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A study of the teaching of primary prevention competencies as recommended by the Report of the Pew Health Professions Commission in bachelor of science in nursing programs and associate in nursing programs.

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A STUDY OF THE TEACHING OF PRIMARY PREVENTION COMPETENCIES AS RECOMMENDED BY THE REPORT OF THE PEW HEALTH PROFESSIONS COMMISSION IN BACHELOR OF SCIENCE IN NURSING PROGRAMS AND ASSOCIATE IN NURSING PROGRAMS

by

PEGGY LANGLEY PAYNE

A DISSERTATION

Submitted in partial fulfillment of the requirements
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ABSTRACT OF DISSERTATION
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Title A Study of the Teaching of Primary Prevention Competencies as Recommended by the Report of the Pew Health Professions Commission in Bachelor of Science in Nursing Programs and Associate in Nursing Programs

The Report of the Pew Health Professions Commission summarized the knowledge and skills needed by health care professionals in the area of health promotion and disease prevention into three broad primary prevention competencies: (a) Care for the Community's Health, (b) Practice of Prevention and Promotion of Healthy Lifestyles, and (c) Involve Patients and Families in the Decision-making Process (O'Neil, 1993).

The purposes of the study were (a) to ascertain to what extent the bachelor of science in nursing (BSN) and associate degree (AD) nursing programs are preparing practitioners for the primary prevention competencies for the year 2005 as described by the Report of the Pew Health Professions Commission, and (b) to determine if there is a difference in the nature and amount of content for primary prevention competencies taught in BSN and AD nursing programs in the Southern Regional Education Board (SREB) area. Neuman's systems model was the conceptual framework for the study.

The subjects were 323 undergraduate nursing programs in the 14 states of the SREB area. A questionnaire was mailed to BSN and AD nursing programs accredited by the National League of Nursing. A 68% return rate (219 questionnaires) indicated a high degree of interest in primary prevention competencies in BSN and AD nursing programs. The nature of primary prevention was divided into 13 components. Ten of the 13 components were significantly different in BSN programs. When analysis was done for the amount of content measured in lecture hours for the three primary prevention competencies, differences were found in two of the three competencies. It was found that BSN and AD programs were significantly different in the number of lecture hours for Competency 1: Care of the Community's Health and Competency 3: Involve Patients and Families in the Decision-making Process. There was no difference in lecture hours between BSN and AD programs in Competency 2: Practice of Prevention and Promotion of Healthy Lifestyles.

Recommendations included replication of the study in other regions of the country and specific methods for improving health promotion and disease prevention content and experiences in undergraduate nursing programs in the SREB region.

Abstract Approved by: Committee Chairman _____

Program Director _____

Date _____ Dean of Graduate School _____

DEDICATION

to my loving

husband, Vic

for always believing in me,

supporting me and being

my best friend.

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I want to thank the Lord Jesus Christ, my Saviour, for helping me in this endeavor. Without the guidance of my Lord, I would not have been able to enjoy this research and produce the results in a timely manner.

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CHAPTER I

Introduction

Americans today are interested in their own health. Since 1975, there has been a growing interest in how Americans can enhance and protect their own health (U. S. Department of Health and Human Services, Public Health Services, 1990). In light of the interest in self-help, nursing needs to clearly identify what role nurses will play in meeting this need of the American public.

In recent years, the need has been identified by health care practitioners to add emphasis to prevention of disease and promotion of health rather than just curing disease. Nursing has identified the need for health care reforms to provide a standard package of essential health care benefits which emphasize primary care, health promotion, and disease prevention that would be available to all citizens and residents of the United States (The American Nurse, 1991). Previous authors have also identified the need for the positive cost-benefit ratios of prevention (Kennedy, 1978; Nassif, 1980; Starck, 1991).

Even though authors have spoken of the need for more health promotion and disease prevention, health professionals do not always describe their education as excellent in the areas of fostering wellness and

encouraging preventive behaviors. In a 1991 report of the Pew Health Professions Commission, all health professionals named as one of seven very important areas of professional training, "How to foster wellness and encourage preventive behaviors" (Shugars, O'Neil, & Badger, 1991, p. 97). When nurses were studied as a separate group, only 21% believed they received excellent training in preventing disease. This research finding pertaining to graduate nurses lead to the question: How are students prepared to practice primary prevention? In response to the previous question, the Report of the Pew Health Professions Commission and the growing self-help philosophy among Americans, a closer look at health promotion and disease prevention content in nursing curricula seems indicated.

Statement of the Problem

The Pew Health Professions Commission study was initiated because of a belief that the health care professionals were not being educated and trained to meet the evolving health needs of the American people (Shugars et al., 1991). Through examination of the report, the question one can ask is, How much of nursing education is directed toward attaining the specific competencies that promote health and prevent disease? Of the 17 competencies listed as necessary for practitioners for the year 2005 in the first Report of the Pew Health Professions Commission, five related specifically to the need for primary prevention or health promotion and disease prevention: "practice prevention, promote healthy lifestyles, involve

patients and families in the decision-making process, care for the community's health, emphasize primary care" (Shugars et al., 1991, pp. 18-19). In the second Report of the Pew Health Professions Commission, the primary prevention competencies were summarized as three: Care for the Community's Health, Practice Prevention and Promote Healthy Lifestyles, and Involve Patients and Families in the Decision-Making Process (O'Neil, 1993, p. 8). The clear challenge from the Commission to health care providers is to help people acquire primary and secondary intervention strategies for health promotion and disease prevention.

Nurses are the largest group of health care practitioners in America and as such are in a major position to help America stay healthy. An identification of how the competencies for the future practitioner are being taught will help to lay the groundwork for asking the question, How much is enough? If nursing is to assume a leadership role in primary prevention, its practitioners must be educated toward the role.

Peggy Primm, with the Midwest Alliance in Nursing, has attempted to help clarify the two levels of nurses' competencies. Based on the provision of direct care competencies as outlined by Primm (1986), the associate degree (AD) nurse

> provides direct care for the focal client with common well-defined nursing diagnoses by: . . . developing and implementing an individualized nursing plan of care using established nursing diagnoses and protocols to promote, maintain, and restore health. (p. 136)

The nurse with the bachelor of science in nursing (BSN) "provides direct care for the focal client with complex interactions of nursing diagnoses by . . . developing and implementing a comprehensive nursing plan of care based on nursing diagnoses for health promotion" (Primm, 1986, p. 136). Both levels of nursing speak to promotion of health and prevention of disease.

Even though Primm has identified differences in AD and BSN nurses, the realities of the practice arena do not reflect the differences. The National League of Nursing (NLN) has published AD nursing competencies but is still working on BSN competencies (Deering-Floy & Neighbors, 1991). The problem of primary prevention in nursing curricula is compounded due to the realities of undifferentiated practice of the BSN and AD graduates in the clinical area. Research in the specific area of primary prevention competencies being taught is lacking. It is because of the identified gap in the literature that the present study was designed.

Statement of the Purpose

The first purpose of the proposed study was to ascertain to what extent the BSN and AD nursing programs in the Southern Regional Education Board (SREB) area are preparing practitioners for the primary prevention competencies for year 2005 as described by the Report of the Pew Health Professions Commission. The second purpose was to determine if there is a difference in the nature and

amount of content for primary prevention competencies taught in BSN and AD nursing programs in the SREB area.

Research Questions

The following research questions guided the study.

1. Is there a difference in the nature of primary prevention taught and clinical learning experiences provided in BSN and AD nursing programs in the SREB area?

2. Is there a difference in the amount of content for primary prevention competencies taught in BSN and AD nursing programs in the SREB area?

To be able to look at the primary prevention competencies, a nursing model was identified as a framework. The Neuman systems model was utilized.

Conceptual/Theoretical Framework

One nursing conceptual model that has been identified as providing help in meeting the current health needs of the population is the Neuman systems model. Neuman's own words describe the model's contribution:

> The Neuman Systems Model fits well with the wholistic concept of optimizing a dynamic yet stable interrelationship among the mind, body, and spirit of the client in a constantly changing environment and society. It joins the World Health Organization mandate for the year 2000 desiring unity in wellness states--wellness of body, mind, spirit, and environment. It is also in accord with the views of the American Nurses' Association sharing its concern about potential stressors and its emphasis on primary prevention. (Neuman, 1989, p. 87)

Overview of the Neuman Systems Model

The Neuman systems model is viewed as an open system. It represents the client as a series of concentric circles surrounding a basic core structure. The core structure

consists of basic survival factors such as genes, temperature, organ strength, and weakness. The circles are viewed as interacting with five variables--physiological, psychological, sociocultural, developmental, and spiritual (Neuman, 1989). The client can be an individual, group, or community. If the client is in an ideal state, it will be a harmonious state. The client will be in a stable relationship with internal and external stressors. The model is viewed as a wellness model by Neuman. Because of this optimal client/client system, wellness attainment and maintenance are major considerations of its use.

The model is based on two major components: stress and the reaction to stress (Neuman, 1989). The client is viewed as an open system in interaction with the environment and interfacing with the environment. The client is a system and has capabilities for output and input relating to intrapersonal, interpersonal, and extrapersonal environmental influences. The following are the stated assumptions inherent in the model and useful to the framework.

1. Many known, unknown, and universal stressors exist. Each differs in its potential for disturbing a client's stability or normal line of defense. The particular interrelationship of client variables--physiological, psychological, sociocultural, developmental, and spiritual--at any point in time can affect the degree to which a client is protected by the flexible line of defense against possible reaction to a single stressor or combination of stressors.

2. Each individual client/client system, over time, has evolved a normal range of response to the environment which is referred to as a normal line of defense or usual wellness/stability state.

3. When the cushioning, accordion-like effect of the flexible line of defense is no longer capable of protecting the client/client system against an environmental stressor, the stressor breaks through the normal line of defense. The interrelationship of variables . . . determines the nature and degree of the system reaction or possible reaction to the stressor.

4. The client in a state of wellness or illness is a dynamic composite of the interrelationship of variables. . . . Wellness is on a continuum of available energy to support the system in its optimal state.

5. Primary prevention relates to general knowledge that is applied in client assessment and intervention in identification and reduction or mitigation of risk factors associated with environmental stressors to prevent possible reaction. (Neuman, 1989, p. 17, 21-22)

Within the commonly accepted metaparadigm of nursing, the concepts of person, environment, health, and nursing are linked to Neuman's systems model. The term client is used "because of respect for newer client, caregiver collaborative relationship and wellness perspectives of the model" (Neuman, 1989, p. 17). The client is comprised of a core, surrounded by lines of resistance which protect the basic core. The normal lines of defense represent the usual wellness state, which is protected by the flexible line of defense. The flexible line of defense is shown in the model as an outer broken circle. The broken circle acts in an accordion-like manner for protection but can be rapidly altered such as with loss of sleep or dehydration. When the circle becomes narrow, the normal line of defense can be penetrated by stressors and illness symptoms appear. Primary prevention aims to strengthen the flexible line of defense.

The environment in the Neuman model is defined as all internal and external factors and the created-environment (Neuman, 1989). The created-environment offers a protection for the core as it is subconscious. Neuman equates wellness with negentropy and illness with entropy.

Nursing is viewed by Neuman (1982) as a "unique profession" that "is concerned with all the variables affecting an individual's response to stressors" (p. 37). Neuman describes a focus of nursing in the following manner:

> The major concern for nursing is in keeping the client system stable through accuracy both in the assessment of effects and possible effects of environmental stressors and in assisting client adjustments required for an optimal wellness level. (Neuman, 1989, p. 34)

Neuman (1989) presents the nursing process as three parts, nursing diagnosis, nursing goals, and nursing outcome. Nursing diagnosis takes into account the data base from which one identifies, assesses, classifies, and evaluates the interactions among the five variables. The first step of the nursing process ends with a diagnostic statement defined (Neuman, 1989).

The second step of the nursing process is the formulation of nursing goals. The goals are negotiated with the client for desired prescriptive change to correct variances for wellness. The second step includes intervention strategies designed to achieve the goals.

The third stage of the nursing process is nursing outcomes. Intervention strategies using one or more preventions as intervention modalities are used at this

step. All four metaparadigm concepts are linked in Neuman's (1989) statements about primary prevention. The linkage is described in the following quotations:

> Primary Prevention as intervention . . . is used for Primary Prevention as wellness retention, that is, to protect the client system's normal line of defense or usual wellness state by strengthening the flexible line of defense. The goal is to promote client wellness by stress prevention and the reduction of risk factors. (Neuman, 1989, p. 35)

The Neuman model was used to guide the study especially in organizing content areas of primary prevention taught in the BSN and AD nursing programs.

Definition of Terms

The following terms are defined for the purpose of the current study.

Primary Prevention - health promotion and disease prevention such as exercising and adequate nutrition.

Health Promotion - activities and attitudes that lead to sustaining or improving one's overall ability to withstand stressors (Neuman, 1989; Shamansky & Clausen, 1980).

Disease Prevention - specific measures used to protect against a particular disease such as obtaining immunizations (Stuart & Sundeen, 1991).

Clinical Experiences - A nursing student opportunity with a specific focus on health promotion or disease prevention. The role the student performs can be to observe another health care worker doing health promotion or to perform the activities. When a student is performing

the activities of health promotion, the experience will be called a participant in the questionnaire.

Associate Degree Nursing Programs - any NLN accredited school that awards an Associate of Science in nursing, or an AD in nursing and is located in the SREB area.

Bachelor of Science in Nursing Program - any NLN accredited school in the SREB area that awards a Bachelor of Science Degree or BSN.

Nature of Primary Prevention - curricular components related to health promotion and disease prevention, taught in a nursing program: Components of the nature of primary prevention are: (a) when curriculum primary prevention topics are first introduced, (b) where in the curriculum primary prevention topics are primarily taught, (c) student's required assessment of personal health behaviors, (d) student's required development of personal health goals, (e) text used exclusively for teaching primary prevention, (f) primary prevention clinical experiences, (g) use of theorists for primary prevention content, and (h) use of theorists for curriculum.

Amount of Content for Primary Prevention Competencies - clock hours of lecture content taught on the following nine topics as identified by Olivieri and Ouellette (1986) and that appeared on the questionnaire (Appendix A). The topics are: (a) The Health Belief Models/Betty Neuman Model or Other Health Promotion Model, (b) Community Assessment, (c) Environmental Stressors, (d) The Nurse's Role in Primary Prevention (Health Promotion and Disease

Prevention), (e) Biopsychosocial Stressors, (f) Personal Practices Health Inventory, (g) Principles of Teaching/Learning, (h) Nutrition in Health, and (i) Change Theory. The topics were grouped under the three competencies identified by the Report of the Pew Health Professions Commission (O'Neil, 1993) that address primary prevention, as previously identified.

Assumptions

For the purpose of the current study, the following assumptions were made.

1. Nursing faculty can identify the nature and amount of content for primary prevention competencies taught in the curriculum of their program.

2. Nursing faculty will accurately report the primary prevention content taught in their curricula.

Significance of the Study

During a period of time when the public is intensely interested in their health, nursing has a unique opportunity for providing leadership in the arena of health promotion and disease prevention. The significance of the current study is in clearly describing the nature and amount of content for primary prevention competencies taught in BSN and AD nursing programs in the SREB region. The collected data will help determine if graduates have been taught a primary prevention philosophy. Since the National Council Licensure Examination-Registered Nurse (NCLEX-RN) tests 12% to 18% of health promotion and health maintenance (Saxton, Pelikan, Nugent, & Needleman, 1992),

it is clear that some preparation is taught in all RN programs. The current study attempts to determine if there is a statistically significant difference in the nature and amount of content for primary prevention competencies taught in BSN and AD nursing programs. The current study attempts to ascertain to what extent the BSN and AD nursing programs in the SREB area are preparing practitioners for the primary prevention competencies for year 2005 as described by the Report of the Pew Health Professions Commission (O'Neil, 1993). The competencies described in the Report of the Pew Health Professions Commission are congruent with Neuman's model of primary prevention which is to maximize the client's interaction with the environment and promote the client's highest level of wellness. The significance of this study lies in the evidence supported by research of the extent that nursing curricula in primary prevention will meet the health care needs of the next century.

Summary

An introduction to the problem and purpose of the study was discussed in Chapter I. Research questions and conceptual framework were identified. Definition of terms, assumptions, significance of the study, and summary concluded the chapter. Review of the related literature is discussed in Chapter II.

CHAPTER II

Review of Literature

The review of the literature was directed by the background of the topic and the framework of the study. The categories of the literature reviewed were prevention, primary prevention, terms used interchangeably, the role of the nurse in primary prevention, and nursing curricula related to primary prevention. A summary concludes Chapter II.

Prevention

Prevention has long been discussed in community health literature. Measures have been taken throughout history to safeguard human health such as the Mosaic food laws, but specific preventive health measures were rare in early scientific literature (Hilbert, 1977). In the community health literature, prevention has been vaguely defined and only superficially understood.

Primary Prevention

Primary prevention, based on public health concepts, was first discussed in the early 1950s by Leavell and Clark (1965). In their model, three levels of prevention were identified and included specific examples of prevention measures categorized under each level of prevention: primary, secondary, and tertiary.

Leavell and Clark's (1965) classic definition of primary prevention was: ". . . protection of man against disease agents or the establishment of barriers against agents in the environment. These procedures have been termed primary prevention" (pp. 20-21).

To understand primary prevention, a contrast was made with secondary and tertiary prevention as explained by Leavell and Clark (1965).

> As soon as the disease is detectable, early in pathogenesis, secondary prevention may be accomplished by early diagnosis and prompt and adequate treatment. When the process of pathogenesis has progressed and the disease has advanced beyond its early stages, secondary prevention may also be accomplished by means of adequate treatment to prevent sequelae and limit disability. Later when defect and disability have been fixed, tertiary prevention may be accomplished by rehabilitation. (p. 22)

The physiologic perspective of primary prevention is in contrast to Caplan's (1964) definition from a mental health perspective.

Caplan (1964) defined primary prevention as lowering the incidence of mental disorder, or reducing the rate at which new cases of disorder develop. Caplan contrasted primary prevention with secondary prevention which involved reducing the prevalence of a mental disorder by reducing its duration. The definition included early case finding, screening, and prompt early treatment. Tertiary prevention was defined as activities which attempted to reduce the severity of a disorder and associated disabilities (Caplan).

The approaches of Leavell and Clark (1965) and Caplan (1964) have served as a basis for many other definitions of primary prevention. Some have led to a lack of clarity. Bower (1990) defines primary prevention in mental health as,

> any specific biological, social or psychological intervention which promotes or enhances mental and spiritual robustness, or reduces the incidence and prevalence of learning and behavior disorder in the population at large. (p. 1)

The definition differed from Caplan's work which identifies attempts to reduce prevalence of a disease as secondary prevention.

However, Wagenfield (1972) defined primary prevention in two basic forms: intervention in life crises of individuals and altering the balance of sociocultural, physical, and psychosocial forms in the community. From the definition, the question is asked, Is situation crisis counseling true primary prevention?

In current nursing literature, a variety of definitions of primary prevention was found. Pender's (1982) definition of primary prevention included generalized health promotion as well as specific protection against disease. However, Pender proposed to change the definition of primary prevention to only one concept, "activities directed toward decreasing the probability of encouraging illness including active protection of the body against unnecessary stressors" (p. 42). In addition, Pender proposed that health promotion and primary prevention should replace the basic definition of primary

prevention. Pender (1982) defined health promotion as "activity directed toward sustaining or increasing the level of well-being, self-actualization and personal fulfillment of a given individual or group" (p. 42). Later, Pender (1982) clouded the issue by stating that primary prevention is important in the area of mental health, and stated "Counseling individuals and families to help them recognize, avoid or deal constructively with problems or situations that may pose a threat to mental health is an important preventive measure" (p. 43). Difficulty was encountered in distinguishing this activity from health promotion. Pender (1987) clearly stated that health promotion and primary prevention should be viewed as separate entities. Edelman and Mandle (1986) differed with Pender by stating "primary prevention includes health promotion as well as specific protection" (p. 9).

Another view and definition of primary prevention is presented by Neuman (1989). Neuman described primary prevention as involving an interaction with the client system to identify and utilize factors that strengthen or maintain the flexible lines of defense. Primary prevention was described as an intervention which occurs when a client system has been assessed as being in a high-risk category for potential health care problems, but when a reaction to stressors has not yet occurred. Neuman (1989) further describes "health promotion as a component of primary prevention" (p. 38).

Other authors defined primary prevention in different ways. McGavran (1977) described primary prevention as basic to preventive procedures that affect the total community. Bower (1990) said primary prevention is health protection that is done for the population at large. Stuart and Sundeen (1991) stated everything has potential for primary prevention.

In light of the literature review, the term primary prevention has been identified as activities of health promotion and disease prevention. A definition that included both components was consistent with the origins of primary prevention (Caplan, 1964; Leavell & Clark, 1965). In addition, the definition is consistent with Neuman (1989). Primary prevention was a major consideration in Neuman's systems model. In Healthy People 2000 (U. S. Department of Health and Human Services, Public Health Service, 1990), the concept of primary prevention is not named, but is addressed in essence by the listing of national health promotion and disease prevention objectives.

Terms Used Interchangeably

There were a number of terms in the literature that were used interchangeably with the term primary prevention. The terms were health promotion, disease prevention, health enhancement, self-protective behaviors, and health maintenance.

The first of five terms used interchangeably with primary prevention was health promotion. Pender (1982)

defined health promotion as "activities directed toward developing the resources of clients that maintain or enhance well-being" (p. 2). Pender later developed the definition to include an individual or group. Shamansky and Clausen (1980) expressed health promotion as a way to encourage personality development and optimum health to strengthen one's ability to withstand emotional and physical stress. So health promotion basically was defined as activities and attitudes that lead to sustaining or improving one's overall ability to withstand stressors.

The second term explored was disease prevention. Disease prevention has a focus on specific preventive measures to protect against a specific disease (Stuart & Sundeen, 1991). The term disease prevention included activities such as immunizations and family planning (Spradley, 1981). Healthy People 2000 (U. S. Department of Health and Human Services, Public Health Service, 1990), a national 1990 publication, included counseling, screening, and chemoprophylactic interventions as a part of disease prevention.

The third term used interchangeably was health enhancement. The practice of life style changes to decrease risk to individuals and groups was defined as health enhancement (Craig & Weiss, 1990). An example of health enhancement was the whole health conscious movement addressing second-hand smoke and other issues.

Self-protective behaviors was the fourth term that was used interchangeably with primary prevention. Weinstein

(1987) described self-protective behaviors as the activities one engages in to preserve one's life and well-being. An example of the behavior is wearing seat belts. Self-protective behaviors were defined as opposite to self-destructive behaviors.

The fifth term used interchangeably was health maintenance. The definition of health maintenance was to utilize the family as a group in handling its health problems. Health maintenance includes therapeutic nursing services or help in times of crises, such as illness, birth, or hospitalization. Another part of health maintenance was described as coordination of health and nursing services (Stanhope & Lancaster, 1991).

The Role of the Nurse in Primary Prevention

One research study reviewed was the case study of Frank Thompson as described by Edelman and Mandle (1986). Frank was a poor tenant farmer's son. He helped his father with small tobacco and corn crops, but was unaware of the hazardous chemicals in pesticides. His father reminded him to do well in school to avoid being a tenant farmer. Frank was thin and tired and often had recurrent streptococcal infections. Frank went to college and received an MBA. After marriage, he began to realize his dream, first as a salesman, then as a division head. Frank rapidly advanced in his company due to intense work. He gained weight as he kept long hours and long weekends. He had a persistent cough, probably from a smoking habit. His physician told him his blood pressure and lipids were high. The doctor

recommended a change and the nurse tried to help but Frank had no time for exercise.

When Frank began to compete for a promotion, his wife pointed out that losing weight might help him in the competition. He joined an expensive physical fitness program designed to attend on Sundays and before work. At his first workout, he experienced severe chest pains and a massive heart attack.

A review of the case study revealed ways that Frank could have benefited from primary prevention. Positive health practices could have been introduced. Frank needed encouragement to avoid poor nutrition, smoking, and drinking alcohol. Ways to reduce stress and adequate precautions for excessive programs would have been helpful to Frank. In these ways, Frank might have benefited from primary prevention. Health promotion and disease prevention, as components of primary prevention, were described as appropriate interventions for Frank (Edelman & Mandle, 1986).

In two other studies, Duffy (1989) and Decker and Knight (1990) described the use of primary prevention. Duffy discussed primary prevention behaviors in single parent families. Barriers that deterred the practice of primary prevention included role overload, stereotyping, and poverty. Decker and Knight described the need for primary prevention in migrant camps. The functional health pattern assessment and other tools included health promotion and disease prevention.

In another research study of a Finnish family, the authors described the need for health education and primary prevention, especially at the time of child bearing (Rautana, Erkkola, & Sillania, 1990). In other studies, primary prevention is described in a variety of clients and in many settings: HIV testing and counseling for women (Moroso & Holman, 1990), workplace hazards to reproductive health (Bernhardt, 1990), and school-based programs of primary prevention (Czupryna, 1984; Frank, 1983; Lungmuss, 1989; Opie & Slater, 1988; Walter, 1989). These activities as described were congruent with the definition of primary prevention expressed.

Nursing Curricula as Related to Primary Prevention

Other studies have examined primary prevention as taught in programs in nursing (Jack, 1989; Santopietro & Rozendal, 1975; Welch, Boyd, & Bell, 1987). These authors describe primary prevention with the same two components of health promotion and disease prevention.

The nurse's role in primary prevention was discussed by Kenyon et al. (1990). The authors described clinical competencies for the community health nurse in community care and acute care settings. Because of the increased numbers of acutely ill clients being cared for in the home, the numbers of community health nurses needed have increased. Many of the nurses are coming from the acute care setting. The article was helpful in looking at the competences needed for the two settings. The listing of

competencies find health promotion and disease prevention as necessary preparations for both types of settings.

A study by Olivieri and Ouellette (1986), assistant professors at the School of Nursing at Boston College, described the amount and type of primary prevention and health promotion taught in baccalaureate degree programs in nursing in the United States. Olivieri and Ouellette analyzed the data from three perspectives: role preparation, role perception, and the role application. A questionnaire was mailed to all 416 NLN accredited generic baccalaureate degree programs in nursing. Twenty-four percent of the schools taught primary prevention in a separate course. Role components for primary prevention was a required course in all but 3% of the schools. Of the schools teaching the content in a separate course, 42% reported spending between 21-40 hours in the classroom, 34% allocated between 41 and 60 hours for theory, and 13% had greater than 60 hours of lecture time devoted to the primary prevention content. One of the conclusions drawn by the authors was that primary prevention was a specific course in approximately one-fourth of the baccalaureate nursing programs. Another finding related to clinical time spent in primary prevention. Fifty percent of schools had more than 26 clinical hours in primary prevention.

One group of authors have called for curricula auditing to determine the health promotion and disease prevention content taught in undergraduate nursing programs (Pender, Barkauskas, Hayman, Rice, & Anderson, 1992). To

better determine the current extent of health promotion and disease prevention in nursing curricula, a concentrated effort is needed.

The NLN Council of Associate Degree Programs published a revised list of AD competencies at the entry level for the associate degree nurse (Deering-Floy & Neighbors, 1991). Deering-Floy and Neighbors conducted a study to determine if the competencies were being met. The outcome of the study showed a wide difference between education and service on competencies that AD graduates were meeting. The authors called for a study of AD curricula relative to the NLN competencies. Evidence documented that the AD graduate was not meeting one NLN competency which was that "The nurses promote participation of the client, family, significant others, and members of the health care team in the plan of care" (Deering-Floy & Neighbors, 1991, p. 475). The authors recommended further research to ascertain that recommended NLN competencies are being met, by identifying courses and content wherein the competencies are taught.

One article by Richardson and Petrarca (1990) was found which described a course to educate nurses in health promotion and disease prevention. The course had a wellness focus and was placed at the sophomore year of a BSN curriculum. Copp (1984) described the fact that one cannot view health promotion without looking at one's own health practices. No other articles were found which identified one time as more appropriate for wellness teaching.

Boyle and Ahyenych (1987) recommended a personal wellness plan be developed for nursing students as a way to increase their health behaviors. The deficit of a health plan for nursing students was discussed.

In 1991, Fredinger, Johnson, Chang, and Choo (1991) questioned whether nursing education emphasized the teaching of behavior-change strategies as a way to increase the nurse's ability to teach health promotion. In the topics covered to promote health, change theory was explicitly identified.

Starck (1991) describes the U.S. health care system as being the most expensive of any developed country. In light of the money spent, one would expect excellent care. However, health promotion in the U.S. health care system was found missing or inadequate.

In the second Report of the Pew Health Professions Commission (O'Neil, 1993), the future health care system is described as an "orientation toward health, greater emphasis on prevention and wellness, and greater expectations for individual responsibility for healthy behaviors" (p. 6). Toward meeting the goal of a healthy America, the judgement of how the competencies are being taught was explored. One identified characteristic of future health care systems will be a better integration of health promotion and disease prevention within all health care systems to meet the future challenge. The challenge for all nursing programs is to redirect parts of the curricula for care of community-based patients.

Summary

In summary, definitions of primary prevention and other terms used interchangeably were examined in the review of literature. Selected research studies were explored.

Primary prevention is a topic that has been taught in programs of nursing for a long period of time. However, programs in nursing differ by how primary prevention is defined and how much primary prevention content should be included in the curriculum. To better identify nurses' roles in meeting the health needs of the American public, primary prevention needs to be clarified. No studies were found which described the primary prevention content in BSN and AD nursing programs in the same region. At least one BSN program has changed primary prevention content since the 1986 study based on the need to increase the pass rate on the NCLEX-RN (R. Olivieri, personal communication, October 25, 1991).

No studies were found to ascertain if there is a difference in the amount of content for primary prevention competencies taught in BSN and AD nursing programs. Based on the identified gap in the literature, the current study may help to further identify the primary prevention knowledge in nursing curricula. Such research is necessary to identify whether curricula changes are necessary to meet the public need for health promotion and disease prevention.

CHAPTER III

Methodology

The first purpose of the current study was to ascertain to what extent the BSN and AD nursing programs are preparing practitioners for the primary prevention competencies for the year 2005 as described by the Pew Health Professions Commission Report. The second purpose of the study was to determine if there is a difference in the nature and amount of content for primary prevention competencies taught in BSN and AD nursing programs in the SREB area.

The methodology was formulated, based on the framework of identified content in health promotion and disease prevention using the Neuman systems model. The sample, setting, protection of human rights, instrumentation, pilot study, and design are discussed. Data analysis methods are described. Limitations of the study and a summary conclude Chapter III.

Subjects

The subjects for the study were 323 undergraduate nursing programs in the SREB area. The schools identified comprise the total population of BSN and AD nursing programs in the SREB area that were accredited by the NLN as of April, 1992. The schools that participated in a

pilot study were not included in the study. All programs have the following characteristics: an undergraduate nursing program, current accreditation from NLN, and not a RN completion program.

Sample

The sample was recruited from the listing of the NLN accredited program in nursing in the 14 states in the SREB area. The states included in the study were: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia, and West Virginia (Southern Council on Collegiate Education for Nursing in Affiliation with the Southern Regional Education Board, 1992).

The SREB area was determined to have an adequate number of programs in nursing in which to conduct the study. The programs that have NLN accreditation were chosen because each one had undergone a self-study according to stated criteria.

Protection of Human Rights

Approval of the Institutional Review Board (IRB) for research on human subjects was sought and obtained for the pilot study from the University of Alabama at Birmingham (Appendix B). Completion of the questionnaire was considered as consent to participate in the study. IRB approval was sought and obtained for the current study. Exempt approval was granted (see Appendix C).

Instrumentation

Permission to use a questionnaire and cover letter was obtained from Olivieri and Ouellette (Appendix D). The tool was adapted to reflect the content for primary prevention competencies from the Report of the Pew Health Professions Commission, and expanded to identify curricula based on a theory. The tool was a 10-item questionnaire. The first item asked for placement of the beginning of primary prevention content. The second item asked for area of the program in which primary prevention concepts are primarily taught. Items three and four asked about requiring the students to assess personal primary prevention behaviors and set personal goals for primary prevention. Item five identified the topics of primary prevention and groups the topics with competencies from the Report of the Pew Health Professions Commission. Item six asked for specific texts used for primary prevention. Items seven and eight explored the use of clinical experiences for primary prevention. Items nine and ten asked for bases of primary prevention and curriculum theory. The original authors, Olivieri and Ouellette (1986), state they "had the tool reviewed by six educators for the purpose of revising any unclear and/or ambiguous wording" (p. 26). The adapted tool was analyzed by four doctorally prepared educators for appropriateness of content for primary prevention as reflected by the Report of the Pew Health Professions Commission in the competency statements. The items listed were viewed as relevant to

the competencies. The Neuman systems model (Neuman, 1989) was helpful in adaptation of the tool.

A cover letter (Appendix E) was included with the questionnaire. A stamped, self-addressed envelope was enclosed. An herbal tea bag was enclosed as an incentive to complete the questionnaire.

The independent variable in the study was identified as the nursing program. The variable has two levels of education. The AD is a degree that usually is completed in 18 to 24 months. The BSN is a degree that usually requires 4 years to complete. The dependent variable was identified as the primary prevention content taught in the nursing programs. The content was identified by clock hours taught as well as topics covered in the content under the headings of three primary prevention competency statements. In addition, the content was identified as lecture only or lecture with clinical practice. If clinical practice was utilized, it was subdivided by type of experience: observation or participation.

Pilot Study

Prior to data collection for the current study, a pilot study was completed with four AD nursing programs. The pilot study was done to determine the effectiveness of the amended tool with AD nursing programs. All of the AD programs had primary prevention integrated in courses.

The tool was found to be adequate and appropriate to measure the nature and amount of primary prevention taught in AD nursing programs. One hundred percent of the AD

schools used an integrated approach to teaching primary prevention in the curriculum. One hundred percent of the AD schools offered the first primary prevention content prior to an experience in an acute care setting. Twenty-five percent of the programs offered all the primary prevention in the first half of the nursing program, while 75% had it in both halves. Only 50% of the AD schools required the students to assess their own personal health and set health goals. No AD school used a separate text to teach primary prevention. Fifty percent of the schools used a clinical experience to teach primary prevention. Of the clinical experiences used, some students' experiences involved participation while others were only observational. Table 1 represents the results of the clinical experiences utilized by the AD schools of nursing. Of note is that only the clinics were utilized by all four AD nursing programs with a clinical experience in primary prevention. The total hours taught in the four AD schools ranged from 3.5 to 119 lecture hours in the 2 years, with a range of 0 to 60 hours per topic. A breakdown of the ranges of clock hours of lecture per topic area in primary prevention is shown in Appendix F. In the pilot study, it was determined that primary prevention content can be measured in AD nursing programs with the amended tool.

Design

A correlational design was used for the study. The sample included the entire population of BSN and AD nursing

programs in the SREB region, except the nursing programs that participated in the pilot study.

Table 1

Clinical Experiences Utilized by AD Nursing Programs in Pilot Study (N = 4)

Clinical agency	% Participated	% Observed
Community health	25	25
Adult day care	25	0
Health fairs	50	0
Schools	25	25
Clinics	25	75

Procedure

The following steps were taken in the study:

1. Approval of application to conduct the study was obtained from the IRB of the University of Alabama at Birmingham (Appendix C).

2. The questionnaire (Appendix A) with the cover letter (Appendix E) and a stamped self-addressed envelope was mailed to the dean or director of 323 undergraduate nursing programs in the SREB area. A time frame of 4 weeks (February 1, 1993) was set for response to the survey. An herbal tea bag was included as an incentive to encourage filling out the survey.

3. A follow-up card was sent to nonresponding nursing programs with a phone number to call if a new questionnaire was needed. Two requests for a new

questionnaire were received and a new questionnaire was supplied. A final date for completion of the survey was extended to February 20, 1993.

4. The deadline was extended a second time to February 25, 1993.

Data Analysis

For the purpose of data analysis, the following null hypotheses were tested at the alpha level of .05.

1. There is no difference in the nature of primary prevention taught in BSN and AD nursing programs in the SREB area.

2. There is no difference in the amount of content for primary prevention competencies taught in BSN and AD nursing programs in the SREB area.

The analysis of the data included descriptive data and quantitative analysis using *t* tests at the .05 significance level. A modified *t* test was used because homogeneity of variance was absent.

Modified *t* tests were used to measure the amount of content for primary prevention competencies taught in BSN and AD nursing programs. Paired *t* tests were used to compare each list of subtopics. The paired *t* test was used to compare each competency of AD nursing programs with each list of subtopics.

For nominal data relating to the nature of primary prevention taught, chi-squared analysis was used for each item. Data were analyzed using the Statistical Package for the Social Sciences, PC edition (SPSS/PC).

Limitations

The acknowledged limitations of the study are as follows:

1. Generalization of the findings of the study can not be made beyond the sample.

2. The data are based on self-reported data from the nursing programs.

3. The sample was voluntary.

4. The findings from a specific geographic location may not be representative of the population at large.

Summary

A discussion of the methodology for the current study was presented in Chapter III. Included in the discussion were the sample setting, protection of human rights, and instrumentation. A pilot study was discussed. The design, procedure, data analysis, limitations, and summary were included.

CHAPTER IV

Presentation and Analysis of Findings

The fourth chapter contains a presentation and analysis of the findings. The findings are presented in three parts. The first part is the description of the population and sample. The second part addresses the two null hypotheses presented in chapter three and is followed by the third part which is a summary.

Population and Sample

The invited participants of the study were the 323 undergraduate nursing programs in the SREB area that were accredited in 1992 by the National League of Nursing (NLN) (NLN, 1992a, 1992b). The states in the SREB area are: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

Of the programs invited to participate in the study, 152 were BSN programs and 171 were AD nursing programs. Programs used in the pilot study were not included in the sample. All programs in the study had the following characteristics: (a) an undergraduate nursing program, (b) current accreditation from the NLN, and (c) not a RN completion program.

Of the 323 nursing programs in the study, 221 (68%) returned the survey of which 214 qualified for use in the study. Of these, 102 were BSN programs and 112 were AD programs. Surveys unable to be used consisted of six returned with insufficient information and one returned by a program that offered only a master's degree in nursing.

Hypotheses and Findings

The two null hypotheses of the study were:

1. There is no difference in the nature of primary prevention taught in BSN and AD nursing programs in the SREB area.

2. There is no difference in the amount of content for primary prevention competencies taught in BSN and AD nursing programs in the SREB area.

The first hypothesis was tested for a difference in the nature of primary prevention. Chi-squared analysis was used for the nominal data. In chi-squared analysis, the observed frequencies of occurrence are compared with the expected frequencies. When using the chi-squared analysis, the researcher must be careful when the expected cell frequencies are less than 5. With cell frequencies of expected values less than 5, an inflated or distorted value of chi-squared may result. In the test for nature of primary prevention, all expected frequencies were greater than 5 in 12 of 13 values. Hinkle, Wiersma, and Jurs (1988) described the use of the chi-squared test for a 2 x 2 table with 1 degree of freedom and recommended that Yates' correction for continuity not be used as it would

result in an unnecessary loss of power. The loss of power is described as not rejecting a null hypothesis when in fact it is false, or a Type II error. Tables 2-14 are presented with chi-squared values.

Survey questions relative to the first hypothesis are questions 1 through 4, and 6 through 10. The questions and analysis of findings will be presented in that order.

The first question in the survey asked, "Is the primary prevention material taught prior to the students' first acute care experience?" There was not a significant difference in when the primary prevention was first taught in the two types of nursing programs ($\underline{X}^2$ = .034, $\underline{df}$ = 1, $\underline{p}$ = .85). Table 2 presents the number of BSN and AD programs answering Yes and No to the first question.

Table 2

Primary Prevention Taught Prior to the Students' First Acute Care Experience by Type of Nursing Program

Primary prevention taught prior to acute care experience	AD ($\underline{n}$ = 112)	BSN ($\underline{n}$ = 102)
Yes	70 62.5%	65 63.7%
No	42 37.5%	37 36.3%

The second question addressing the nature of primary prevention was, "Approximately where in the nursing program are these concepts primarily taught?" The results are presented in Table 3. A statistically significant

difference was found between BSN and AD nursing programs as to where primary prevention concepts are placed ($\underline{X}^2$ = 21.71, $\underline{df}$ = 3, $\underline{p}$ = .000075). Phi = .32 or low positive relationship. The phi coefficient was used to measure the strength of the relationship when a statistically significant difference was found.

Table 3

Location Where Primary Prevention is Taught in Curriculum by Type of Nursing Program

Location	AD ($\underline{n}$ = 112)	BSN ($\underline{n}$ = 102)
First half	36 32.1%	18 17.6%
Second half	3 2.7%	21 20.6%
Both halves	67 59.8%	53 52.0%
Other design	6 5.4%	10 9.8%

The third question addressing the nature of primary prevention was, "Within your particular framework of primary prevention concepts, are the students required to assess their own primary prevention behaviors?" (See Table 4 and Figure 1.)

A statistically significant difference was found between type of program and the requiring of students to assess their own primary prevention behaviors ($\underline{X}^2$ = 4.71, $\underline{df}$ = 1, $\underline{p}$ = .030). Phi = .15 or little relationship.

Table 4

Students Required to Assess Own Primary Prevention Behaviors by Type of Nursing Program

Assess own healthy behaviors	AD (n = 112)	BSN (n = 102)
Yes	63 56.3%	72 70.6%
No	49 43.8%	30 29.4%

The fourth question addressing the nature of primary prevention was, "Within your particular framework of primary prevention concepts, are the students required to identify personal goals related to these concepts?" Table 5 and Figure 2 report the results. A significant difference was found between program and goals (X^2 = 10.32, df = 1, p = .0013). Phi = .22 or little relationship.

Table 5

Personal Goals Required of Students Related to Primary Prevention Concepts by Type of Nursing Program

Personal Goals required	AD (n = 112)	BSN (n = 102)
Yes	33 29.5%	52 51.0%
No	79 70.5%	50 49.5%

The sixth question addressing the nature of primary prevention is, "Within the integration of these concepts

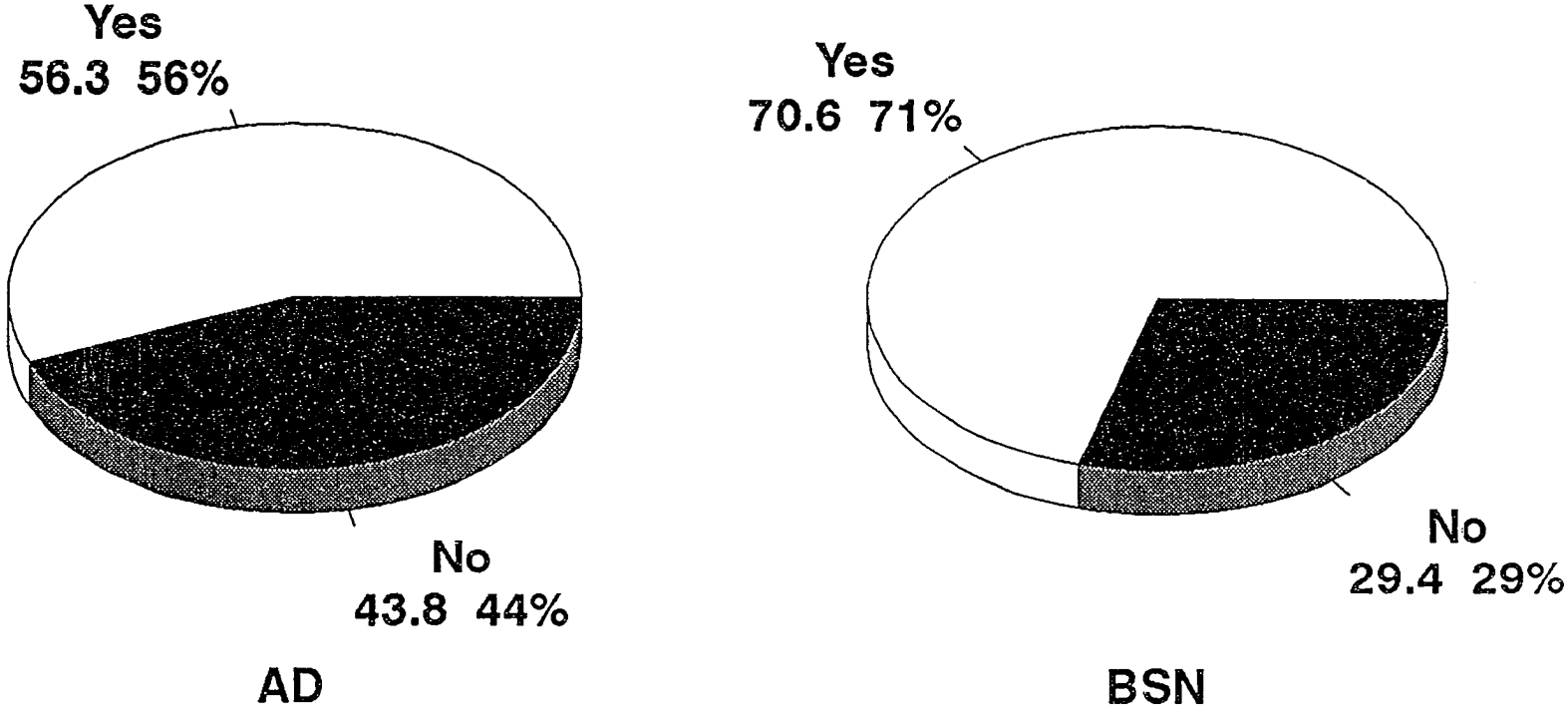

Figure 1. Students Required to Assess Own Primary Prevention Behaviors by Program

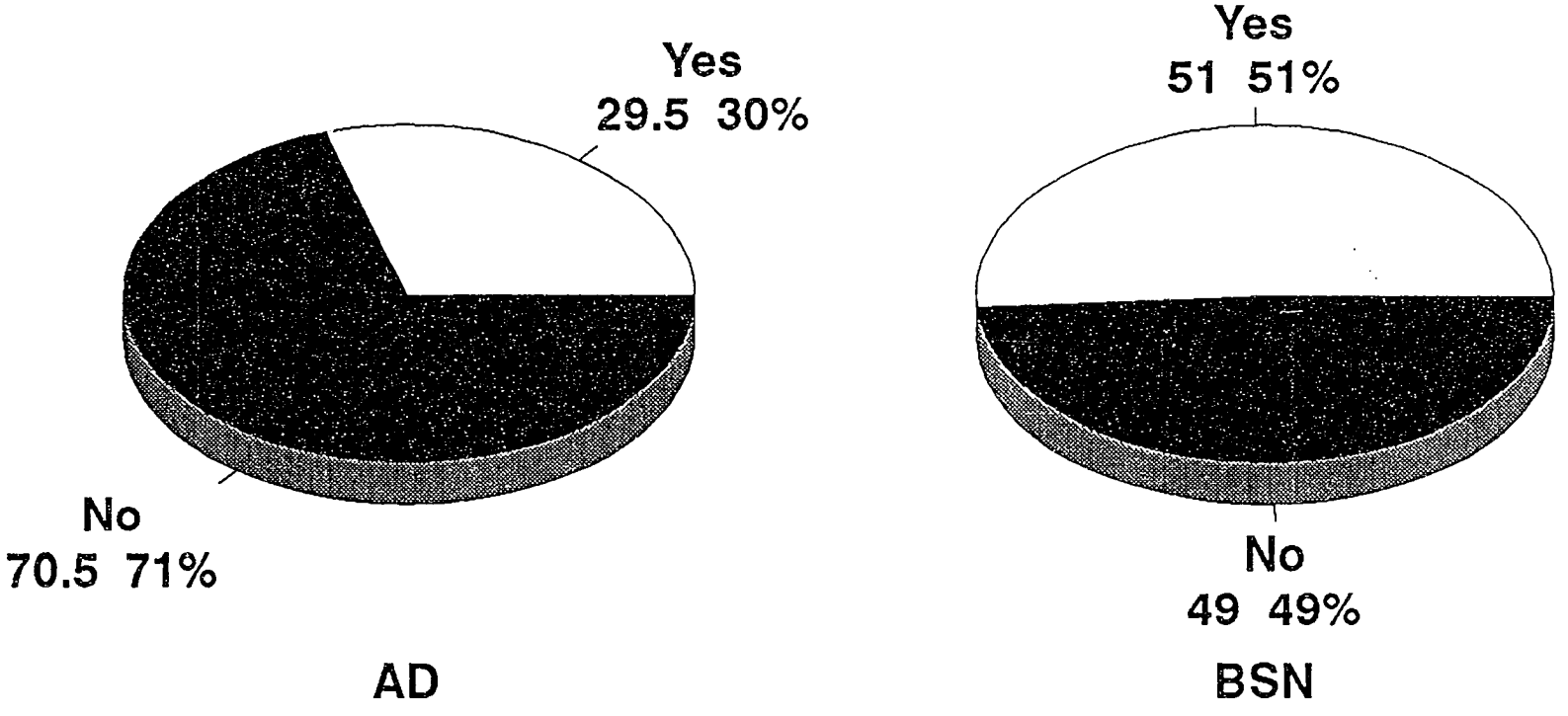

Figure 2. Personal Goals Required of Students Related to Primary Prevention Concepts

into your curriculum, do you use any texts that are exclusively devoted to primary prevention?" (See Table 6.) A significant difference was found between program and texts (X^2 = 28.71, df = 1, p < .00001). Phi = .37 or low positive association. The authors of the texts mentioned more than once were Pender (n = 11), Stanhope and Lancaster (n = 4), Murrey and Zentner (n = 2), and White (n = 2).

Table 6

Text Used Exclusively for Teaching Primary Prevention by Type of Nursing Program

Text required	AD (n = 112)	BSN (n = 100)
Yes	2 1.8%	27 27.0%
No	111 98.2%	73 73.0%

The seventh question to address the nature of primary prevention was, "Does your integrated curriculum include a clinical experience that relates to primary prevention?" (See Table 7.) A significant difference was found between program and primary prevention clinical experiences (X^2 = 28.1, df = 1, p < .00001). Phi = .37 or low positive relationship.

The eighth question that addressed the nature of primary prevention was, "If students have any experiences that are related to primary prevention at any of the following clinical settings, are they participants or

Table 7

Clinical Experiences Related to Primary Prevention by Type of Nursing Program

Primary prevention clinical experiences	AD (n = 110)	BSN (n = 97)
Yes	59 53.6%	85 87.6%
No	51 46.4%	12 12.4%

observers?" Clinical settings included adult day care, health fairs, schools, clinics, and community health agencies. Table 8 reports the results of the clinical experiences in an adult day care center, by type of nursing program. A significant difference was found between program and adult day care experiences (X^2 = 8.16, df = 1, p = .0043). Phi = .28 or low positive relationship.

Table 8

Clinical Experiences in Adult Day Care by Type of Nursing Program

Adult day care	AD (n = 40)	BSN (n = 63)
Participants	18 45.0%	47 73.0%
Observers	22 55.0%	17 27.0%

Table 9 shows the results of health fair experiences. No statistically significant difference was found between

program and clinical experience in health fairs (X^2 = .37, df = 1, p = .54). Fischer's exact test gives p = .44, used because expected cell frequency less than 5.

Table 9

Clinical Experiences in Health Fairs by Type of Nursing Program

Health fair	AD (n = 76)	BSN (n = 87)
Participants	73 96.1%	85 97.7%
Observers	3 3.9%	2 2.3%

"Are the clinical experiences in schools?" Table 10 shows the results of clinical experiences in schools. A statistically significant difference was found between program and school clinical experiences (X^2 = 22.12, df = 1, p = .0000026). Phi = .39 or low positive relationship.

Table 10

Clinical Experiences in Schools by Type of Nursing Program

Schools	AD (n = 50)	BSN (n = 92)
Participants	31 62.0%	86 93.5%
Observers	19 38.0%	6 6.5%

Table 11 shows the results of clinic experience. A statistically significant difference was found between

program and clinic experiences (X^2 = 42.12, df = 1, p < .000001). Phi = .49 or low positive relationship.

Table 11

Clinical Experiences in Clinics by Type of Nursing Program

Clinics	Type of nursing program AD (n = 81)	BSN (n = 98)
Participants	48 59.3%	96 98.0%
Observers	33 40.7%	2 2.0%

Table 12 shows the results of clinical experiences in community health agencies. A statistically significant difference was found between type of nursing program and community health agency experiences (X^2 = 28.87, df = 1, p < .000001). Phi = .43 or low positive relationship.

Table 12

Clinical Experiences in Community Health Agencies by Type of Nursing Program

Community health agencies	Type of nursing program AD (n = 81)	BSN (n = 98)
Participants	39 63.9%	89 96.7%
Observers	22 36.2%	3 3.3%

The ninth question on the survey addressing the nature of the primary prevention was, "Is your primary prevention content based on a nurse theorist?" (See Table 13.) The use of nurse theorist for primary prevention content by type of nursing program was statistically significantly different (X^2 = 12.36, df = 1, p = .00044). Phi = .24 or little relationship. The theorists listed more than once as the basis of primary prevention content for BSN nursing programs were Orem (11), Pender (11), Neuman (8), and Roy (2). The theorists listed more than once as the basis of primary prevention content for AD nursing programs were Orem (4) and Roy (2).

Table 13

Use of a Nurse Theorist for Primary Prevention Content by Type of Nursing Program

Use of a nurse theorist for primary prevention content	Type of nursing program: AD (n = 112)	BSN (n = 100)
Yes	12 10.7%	30 30.0%
No	100 89.3%	70 70.0%

The tenth question on the survey addressing the nature of primary prevention was, "Is your curriculum based on a nurse theorist?" The results are reported in Table 14 and are not statistically significant by type of nursing programs (X^2 = .089, df = 1, p = .77). The theorists

listed more than once by BSN nursing programs as basis of curriculum were Orem (n = 13), Neuman (n = 7), Roy (n = 4), Rogers (n = 2), and Watson (n = 2). The theorists listed more than once by AD nursing programs as basis of curriculum were Roy (n = 10), Orem (n = 8), Henderson (n = 4), Chater (n = 3), King (n = 2), and Maslow (n = 2).

Table 14

Curriculum Based on a Nurse Theorist by Type of Nursing Program

Curriculum based on nurse theorist	Type of nursing program: AD (n = 112)	BSN (n = 102)
Yes	26 23.0%	25 24.8%
No	87 77.0%	76 75.2%

Of the 13 survey questions addressing the nature of primary prevention, 10 items were significantly different in BSN and AD nursing programs so the first null hypothesis was rejected. However BSN and AD nursing programs were not significantly different in: (a) the time the primary prevention is first taught, (b) clinical experiences in health fairs, and (c) basing the entire curriculum on a nurse theorist.

The second hypothesis was tested with t tests (approximate t tests when standard deviations are different) for independent samples of groups. The three

competencies for primary prevention, as defined by the Report of the Pew Health Professions Commission, were tested. The three competencies for primary prevention content were: (a) care of the community's health, (b) practice of prevention and promotion of healthy lifestyles, and (c) involving patients and families in the decision-making process. Item five on the survey was analyzed to answer hypothesis two. Because two of the three competencies analyzed were significantly different, the second null hypothesis was rejected.

The following is the way that the content for the three primary prevention competencies with subtopics listed. The analysis of competencies is presented as total lecture hours of content per competency by type of nursing program (Table 15 and Figure 3). A comparison of subtopics within each competency by nursing program is presented in Tables 16-18. All three competencies with subtopics within each type of school are presented in Tables 19-24.

The independent *t* test was used to determine any statistically significant difference in number of lecture hours of content for the three primary prevention competencies by type of nursing program. Table 16 and Figure 4 compare lecture hours by each program in each competency. There is a statistically significant difference in number of lecture hours spent on Competency A and C between BSN and AD nursing programs. There is no statistically significant difference in Competency B between BSN and AD nursing programs.

Table 15

Comparison of Lecture Hours of Content for Three Primary Prevention Competencies of the Report of the Pew Health Professions Commission in BSN and AD Nursing Programs in the SREB Area

Type of nursing program	Competencies A: Community's health	B: Practice of prevention & promotion of health	C: Involving patients & families in decisions
AD	M = 6.60 SD = 11.83 N = 68	M = 20.57 SD = 42.55 N = 74	M = 17.42 SD = 17.04 N = 74
BSN	M = 24.10 SD = 64.52 N = 92	M = 29.64 SD = 57.74 N = 75	M = 30.01 SD = 38.88 N = 90
	BSN more times than AD	No difference	BSN more times than AD
	t = 2.54 *df = 99.19 p = .013(S)	t = 1.09 *df = 136.09 p = .276(NS)	t = 2.77 *df = 126.97 p = .007(S)

*Approximate degrees of freedom are used for approximate t tests when standard devisions are different (heteroscedastic situation).

To better describe exactly where the differences exist in teaching the primary prevention competencies, the subtopics of each competency by type of nursing program are presented. Competency A is care of the community's health. The subtopics for Competency A are: (a) health promotion model, (b) community assessment, and (c) environmental stressors. For the comparison of subtopics within each competency, lecture hours that could not be classified from

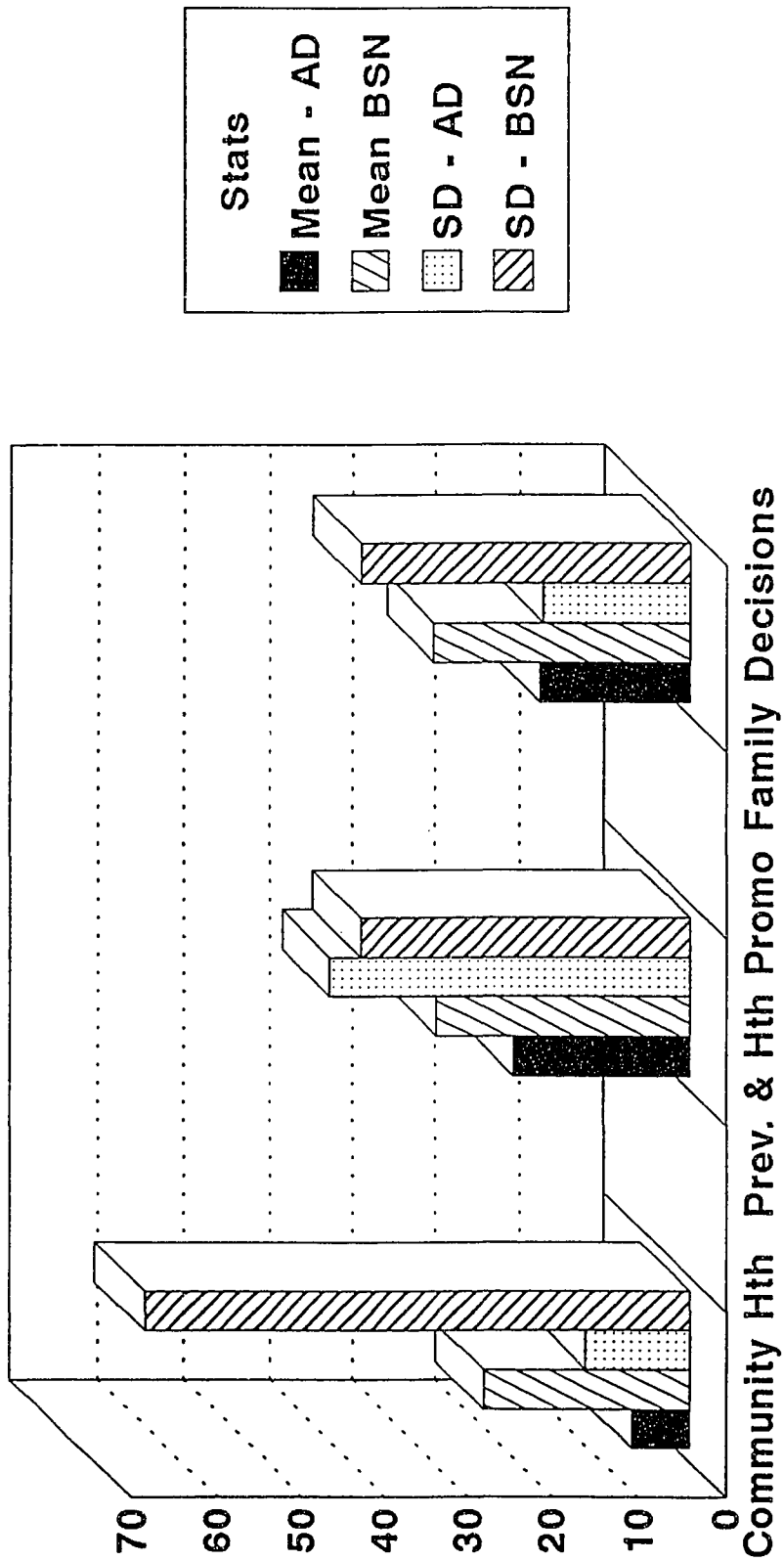

Figure 3. Comparison of Lectures Hours--BSN and AD in SREB

Table 16

Comparison of Lecture Hours Taught in Subtopics of Primary Prevention in Competency A: Care of Community Health by Type of Nursing Program

Subtopics of competency A: care of community's health	Nursing programs AD	Nursing programs BSN	Separate variance (estimate) t value	Separate variance (estimate) Two-tail probability
Health promotion model	M = 2.48 SD = 7.60 (M = 54, Min = 0, N = 85)	M = 4.71 SD = 10.35 (M = 100, Min = 0, N = 94)	-1.63	.10 NS
Community assessment	M = 2.43 SD = 6.03 (M = 45, Min = 0, N = 82)	M = 10.17 SD = 23.16 (M = 200, Min = 1, N = 99)	-3.20	.0016 S
Environmental stressors	M = 3.46 SD = 4.39 (M = 30, Min = 0, N = 92)	M = 9.59 SD = 31.77 (M = 300, Min = 1, N = 94)	-1.85	.67 NS

S = Significant

NS = Not significant

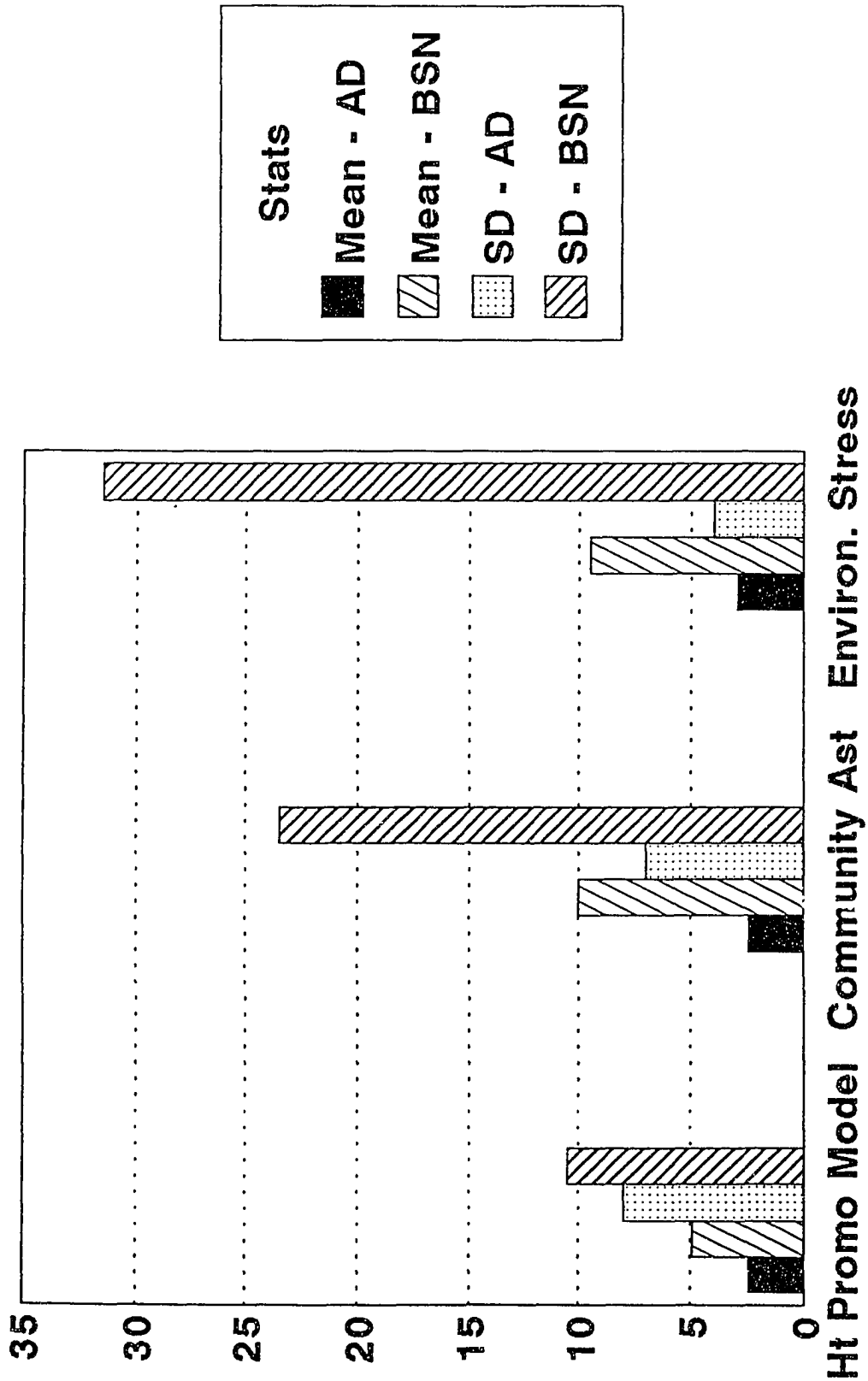

Figure 4. Summary of Care of Community's Health

the data were omitted from the analysis. Table 16 presents a comparison of hours taught in each subtopic by type of nursing program. There was a statistically significant difference in the subtopic community assessment by type of nursing program. There was a significant difference by type of nursing programs in lecture hours of content in the subtopics of health promotion and environmental stressors.

A comparison of lecture hours of content for the subtopics of Competency B is presented in Table 17 and Figure 5. Only the subtopic of the nurse's role in primary prevention was found to be significantly different by type of program.

A comparison of lecture hours of content for the subtopics of Competency C are presented in Table 18 and Figure 6. Two of the three subtopics, principles of teaching/learning and change theory, were found to be significantly different by type of nursing program.

To further explore the differences, the three subtopics under each competency were analyzed by BSN and AD nursing programs separately. T tests were chosen for analysis to be able to use the largest sample size possible for each subtopic.

Tables 19 through 21 show the results for AD programs for the subtopics of Competencies A, B, and C. Table 19 shows the comparison of mean lecture hours of content between the subtopics for Competency A. There is no statistically significant difference between lecture hours in health promotion model and community assessment in AD

Table 17

Comparison of Lecture Hours Taught in Subtopics of Primary Prevention Competency B: Promotion of Healthy Lifestyles by Type of Nursing Program

Subtopics of competency B: promotion of healthy lifestyles	Nursing programs		Separate variance (estimate)	
	AD	BSN	t value	Two-tail probability
Nurse's role in primary prevention	M = 6.85 SD = 10.78 (M = 54, Min = 0, N = 95)	M = 12.99 SD = 26.39 (M = 100, Min = 0, N = 93)	-2.08	.040 S
Biopsychosocial stressors	M = 10.53 SD = 32.73 (M = 54, Min = 0, N = 93)	M = 12.70 SD = 20.69 (M = 100, Min = 0, N = 91)	-.54	.59 NS
Personal practices health inventory	M = 2.13 SD = 4.66 (M = 54, Min = 0, N = 82)	M = 4.15 SD = 11.94 (M = 100, Min = 0, N = 79)	-1.40	.16 NS

S = Significant

NS = Not significant

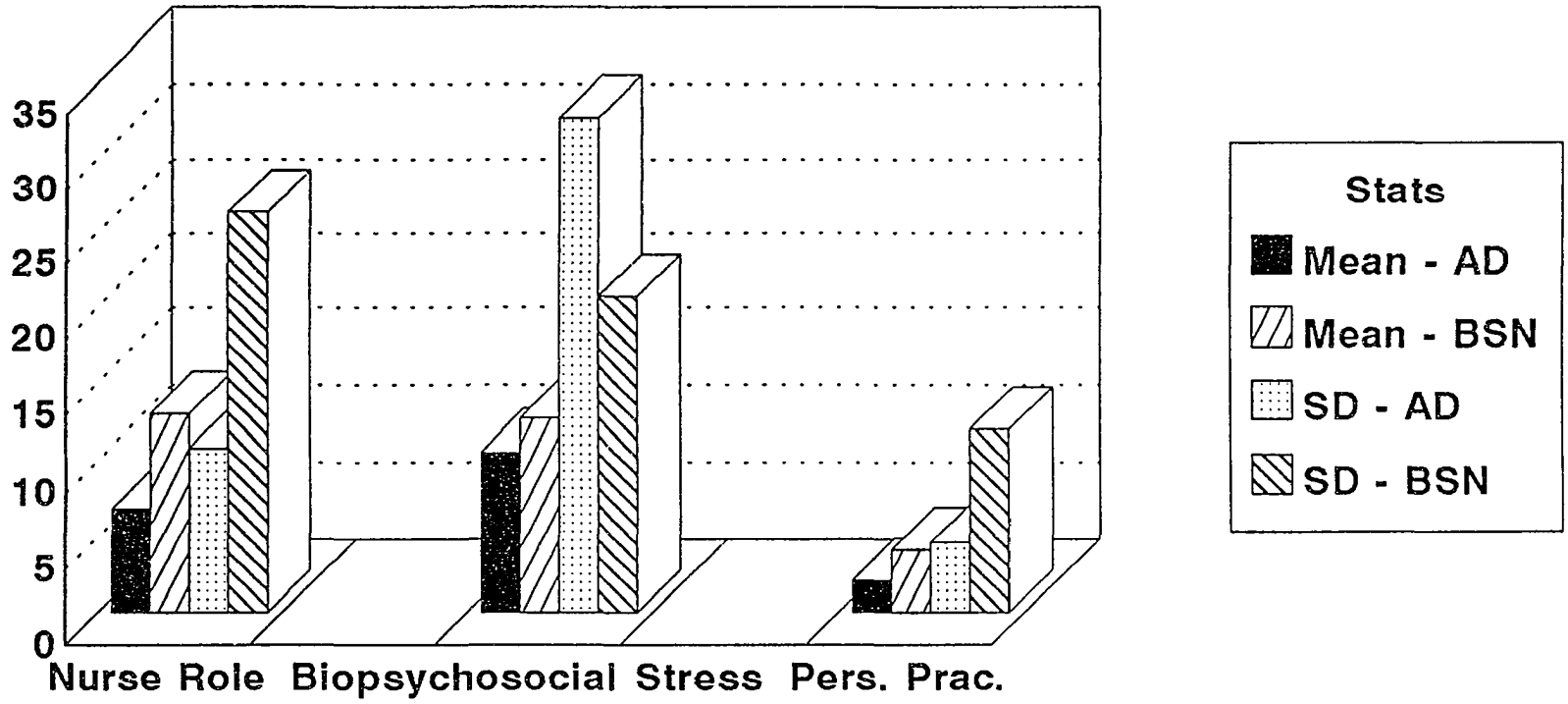

Figure 5. Summary of Practice of Prevention and Promotion of Healthy Lifestyles

Table 18

Comparison of Lecture Hours Taught in Subtopics of Primary Prevention Competency C: Involve Patients and Families in the Decision-Making Process by Type of Nursing Program

Subtopics of competency C: involve patients and families in decision-making process	Nursing programs		Separate variance (estimate)	
	AD	BSN	t value	Two-tail probability
Principles of teaching/ learning	M = 4.90 SD = 5.70 (M = 54, Min = 0, N = 97)	M = 9.20 SD = 17.37 (M = 100, Min = 0, N = 98)	-2.33	.022 S
Nutrition in health	M = 11.10 SD = 12.31 (M = 54, Min = 0, N = 97)	M = 15.12 SD = 19.07 (M = 100, Min = 0, N = 93)	-1.72	.088 NS
Change theory	M = 1.63 SD = 1.87 (M = 54, Min = 0, N = 82)	M = 5.58 SD = 7.79 (M = 100, Min = 0, N = 95)	-4.78	.0000037 S

S = Significant

NS = Not significant

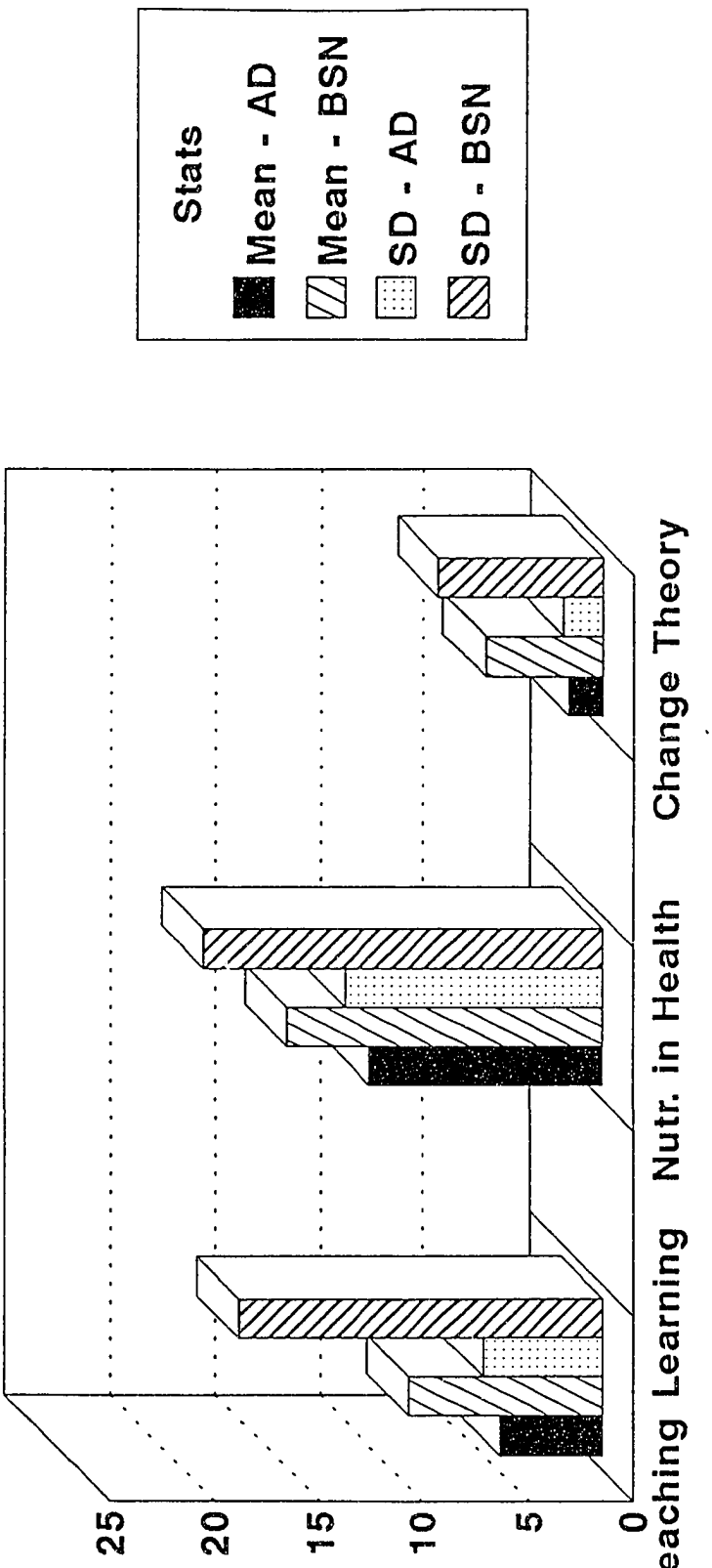

Figure 6. Summary of Involve Patients and Families in Decision-Making

programs (t = .80, df = 71, p = .43). There is a statistically significant difference between lecture hours taught in health promotion model and environmental stressors in AD nursing programs (t = -2.36, df = 76, p = .021).

Table 19

Comparison of Lecture Hours by Subtopic for Competency A: Community's Health in AD Nursing Programs

Nursing program	Health promotion model	Community assessment	Environmental stressors
AD	M = 2.51 SD = 8.21 N = 72	M = 2.00 SD = 5.48 N = 72	M = 3.25 SD = 4.46 N = 77

Table 20 shows the comparison of mean lecture hours of content for the subtopics of Competency B in AD nursing programs. There is not a statistically significant difference between lecture hours of content in the nurse's role and biopsychosocial stressors in AD programs (t = 1.27, df = 89, p = .21). There is a statistically significant difference between lecture hours of content in the nurse's role in primary prevention and personal practice health inventory in AD nursing programs (t = 4.93, df = 76, p = .0000047).

Table 21 shows the comparison of mean lecture hours of content for the subtopics of Competency C in AD nursing programs. There is a statistically significant difference in the mean lecture hours of content between principles of

Table 20

Comparison of Lecture Hours by Subtopic for Competency B: Practice of Prevention and Promotion of Healthy Lifestyles in AD Nursing Programs

Nursing program	The nurse's role in primary prevention	Biopsychosocial stressors	Personal practices health inventory
AD	M = 6.54 SD = 10.03 N = 90	M = 10.76 SD = 33.25 N = 90	M = 1.89 SD = 3.75 N = 77

Table 21

Comparison of Lecture Hours Taught by Subtopic for Competency C: Involve Patients and Families in the Decision-Making Process in AD Nursing Programs

Nursing program	Principles of teaching/learning	Nutrition in health	Change theory
AD	M = 5.01 SD = 5.80 N = 93	M = 11.37 SD = 12.49 N = 93	M = 1.68 SD = 1.90 N = 75

teaching/learning and nutrition in health (t = 6.00, df = 92, $p < .00001$) and between nutrition in health and change theory (t = 4.68, df = 74, p = .000013)

Tables 22 through 24 show the results for BSN programs for lecture hours of content in the subtopics for Competencies A, B, and C.

Table 22 shows the comparison of lecture hours of content between the subtopics for Competency A. Statistically significant differences were found in mean

Table 22

Comparison of Lecture Hours Taught by Subtopics for Competency A: Community's Health in BSN Nursing Programs

Nursing program	Health promotion model	Community assessment	Environmental stressors
BSN	M = 4.711 SD = 10.56 N = 94	M = 9.57 SD = 23.32 N = 94	M = 9.71 SD = 32.10 N = 92

lecture hours between health promotion model and community assessment (t = 3.18, df = 93, p = .0020) and health promotion model and environmental stressors (t = 2.13, df = 91, p = .036).

No statistically significant difference was found between community assessment and environmental stressors in BSN nursing programs (t = .05, df = 93, p = .96).

Table 23 shows comparison of lectures hours by topic for Competency B in BSN nursing programs.

Table 23

Comparison of Lecture Hours Taught by Subtopics for Competency B: Practice of Prevention and Promotion of Healthy Lifestyles in BSN Nursing Programs

Nursing program	The nurse's role in primary prevention	Biopsychosocial stressors	Personal practices health inventory
BSN	M = 12.81 SD = 26.35 N = 88	M = 12.05 SD =20.68 N = 88	M = 2.22 SD = 12.09 N = 77

There was no statistically significant difference between mean lecture hours of content for the nurse's role

in primary prevention and biopsychosocial stressors (t = .59, df = 87, p = .55). There was a statistically significant difference in lecture hours of content between the nurse's role in primary prevention and personal practices health inventory (t = 3.37, df = 76, p = .0012).

Table 24 shows a comparison of lecture hours by subtopic for Competency C in BSN nursing programs.

There was a statistically significant difference in mean lecture hours between principles of teaching/learning and nutrition in health (t = 3.24, df = 91, p = .0017) and between principles of teaching/learning and change theory (t = 2.54, df = 94, p = .013). There was no statistically significant difference in lecture hours of content between nutrition in health and change theory (t = 5.32, df = 89, p < .00001).

Table 24

Comparison of Lecture Hours Taught by Subtopics for Competency C: Involve Patients and Families in the Decision-Making Process in BSN Nursing Programs

Nursing program	Principles of teaching/learning	Nutrition in health	Change theory
BSN	M = 9.49 SD = 17.88 N = 92	M = 14.83 SD = 18.97 N = 92	M = 5.58 SD = 7.79 N = 95

Summary

Chapter four presented an analysis of the findings of the study. The chapter presented the description of the population and the sample, and the analysis of the two addressed null hypotheses for the study.

CHAPTER V

Conclusions, Discussion, Implications and Recommendations

The current study used a framework based on the Neuman systems model (Neuman, 1989). The first purpose of the study was to ascertain to what extent the BSN and AD nursing programs in the SREB area are preparing practitioners for the primary prevention competencies for the year 2005 as described by the Report of the Pew Health Professions Commission (O'Neil, 1993). The second purpose of the study was to determine if there was a difference in the nature and amount of content for primary prevention competencies taught in BSN and AD nursing programs in the SREB area. Two hypotheses were generated and subjected to statistical analysis. The discussion of the findings presented the nature and amount of content for primary prevention competencies, using the results of the hypotheses testing to answer the following research questions.

1. Is there a difference in the nature of primary prevention taught and clinical learning experiences provided in BSN and AD nursing programs in the SREB area?

2. Is there a difference in the amount of content for primary prevention competencies taught in BSN and AD nursing programs in the SREB area?

The findings are further discussed in relation to the tenets of the Neuman systems model (Neuman, 1989). Conclusions are drawn in a similar manner. Likewise, the implications and recommendations are stated within the perspectives of the hypotheses testing and research questions as they relate to nursing education, nursing practice, and nursing research.

There are a number of possible explanations for the findings that were presented in chapter IV. The first is that the sample may not be representative of the population of nursing programs as a whole in the SREB area. However, the high return rate of the survey (68%) makes this unlikely. According to Polit and Hungler (1991), a response rate greater than 60% is sufficient for valid and reliable analysis of questionnaires. The authors further noted that much lower rates are quite common. The high return rate of the questionnaire adds to the strength of the findings. There is a high interest in primary prevention due to the current political climate among health care providers centering around need for cost containment.

In addition, health care providers have had access to national data based on research studies stressing health care such as Healthy People 2000, National Health Promotion and Disease Prevention Objectives (U. S. Department of

Health and Human Services, Public Health Service, 1990), Healthy America: Practitioners for 2005 (Shugars et al., 1991), and Health Professions Education for the Future: Schools in Service to the Nation (O'Neil, 1993). The results of the Report of the Pew Health Professions Commission is beginning to be circulated among nursing programs as they plan for projected changes in health care.

Conclusions and Discussion

The following conclusions were drawn from the findings of the current study and are subject to the previously cited limitations. The discussion of the findings that support each conclusion will be discussed after each conclusion is stated.

The discussion of the findings of the nature of primary prevention will be considered in the order in which the questions appeared on the questionnaire (questions 1 through 4, 6 through 10). Conclusions and discussion of question five relating to the amount of content for primary prevention competencies will follow.

The first hypothesis was tested by an analysis of 13 items addressing the nature of primary prevention. The ten items that were different have been discussed to reject the first null hypothesis.

Conclusion 1

No significant difference was found between when primary prevention material was taught prior to the students' first acute care experience and type of nursing program. Both types of programs had approximately 63% that

taught primary prevention material prior to the students' first acute care experience. This is in contrast to Olivieri and Ouellette's study (1986) which found 90% of integrated BSN programs teaching primary prevention first. One possible reason for the change may be an effort by the nursing programs to promote more illness teaching to assist graduates with passing of NCLEX-RN. A study by Richardson and Petrarca (1990) described a wellness focus in a BSN program which placed the primary prevention content in the sophomore year, prior to the student having any acute care experiences. No studies were found which described the placement of primary prevention content in AD nursing programs.

Conclusion 2

There is a significant difference in the nature of primary prevention taught in BSN and AD nursing programs addressed by the question, "Approximately where in the nursing program are these concepts primarily taught?" There was a low positive relationship between where primary prevention is taught and the type of nursing programs. More BSN programs offered the primary prevention content in the second half of the nursing program. Pender et al. (1992) suggested a need to audit curricula to determine where the health promotion and disease prevention is being taught. Because of diverse cultural settings within the population, some schools place primary prevention later. This placement would allow the study of culture and allow the student the opportunity to integrate knowledge from all

courses before teaching different populations primary prevention in the community. However, this is not true of all BSN programs in the current study as evidenced by only a low positive relationship.

Conclusion 3

A significant difference was found by type of nursing program with the third question, "Within your particular framework of primary prevention concepts, are the students required to assess their own primary prevention behaviors?" The results showed that 71% of BSN programs and 56% of AD programs required the students to assess their own primary prevention behaviors. A significant difference was found but had little relationship. The requirement of assessing one's own primary prevention behaviors is congruent with the framework of the current study. The Neuman framework supports the view of the student as experiencing stress and reactions to stress. From the framework, one can see the need to build up flexible lines of personal defense by the study of personal primary prevention before relating to the conditions of illness that are studied in the curriculum.

Copp (1984) described the fact that one cannot teach health promotion without viewing one's own health in terms of wellness, disease prevention, and risk of disease. Boyle and Ahyenych (1987) suggested that students be required to develop a personal wellness plan as a recommended way to increase health behaviors. O'Neil (1993) describes an emerging trend in nursing as a better integration of health promotion and health maintenance into

the overall system. The integration may best be fulfilled after identifying personal behaviors as a first step.

Conclusion 4

There was a significant difference between BSN and AD nursing programs when addressing the question, "Within your particular framework of primary prevention concepts, are the students required to identify personal goals related to these concepts?" In response to question four, fewer (52%) of BSN programs and less (33%) AD programs required the students to set personal goals, than required students to assess their own primary prevention behaviors. This finding is supported by Olivieri and Ouellette (1986). No studies were found to answer why there is a difference. The researcher believes the difference may be due to the lack of nursing instructors to have personal health goals and therefore there is a hesitation to require others to develop goals.

Conclusion 5

There was a significant difference in the sixth question addressing the nature of primary prevention which was, "Within the integration of these concepts into your curriculum, do you use any texts that are exclusively devoted to primary prevention?" A significant difference was found with a low positive relationship. BSN nursing programs were more likely to require a text, but more than half of each program, 98% of AD and 73% of BSN nursing programs, did not require a text exclusively for primary prevention. The authors of the texts mentioned more than

once were Pender (n = 11), Stanhope and Lancaster (n = 4), Murray and Zentner (n = 2), and White (n = 2). These texts are health promotion or community health texts. Texts are required more often by BSN programs because of the community health requirement.

Conclusion 6

There was a significant difference between type of program when asked, "Does your integrated curriculum include a clinical experience that relates to primary prevention?" In addition to the significant difference that was found between BSN and AD nursing programs, there was a low positive relationship. BSN programs required the clinical experiences more often. Pender et al. (1992) call for the use of client encounters for the specific focus of teaching health promotion strategies. Pender and associates' (1992) study supports the current study's identified need for more nursing programs to require a specific clinical experience in primary prevention.

Conclusion 7

There was a significant difference in the use of students as participants rather than observers in all clinical experiences except health fairs by BSN programs. Item eight in the questionnaire addresses the nature of primary prevention by the following question, "If students have any experiences that are related to primary prevention at any of the following clinical settings, are they participants or observers?" BSN programs had more

participants than AD programs in adult day care, schools, clinics, and community health agencies.

The use of more participants by BSN programs was an expectation of the study due to the differences in the nature of the programs, as BSN nursing programs require a community health course. The possible reason there was not a significant difference in the use of participants in health fairs may be due to the type of participation in health fairs as mainly task or procedure oriented. If a nursing student is present, the minimal duties probably would need to be performed, thus the participant role is fulfilled. The use of the other experiences relates more to community health courses and a community health course is one difference between BSN and AD nursing programs that is necessary for NLN accreditation.

Conclusion 8

There was a significant difference between the use of a nurse theorist for primary prevention and type of nursing program. The BSN programs mentioned theorists more often. The theorists mentioned more than once as the basis of primary prevention content were Orem (n = 11), Pender (n = 11), Neuman (n = 8), and Roy (n = 2). In AD nursing programs, the theorists mentioned more than once for basis of primary prevention content were Orem (n = 4), and Roy (n = 2).

Conclusion 9

There was not a difference between type of nursing program when the question was asked, "Is your curriculum

based on a nurse theorist?" The theorists listed more than once by BSN nursing programs as basis for curricula were Orem (n = 13), Neuman (n = 7), Roy (n = 4), Rogers (n = 2), and Watson (n = 2). The theorists listed more than once by AD nursing programs as bases of curriculum were Roy (n = 10), Orem (n = 8), Henderson (n = 4), Chater (n = 3), King (n = 2), and Maslow (n = 2).

The second hypothesis was tested with t test for independent sample of groups. Item five on the questionnaire was addressed by the following question, "Within your curriculum framework, approximately how many lecture hours are allocated to each of the following topics?"

Competency A: Care of the Community's Health, with subtopics of:

(1) Health belief model,

(2) Community assessment,

(3) Environmental stressors

Competency B: Practice of Prevention and Promotion of Healthy Lifestyles with subtopics of:

(1) The nurse's role in primary prevention

(2) Biopsychosocial stressors

(3) Personal practices health inventory

Competency C: Involve Patient and Families in the Decision-Making Process with subtopics of:

(1) Principles of teaching/learning

(2) Nutrition in health

(3) Change theory

Conclusion 10

In Competency A: Care of the Community's Health, there was a significant difference in the mean of content for competencies between the types of nursing program. This was expected because BSN programs have recognized community health content. However, O'Neil (1993) called for a strategy to "Develop nursing programs at the various levels of nursing education that reflects the contributions that are needed in the changing patient care system" (p. 87). Another strategy suggested was to "Redirect a significant part of all nursing programs and schools to the patient care needs of community-based patients" (O'Neil, p. 88). The report lends support to the current study's identified need for AD nursing programs to care for more patients in the community.

Of the subtopics under Competency A: Care of the Community's Health, the following data were found: (a) health belief model--no significant difference between programs, (b) community assessment--a significant difference (more taught in BSN programs), and (c) environmental stressors--no significant difference between programs. There seems to be a trend in the SREB area for AD nursing programs to teach some community assessment, even though the NLN Council of Associate Degree criteria

does not state that community assessment is necessary for AD nursing programs.

Conclusion 11

The second, Competency B: Practice of Prevention and Promotion of Healthy Lifestyles, did not reflect a significant difference. The primary reason for this might be due to the biopsychosocial stressors subtopic under Competency B: Practice of Prevention. This is consistent with the Neuman systems framework of stress and reaction to stress as being a major way to organize nursing content (Neuman, 1989). The fact that each program type is strong in that area is a strength of nursing programs and a strength of the current study.

In primary prevention competency, practice of prevention and promotion of healthy lifestyles, the results of individual subtopics by type of nursing program were: (a) nurse's role in primary prevention--a significant difference (more is taught in the BSN nursing programs), (b) biopsychosocial stressors--no significant difference, and (c) personal practice health inventory--no significant difference.

Conclusion 12

The third, Competency C: Involve Patients and Families in the Decision-Making Process, a difference was found, when a difference should not exist. BSN programs teach this competency but AD nursing programs need to spend more time on this competency as it is one of the new AD competencies described by the NLN AD Council. Because a

research study (Deering-Floy & Neighbors, 1991) found the competency one of those that new AD graduates were not practicing, this supports the current study's demonstrated need for more hours of content in the competency of involving patients and families in decision-making. The specific area of content that needed increasing are teaching/learning and change theory.

In the primary prevention competency, involve patients and families in the decision-making process, the results of subtopics by type of nursing program were: (a) principles of teaching/learning--significant difference (more is taught in BSN nursing programs), (b) nutrition in health--no significant difference, and (c) change theory--a significant difference (more is taught in BSN nursing programs).

Implications

The findings of the current study cannot be extended beyond the study population. Educators, clinicians, and researchers need to apply the findings with caution. However, a number of implications for nursing education, nursing practice, and nursing research were derived.

Nursing Education

The data from the study suggest that the competencies for 2005 from the Report of the Pew Health Professions Commission are taught differently in BSN and AD nursing programs in the SREB area. The three competencies that addressed primary prevention were researched for amount of primary prevention content taught per competency. The

Competency A: Care of the Community's Health was significantly stronger in BSN programs than AD nursing programs. The mean time taught on community's health was 6.60 for AD as compared with 24.10 for BSN programs. BSN programs spend approximately four times as many hours of lecture on community's health as AD nursing programs. This needs to remain different as community's health is one NLN dictated difference in the two types of programs.

In the second Competency B: Practice of Prevention and Promotion of Healthy Lifestyles, there was no significant difference in means of BSN and AD nursing programs, as far as content hours taught. This is a strength of the study as graduates of both types of programs need to practice that competency equally.

The third, Competency C: Involve Patients and Families in the Decision-Making Process, a difference was found, when a difference should not exist. BSN programs teach this competency but AD nursing programs need to spend more time on this competency as it is one of the new AD competencies described by the NLN AD Council. Because a research study (Deering-Floy & Neighbors, 1991) found the competency to be one that new AD graduates were not practicing, this supports the current study's demonstrated need for more hours of content in the competency of involving patients and families in decision making. The specific areas of content that needed increasing are teaching/learning and change theory.

A second implication for nursing education came from the study findings related to the nature of primary prevention. One area that could strengthen the teaching of primary prevention would be for all BSN and AD nursing programs to require students to assess their own primary prevention behaviors and develop personal goals. This would encourage role modeling of primary prevention and help nursing achieve more of a leadership role in education of the public for the new type of health care centered on health promotion and disease prevention.

Nursing Practice

The study supports a need for further differentiation of levels of nursing in the work setting. An interdisciplinary work group could plan for utilization of both levels of nursing. Another need in nursing practice is to help manage increasing technological information and continue to learn to apply computerized technology in the practice arena as recommended by the second Report of the Pew Health Professions Commission (O'Neil, 1993).

Nursing Research

The data suggest a continued need to assess the differences in BSN and AD nursing programs in other areas of the country. Additional ways to research the movement to provide competent clinical care needs to be developed. The need for development of programs at all levels of nursing education that reflect the changing patient care systems is a challenge for research. Finally, further development of tools to measure differences are encouraged.

Recommendations

Based on the findings from the current study, the following recommendations are made.

1. Nursing faculty in BSN and AD nursing programs should consider requiring all students to assess their own personal primary prevention behaviors and develop personal health goals if that is not currently a part of curricula.

2. Additional research be conducted to assess the current state of teaching the nature of primary prevention and content for primary prevention competencies of the Report of the Pew Health Professions Commission in other regions of the country.

3. AD nursing programs faculty need to evaluate the need to require clinical experiences related to primary prevention as a way of all nurses fulfilling the role of promotion of health and prevention of disease.

4. Nursing faculty should assess the need for BSN and AD nursing programs to shift teaching from care of primarily hospitalized patients to community-based patients as recommended by the Report of the Pew Health Professions Commission.

5. The results of the current study should be shared with deans and directors of BSN and AD nursing programs in the SREB area.

6. Nursing faculty in AD nursing programs should evaluate the need to expand content in principles of teaching/learning and change theory to at least the BSN

mean of 9 content hours on teaching/learning and 6 content hours of change theory as a minimum.

7. New ways to teach primary prevention to all hospitalized patients and their families need to be explored.

8. Replicate the study with the following considerations: (a) additional clarification of the definition of nature of primary prevention, (b) enlarging the sample to other areas of the country, and (c) strengthen the tool by more testing for internal consistency and reordering items for a more logical sequence.

Summary

The data from the current study have added to the body of knowledge of nursing by ascertaining to what extent the BSN and AD nursing programs in the SREB area are preparing practitioners for the primary prevention competencies for the year 2005 as described by the Report of the Pew Health Professions Commission. Additionally, the study has identified the nature and amount of content for primary prevention competencies taught in BSN and AD nursing programs in the SREB area. The study has identified in one region of the country the state of nursing curricula in regard to the teaching of primary prevention competencies as recommended by the Report of the Pew Health Professions Commission. The knowledge may help move nursing toward the recommended emerging health care system as described by the Report of the Pew Health Professions Commission (O'Neil,

1993) as a greater orientation toward health with emphasis on wellness and prevention. The knowledge can be used to help with the ongoing challenge of designing curricula that will help nurses meet the challenge of the health care needs of a changing world.

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Appendix A

Questionnaire

Code # _____

QUESTIONNAIRE: PRIMARY PREVENTION CONCEPTS IN THE CURRICULUM

DIRECTIONS: Circle the number for the appropriate answer or fill in the blank for each question.

1. Is the primary prevention (health promotion & disease prevention) material taught prior to the student's first acute care experience?

   1. Yes 2. No

   Comments:

2. Approximately where in the nursing program are these concepts primarily taught?

   1. Into the first half of the nursing program.
   2. Into the second half of the nursing program.
   3. Into both halves of the nursing program.
   4. Other _____

   Comments:

3. Within your particular framework of primary prevention (health promotion & disease prevention) concepts, are the students required to assess their own primary prevention behaviors?

   1. Yes 2. No

   Comments:

4. Within your particular framework of primary prevention (health promotion & disease prevention) concepts, are the students required to identify personal goals related to these concepts?

   1. Yes 2. No

   Comments:

5. Within your curriculum framework, approximately how many lecture hours are allocated to each of the following topics?

A. Care of the Community's Health

"Understand the determinants of health, work with others in the community to integrate a range of activities that promote, protect and improve health" (*O'Neil, 1993, p. 8) with special note of cultural values .

1. The Health Belief Models/Betty Neuman Model or Other Health Promotion Model _____
2. Community Assessment _____
3. Environmental Stressors _____
4. Other _____

B. Practice of Prevention and Promotion of Healthy Lifestyles

"Emphasize primary and secondary preventive strategies for all people and help individuals, families and communities maintain and promote healthy behaviors" (*O'Neil, 1993, p. 8).

1. The Nurse's Role in Primary Prevention (Health Promotion & Disease Prevention) _____
2. Biopsychosocial Stressors _____
3. Personal Practices Health Inventory _____
4. Other _____

C. Involve Patients and Families in the Decision-Making Process

"Expect patients and their families to participate actively both in decisions regarding their personal health care and in evaluating its quality and acceptability" (*O'Neil, 1993, p. 8).

1. Principles of Teaching/Learning _____
2. Nutrition in Health _____
3. Change Theory _____
4. Other _____

6. Within the integration of these concepts into your curriculum, do you use any texts that are exclusively devoted to primary prevention (health promotion & disease prevention)?

   1. Yes 2. No

   (If yes, please list the text and author_____
   _____).

7. Does your integrated curriculum include a clinical experience that relates to primary prevention (health promotion & disease prevention)?

   1. Yes 2. No

   Comments:

8. If students have any experiences that are related to primary prevention (health promotion & disease prevention) at any of the following clinical settings, are they participants or observers:

Setting	Participant	Observer
Adult Day Care	_____	_____
Health Fairs	_____	_____
Schools	_____	_____
Clinics	_____	_____
Community Health Agencies	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Is your primary prevention content based on a nurse theorist?

   1. Yes 2. No

   If yes, which one? _____

10. Is your nursing curriculum based on a nurse theorist?

    1. Yes 2. No

    If yes, which one? _____

*O'Neil, E. H. (1993). Health professions education for the future: Schools in service to the nation. San Francisco, CA: Pew Health Professions Commission.

Appendix B

Institutional Review Board Approval for Pilot Study

UAB THE UNIVERSITY OF ALABAMA AT BIRMINGHAM
Office of the Institutional Review Board for Human Use

FORM 4: IDENTIFICATION AND CERTIFICATION OF RESEARCH PROJECTS INVOLVING HUMAN SUBJECTS

THE INSTITUTIONAL REVIEW BOARD (IRB) MUST COMPLETE THIS FORM FOR ALL APPLICATIONS FOR RESEARCH AND TRAINING GRANTS, PROGRAM PROJECT AND CENTER GRANTS, DEMONSTRATION GRANTS, FELLOWSHIPS, TRAINEESHIPS, AWARDS, AND OTHER PROPOSALS WHICH MIGHT INVOLVE THE USE OF HUMAN RESEARCH SUBJECTS INDEPENDENT OF SOURCE OF FUNDING.

THIS FORM DOES NOT APPLY TO APPLICATIONS FOR GRANTS LIMITED TO THE SUPPORT OF CONSTRUCTION, ALTERATIONS AND RENOVATIONS, OR RESEARCH RESOURCES.

PRINCIPAL INVESTIGATOR: Peggy Payne

PROJECT TITLE: Measurement of Primary Prevention (Health Promotion & Disease Prevention)Taught in Generic Schools of Nursing

---

____1. THIS IS A TRAINING GRANT. EACH RESEARCH PROJECT INVOLVING HUMAN SUBJECTS PROPOSED BY TRAINEES MUST BE REVIEWED SEPARATELY BY THE INSTITUTIONAL REVIEW BOARD (IRB).

____2. THIS APPLICATION INCLUDES RESEARCH INVOLVING HUMAN SUBJECTS. THE IRB HAS REVIEWED AND APPROVED THIS APPLICATION ON _____ IN ACCORDANCE WITH UAB'S ASSURANCE APPROVED BY THE UNITED STATES PUBLIC HEALTH SERVICE. THE PROJECT WILL BE SUBJECT TO ANNUAL CONTINUING REVIEW AS PROVIDED IN THAT ASSURANCE.

____ THIS PROJECT RECEIVED EXPEDITED REVIEW.

____ THIS PROJECT RECEIVED FULL BOARD REVIEW.

____3. THIS APPLICATION MAY INCLUDE RESEARCH INVOLVING HUMAN SUBJECTS. REVIEW IS PENDING BY THE IRB AS PROVIDED BY UAB'S ASSURANCE. COMPLETION OF REVIEW WILL BE CERTIFIED BY ISSUANCE OF ANOTHER FORM 4 AS SOON AS POSSIBLE.

X 4. EXEMPTION IS APPROVED BASED ON EXEMPTION CATEGORY NUMBER(S) 1.

DATE: 5-22-92

Russell Cunningham M

RUSSELL CUNNINGHAM, M.D.
INTERIM CHAIRMAN OF THE
INSTITUTIONAL REVIEW BOARD

The University of Alabama at Birmingham
212 Mortimer Jordan Hall • 1825 University Boulevard • UAB Station
Birmingham, Alabama 35294-2010 • (205) 934-3789 • FAX (205) 934-7841

Appendix C

Institutional Review Board Approval

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM
Office of the Institutional Review Board for Human Use

FORM 4: IDENTIFICATION AND CERTIFICATION OF RESEARCH PROJECTS INVOLVING HUMAN SUBJECTS

THE INSTITUTIONAL REVIEW BOARD (IRB) MUST COMPLETE THIS FORM FOR ALL APPLICATIONS FOR RESEARCH AND TRAINING GRANTS, PROGRAM PROJECT AND CENTER GRANTS, DEMONSTRATION GRANTS, FELLOWSHIPS, TRAINEESHIPS, AWARDS, AND OTHER PROPOSALS WHICH MIGHT INVOLVE THE USE OF HUMAN RESEARCH SUBJECTS INDEPENDENT OF SOURCE OF FUNDING.

THIS FORM DOES NOT APPLY TO APPLICATIONS FOR GRANTS LIMITED TO THE SUPPORT OF CONSTRUCTION, ALTERATIONS AND RENOVATIONS, OR RESEARCH RESOURCES.

PRINCIPAL INVESTIGATOR: Peggy Payne

PROJECT TITLE: A STUDY OF THE TEACHING OF PRIMARY PREVENTION COMPETENCIES AS RECOMMENDED BY THE PEW HEALTH PROFESSIONS COMMISSION REPORT IN BACHELOR OF SCIENCE IN NURSING PROGRAMS AND ASSOCIATE IN NURSING PROGRAM

_____1. THIS IS A TRAINING GRANT. EACH RESEARCH PROJECT INVOLVING HUMAN SUBJECTS PROPOSED BY TRAINEES MUST BE REVIEWED SEPARATELY BY THE INSTITUTIONAL REVIEW BOARD (IRB).

_____2. THIS APPLICATION INCLUDES RESEARCH INVOLVING HUMAN SUBJECTS. THE IRB HAS REVIEWED AND APPROVED THIS APPLICATION ON _____ IN ACCORDANCE WITH UAB'S ASSURANCE APPROVED BY THE UNITED STATES PUBLIC HEALTH SERVICE. THE PROJECT WILL BE SUBJECT TO ANNUAL CONTINUING REVIEW AS PROVIDED IN THAT ASSURANCE.

_____ THIS PROJECT RECEIVED EXPEDITED REVIEW.

_____ THIS PROJECT RECEIVED FULL BOARD REVIEW.

_____3. THIS APPLICATION MAY INCLUDE RESEARCH INVOLVING HUMAN SUBJECTS. REVIEW IS PENDING BY THE IRB AS PROVIDED BY UAB'S ASSURANCE. COMPLETION OF REVIEW WILL BE CERTIFIED BY ISSUANCE OF ANOTHER FORM 4 AS SOON AS POSSIBLE.

__X__ 4. EXEMPTION IS APPROVED BASED ON EXEMPTION CATEGORY NUMBER(S) 1 .

DATE: 12-9-92

RUSSELL CUNNINGHAM, M.D.
INTERIM CHAIRMAN OF THE
INSTITUTIONAL REVIEW BOARD

The University of Alabama at Birmingham
212 Mortimer Jordan Hall • 1825 University Boulevard • UAB Station
Birmingham, Alabama 35294-2010 • (205) 934-3789 • FAX (205) 934-7841

Appendix D

Permission to use Tool

BOSTON COLLEGE
CHESTNUT HILL, MASSACHUSETTS 02167

SCHOOL OF NURSING
(617) 552-4250

Ms. Peggy Payne
820 Mount Clair Road
Box 18
Birmingham, Alabama 35213
November 6, 1991

Dear Peggy,

Thank you for your interest in our Primary Prevention Study. We have enclosed our original cover letter and survey tool for your use in your doctoral work.

Sincerely,

Frances Ouellette

Frances Ouellette, PhD, RN.
Associate Professor
Boston College SON

Rita Olivieri

Rita Olivieri, PhD, RN
Associate Professor
Boston College SON

Appendix E

Cover Letter for Questionnaire

5327 Coronado Drive
Charlotte, NC 28212
Date: __ _____

Dear _____:

As a doctoral candidate in the Graduate School of the School of Nursing, University of Alabama at Birmingham, I am requesting your assistance in gathering information about the teaching of primary prevention concepts in nursing programs. For the purpose of this study, primary prevention will be considered those concepts that are related to the health promotion and protection of well individuals, families, and communities.

A brief questionnaire has been adapted to reflect the primary prevention recommended competencies from the Pew Health Professions Commission Report. Please direct the enclosed questionnaire to the person or persons who have responsibility for coordination of the teaching of primary prevention (health promotion and disease prevention) in your curriculum. An herbal tea bag has been enclosed. To help make this a relaxed and pleasant experience, please pass along to that person the herbal tea bag I am enclosing.

All findings will be reported as grouped data and the identity of schools participating in this study will remain confidential. If you would like to receive a summary of the results of this research, please include your name and address on the enclosed return envelope. The envelope will be separated from the survey to protect confidentiality. Completion of the survey will be viewed as permission to include your participation in the study.

It is my hope that this study will verify the level of preparation of primary prevention practitioners today, and will offer a basis for improving that preparation in the future. Thank you in advance for your assistance with this study. I am confident that the results will be of use to nurse educators in the development of effective and relevant nursing programs.

Sincerely,

Peggy L. Payne, RN, MN
Doctoral Candidate

/ms
enclosures

Appendix F

Breakdown of Topics Taught in Primary Prevention in Pilot Study with Associate Degree Nursing Programs

Breakdown of Topics Taught in Primary Prevention in Pilot Study

Within your particular integrated framework, approximately how many lecture hours are allocated to each of the following topics?

Topic	Range of hours taught
The health belief models	0-3
Principles of teaching/learning	1-12
The nurse's role in primary prevention, health promotion, and disease prevention	1-60
Personal practices health inventory	0-1
Community assessment	0-2
Nutrition in health	1/2-25
Biopsychosocial stressors	1/2-24
Environmental stressors	1/2-10
Change theory	0-2

GRADUATE SCHOOL
UNIVERSITY OF ALABAMA AT BIRMINGHAM
DISSERTATION APPROVAL FORM

Name of Candidate Peggy Langley Payne

Major Subject Community Mental Health Nursing

Title of Dissertation A Study of the Teaching of Primary Prevention Competencies as Recommended by the Report of the PEW Professions Commission in Bachelor of Science in Nursing Programs and Associate in Nursing Programs

Dissertation Committee:

Ann Sivley, Chairman

Deborah S. Turner

Sharron P. Schlosser

Carol H. Miller

James L. Hudson

Director of Graduate Program Elizabeth Shuffenbarger

Dean, UAB Graduate School

Date May 11, 1993

PS-1428