" (10, p. 24).

Maldistribution of health care professionals in rural areas has been attributed, in part, to limited exposure to rural health care in their educational programs. Since, as has been stated, one of the principle functions of higher education is to "put its results at the service of the public" (2, p. 92), this study seeks to describe ways in which higher education is addressing the rural need for nurses in its undergraduate nursing programs in Texas.

Definition of Terms

For purposes of this study, the following terms have specific definitions:

1. The term "rural" will be used interchangeably with the term "nonmetropolitan."
2. A nonmetropolitan area is designated as any area less than 50,000 and without close economic or social ties with a Metropolitan Statistical Area.
3. A Metropolitan Statistical Area (MSA) consists of "an urbanized area with at least 50,000 inhabitants and outlying counties which have close economic and social relationships with the central county or counties (22).
4. Nurse is defined as that individual who may legally use the title "registered nurse" (RN).

Delimitations

Two delimitations will be used in this study.

1. The survey will be delimited to the State of Texas.
2. The survey will not address specific ethnic groups in Texas.

Procedures for Collection of Data

The descriptive technique was used to identify the extent to which undergraduate schools of nursing in Texas are addressing the needs for nursing in rural areas. In order to accomplish this, a survey questionnaire was mailed to the dean of each undergraduate baccalaureate and each associate degree nursing program in Texas. Deans were asked

to forward the questionnaire to their curricular chairperson for completion.

Methods for Collection of Data

In preparation for this investigation, a list of fifteen topics pertaining to nursing in rural settings was developed by this investigator. Since this list was adapted primarily from the published work of Peggye Lassiter (10-11), a recognized authority in rural nursing, her review and critique was invited. Following a forty-five minute teleconference with Lassiter, the topic list was revised. The final list was reduced to eleven topics. These were incorporated into a questionnaire using a Likert-type scale. Descriptive information about each school was collected by questions designed in closed form or using a Likert-type scale.

Analysis of Data

Curricular emphasis on rural nursing was analyzed using frequencies. Pearson's Product Moment Correlation was applied to determine the association between current and perceived ideal curricular emphasis in each program classification. Differences in curricular emphasis between baccalaureate and associate degree programs were analyzed using the Chi Square test for independence augmented by the t-test for independent means.

Multiple regression, stepwise procedures, were applied to analyze the effect of selected variables on curricular emphasis on rural nursing. Further analysis was conducted through Pearson's Product Moment Correlation.

Recruitment efforts were analyzed using frequencies, augmented by the t-test for independent means.

Summary

Chapter I contains the statement of the problem, the purposes of the study, the research questions, the background and significance of the study, the definition of terms used in the study, the delimitations, a description of the population and an overview of the procedures for the collection and analyses of the data. Chapter II presents a review of related literature. Chapter III details the methods and the procedures of the study. Chapter IV presents the findings of the study in narrative and in tabular form. Chapter V includes a summary, a discussion of the findings, conclusions and recommendations for future research. Appendices and a bibliography are also provided.

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CHAPTER II

REVIEW OF RELATED LITERATURE

The current nursing shortage compounds an already existing problem of maldistribution of nursing resources to rural Texas communities. "The nursing educational system in Texas will be almost the sole source of new nurses in the immediate future" (22, p. 1-3). It is fitting, then, that schools of nursing address rural nursing needs in their curricula.

The Nursing Shortage

Registered nurses (RNs) represent the largest pool of health provides in the United States" (22, p. 3-1). Yet, in 1988 the Texas Nurses Foundation noted that twenty-four percent of hospitals nationwide reported a vacancy rate of 15 percent of budgeted RN positions. The total number of full time equivalent nurses needed to fill budgeted vacancies in hospitals and nursing homes alone was a reported 137,000 (23). In this same year, Texas hospitals reported vacancies of 12.2 percent of budgeted RN staff positions. Metropolitan areas in Texas reported a 12.1 percent vacancy rate; that rate in rural areas was 13.8 percent (22).

Public attention has largely focused on the current RN shortage in large, urban hospitals. Less attention has been given to the nursing shortage in rural areas. This is due, in part, to the "scarcity of data needed to identify rural shortage situations. . . shortages of health professionals has always been a problem in rural areas. The current nurse shortage is exacerbating the situation. Available data indicate that the impact of RN shortage on rural facilities is as great or greater than on urban facilities. . ." (23, p. IV-2).

Data for 1986 (28) reported an estimated 241 persons for every employed registered nurse in Texas. Data for this same year reported one employed registered nurse for every 438 persons in nonmetropolitan areas in contrast to one employed registered nurse for every 217 persons in metropolitan areas. Two Texas counties, both nonmetropolitan nonmetropolitan, had no registered nurse (28). In 1988, six counties were without a full-time registered nurse although one of the six did report two part-time RN's (22).

Thurkill and Pickard (24) surveyed job satisfaction among mental health workers in a rural Texas adolescent drug abuse center reporting: "the subjects were mental health workers who were equivalent to nurses' aides in general hospitals. It was necessary to staff with this level of

worker because of the limited number of registered nurses and licensed vocational nurses in the area" (p. 28).

The impact which the under supply of nurses has on the rural elderly is of particular concern. A shortage of health professional is forcing many rural elderly to forgo essential health care services (4, 26, 27). Van Hook (27) notes that many rural areas are also without alternative care services that could often substitute for more expensive institutional care. The "nursing shortage will inhibit attempts to improve the availability of alternative care services essential to rural elders" (27, p. 2). In 1985 rural Texans accounted for 33 percent of the state's aged and Medicaid-eligible (1). In 1986 the department of Health and Human Services designated 80 percent of nonmetropolitan counties in Texas as medically underserved (28).

The decline of the state's economy is one factor contributing to the current nursing shortage in Texas. The plummeting price of oil on the world market in 1985 resulted in fewer nurses moving to Texas while many others were forced to leave when their family members lost jobs in the oil industry (18).

Conditions influencing the chronic maldistribution of nurses in rural areas are several. Many nurses do not want to work in areas with limited facilities and little peer support (17). The greater socioeconomic advantage of

metropolitan over rural communities is another factor cited for the maldistribution (21, 29). Other reasons for choosing urban over rural practice settings include fewer opportunities for advancement, less access to continuing education, fewer specialties, and fewer employment opportunities for mates (21).

The "urban bias" of most professional schools is another often cited reason for the maldistribution of health care professionals in rural areas (2, 12, 16, 17). Most professional schools are located in urban settings. Thus "the standard for job comparison becomes the urban experience" (21). Without exposure to working and living in rural settings, students lack data with which to make an informed decision regarding opportunities available in rural communities (16). Basic nursing programs generally are not designed to provide an active, experiential focus on rural nursing. Arlton (2) believes that

"If baccalaureate nurse students were oriented to the characteristics of rural nursing environments, assisted in coping with the existences of rural nursing by supportive faculty and preceptors, and integrated into a community during a clinical learning experience, they would be more likely to seek rural nursing employment after graduation" (p. 204).

The Concept of Rurality

Rural Definitions

The precise meaning of the term "rural" is one over which "rural sociologists generally agonize" (5, p. 3).

Rosenblatt and Moscovice (14) describe rurality as a "Platonic ideal" (p. 12) which resists quantification. The United States Bureau of Census defines a rural population as those people living in an area under 2,500 population and in the open country (25). Rosenblatt and Moscovice (14) suggest that this definition does not take into account the ecological and the psychological qualities of rural life which might also apply to a small community of 4,000.

The United States Department of Health and Human Services uses the metropolitan/nonmetropolitan (MSA/nonMSA) classification, which is based on county level data, for reimbursement and for service (23). The Bureau of the Census classifies a Metropolitan Statistical Area as an urbanized area with at least 50,000 inhabitants and outlying counties which have close economic and social relationships with the central county or counties (19). Under this definition, metropolitan areas might contain both rural and urban populations (5). Population density is also used to classify rural areas (23, 14). Using this system, counties can be classified as frontier or non-frontier. Frontier counties have six or fewer people per square mile (23).

Rosenblatt and Moscovice (14) argue that:

No one definition is totally compelling Rural is a relative term; dichotomous divisions that separate populations into urban and rural categories may be necessary for comparison, but they ignore the fact that there is a continuum from most rural to most

urban. Meaningful definitions must recognize this gradient. (p. 4; 9).

Rural Society

Although sociologists struggle to define "rural" in a statistically meaningful manner, there is a pattern of characteristics that describe rural society. Rural people are generally conservative; they have a different approach to the solution of problems than do their urban counterparts (14, 21). "Rural dwellers are . . . inherently more conservative, unbending and independent . . ." (14, p. 6). Role constraints are more rigid and community interactions are more intense and important in rural society than in more densely populated areas. Hassinger (5) notes that social relationships in rural communities are more homogeneous and informal than in urban communities. "Informal groups are the woof and warp in the fabric of community life" (5, p. 39).

Families, cliques and neighborhoods are particularly prominent groups in rural communities and become the basis of natural support systems. Schools, churches and local governments are likely to conduct business on a friends and neighbor basis. Informal groups also serve as mechanisms of social control. Rural residents may be slow to accept newcomers, particularly when the values and behavior patterns of the newcomers are different from their own (3).

"If a stranger comes to town, townsfolk view him or her with curiosity. If the stranger is willing to work, play and live by the community rules, he or she can stay: if the stranger wants to change anything, he or she is ostracized" (21).

It is a given that every individual must eventually confront the problems of illness and death. Health decisions among rural dwellers are often validated by informal support groups. Indeed, "informal support networks in rural communities may be as effective in accounting for rural/urban differences in the use of health services as are differences in the availability of health services" (5, p. 10). Rosenblatt and Moscovice (14) suggest that one challenge in providing health care to rural people lies in improving services through systems that mesh with the needs, desires and customs of the community. Moon (10) avers that this information is something for which one has to search: "The local people won't volunteer it" (p. 12).

Education for Rural Practice

Most health education programs are in urban centers. They are based on the metropolitan health care model of a high volume and technological complexity. There is a variety of easily accessed resources. Students educated in these centers become accustomed to the urban lifestyle and adopt the values of the large urban medical complex. They

are generally unfamiliar with the rural experience, its unique cultural and sociological dimensions and its more complex practice demands (21, 17).

Rural nurses have a more diversified role and they function more independently in this role than do nurses in urban settings (8, 12, 14, 20, 21). Nurses in urban settings are generally not called upon to function with ease in adult care, pediatric care, the emergency room and the delivery room. However, this is the norm in rural settings (8, 14, 20). Rural nurses are frequently practitioners with limited access to referral and consultation resources; urban nurses may emphasize an advanced specialty area and rely on other nurses for selected advanced skills (8).

Rural nurses are generally more involved with the people than are urban nurses. Professional and personal roles may overlap. Nurses in rural communities may encounter a citizen in both social and clinical settings. They often know an individual as a neighbor or community leader as well as a patient (7, 21). Hosowaka (6) refers to the "savvy to succeed in a rural environment . . . the intangible ability to gain acceptance and community membership" (p. 16) as an essential component of the rural practitioner's skill mix. Lassiter (8) would have the rural nurse "work as a partner with the community in identifying and seeking to fulfill health needs" (p. 25)

In rural communities, families and other social networks play an important role in influencing decisions which group members make about health problems. Therefore, "rural nurses must understand these groups and how to work with them" (8, p. 25). Lassiter (8), Keller (7), Hosokawa (6), and Reimer (13) suggest that this understanding is best gained experientially. Clinical practice experiences in rural settings "permit reality testing and lead to an experiential understanding of rural community nursing" (9, p. 59).

Typically, educational preparation focusing on rural nursing has been at the graduate level. Indeed, graduate preparation for expanded roles as family nurse practitioners and clinical nurse specialists is recognized as one means of providing alternate services in rural areas, particularly to the rural elderly. On July 4, 1989, Senator Tom Daschle (Democrat, South Dakota) introduced A1384, a bill entitled "The Rural Nursing Incentive Act of 1989." This measure would provide direct Medicare reimbursement to nurse practitioners and clinical nurse specialists serving in rural areas (26).

Pickard (11) cites schools with graduate programs in rural health nursing at the University of Virginia, Georgia Southern College, Salisbury State University in Maryland and the University of Florida. The graduate program at the

University of Virginia is credited with being the first in the nation to focus specifically on community health nursing in rural areas (8).

The idea of including a rural nursing focus in undergraduate curricula is relatively recent. The 1988 report of the Secretary's Commission on Nursing notes that few formal nursing education programs have a philosophy and a mission which supports education for rural settings, or theoretical and clinical components that prepare students for practice in rural settings (23). Reasons cited for this lack of focus include 1) the financial constraints of providing clinical experiences in rural settings, 2) a lack of faculty who are prepared in rural nursing, and 3) the requirements of state boards of nursing that impede the use of rural hospital nurses as mentors (23).

Undergraduate programs which do prepare nurses for rural practice range from those which offer one optional rural clinical experience to programs which use rural facilities for most of their clinical experiences. Undergraduate programs reported in the literature which offer rural nursing electives include The University of Colorado Health Science Center (12), the University of Northern Colorado (2), California State University-Chico (20). Students enrolling in these electives actually live in rural communities; their clinical practice is guided by

clinical preceptors chosen from the rural health care facilities in which the practicum occurs. These experiences have proven mutually beneficial to both care facilities and to students. Students have been a source of stimulation to employees and the rural experience has opened new career vistas for students. The University of Northern Colorado and the University of Colorado Health Science Center report that an average of 33 to 50 percent of students who enrolled in these electives returned to rural communities to practice as graduate nurses. Other baccalaureate programs which offer a rural nursing focus are at Montana State University, OHSU-Eastern Oregon State College, Georgia Southern College and Luther College of Iowa (23).

An incentive for undergraduate nursing students to practice in rural communities is being offered through the provision of scholarships for those students who demonstrate financial need and who agree to serve at least two years in such facilities as rural health clinics, community health centers or public hospitals following graduation. Money for these scholarships will come from four million dollars which the United States House of Representatives has allocated for this purpose for the 1990 fiscal year (15).

Some educational programs are addressing the rural nursing shortage by providing weekend options which accommodate nurses from rural areas. The University of

Texas at Arlington offers a weekend option designed to attract nurses from rural areas to enroll in the Family Nurse Practitioner Program. Classes are held at the university on two weekends each month; clinical preceptorships are arranged in the student's home area. Weekend classes to accommodate nurses from rural areas are also offered at the University of Wyoming (11).

Summary

A review of the literature supports the previously cited scarcity of data regarding rural nursing situations (23). Gaps in the literature leave unanswered questions regarding educational efforts to address the need for nurses in predominantly rural states. The continuing shortage of nurses is, however, well documented. This shortage only exacerbates a chronic maldistribution of nurses in rural areas. Since, as has been noted (22), the nursing educational system will be the predominate source of new nurses in Texas, it is fitting that schools of nursing in Texas address rural nursing needs in their curricula.

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CHAPTER III

METHODS AND PROCEDURES

This chapter describes the methods and procedures used to study the research questions. These questions are listed in Chapter I.

Population

The population in this study consisted of curricular chair persons of each of the twenty-one baccalaureate and forty-four associate degree schools of nursing in the state of Texas. A current list of baccalaureate and associate degree nursing programs was obtained from the Texas Board of Nurse Examiners. Since the entire population of curricular chairpersons was used, no sampling procedures were required.

Instrument

The questionnaire used for the collection of data (see Appendix A, page 73) was designed by this investigator to collect information pertinent to the study. Based on the published work of Lassiter (2, 3) and insights from that of Hosokawa (1), a list of fifteen topics pertaining to rural nursing roles was developed. Because she is a recognized authority in rural nursing, Lassiter's review and critique

of the proposed topics was invited. A forty-five minute teleconference was scheduled during which four of the topics which might apply to any core nursing course were deleted from the initial list.

The revised list of eleven topics specific to rural nursing was incorporated into a questionnaire using a Likert-type scale. In order to compare 1) current curricular emphasis on rural nursing and 2) ideal emphasis as perceived by curricular chairs, each one of these items was rated twice. Additional information which might impact the development of content with a rural emphasis was selected for consideration. These data, as well as data concerning rural clinical practice experience, were collected by questions designed in closed form or using a Likert-type scale. In its final form, the questionnaire consisted of twenty-eight items. As stated above, items thirteen through twenty-three were rated twice.

Data Collection

One survey packet was mailed to the dean of each of the baccalaureate programs and of the associate degree programs. Because one of the baccalaureate programs has campuses in three cities, the total number of questionnaires mailed to baccalaureate schools was twenty-three. One associate degree program was inadvertently omitted from the mailing; therefore, the total number of questionnaires mailed to

associate degree programs was forty-three. The survey packet included 1) the questionnaire which was number coded to facilitate follow-up, (see Appendix A, page 73), a personal cover letter explaining the purpose of the study with a request that the instrument be referred to the curricular chair for completion, (see Appendix A, page 76), 3) a letter of support from Myrna Pickard who is a member of the National Rural Health Association, (see Appendix A, page 77), 4) a stamped, self-addressed envelope for the convenience of reply within two weeks of the time the packet was received.

Within one month following the initial mailing, twenty-two of twenty-three questionnaires mailed to baccalaureate schools and thirty-three of forty-three questionnaires mailed to associate degree programs had been returned. This was a ninety-five percent return for baccalaureate programs and seventy-six percent return from associate degree programs. Since this exceeded the goal of a fifty-one percent return from each category, no further follow-up attempts were made.

Data Analysis

The research questions were answered as follows.

1. The extent to which identified content related to rural nursing is currently included in

undergraduate nursing curricula in Texas was determined by computing frequency of responses for items thirteen through twenty-three on the questionnaire. These items were rated on a Likert-type scale. Class hours given to this content were determined by computing frequency of responses for item twenty-four on the questionnaire. This item was designed in closed form.

2. Courses containing content relating to nursing in rural settings were determined by computing frequency of responses to item twenty-six, designed in closed form, on the questionnaire.
3. Pearson's Product Moment Correlation was applied to responses to survey items thirteen through twenty-three to analyze the association between emphasis placed by curricular chairpersons on content relating to rural nursing and current curricular emphasis of this content. These items were in the form of a Likert-type scale.
4. The Chi Square test of independence was used to analyze responses to survey items thirteen through twenty-three to examine the difference in emphasis placed on curricular content relating to nursing roles in rural settings by baccalaureate and by associate degree nursing programs in Texas. This

was augmented by the t-test for independent means. Ratios between current and ideal curricular focus on rural nursing were then determined for baccalaureate and for associate degree programs in the state. Responses of curricular chairs to survey item twenty-four, designed in closed form, were also analyzed using the Chi Square test of independence.

5. The extent to which clinical practice experiences in rural settings are currently offered in undergraduate nursing curricula in Texas was determined by computing frequency of responses to item twenty-five on the questionnaire. This item was designed in closed form.
6. Courses in which clinical practice in rural settings occur were determined by computing frequency of responses to item twenty-seven, also designed in closed form, on the questionnaire.
7. Multiple regression, stepwise procedures were used to determine those variables which are the best predictors of emphasis placed on undergraduate preparation for nursing in rural settings. These analyses were augmented by Pearson's Product Moment Correlation. The variables analyzed were reflected in items one through eleven and item twenty-eight.

All of these items were designed in closed form.

8. Efforts which undergraduate nursing schools in Texas are making to recruit students from rural areas were analyzed by computing frequency of responses to item twelve, designed in closed form, on the survey. Further analysis was conducted by the t-test for independent means.

Summary

This study involved developing a survey questionnaire to identify curricular content topics relating to nursing in rural areas. This development was accomplished through a review of the literature and a teleconference with Peggye Lassiter, a recognized authority in rural nursing. The finalized survey questionnaire was mailed to the dean of each baccalaureate and each associate degree nursing school in Texas. Deans were asked to forward the questionnaire to their curricular chairperson for completion.

The extent to which identified content is currently included in undergraduate nursing curricula was analyzed using frequencies.

Association between actual curricular emphasis and that which curricular chairpersons perceived as the ideal emphasis was analyzed using Pearson's Product Moment Correlation. Differences in emphases between baccalaureate

and associate degree nursing programs were analyzed using the Chi Square test for independence and the t-test for independent means. Further comparisons were made by computing the ratio between current and ideal curricular focus on rural nursing. Demographic variables were reported using frequencies, means, medians and range. Variables which might predict current curricular emphasis on nursing in rural settings were determined using multiple regression, step-wise procedures. These variables were further analyzed by Pearson's Product Moment Correlation.

Recruitment efforts were analyzed using frequencies and the t-test for independent means.

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CHAPTER IV

PRESENTATION OF FINDINGS

The data were obtained through procedures described in Chapters I and III. They were then analyzed using appropriate statistical techniques to address each research question. Statistical values were calculated using SPSS-X computer software. The results of these analyses are presented in tabular form.

Characteristics

Fifty-five (55) of the sixty-six (66) survey questionnaires mailed to baccalaureate and to associate degree nursing programs in Texas were returned. The total was reduced to fifty-four because one of the respondents had answered as both a baccalaureate and as an associate degree program on the same questionnaire. Twenty-one of these were responses from baccalaureate and thirty-three from associate degree programs. Accreditation status, graduate programs offered and campus sites for both baccalaureate and associate degree programs are reported as frequencies in Table 1. These same characteristics are reported separately in tables located in the Appendix for baccalaureate programs and for associate degree programs (see Appendix B).

Table 1.--Accreditation, Number of Graduate Programs, Type of Graduate Program, Satellite Campuses and Campus Sites for Both Baccalaureate and Associate Degree Nursing Programs in Texas. (N=54)

Characteristics	Number Reporting Frequency
National League for Nursing Accreditation	43
Graduate Program:	11
Community Health	6
Rural Health	0
Geriatric Nursing	3
Nurse Practitioner	3
Satellite Campuses	18
Primary Campus Site: (N=53)	
Urban	36
Rural	17
Satellite Campus Site:	
Urban	9
Rural	8

It should be noted in Table 1 that none of the graduate programs offered had a rural focus. It is also important to note that the predominate locale of primary campuses was urban. Satellite campuses (campuses located in a different setting, but administered by the parent institution) and primary campuses (the parent institution) were treated separately due to the possibility of different curricular emphases by campus location.

Additional characteristics of baccalaureate and associate degree nursing programs in Texas reported in

Table 2 include program, age, enrollment, full-time faculty equivalents, population and distance of campus sites from city. These data are reported as mean, median and range. Tables 15-22 summarize these same characteristics for baccalaureate programs and for associate degree programs respectively.

Table 2.--Program Age, Enrollment, Full Time Faculty Equivalents, Population and Distance of Campus Sites from City for Both Baccalaureate and Associate Degree Nursing Programs in Texas. (N=54)

Characteristic	Mean	Median	Range	Not Reported
			Min.-Max.	
Age of Program	20	20	1-99	--
Enrollment	243	165	24-1,579	--
Full Time Faculty Equivalents	19	14	2-88	--
Population, Primary Campus Site:				
Urban	394,350	170,000	10,222-999,999	4
Rural	32,130	20,000	4,500-150,000	9
Population, Satellite Campus Site:				
Urban	426,250	175,000	30,000-999,999	1
Rural	20,560	14,500	6,361- 50,000	2
Miles of Rural Campus From City of 50,000				
Primary	82	63	14-250	1
Satellite	73	60	20-150	4

Note: Numbers have been rounded.

Data reported in Table 2 indicate baccalaureate and associate degree nursing programs in Texas to be fairly well established with a median age of twenty years. The reported means and the median scores indicate moderate enrollments in these schools with small to medium sized faculty. None of the items concerning population were answered by every respondent who had reported the locale of the corresponding campus site. Interestingly, the highest limit for the range of rurally located campuses was reported as 150,000 and the lowest limit as 4,500. This supports the ambiguity of rural definition reported in the literature. Respondent comments written on the questionnaires referred to the relative isolation of some campuses despite an urban population number.

Curricular Emphasis on Rural Nursing

Content

Curricular chairpersons indicated current emphasis on rural nursing content by rating eleven curricular topics on a Likert-type scale. Data for current curricular emphasis by both baccalaureate and associate degree programs are reported in Table 3 as frequencies. Data are reported separately for each level of program in Appendix C.

Frequency responses for the eleven content topics indicated that each one was highly emphasized by some schools. Health resources in rural communities was the one

Table 3.--Current Curricular Emphasis Placed on Rural Nursing Content by Baccalaureate and Associate Degree Nursing Programs in Texas. (N=54)

Topics in Curriculum	Frequency of Rating				Not Reported
	1	2	3	4	
Rural Life Styles	16	24	8	5	1
Effect of Ruralness on Health	15	21	12	5	1
Cultural Characteristics of Rural People	13	19	15	6	1
Family, Kin and Group Influence of Rural People	14	21	13	5	1
Major Rural Health Problems	13	19	16	5	1
Partnership for Healthful Change in Rural Families	23	18	9	2	2
Partnership for Healthful Change in Rural Communities	23	19	8	2	2
Leadership in Rural Communities	24	28	8	3	1
Health Resources in Rural Communities	11	17	19	6	1
Referral Resources in Rural Communities	9	21	17	6	1
Rural Health Economics and Organization	20	24	7	2	1

Note: Items have been rated as: 1=No Emphasis; 2=Slight Emphasis; 3=Emphasis; 4=High Emphasis.

item with the greatest frequency response indicating "emphasis." Those items with the greatest frequency indicating "no emphasis" were 1) partnership for healthful change in rural families, 2) partnership for healthful change in rural communities, and 3) leadership in rural communities. However, the concentration of frequency scores for this set of data indicated "no emphasis" to only "slight emphasis" on rural nursing content in baccalaureate and associate degree curricula.

Core courses containing rural nursing content are summarized for both baccalaureate and associate degree programs in Table 4. The number of reporting schools are displayed in this table.

Placement of rural nursing content in core courses differs between baccalaureate and associate degree programs. Eighteen baccalaureate schools reported placement of this content in the community health nursing course while only three associate degree programs reported rural nursing content in this course. Rural nursing content placement in the medical-surgical nursing course was reported by sixteen associate degree programs, but by only four of the baccalaureate programs. This may be explained in part by the fact that community health nursing is not included as a course in many associate degree curricula.

Table 4.--Core Courses With Rural Nursing Content in
Baccalaureate and Associate Degree Nursing
Programs in Texas. (N=54)

Core Course	Baccalaureate n=21	Associate n=33
Medical-Surgical Nursing	4	16
Community Health Nursing	18	3
Maternal-Child Nursing	4	9
Leadership- Management	2	6
Other	1	7

Note: Columns totals may exceed N's if content is integrated throughout core courses.

Class time allotted for rural nursing content is reported in Table 5. The number of schools reporting hours of class time allotted is shown in this table.

Ten baccalaureate and thirteen associate degree programs reported spending one to three hours on rural nursing. However, eleven schools reported that no class time was allotted to this content. This latter finding parallels the data reported in Table 3 which indicated only slight emphasis on rural nursing content.

In addition to rating specified items relating to rural nursing content according to current curricular emphasis,

Table 5.--Class Time Allotted for Rural Nursing Content in Baccalaureate and Associate Degree Nursing Programs in Texas. (N=54)

Class Time/ Allotment	Baccalaureate n=21	Associate n=33
1-3 Hour Lecture	10	13
4-12 Hour Unit	4	2
No Allotted Time	3	8
Other	4	8
Not Reported	0	2

curricular chairs were asked to rate these same items according to their perceived ideal curricular emphasis of rural nursing. Data for perceived ideal emphasis of these content areas by both baccalaureate and associate curricular chairs are reported as frequencies in Table 6. These data are reported separately for each level of program in Appendix B.

Frequency ratings for perceived ideal curricular emphasis of rural nursing content indicated that curricular chairs would place high emphasis on each of the eleven items. However, as shown in Table 6, the number of items not reported was greater for perceived ideal emphasis than for current curricular emphasis.

Table 6.--Perceived Ideal Emphasis on Rural Nursing Content
in Baccalaureate and Associate Degree Nursing
Programs in Texas. (N=54)

Topics in Curriculum	Frequency of Rating				Not Reported
	1	2	3	4	
Rural Life Styles	2	16	25	8	3
Effect of Ruralness on Health	2	13	25	10	4
Cultural Characteristics of Rural People	1	13	27	9	4
Family, Kin and Group Influence of Rural People	2	15	26	7	4
Major Rural Health Problems	1	12	23	13	5
Partnership for Healthful Change in Rural Families	3	17	21	7	6
Partnership for Healthful Change in Rural Communities	5	16	20	7	6
Leadership in Rural Communities	6	17	19	7	5
Health Resources in Rural Communities	1	11	24	13	5
Referral Resources in Rural Communities	2	8	27	12	5
Rural Health Economics and Organization	5	17	19	8	5

Note: Items have been rated as: 1=No Emphasis; 2=Slight Emphasis; 3=Emphasis; 4=High Emphasis.

The three content items with the greatest frequency response indicating "high emphasis" were 1) major rural health problems, 2) health resources in rural communities, and 3) referral resources in rural communities. Those items reported with the greatest frequency indicated "no emphasis" were: 1) leadership in rural communities, 2) partnership for healthful change in rural communities and 3) rural health economics and organization.

Frequency ratings for perceived ideal emphasis of rural nursing content were concentrated under ratings indicating "slight emphasis" and "emphasis." There were noticeably fewer scores indicating "no emphasis" of rural nursing content in this set of data than in that reported for current curricular emphasis on rural nursing.

Association Between Current and Ideal Curricular Emphasis on Rural Nursing Content

Association between actual content emphasis and that which curricular chairpersons indicated as the ideal emphasis was analyzed using Pearson's Product Moment Correlation. These data are summarized in Table 7.

In analyzing responses of baccalaureate and of associate degree programs combined, the correlation between current and ideal content emphasis on rural nursing content was not statistically significant ($P = >.05$) with $r = .20$, one-tailed. The correlation between the current and

Table 7.--Pearson Product Moment Correlation of Current and Perceived Ideal Curricular Focus on Rural Nursing Roles in Baccalaureate and Associate Degree Nursing Programs in Texas. (N=54)

Program	n	r	p
Baccalaureate and Associate	51	0.20	0.08
Baccalaureate	20	0.61	<0.01
Associate	31	-0.007	0.48

r=Correlation Coefficient

p=Level of Significance, One-Tailed

perceived ideal content emphasis placed by baccalaureate schools was significant ($P = <.01$) with $r = .61$, one-tailed. The association between current and perceived ideal curricular focus on preparation for rural nursing roles in associate degree programs was not statistically significant ($P = >.05$) with $r = -.007$, one-tailed.

Difference in Emphasis of Rural Nursing Roles
Between Baccalaureate and Associate Degree
Nursing Programs in Texas

The Chi-square test of independence was applied to analyze the difference of current and perceived ideal emphasis of rural nursing content in baccalaureate and associate degree nursing programs. The difference in class hours allotted for curricular content was also analyzed. These data are summarized in Table 8.

Table 8.--Chi Square Test of Independence for Difference in Current and Perceived Ideal Emphasis on Rural Nursing Content and on Allotted Class Hours in Baccalaureate and Associate Degree Programs in Texas. (N=54)

Emphasis	χ^2	df	p
Current	2.81	3	0.42
Perceived Ideal	3.35	3	0.34
Class Hours	2.49	2	0.29

χ^2 =Chi Square

Note: Decimals have been rounded to hundreths.

The Chi Square analysis indicated no statistically significant difference in either current or ideal emphasis on rural nursing content between baccalaureate and associate degree nursing programs in Texas. Neither was there a statistically significant difference between the two programs in the hours allotted for this content.

Further analysis of the difference between current and perceived ideal curricular emphasis on rural nursing content was conducted using the two-tailed t-test for independent means. The t-test comparing current rural nursing emphasis between baccalaureate and associate degree schools is reported in Table 9.

Table 10 reports results of the two-tailed t-test for independent means comparing perceived ideal curricular

Table 9.--Two-Tailed T-Test of Means for Comparison of Current Emphasis on Rural Nursing Content Between Baccalaureate and Associate Degree Nursing Programs in Texas.

Baccalaureate (n=21)		Associate (n=32)		t	df	p
Mean	SD	Mean	SD			
24.10	7.54	21.91	8.74	-0.94	51	0.351

Note: Mean, Standard Deviation and t-values have been rounded to hundredths; p-values have been rounded to thousandths.

emphasis on rural nursing content between baccalaureate and associate degree nursing programs.

Table 10.--Two-Tailed T-Test of Means for Comparison of Perceived Ideal Emphasis on Rural Nursing Content Between Baccalaureate and Associate Degree Nursing Programs in Texas.

Baccalaureate (n=20)		Associate (n=31)		t	df	p
Mean	SD	Mean	SD			
31.85	7.55	20.23	8.63	-1.54	49	0.131

Note: Mean, Standard Deviation and t-values have been rounded to hundredths; p-values have been rounded to thousandths.

The t-tests demonstrated no statistically significant difference in either current or perceived ideal emphasis of rural nursing content ($P > .05$).

The data reported in Tables 7-10 indicate that 1) there is no statistically significant association between curricular emphasis on rural nursing content and that perceived as ideal by curricular chairpersons in baccalaureate and associate degree nursing programs combined, 2) there is a statistically significant association between current and perceived ideal emphasis on rural nursing in baccalaureate programs but not in associate degree programs, and 3) statistically, the emphasis, whether current or perceived as ideals, placed on rural nursing content by one level of nursing program is not significantly different from that emphasis placed by the other level of nursing program. Neither are the class hours allotted to rural nursing by one level of programs significantly different from the hours allotted to this content by the other level of programs.

Clinical Practice Experience in Rural Settings

Data reflecting clinical practice experience in rural settings were obtained by analyzing 1) curricular placement, 2) type, and 3) site of the experience. Course placement of clinical practice in rural settings is reported in Table 11.

Table 11.--Course Placement of Clinical Practice Experience in Rural Settings in Bacalaureate and Associate Degree Nursing Programs in Texas.

Core Course	Bacalaureate n=21	Associate n=33
Medical-Surgical Nursing	3	11
Community Health Nursing	10	1
Maternal-Child Nursing	3	3
Leadership-Management	3	3
Other	4	7

Note: Column totals may exceed N's if practice experience is integrated throughout core courses.

Rural clinical practice was reported as a component of the community health nursing course by ten bacalaureate programs. Eleven associate degree programs reported this experience as a component of the medical-surgical nursing course. This difference in placement may be reflective of the fact that, as previously noted, a community health nursing course is generally not included in associate degree nursing curricula.

Types of rural clinical practice experience reported by bacalaureate and associate degree nursing programs are

summarized in Table 12. Schools reported this experience in only two ways.

Table 12.--Type of Clinical Practice Experience in Baccalaureate and Associate Degree Nursing Programs in Texas.

Experience	Baccalaureate n=21	Associate n=33
Field Trip	2	4
Four-Six Weeks Practicum	4	2
No Rural Experience	10	18
Other	6	10

Note: Column totals may exceed N's if experience is integrated throughout core courses.

Twenty-eight respondents reported no rural clinical practice experiences while six reported practice experiences by field trip observation. Sixteen indicated "other" types of practice experiences not specified on the questionnaire and six of the fifty-four respondents reported four to six weeks rural clinical practicum. However, this does not necessarily indicate a practicum which focuses solely on rural nursing. One respondent commented that all clinical experiences occurred in rural settings; another that several small hospitals in small towns <50,000 were used for clinical practice experiences.

Predictors of Rural Nursing Emphasis

Multiple regression, stepwise procedures augmented by Pearson's Product Moment Correlation were used to analyze variables which were the best predictors of curricular emphasis on rural nursing. There were insufficient data to determine predictors of current content emphasis on rural nursing.

Recruitment Effort

Efforts to recruit students are reported in Table 13. The frequency of responses indicating recruiting efforts are reported as Likert-type responses.

Table 13.--Efforts by Baccalaureate and Associate Degree Nursing Programs in Texas to Recruit Rural Students.

Type of Program	None	<u>Effort to Recruit</u>		Intense
		Some	Special	
Baccalaureate n=20	2	13	3	2
Associate n=31	5	14	5	7

Table 14 reports the comparison of recruiting efforts in baccalaureate and associate degree programs. The results are displayed in this table.

Table 14.--Two-Tailed T-Test of Means for Comparison of Efforts By Baccalaureate and Associate Degree Nursing Programs in Texas to Recruit Rural Students.

Baccalaureate (n=20)		Associate (n=31)		t	df	p
Mean	SD	Mean	SD			
2.25	0.79	2.45	1.03	0.75	49	0.459

Note: Mean, Standard Deviation and t-values have been rounded to hundredths; p-values have been rounded to thousandths.

Table 13 reports that twenty-seven schools made "some effort" to recruit students from rural areas. However, the t-test for independent means, reported in Table 14, indicated no statistically significant difference between the recruitment efforts of baccalaureate and associate degree programs ($P > .05$).

Summary

Several major findings emerged from this study. Although few of these were unexpected, they were thought-provoking.

1. The data reporting current curricular emphasis on rural nursing content indicated little or no emphasis placed on this content by baccalaureate and associate degree

nursing programs. However, there was a noticeable shift from "no emphasis" to "emphasis" responses in data reporting perceived ideal emphasis on rural nursing content.

2. There was no statistically significant difference in emphasis placed on rural nursing content between baccalaureate and associate degree nursing programs in Texas.

3. The relationship between actual and perceived ideal curricular emphasis on content relating to rural nursing was statistically significant for baccalaureate programs.

4. The relationship between actual and perceived ideal curricular emphasis on rural nursing content was not statistically significant for associate degree programs.

5. Rural nursing content was cited as a component of the community nursing by eighteen baccalaureate programs but was a component of the medical-surgical nursing course in sixteen associate degree programs.

6. Twenty-eight of fifty-four schools reported no clinical practice experience in rural settings.

7. There were insufficient data to determine predictors of current content emphasis on rural nursing.

8. Twenty-seven schools reported some effort to recruit students from rural areas. Special and intense recruiting efforts were reported by a lesser number of schools.

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CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS, RECOMMENDATIONS

Introduction

The problem of this study was the extent to which institutions of higher education in Texas are addressing the need for nurses in rural areas. Its purposes were to determine ways in which undergraduate nursing curricula have been modified to make them more responsive to needs of nurses in rural practice sites and to identify the importance which undergraduate curricular chair persons place on such curricular modifications.

Other purposes of this study include evaluating the difference in emphasis on curricular preparation for rural nursing between baccalaureate and associate degree nursing programs in Texas, assessing efforts to recruit students from rural areas into undergraduate nursing programs and determining variables which might be predictive of curricular emphasis on rural nursing roles.

Curricular chairpersons of the twenty-one baccalaureate and forty-four associate degree programs in Texas were asked to participate in the study by completing a mailed questionnaire. Selected statistical procedures were used to analyze responses.

Summary of Major Findings

Several major findings emerged from this study. While these were not unexpected, they were thought-provoking.

1. The data reporting current curricular emphasis on rural nursing content indicated little or no emphasis placed on this content by baccalaureate and associate degree nursing programs. However, there was a noticeable shift from "no emphasis" to "emphasis" responses in data reporting perceived ideal emphasis on rural nursing content.

2. There was no statistically significant difference in emphasis placed on rural nursing content between baccalaureate and associate degree nursing programs in Texas.

3. The relationship between actual and perceived ideal curricular emphasis on content relating to rural nursing was statistically significant for baccalaureate programs.

4. The relationship between actual and perceived ideal curricular emphasis on content relating to rural nursing was not statistically significant for associate degree programs.

5. Rural nursing content was cited as a component of community nursing by eighteen baccalaureate schools and of medical-surgical nursing by sixteen associate degree programs.

6. Twenty-eight of fifty-four schools reported no clinical practice experience in rural areas.

7. There were insufficient data to determine predictors of emphasis on rural nursing content.

8. Twenty-seven schools reported some effort to recruit students from rural areas. Special and intense recruiting efforts were reported by a lesser number of schools.

Discussion of Findings

This study addressed undergraduate nursing schools in Texas only. Therefore the following discussion will not be generalized beyond that state.

Examination of the reported frequencies for current and perceived ideal curricular emphasis on rural nursing content by baccalaureate and associate degree programs revealed less variation within each program than had been expected. One question that must be addressed is whether the format of the survey instrument had any bearing on the selection of responses. Curricular chairs were asked to rate each content item according to its current emphasis in their curriculum and again according to the emphasis which, in their judgment, would be ideal. The format of the instrument allowed respondents to indicate their answers in side-by-side columns on a single page. One wonders if the spread between categories might not have been greater had they been placed on separate pages of the questionnaire.

Twenty-three schools reported that one-to-three hours of lecture time were allotted for rural nursing content. However, written comments made on the questionnaires indicated that some schools integrate content throughout the curricula. That one-to-three hours of class time were reportedly allotted to rural nursing content does not, then, necessarily mean that this time was focused solely on rural nursing.

One-half the study participants reported no clinical practice experiences in rural settings. Of those who did report rural practice experiences, four baccalaureate schools indicated practicum was required or offered as an elective. Some respondents indicated in written comments that all clinical practice experiences were in rural settings because the school was rurally located.

The fact that half of the study participants reported no rural clinical practice experience may bear out the "urban bias" of nursing education. This bias was a recurring theme cited in the literature.

It was expected that curricular chair-persons' perceived ideal emphasis on rural nursing content would be predictive of actual curricular emphasis on this content. It was also expected that programs located in rural settings would be predictive of greater emphasis on rural nursing. This expectation was not validated statistically since

there were insufficient data to determine predictors of current content emphasis on rural nursing.

The literature spoke of the efficacy of recruitment targeted in rural communities because of the likelihood that students from those areas would return to practice. Data in this study indicated that, while some efforts were being made to recruit from rural areas, special or intense efforts were not made. Since schools of nursing generally are intensifying recruitment efforts in response to the current nursing shortage coupled with decreased enrollments of the recent past, this might well be an optimal time to intensify recruitment efforts in rural communities.

Conclusions

Results of this study support several conclusions.

1. Rural nursing content is not emphasized in baccalaureate and associate degree nursing programs in Texas.
2. Rural clinical practice experiences are limited in baccalaureate and associate degree nursing schools in Texas.
3. There is no significant difference in rural nursing emphasis between baccalaureate and associate degree programs.
4. Emphasis on rural nursing which curricular chairs perceive to be ideal does not necessarily influence actual curricular emphasis of this content.

5. Efforts to recruit students from rural areas are generally limited.

Implications

Findings in this study have several implications for baccalaureate and associate degree nursing programs in Texas.

1. Greater curricular emphasis than is currently being given to rural nursing content must occur.

2. Clinical practice experience in rural settings in order to expose students experientially to the rural culture, its values and the impact which these values have on decisions regarding health care deserves consideration. Rural clinical practice experience would also permit students to experience a greater role diversity than is common in the larger, metropolitan health care complex. Such role diversity and the prospect of greater autonomy may be the right combination which would inspire students to accept the rural nursing challenge.

3. Efforts to recruit students who have grown up in rural areas need to be intensified. There is some indication that students who have grown up in rural communities will return to practice.

The above recommendations will not solve the problem of too few nurses practicing in rural communities; there probably is no one solution. But schools and colleges of

nursing could contribute to the solution of this long-standing problem by addressing rural nursing needs in their curricula and in their recruitment efforts. In so doing, schools and colleges of nursing in Texas would make a statement affirming that they are, in active fact, striving to put their results at the service of the total public (1).

Recommendations

Several research possibilities emerged from this study.

1. A descriptive study which identified the incentives, personal and professional, which inspire nurses currently practicing in rural areas would offer insights for motivating students to consider rural communities as potential practice sites.

2. Longitudinal research would identify long range implications for curricular modifications to address rural nursing needs.

3. A study to identify rural health care facilities that are willing and able to absorb expenses for students' tuition and books on a work/back, pay/back arrangement might give impetus to recruiting students from rural communities.

4. A study to identify faculty members' perceptions of the importance of rural health content in the curriculum might facilitate curricular modification to address this area.

5. A more extensive data collection of the nursing needs experienced in rural areas which was then published would help raise the consciousness of educators regarding the importance of student exposure to rural nursing.

6. A study in which students worked in a rural facility under the guidance of an RN preceptor with periodic conferences with university faculty while earning monetary reimbursement as well as academic credit, could be a beneficial recruiting strategy for rural health facilities as well as opening opportunity for dialogue between faculty and nurses who practice in rural settings. This would have potential for a more reality based curricular orientation to nursing needs in rural communities.

7. Researchers wishing to replicate this study or to conduct a similar study in their state might consider site visits, and/or telephone follow-ups to gain more specific information.

8. It is recommended that curriculum developers consider adding an elective course in rural nursing to the curriculum.

Undergraduate nursing programs have only recently addressed rural nursing needs in their curricula. Results of this study indicate that, if schools and colleges of nursing in Texas are, in fact, putting their results at the service of the total public (1), curricular attention to

nursing in rural settings needs greater emphasis than is currently being given.

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APPENDIX A
MATERIALS FOR DATA COLLECTION

Identification No.: _____

**CURRICULUM ANALYSIS OF CONTENT RELATED TO RURAL NURSING
IN BACCALAUREATE AND ASSOCIATE DEGREE NURSING PROGRAMS IN TEXAS**

The following items concern background information and/or recruitment practices. Please indicate which of the following best describes your program.

1. BSN ADN
2. For how many years has your program been in existence?

3. Is your program accredited by the National League for Nursing?
 Yes No
4. What is your current enrollment?

5. What is the current number of full time equivalents on your faculty?

6. Does your school offer a graduate program in nursing?
 Yes No
7. If your school does offer a graduate program in nursing, is it in:
 Community Health Rural Health Geriatric Nursing
 Nurse Practitioner (Specify Type) _____ Other _____
8. Does your program offer courses on satellite campuses?
 Yes No
9. If your program does offer courses on satellite campuses, are these in predominately:
 Urban settings of _____ population Rural settings of _____ population
10. Is your primary campus located in a(n):
 Rural setting of _____ population Urban setting of _____ population
11. If in a rural setting, how far are your campuses from a city of at least 50,000?
 Miles(Primary campus) Miles(Satellite campus) Not applicable
12. To what extent do your current recruitment efforts target rural areas?
 No effort Some effort Special effort Intense effort

The following items address curricular content areas that are currently emphasized in your undergraduate nursing curriculum and the emphasis which, in your opinion, would be most appropriate to your curriculum. Answer by indicating the number which best applies, using the scale: 1=No Emphasis, 2=Slight Emphasis, 3=Emphasis, 4=High Emphasis.

	CURRENT EMPHASIS	IDEAL EMPHASIS
3. Rural life styles	__1 __2 __3 __4	__1 __2 __3 __4
4. Effect of ruralness on health status	__1 __2 __3 __4	__1 __2 __3 __4
5. Cultural characteristics of rural people	__1 __2 __3 __4	__1 __2 __3 __4
6. Family, kin and group influences for rural people	__1 __2 __3 __4	__1 __2 __3 __4
7. Major rural health problems	__1 __2 __3 __4	__1 __2 __3 __4
8. Partnership for healthful change within rural families	__1 __2 __3 __4	__1 __2 __3 __4
9. Partnership for healthful change within rural communities	__1 __2 __3 __4	__1 __2 __3 __4
10. Leadership in rural communities	__1 __2 __3 __4	__1 __2 __3 __4
11. Identification of health resources in rural communities	__1 __2 __3 __4	__1 __2 __3 __4
12. Referral resources in rural communities	__1 __2 __3 __4	__1 __2 __3 __4
13. Rural health economics and organization	__1 __2 __3 __4	__1 __2 __3 __4

The following items concern placement of content relating to rural nursing roles. Please indicate the response which best applies to your undergraduate nursing curriculum.

24. Content relating to nursing roles in rural settings is generally taught in your undergraduate nursing curriculum by:
 1-3 hour lecture 4-12 hour unit Not at all Other (Specify) _____
25. Clinical practice experience for undergraduate nursing students in your program currently occurs in rural settings:
 Not at all By field trip observation Four to six weeks practicum
 Other (Specify) _____
26. Content relating to nursing roles in rural areas is currently taught as a component of:
 Medical-Surgical Nursing Community Health Nursing Maternal-Child Nursing
 Leadership-Management Other (Specify) _____
27. Clinical practice in rural settings occur as a component of:
 Medical-Surgical Nursing Community Health Nursing Maternal-Child Nursing
 Leadership-Management Other (Specify) _____
28. Clinical practice in rural settings occurs in a setting of:
_____ Population _____ Miles from a city of at least 50,000 Not applicable

I UNDERSTAND THAT THE RETURN OF MY QUESTIONNAIRE CONSTITUTES MY INFORMED CONSENT TO ACT AS A SUBJECT IN THIS RESEARCH.

October 29, 1989

Inside Address:

Dear

I am conducting research regarding educational preparation of undergraduate nursing students in Texas for nursing roles in rural settings. Statistics for 1986 report that only eleven percent of registered nurses actively in Texas were providing care in nonmetropolitan areas. Two counties were reported to be without a registered nurse at all. One of the reasons cited for this maldistribution of nurses in rural areas is related to educational preparation for nursing roles in rural settings.

Would you please refer the enclosed questionnaire to your curriculum chairperson? Completion will require approximately fifteen minutes; it is, of course voluntary. If you desire, I will be happy to share the results of the study with you.

I would appreciate your participation and return of the questionnaire within two weeks of its receipt.

Sincerely,

Shannon G. Singer, R.N., M.S.N.



The
University of Texas
at
Arlington

School of Nursing
Box 19407
Arlington, Texas 76019-0407
Metro 273-2778
Fax# 817-794-5006

Inside address:

Dear _____ :

We are all well aware of the tremendous need for additional rural health care providers, particularly nurses. The University of Texas at Arlington has a commitment to work with rural outreach programs. We would like to determine the extent to which our schools of nursing in Texas are including rural nursing in the curriculum. I would sincerely appreciate your taking the time to respond to this questionnaire from Shannon Singer.

Sincerely,

Myrna R. Pickard, R.N., Ed.D.
Dean

sjm

APPENDIX B

TABLES

Table 15.--Accreditation, Number of Graduate Programs, Type of Graduate Program Satellite Campuses and Campus Sites for Baccalaureate Nursing Programs in Texas. (n=21)

Characteristic	Frequency
National League for Nursing Accreditation	20
Graduate Program	11
Graduate Program by Type:	
Community Health	6
Rural Health	0
Geriatric Nursing	3
Nurse Practitioner	3
Other	4
Satellite Campus	9
Primary Campus Site:	
Urban	17
Rural	4
*Satellite Campus Site:	
Urban	4
Rural	3

Note: *Two schools did not report.

Table 16.--Accreditation, Satellite Campuses and Campus Sites for Associate Degree Nursing Programs in Texas. (n=33)

Characteristic	Frequency
National League for Nursing Accreditation	23
Satellite Campuses	9
Primary Campus Site:	
Urban	18
Rural	13
Satellite Campus Site:	
Urban	5
Rural	5

Table 17.--Age, Enrollment, Full Time Faculty Equivalents, Population and Distance of Campus Sites from City of 50,000 for Baccalaureate Nursing Programs in Texas. (n=21)

Characteristic	Mean	Median	Range Min.-Max.	Not Reported
Age in Years	29	27	3- 99	-
Enrollment	384	326	30-1579	-
Full Time Faculty Equivalents	30	22	4- 88	-
Population, Primary Campus Site:				
Urban	532,857	394,500	60,000- 999,000	4
Rural	22,500	22,500	20,000- 25,000	2
Population, Satellite Campus Site:				
Urban	320,000	175,000	30,000- 900,000	-
Rural	6,361	6,361	-----	2
Miles of Rural Campus from City of 50,000				
Primary	147	120	72-250	2
Satellite	20	20	-----	2

Note: Numbers have been rounded.

Table 18.--Age, Enrollment, Full Time Faculty Equivalents, Population and Distance of Campus Sites from City for Associate Degree Nursing Programs in Texas. (n=33)

Characteristic	Mean	Median	Range Min.-Max.	Not Reported
Age in Years	15	18	1- 30	-
Enrollment	153	123	24-506	-
Full Time Faculty Equivalents	12	9	2- 42	-
Population, Primary Campus Site:				
Urban	286,623	100,000	10,222- 999,000	-
Rural	33,611	15,000	4,500- 150,000	-
Population, Satellite Campus Site:				
Urban	532,500	540,000	50,000- 999,999	1
Rural	23,400	15,000	8,000- 50,000	-
Miles of Rural Campus from City of 50,000				
Primary	67	60	14-250	-
Satellite	90	100	20-150	2

Note: Numbers have been rounded.

Table 19.--Current Curricular Emphasis on Rural Nursing Content in Baccalaureate Nursing Programs in Texas. (n=21)

Topics in Curriculum	Frequency				Not Reported
	1	2	3	4	
Rural Life Styles	4	11	4	2	--
Effect of Ruralness on Health Status	4	8	8	1	--
Cultural Characteristics of Rural People	5	10	4	2	--
Family, Kin and Group Influence of Rural People	5	11	4	1	--
Major Rural Health Problems	3	6	11	1	--
Partnership for Healthful Change in Rural Families	6	10	4	1	--
Partnership for Healthful Change in Rural Communities	5	11	3	2	--
Leadership in Rural Communities	7	9	4	1	--
Health Resources in Rural Communities	2	8	10	1	--
Referral Resources in Rural Communities	2	10	8	1	--
Rural Health Economics and Organization	4	13	3	1	--

Note: Items have been rated as: 1=No Emphasis; 2=Slight Emphasis; 3=Emphasis; 4=High Emphasis.

Table 20.--Current Emphasis on Rural Nursing Content in
Associate Degree Nursing Programs in Texas.
(n=33)

Topics in Curriculum	Frequency				Not Reported
	1	2	3	4	
Rural Life Styles	12	13	4	3	1
Effect of Ruralness on Health Status	11	13	4	4	1
Cultural Characteristics of Rural People	8	9	11	4	1
Family, Kin and Group Influence of Rural People	9	10	9	4	1
Major Rural Health Problems	10	13	5	4	1
Partnership for Healthful Change in Rural Families	17	8	5	1	2
Partnership for Healthful Change in Rural Communities	18	8	5	0	2
Leadership in Rural Communities	17	9	4	2	1
Health Resources in Rural Communities	9	9	9	5	1
Referral Resources in Rural Communities	7	11	9	5	1
Rural Health Economics and Organization	16	11	4	1	1

Note: Items have been rated as: 1=No Emphasis; 2=Slight Emphasis; 3=Emphasis; 4=High Emphasis.

Table 21.--Perceived Ideal Emphasis on Rural Nursing Content
in Baccalaureate Nursing Programs in Texas.
(n=21)

Topics in Curriculum	Frequency				Not Reported
	1	2	3	4	
Rural Life Styles	5	11	4	1	1
Effect of Ruralness on Health Status	1	4	11	4	1
Cultural Characteristics of Rural People	-	6	11	3	1
Family, Kin and Group Influence of Rural People	1	6	10	3	1
Major Rural Health Problems	-	4	10	6	1
Partnership for Healthful Change in Rural Families	1	7	8	4	1
Partnership for Healthful Change in Rural Communities	1	5	9	5	1
Leadership in Rural Communities	1	5	11	3	1
Health Resources in Rural Communities	-	5	10	5	1
Referral Resources in Rural Communities	1	3	11	5	1
Rural Health Economics and Organization	1	5	10	4	1

Note: Items have been rated as: 1=No Emphasis; 2=Slight Emphasis; 3=Emphasis; 4=High Emphasis.

Table 22.--Perceived Ideal Emphasis on Rural Nursing Content
in Associate Degree Nursing Programs in Texas.
(n=33)

Topics in Curriculum	Frequency				Not Reported
	1	2	3	4	
Rural Life Styles	2	11	14	4	2
Effect of Ruralness on Health Status	1	9	14	6	3
Cultural Characteristics of Rural People	1	7	16	6	3
Family, Kin and Group Influence of Rural People	1	9	16	4	3
Major Rural Health Problems	1	8	13	7	4
Partnership for Healthful Change in Rural Families	2	10	13	3	5
Partnership for Healthful Change in Rural Communities	4	11	11	2	5
Leadership in Rural Communities	5	12	8	4	4
Health Resources in Rural Communities	1	6	14	8	4
Referral Resources in Rural Communities	1	5	16	7	4
Rural Health Economics and Organization	4	12	9	4	4

Note: Items have been rated as: 1=No Emphasis; 2=Slight Emphasis; 3=Emphasis; 4=High Emphasis.

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