International Journal of Medical and Health Sciences Research
2017 Vol. 5, No. 2, pp. 32-45
ISSN(e): 2313-2752
ISSN(p): 2313-7746
DOI: 10.18488/journal.9.2018.52.32.45

PREPARING NURSES FOR COMMUNITY HEALTH CARE: A COMPARATIVE STUDY OF THE ADN AND BSN PROGRAMS

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Article History
Received: 6 August 2018
Revised: 10 September 2018
Accepted: 12 October 2018
Published: 14 November 2018

Keywords
Nursing education
Community health
ADN curriculum
BSN curriculum
Home health nursing
Entry level nursing.

ABSTRACT

Because of current changes in our society and the healthcare system, it is important to be aware of the expertise and efficiency of nurses in terms of how they are prepared to meet the health care needs of our society today and in the future. Along with this awareness, it is important for us to examine carefully the manner in which nurses are educated to meet the increasing demands of a changing society and the increased need for community health care. The purpose of this study was to compare the degree to which ADN's and BSN's graduates, from selected schools in the Northeast region of the United States that were exposed to community health nursing concepts during their educational programs. This descriptive, non-experimental study compared the community health orientation of graduating nursing and the degree of student exposure to community health concepts in their curricula. Data analysis revealed a difference in the perceived exposure to community health nursing concepts, with BSN students perceiving greater exposure to the concepts. Also, there was a difference in the community health orientation of students, with the highest orientation demonstrated in BSN programs.

Contribution/Originality: This paper contributes to the existing literature regarding the importance of incorporating community health contents into Associate Degree Nursing curricula in order to prepare new ADN graduates to work in the home health care field and community health settings.

1. INTRODUCTION

There is every indication that the health care system has changed significantly. These changes are intended to improve access, quality, and health care services for all. Special attention is directed to health promotion, prevention, and care of undeserved groups. Health care reform, regardless of the specific proposal, calls for changes in baccalaureate (BSN) and associate degree (ADN) nursing education to prepare students for community-based practice. These changes include a shift toward the community as the primary setting for clinical practice; integration of primary health care within different levels of the curriculum; expanded knowledge and skills for care of mothers, children, the aged, and critically patients in varied settings; and the preparing nursing students, at ADN and BSN levels for these diverse functions.

2. STATEMENT OF THE PROBLEM

Because of current changes in our society, and others which will occur, it is important for us to be aware of the expertise and efficiency of nurses in terms of how they are prepared to meet the health care needs of our society

today and in the future. Along with this awareness, it is important for us to examine carefully the manner in which nurses are educated to meet the increasing demands of a changing society and the increased need for community health care. By examining the trends affecting community health care delivery and the community health nursing content of nursing programs, we can make a better judgment as to whether nurses are educated appropriately for health care services now and in the future.

The schools educating students to become registered nurses offer associate degree (ADN, two year) and baccalaureate (BSN, four year) nursing programs. Still, there are a few schools offering diploma (three year) program. Although there are a variety of nursing programs available, studies suggest that baccalaureate nurses are the only group of graduates prepared in undergraduate to work in community health [1, 2]. However, a few ADN programs also include community health nursing concepts as part of their instruction [3]. Consequently, it is not always clear what types of exposure to community health concepts nurses receive by identifying the sort of program from which they graduated. In the 1988 National Sample Survey of Registered Nurses [4] 37% of the community health nurses reported a baccalaureate degree as their highest educational preparation. Also, this survey indicated that the percentage of nurses employed in community health settings increased 26%. These statistics and trends reflect a phenomenon of concern to community health nursing-the need for education in community health nursing. National League for Nursing [5] reported percentage of graduations by program type as: ADN 32% and BSN 27%. The mission of undergraduate nursing education programs is to prepare nurses for practice environments they will encounter when they enter the profession. Curricula are then designed and implemented to meet those anticipated demands. Nevertheless, professional nurses need to be prepared to deliver care across settings, not just in the community or in hospitals. It is the content of the curriculum, rather than specific practice settings, that should be central [6].

Northrup-Snyder, et al. [7] asserted that ADN curricula emphasize competencies focused on direct bedside nursing, care coordination, and management. The American Nurses Association [8] defined *competency* as an expected level of performance that integrates knowledge, skills, and behaviors. *Competence* implies a performance aspect of a job or position, whereas *competency* implies a non-task-oriented behavior supporting this performance. ADN students do not gain experience in community settings initially. Students build competence in community-care in their AND to BSN curriculum, when expand their conception of nursing practice from direct patient care to nursing within a system of care. Community health is the provision of nursing care that is directed at improving the health of the *entire* community. Community health nursing focuses on prevention of disease. It is concerned with clients across their life span but puts special emphasis on high risk populations. Community health nursing may take place in a home, a clinic, or any place an individual or a population can be served.

3. PURPOSE OF THE STUDY

The purpose of this study was to compare the degree to which ADN's and BSN's graduates, from selected schools, were exposed to community health nursing concepts during their educational programs. Differences in students' preparation for community health nursing were investigated to answer the following research question, "What are the differences in degree of exposure to community health concepts and community health orientation between nursing students from ADN and BSN programs?"

4. HYPOTHESIS

Statically significant differences in the degree of exposure to community health nursing concepts and community health orientation will be observed between students in ADN and BSN programs.

4.1. Operational Definitions

Orientation is "the sense of an integrated set of beliefs about the sociological and political environment held collectively by a group of people" [9].

Primary Prevention is the action or intervention designed to prevent etiologic agents from causing disease or injury [10].

Secondary Prevention is concerned with the early detection and treatment of disease [10].

Tertiary Prevention is concerned with the amelioration of disease by reducing disability [10].

ADN Programs are located in community colleges, with a few located in colleges or universities, which are two academic years in length and lead to an Associate Degree [2].

BSN Programs are located in senior colleges or universities which are generally four years in length [2].

5. SIGNIFICANCE OF THE STUDY

This introduction has raised the question of the extent to which educational programs prepare nursing students for community health nursing. To answer this question, there is a need to study the relationship between the degree of exposure to community health concepts. This type of study would indicate whether or not it is important for students to have community health nursing concepts included in their educational curricula.

6. ASSUMPTIONS OF THE STUDY

There is no psychological, emotional, or physical risk to subjects participating in this study is anticipated. A consent form indicating willingness to participate required to be signed by each subject included in the study.

7. REVIEW OF LITERATURE

7.1. History of Nursing

Nursing has reflected the social values, culture, and customs of the time from the beginning of the nineteenth century. In the United States and Europe during the early 1800's "proper" women did not work outside home. Nurses came primarily from religious orders in which it was acceptable to work as a nurse. Their motivation was thought to be religious in origin and there was little or no cost to the hospitals, which were run by the religious orders themselves. Some of the nurses from religious orders immigrated from Europe to the United States, but they were few and did not meet the needs of physically and mentally ill. During the Civil War there was not organized system to care for the sick and wounded. Women volunteered to meet this need, and some were trained through short courses conducted by the physicians and surgeons. After the war some of these women led the movement to establish training schools for nurses [11].

Another influence leading to the establishment of training schools for nurses was Florence Nightingale. To improve health care in England, Nightingale organized training schools for nurses. Her insight and success made her famous throughout Europe. This fame brought to the American public the need for nurses, as well as the desirability of establishing programs of training in the United States.

Today there are two main types of programs in nursing education which prepare students to become registered nurses: ADN and BSN. Although all these programs prepare registered nurses, there are differences between them. Some of the ways in which programs vary are in philosophy, length of the program, entrance requirements, course content, and clinical practice.

7.2. Associate Degree Programs

ADN programs were developed from a systematic plan with carefully controlled experimentation. As part of her doctoral dissertation work in 1951, Mildred Montag proposed the idea of a two-year ADN program which would educate a "nurse technician." The two basic premises on which the ADN program was based were that

functions of nursing should be differentiated and that these functions lie on a continuum with professional nursing at one end and technical nursing at the other [12]. Montag believed there were two kinds of nurses, and they should be prepared differently. The technical nurse was intended by Montag to perform the functions of a bedside nurse but was not intended to assume administrative responsibilities.

According to Orsolini-Hain and Waters [13] in response to a critical nursing shortage following World War II, a sociologist, Dr. Esther Lucille Brown, was commissioned by the Carnegie Foundation to study nursing education. Her report, "Nursing for the Future," which was published in 1948, recommended nurses be educated in colleges and universities, and criticized hospital diploma programs in which students were treated as employees (Brown, 1948; cited in Orsolini-Hain and Waters [13]). Several nursing leaders and two major nursing leadership organizations, the American Nurses Association (ANA) and the National League for Nursing (NLN), supported moving nursing education to an educational environment. Although ADN programs currently take a minimum of 3 years to complete, at inception, ADN programs required only 2 years of instruction, including prerequisites and co-requisites. However, in practice citing the nursing shortage and the competent performance of the AD graduates, hospitals put these nurses almost immediately in management and leadership positions, a role for which they had had no preparation in the educational program. As it became clear that work roles in nursing were rarely based on educational preparation. Differentiation of practice debates have started in the early 1960s when a preliminary report by the Surgeon General's Consultant Group on Nursing stated nurses in leadership positions should have a minimum of BSN preparation. Throughout the ensuing half-century, numerous local, regional, and national committees, commissions, and study groups have struggled to define, advocate, and legislate differences between graduates of the two programs.

ADN program is considered a terminal degree with the graduate able to function effectively without further education. There have been changes in curricula over the years including an increased emphasis on nursing subjects and additional clinical experiences in some schools. Others have added team leadership and managerial principals because of graduates being put into positions requiring these skills. Traditionally, ADN programs have included selected community health concepts such as referral to community agencies and health team collaboration.

However, these concepts have not been organized into a distinct course with objectives that emphasize "continuity of care" within the scope of ADN practice [14]. According to Montag [12] and the National League for Nursing [15] the ADN graduate should function directly under the supervision of professional nursing practitioners.

7.3. Baccalaureate Programs

BSN programs were established to educate the professional nurse as a generalist who could work in any setting [15]. The first BSN program was established in 1909 at the University of Minnesota. BSN programs are in colleges and universities and are usually four years in length with students receiving a baccalaureate degree upon completion of the course of study. Major educational objectives are to prepare the nurse for public health and for leadership and management roles in nursing. Students in baccalaureate programs must meet the same admission requirements and maintain the same academic level as other students in the school. Nursing students take regular college courses in the sciences and humanities along with all other students on the campus. In this way the nursing program is an integral part of the college or the university community. Course work includes three types of courses general education and the liberal arts, supportive sciences, and nursing courses. The nursing content may be taught after the two years in some curricula or over entire the four years in others. Theoretical content and clinical experiences include a wide variety of experiences and subject matter is studied in greater depth than in the other program.

Differences between ADN and BSN are: 1-the focus on providing a liberal education, 2-the development of intellectual skills of problem solving and making sound judgments, and 3-the addition of public health content and experience, teaching, and management skills [11].

7.4. Competencies of Graduates

The national league for nursing (NLN) is the national accrediting body for programs in nursing and has published position papers identifying the competencies of graduates from the basic programs in nursing education. The League describes the ADN graduate as one who has developed skills which permit effective functioning in any structured setting-primarily in acute and extended-care facilities, under the direct or indirect guidance of a more experienced registered nurse [15]. The baccalaureate graduate is prepared to practice in a wide variety of setting-including hospital, home, and community-and can function as a generalist with comprehensive skills. The NLN stated that the BSN graduates are the only ones to consistently have theoretical content and clinical practice in community health nursing as a part of basic curriculum. The League also indicated that graduates are prepared to work in specific settings according to their educational preparation (as cited in Hunt, et al. [14]).

Even though there is recognition of the differences in performance expectations of these nurses, their knowledge base is measured as if they were all the same, since all take the same state board examination for licensure. Ones who successfully pass this examination are given the right to practice as a professional registered nurse with no differentiation between graduates from various programs in terms of their legal right to practice. The state board examination measures content in all areas of nursing except community health. There is no identification of the nurse's preparation for this specialty area. Even though the assumption is made that educational preparation does provide only baccalaureate nurses with community health nursing concepts and knowledge, the appropriate guide for the placement of nurses into community health settings has not been identified.

7.5. Community Health Nursing

The focus of community health nursing is the prevention of illness and the promotion and maintenance of health [16]. These principles are implemented by providing care to population groups rather than to individuals only [17]. Nurses try to be the client advocate, the mentor to guide individuals and their families through the complexities of the health care system, the counselor to help people cope with disease and injury, and the prime instructor in the business of staying well [18].

The American Nurses Association (ANA), as the professional organization for nursing in the United states, has the responsibility to define the scope of nursing practice [19]. The Association has placed the preparation for entry into community health nursing practice as the baccalaureate in nursing and has developed a conceptual model of community health nursing by synthesizing the principles of nursing practice and public health practice.

7.6. Community Assessment

The community itself is the major focus for community health nursing activities. Hanchett [20] discussed community health assessment as "the process of defining a community as a system, identifying the attributes of its components, and describing the pattern and organization of the community in reference to its level of wellness". This process which is basic to determining health priorities, includes identification of health services and determination of their adequacy to meet current and future needs of a population. The community assessment provides the nurse with information about demography which includes statistics describing the population, geographical considerations, the economic status of the area, as well as the existing health resources. The nurse can identify the various cultural/ethnic characteristics, religious practices and life style patterns that affect health status [21]. The process of identifying both positive and negative influences which affect the health of a community is

basic to the community health assessment. As the needs of the population change, the health care services must also change [22]. All this information provides direction to
the nurse in developing a better understanding of the community's needs and in enhancing utilization of existing resources.

7.7. History of Community Health Nursing in the United States

Community health nursing's heritage in the United States is very rich and diverse. Lillian Wald (1867-1940) was one of the pioneers in the community health nursing in the United States. Research regarding the most efficient and effective means of organizing and delivering community health nursing was first conducted in 1926 in a comprehensive study of generalized and specialized nursing through the East Harlem Nursing and Health Demonstration in New York City [23]. Because the increased demand for public health nursing was hard to meet, in 1910, the Department of Nursing and Health was started at the Teachers College of Columbia University in New York. In 1912, the National Organization of Public Health Nursing was formed, and Lillian Wald was elected as president. In 1913, the Los Angeles Department of Health formed the first bureau of Public Health Nursing [24].

7.8. Principles and Practices of Community Health

Promer [25] described the nurse functioning as a client advocate when through the teaching role the consciousness of the client is raised. In this way, the client can recognize and meet his/her own needs with the nurse leading the way. Sometimes this involves the nurse functioning as a liaison between the client and resources available within the community. At other times clients may benefit most from health counseling and health education which assists them in becoming responsible for their own health. Visiting clients in their homes or conducting screening programs are two important methods of case finding. Individuals in the community unknowingly may have a chronic condition or an infectious disease. If the nurse can identify these individuals, health promotion and/or disease prevention can occur through teaching or referral to the appropriate health professional. In this way, team participation in health care delivery is facilitated [26].

7.9. Standards of Community Health Nursing Practice

The American Nurses Association [27] published a set of standards of practice for community health nursing to seek control of nursing practice and subsequently assure delivery of quality of nursing service to the public. These standards are:

Standard I-The collection of data about the health status of the consumer is systematic and continuous. The data are accessible, communicated, and recorded.

Standard II-Nursing diagnosis are derived from health status data.

Standard III-Plans for nursing service include goals derived from nursing diagnoses.

Standard IV-plans for nursing service include priorities and nursing approaches or measures to achieve the goals derived from nursing diagnoses.

Standard V-Nursing actions provide for consumer participation in health promotion, maintenance and restoration.

Standard VI-Nursing actions assist consumers to maximize health potential.

Standard VII-The consumer's progress toward goal achievement is determined by the consumer and the nurse.

Standard VIII-Nursing actions involve ongoing reassessment, reordering or priorities, new goal setting and revision of the nursing plan.

In 1998 the American Association of Colleges of Nursing (AACN) created their version of the BSN Essentials. Since that time many changes have happened in health care, including working to make healthcare safer. The BSN

Essentials provide a framework and expected outcomes for all nursing programs that prepare future nurses. The result of the program is a nurse generalist. The outcomes are expected of all BSN prepared nurses, whether through a pre-licensure program or a RN to BSN program. The roles of a nurse generalist include: provider of care; designer/manager/coordinator of care; and member the nursing profession [28]. Upon graduation the Essentials assume the graduate generalist is prepared to: work in a holistic, caring framework; utilize evidence-based practice; promote safe, quality care; use clinical reasoning to address situations; be accountable for one's own and delegated nursing care; practice in various healthcare settings; care for patients across the lifespan, health-illness continuum, and in diverse populations; care for oneself; and engage in life-long learning [28].

The Nine Essentials are:

* Liberal Education for Baccalaureate Generalist Nursing Practice
* Basic Organizational and Systems Leadership for Quality Care and Patient Safety
* Scholarship for Evidence-Based Practice
* Information Management and Application of Patient Care Technology
* Healthcare Policy, Finance, and Regulatory Environments
* Interprofessional Communication and Collaboration for Improving Patient Health Outcomes
* Clinical Prevention and Population Health
* Professionalism and Professional Values
* Baccalaureate Generalist Nursing Practice

7.10. Health Care Delivery in Alternate Settings

In the early development of the role of community health nursing, the primary role was that of a visiting nurse, i.e., health care provided in a client's home on an individual basis. This role has expanded to include the nurse working in a variety of settings with many population groups. Clients may be at home, work, play, or in school settings. The nurse's clinical practice encompasses client education, health counseling, health maintenance, and preventive and primary care [29]. The functions and focus of the nurse will vary depending upon the setting, i.e., the goal of occupational nursing is a healthy worker for industry, the goal of school nursing is health promotion and maintenance of the total school population, and in recreational settings the focus of nursing is on the individual health of each of the participants [30].

The health care delivery may involve the client and the nurse in a one-to-one relationship, or it may involve more of a group approach [26]. Another reason for utilizing the group approach is that different kinds of people with similar concerns can work on these concerns together. Therefore, the setting as well as the type of approach must be taken into consideration for the nurse.

7.11. Education for Community Health Nursing

The above are the major content areas specific to community health nursing. Since they are defined by nursing professional and educational accreditation groups as important to the specialty area of community health, the content should be included in educational curricula. This is particularly true when graduates of the various programs seek employment in community health settings. Archer and Fleshman [31] researched various nursing programs throughout the United States to identify which community health concepts were included in these curricula. The concepts they found to be included were: introduction to epidemiology, health education, nursing research, community assessment, population based or aggregate nursing care, and primary prevention. Students in the nursing programs are then expected to apply these concepts in clinical experience situations. When comparing these components for community health nursing education with ANA content for nursing practice, it is clear that Archer and Fleshman as well as the ANA are addressing the same content areas. These concepts should be

incorporated into curricula in nursing education in order to provide the necessary preparation for community health nursing.

The curriculum, in turn, must reflect the characteristics of the community served by the school, the health needs of individuals, and groups within that particular community, and strategies for promoting the community's health. The NLN (1992; cited in Oermann [32]) recommends that educational programs respond to the specific needs of their community. Because of health care reform, clinical experiences throughout the nursing program will need to prepare students for practice in community-based systems [32].

7.12. Summary

Even though only BSN programs consistently include formal instruction and clinical practice in community health, there is evidence to suggest that some ADN programs also include at least partial exposure to major community health concepts. An effort must be made to identify what differences do exist in exposure to community health nursing concepts between ADN and BSN students.

8. METHODOLOGY

A descriptive design was used to investigate the differences in the degree of exposure to community health concepts between nursing students from six nursing programs-three ADNs and three BSNs. This section will describe the methodology of the study, including samples, setting, instruments used for data collection, and procedure for conducting the study.

8.1. Sample

The population consists of six nursing programs in the Northeast region of the United States, including three ADN programs (C1, C2, C3) and three BSN programs (U1, U2, U3). Students were in the last semester of their final program year, which typically is when community health concepts are taught. All participants signed a consent form indicating their willingness to participate in the study. Data collection involved the completion of three instruments: Self-Perception of exposure to Concepts (SPEC), Community Health Orientation Scale (CHOS) developed by Murphy [9] and a demographic questionnaire.

One hundred and twenty samples were selected from this population. Schools on the list were contacted and asked to participate in the study. Initially schools were contacted by phone and the study was explained briefly. The entire graduating class from each school were asked to participate in the study and to complete the instruments.

8.2. Instruments

Instruments used in this study included the Self-Perception of Exposure to Concepts (SPEC), Community Health Orientation Scale (CHOS) and a demographic questionnaire.

The CHOS is a self-administered paper and pencil test developed by Murphy [9]. The subjects will require to respond to each of 41 statements by indicating their degree of agreement with the statements. A high score on the CHOS indicates a high degree of exposure to community health.

The CHOS was developed to include the concepts which are a reasonable representation of the key aspects of community health. Murphy believed that an individual's degree of exposure to community health reflected the manner in which a health professional function. With this premise in mind, he developed a scale to measure an individual's community health degree of exposure.

The scale was administered to a student panel from various health disciplines, and one group completed a retest one week later. A satisfactory test-retest correlation coefficient of 0.83 was obtained. It was concluded in the study that the scale was reasonably reliable and valid for assessing the degree of exposure to community health on a group comparison basis.

The SPEC was developed by compiling concepts identified by the American Nurses Association Division on Community Health Nursing as essential to community health nursing and published in "A Conceptual Model of Community Health Nursing" [19]. There are subtopics under each concept to further delineate and explain the concepts listed for the subjects in the study. Subjects were asked to indicate to what degree they had been exposed to the concepts listed on the scale: not covered, introduced, and stressed.

Demographic information will be collected on all subjects and will be used to describe the sample population. This instrument will gather data including age, sex, marital status, and previous nursing or professional experience. An open-ended option will be included for responses to nursing or professional experience not listed.

8.3. Procedure

Three schools from each type of nursing education program were asked to take part in the study. Students in the last semester/quarter of the final program year were asked to take part in the study. This is the semester/quarter in which community health nursing concepts are generally studied. Students were gathered in a classroom at their school. The purpose and procedures for the study were verbally explained to the subjects by the researcher prior to their completing the instruments. After the student read and signed a consent form indicating willingness to participate in the study, he/she was asked to respond to CHOS and demographic questionnaire according to the instructions given on the questionnaires. No further information was provided to any of the subjects. Subjects were required to respond to forty-one items CHOS based on a seven-point continuum:

Strongly agree	(AAA)	7
Moderately agree	(AA)	6
Slightly agree	(A)	5
Neutral	(N)	4
Slightly disagree	(D)	3
Moderately disagree	(DD)	2
Strongly disagree	(DDD)	1

The subjects were required to respond to each statement by circling the symbol which best represented their own feeling about the statement. Subjects were asked to respond to the SPEC by indicating to what degree they felt they had been exposed to the concepts listed on the scale:

-Not Covered

-Introduced

-Stressed

In their nursing curriculum. They were asked to place an "X" mark in the appropriate column next to the item listed. After completing the instruments students returned them to the researcher. There was no time limit set for completing the instruments.

9. DATA ANALYSIS

All 120 students who completed the instruments were included in the study. Two criterion variables, CHOS scores and SPEC scores, and four predictor variables, Curriculum, nursing experience, age, and gender were investigated. Stepwise multiple regression and ANOVA, and the Tukey HSD were used for computations (SPSS, ver. 16.0). The range for the total score is: minimum possible score = 41 to maximum possible score = 287. There are 22 positive statements and 19 negative statements on the CHOS. The scoring for the positive and negative items is: negative item scoring (strong disagreement = 7 and strong agreement = 1) and positive item scoring (strong agreement= 7 and strong disagreement = 1). A high score indicates a high degree of exposure to community health concepts.

The SPEC has 68 items, with possible range of scores 0-68. The SPEC responses and the CHOS raw scores were computer analyzed to identify any relationship between the subject's perception of exposure to community health nursing concepts and to community health orientation.

10. FINDINGS

Analysis of the data will be presented using the two null hypotheses as a framework.

Null Hypothesis 1:

There is no difference in perceived exposure to community health nursing concepts among students from ADN and BSN nursing programs (as measured by SPEC instrument).

Null Hypothesis 2:

There is no difference in the community health orientation of students from ADN and BSN nursing programs (as measured by CHOS instrument).

Overall, 120 subjects from three ADN and three BSN programs participated in this study. The participants were from C1 (n=20), C2 (n=22), C3 (n= 18), U1 (24), U2 (n=16), and U3 (n=20). There were 41 male (34%) and 79 females (66%). There were total of 60 (50%) ADN and 60 (50%) BSN students. Age of the participants range from 21-48.

Two criterion (outcome) variables were SPEC and CHOS, with range of scores 0- 68, and 41-287, respectively. The predictor variables were curriculum, previous nursing experience, age, and gender.

To investigate whether there is relationship between predictors and criterion variables, stepwise regression model was utilized. First, SPEC scores were entered in the model as criterion variable and curriculum, nursing experience, gender and age as predictors. Alpha significant level was set at 0.05. According to this model, age and gender variables were excluded from the calculation because they were not statistically significant, $p>0.05$. At the first step, curriculum was entered into the model which indicates 91% of variations in SPEC could be explained by this factor alone. Also, adding the next variable, nursing experience, indicates that these two predictors combined could explain 92% of variations in SPEC scores, $p<0.05$. ANOVA demonstrated that in the first and second model, the calculated F ratios are $F= 1252$, df (1,118), $p<0.05$, and $F=679$, df (2,117), $p<0.05$, for curriculum, and curriculum and nursing experience, respectively. This shows that there is statistically significant relationship between these variables and SPEC scores, in these subjects. Therefore, the null hypothesis (#1) is rejected. This indicates a difference in perceived exposure to community health nursing concepts among students from ADN and BSN nursing programs. The correlations matrix supports this data, using Pearson Correlation, indicated a strong positive correlation $r = .95$ between curriculum and SPEC scores. It could be inferred that curriculum and nursing experience are significant predictors for criterion variable SPEC, because of their calculated $t = 36.26$, $p<0.05$, and $t = 3.2$, $p<0.05$. Thus, increasing one unit in curriculum will increase SPEC score by about 40, and increasing one unit in nursing experience will increase SPEC score by 2.8.

Second, CHOS scores were entered in the model as criterion variable and curriculum, nursing experience, gender and age as predictors. Alpha significant level was set at 0.05. According to this model, age, gender, and nursing experience variables were excluded from the calculation because they were not statistically significant, $p>0.05$. At the first step curriculum was entered into the model which indicates about 60% of variations in CHOS could be explained by this factor, $p<0.05$. ANOVA demonstrated that in the first model, the calculated F ratio is $F= 174$, df (1 ,118), $p<0.05$, for curriculum. This shows that there is statistically significant relationship between this variable and CHOS scores, in these subjects. Therefore, the null hypothesis (#2) is rejected. This indicates a difference in the community health orientation of students from ADN and BSN nursing programs. It could be inferred that curriculum is a significant predictor for criterion variable CHOS, because calculated $t = 13$, $p<0.05$. Thus, increasing one unit in curriculum will increase CHOS score by 58.2.

To investigate whether there is any difference in group means of CHOS and SPEC among ADN, and among BSN graduates, scores of these two variables were analyzed using ANOVA. Scores of ADN students, and BSN students were analyzed separately. This was mainly done to explore if there is any difference in way ADN and BSN curriculum prepare students for community health nursing.

The scores of CHOS and SPEC in three community colleges were calculated by ANOVA method. Results indicate that there is a difference in a way each college prepares the students for community health nursing, calculated $F = 11.2$, df (2,57), $p<0.05$, and $F = 4.7$, df (2,57), $p<0.05$, for CHOS and SPEC respectively. However, this does not provide any information as which school prepare students better in this subject. To determine this, post hoc test of Tukey was used. Results indicate, considering CHOS scores, C1 prepares their students in this field better than C2, with Mean Difference = 24.85, $p<0.05$, and C3 curriculum prepares students in this area better than C2, with Mean Difference = 23.73, $p<0.05$. However, regarding SPEC scores, C3 curriculum prepared the students better than C2 curriculum, as evidenced by Mean Difference = 5.06, $p<0.05$.

The scores of CHOS and SPEC in three universities were calculated by ANOVA method. Results indicate that, overall, there is no difference in the way each university prepares the students for community health nursing and its influence on CHOS score, calculated $F = 2.64$, df (2,57), $p>0.05$. Data indicate difference among three universities concerning the materials they provide to the students that influence SPEC scores, calculated $F = 8.46$, df (2,57), $p<0.05$. However, this does not provide any information as which school prepare students better in this area by exposing them more to the related materials. The post hoc test of Tukey was used to investigate this. Results indicate, U3 curriculum prepares the students better than curriculum at U2 with Mean Difference = 7.38, $p<0.05$.

Overall, rejection of null hypotheses confirms there was a difference in the perceived exposure to community health nursing concepts and the community health orientation among ADN and BSN graduates.

10.1. Summary and Conclusions

This descriptive non-experimental study compared the community health orientation of graduating nursing students from selected associate degree and baccalaureate nursing programs and the degree of student exposure to community health concepts in their curricula. Analysis of data showed there was a difference in the perceived exposure to community health nursing concepts, with BSN students perceiving greater exposure to the concepts. Also, there was a difference in the community health orientation of students, with the highest orientation demonstrated in BSN programs.

10.2. Limitations of the Study

The number of schools participating in this study was limited and represented a small geographic area of the United States, therefore, the results cannot be generalized to other areas. Also, samples were not randomly assigned. This study would be strengthened if the sample population were from a wider geographic area, randomly selected or randomly assigned, included more schools of each type of program, and were of varying sizes.

10.3. Recommendation for Further Study

This study has documented there is a difference in the community health orientation of graduating nursing students from the two types of nursing programs. Replication of this study using a larger and more varied sample would be necessary if accurate and useful generalization are to be made about education for community health nursing. The inclusion of a variety of schools from across the United States would be more indicative of community health nursing in a broad sense rather than limited to a small region and thus results would be more valid for all nursing curricula. Also, replication of this study might provide more valid results if nursing student were tested as they graduate from nursing programs and then retested one or two years later to identify what changes might have

occurred in their community health orientation. It would be interesting to note if the community health orientation of graduates increases or decreases as a function of the clinical area in which they are practicing.

A study of community health nursing service agencies would be valuable to determine their perceptions of what community health nursing concepts are necessary to prepare nurses to work in those agencies. This type of study could validate and add to the list of community health nursing concepts identified by the American Nurses Association Division on Community Health Nursing, which did not use research methods to formulate this list.

A study of the community health orientation of nurses working in community health service agencies would be more helpful in identifying whether they are best suited for that clinical area. The higher the community health orientation of nurses working in community health agencies the more effective they are in those settings. A study to investigate how these nurses are oriented to these agencies would be helpful in determining if on-the-job orientation influences the nurse's community health orientation. This type of study may indicate whether it is important for students to have community health nursing concepts included in their educational curricula, or if these concepts can be taught through an orientation program by the service agencies.

10.4. Implications for Nursing Education

In 1965 the ANA (cited in American Nurses Association [19]) adopted a statement called " The American Nurses Association's First Position Paper on Education for Nursing." This paper proposed that the minimum preparation for beginning professional nursing practice should be a baccalaureate degree. Since that time, the ANA has further supported this position and it has been coined the " entry level into practice" mandate. The NLN also supported this mandate at their 1983 convention. There are four major positions in this mandate: (1) the education for nurses should take place in institutions of higher learning, (2) minimum preparation for beginning professional nursing practice should be a baccalaureate degree in nursing, (3) minimum preparation for beginning technical nursing practice should be an associate degree in nursing, and (4) education for assistants in health service occupations should be short, intensive preservice programs in vocational education institutions.

The rapid technological changes in health care delivery, changes in reimbursement to hospitals, and the increasing numbers of elderly in the United States have resulted in changes in the scope of health care and the practice of Nursing. Changes in health care and health care reform are presently occurring and more are predicted for the future. Changes include: (a) cost containment, (b) increased health care costs, (c) heightened use of technology, (d) increased home and ambulatory care, and (e) decreased length of hospital stay. These factors have affected acute hospital care. Decreased reimbursement to acute care hospitals by providers has resulted in the early discharge of acutely ill clients requiring skilled nursing care. Proposals for health care reform, designated to improve access and quality, will require more nurses in

community-based care. Professional nurses need to be prepared to deliver care across settings, not just in the community or in hospitals. In 1993, in response to an industry shift from acute care to community-based alternative settings, some schools revised their curriculum from an acute-care medical model to a community-based wellness model. One of the tenets of this community-based nursing model is that, regardless of the practice setting, nurses need to address the client as part of a community [6].

The increase in the number of home health care agencies has created a corresponding employment demand for registered nurses. The growth of home health care has occurred so rapidly that RNs currently enter home health care employment educationally prepared to practice nursing in acute care settings, not community-based settings. This is particularly true of associate degree prepared nurses whose curricula traditionally have not included the concepts of community and home health nursing. The success of ADN programs has resulted in an increasing number of RNs prepared at the associate degree nurse level. Because community health has traditionally been a curriculum component of baccalaureate degree nursing (BSN) programs, and not ADN programs, a significant number of RNs are not educationally prepared for home health care practice and yet account for a significant

proportion of RNs who may be employed in home health care. Added to this complexity is the historical debates or disagreement between nursing programs accreditation agencies as the "entry level" into practice. The argument has been going on for years. AACN "strongly believes that registered nurses should be minimally prepared with the Bachelor of Science in nursing or equivalent nursing degree." National League for Nursing (NLN) in response to American Association of College Nursing (AACN) Draft Vision Statement for Future of Nursing Education, maintains its long-standing opposition to require entry-level registered nurses to hold a bachelor's or Master of Science in nursing degree, a move supported by the AACN. The league advocates multiple entry points. Greater than 50 percent of today's new nurses begin their careers by earning a two-year associate degree in nursing through which they achieve the requisite academic and clinical foundation to pass the licensing exam to start practice [33].

Until further research has been completed, there are options which might be effective in bridging the knowledge gap for students and graduates of programs which do not include community health nursing theory as part of their curricula. Options might be to include community health nursing concepts in all associate degree programs; establish

orientation programs through the community health service agencies to cover the concepts specific to community health nursing when ADNs are hired, identify community health nursing as a specialty requiring additional formal schooling for ADNs after basic nursing program is completed; or limit those working in community health nursing to nurses from baccalaureate programs. This study would contribute to closing the gap between education and the needs of employers. Studies such as this, indicate the lack of congruency between what content is taught and what content employers feel nurses must know and the curricula need to be designed accordingly.

Funding: This study received no specific financial support.
Competing Interests: The author declares that there are no conflicts of interests regarding the publication of this paper.

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