FACULTY PERCEPTIONS OF THE CRITICAL CARE EXPERIENCE
AS A PART OF THE GENERIC BACCALAUREATE
CURRICULUM IN NURSING

DISSERTATION

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By

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The problem with which this study is concerned is the inclusion of actual critical care experience in generic nursing curricula in the United States. A survey instrument was sent to faculty representatives selected by the dean of each of 312 generic baccalaureate nursing programs. Two hundred fifteen schools (68.9%) responded.

All data from returned survey instruments were computed in percentages; chi square analysis was used where necessary. The data findings include the following.

1. Of the responding schools, 167 include critical care in the curriculum.

2. Only 48 per cent of the Northeast region schools offer critical care. No other demographic significances were found.

3. The two highest ranked positive reasons for offering the critical care experience are that it is part of the health-illness continuum, and critical care is an integral part of nursing today.

4. The two highest ranked negative reasons for excluding the critical care experience are that students focus on technology or the environment instead of the client.
5. Reported technologies and methodologies of teaching critical care include (a) faculty members are usually responsible for the student during the critical care experience; (b) critical care is most often scheduled on a rotation or block system; (c) faculty who teach critical care are usually experts in critical care theory and practice, have Master of Science degrees in nursing, and are assistant professors; (d) the student-faculty ratio in critical care is six-to-ten students per faculty member; (e) most schools that offer critical care include over thirty contact hours of the experience during the senior year; (f) students usually provide total care of the client but share responsibility with a staff nurse; (g) the two highest ranked positive outcomes of the experience are facilitation of integration of theory and practice and students may examine philosophical and ethical issues; (h) the two highest ranked negative outcomes of the experience are a focus on technology or the environment instead of the client.
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CHAPTER I

INTRODUCTION

At present, controversy surrounds the issue of including actual experience in a critical care setting as part of the generic baccalaureate nursing program. Though it is accepted that exposure to the critical care unit (ICU) in the course of a baccalaureate nursing education will not adequately prepare a student to become an ICU nurse, there are those who feel that this is a vital part of nursing today which should be part of the educational experience. In favor of including such experience in the nursing program, Adler (1) supports the fact that, to the consumer, the most important factor in the critical care unit is the nurse. In addition, the technology explosion in recent years has resulted in increased demand by hospitals and consumers alike for specially equipped ICUs that are staffed by highly trained critical care nurses. There is also much interest in ICU nursing among student nurses (4).

On the other hand, the ICU is a highly technical and very stressful place. As will be discussed in Chapter II, there are those faculty who feel that the aim of baccalaureate nursing education, which is to prepare nursing generalists, can be better achieved in settings other than the ICU. This
study explores (a) what is actually being taught today with regard to this issue in baccalaureate schools of nursing in the United States and (b) the rationale for the emphasis and methodologies used. Such data should prove useful to nursing faculties as they make future curricular decisions.

Statement of the Problem

This investigation concerns the inclusion within generic baccalaureate nursing curricula of actual nursing experience in critical care units.

Purpose of the Study

The purpose of this study is to analyze current practices with regard to the inclusion of critical care nursing as a component of the generic baccalaureate curriculum.

Research Questions

Based upon the problem and purpose of this study, the following research questions are proposed.

1. What is the incidence of inclusion of critical care experience into the generic baccalaureate curriculum in nursing?

2. Are there differences among the characteristics of nursing schools that do and do not offer critical care experience?
3. What are the prevailing reasons for inclusion of critical care nursing experience in the generic baccalaureate curriculum in nursing?

4. What are the prevailing reasons for exclusion of critical care experience from the generic baccalaureate nursing curriculum?

5. What are the major characteristics of and methodologies used for teaching critical care experience in the generic baccalaureate nursing curriculum?

6. As viewed by faculty, what are the positive and negative outcomes of the inclusion of critical care nursing in the curriculum?

Background and Significance of the Study

A critical care unit is a special unit of the hospital in which the client is monitored and treated with the most advanced techniques that are available. In American society today, it is unthinkable that the critically ill or injured person of any age would be treated elsewhere; we have come to expect access to the very best technology and expertise available when we or our significant others are critically ill.

The critical care unit may be called by a variety of names, a few of which are intensive care unit (ICU), special care unit (SCU), and coronary care unit (CCU). In this study, the term ICU is used to include critical care units
of any specialty that care for any age group. Regardless of specialty or name, ICUs have many commonalities that include high technology, high levels of expertise, multidisciplinary staffs, and a low ratio of nurses to clients (one nurse to one or two clients is usual). This nurse-client ratio is quite different from the ratio in other areas of the hospital, and it serves to underscore the importance of nursing care in the ICU (2, p. 4).

Although the physician and members of other disciplines are vital to client care in the ICU, the most important member of the team is the nurse (6, pp. 1-2). As the team member who is with the client twenty-four hours a day and who must make constant judgments that affect all aspects of the illness and its outcome, the nurse must understand and be able to use the technology essential to monitoring and treatment, and must be able to support the client and his family psychologically during the stressful ICU experience.

The demand for critical care nurses is high—in fact, critical care is among the most rapidly growing specialties in nursing today (3). Critical care demands nurses who have the best possible academic and clinical preparation. They must be able to work as peers and colleagues with other members of the health team. Today, many young baccalaureate graduate nurses choose the demands and rewards of critical
care as the place to begin their nursing careers, or they move to critical care early in their careers.

Since critical care nursing is such an important facet of nursing and since, at least in theory, baccalaureate nursing graduates should be the best prepared group of new nursing graduates, it should follow that critical care is included an important part of the curricula in generic baccalaureate nursing programs. In actuality, however, and as will be discussed in Chapter II, there is great diversity among the methods and extent to which critical care is included in nursing curricula, and its inclusion is currently quite controversial among nursing educators. Critical care experiences may be heavily emphasized in a curriculum, may not be included at all, or, more commonly, the emphasis falls somewhere between these extremes.

The decision of what to include in each nursing curriculum regarding critical care is made by the individual schools' nursing faculties. Unfortunately, according to Quiring and Gray (8), such decisions are now often made intuitively rather than on the basis of sound data and rationale. Since some faculty feel that critical care experience is entirely too stressful and complex for baccalaureate-level students, the experience is deleted or included only in a minimal way. Other faculties feel that critical care is important and include it in varying
levels of depth of experience. Sometimes, decisions are based on such reasons as whether faculty like or are prepared to teach critical care or on ease of access to such experience. Historical influences on faculty and students are also often important (8, pp. 708-713).

That such factors are the basis for curricular decision making is not surprising since no data exists to inform faculty of either the practices of other schools in teaching critical care nursing to generic baccalaureate nursing students or the valid rationale for or against the inclusion of such experience. Neither is there sharing of the methodologies used to teach critical care nursing.

This study reports data regarding how much critical care experience is being taught and compares the characteristics of schools in which it is and is not taught. It also explores the reasons that are considered by nursing faculties in their decision making regarding critical care experience.

Collection and Treatment of the Data

There are currently 312 accredited generic baccalaureate schools of nursing in the United States (5, pp. 338-343; 7, pp. 57-77). Each of these 312 schools was invited to participate in the study.
A survey instrument was developed on the basis of data from the literature review. Preliminary questions for the survey were evaluated for content validity by five judges who are experienced nursing educators. Once content validity was established and a preliminary survey form was constructed, the instrument was pilot tested by a group of experienced nursing educators.

The final form of the survey instrument was distributed by mail to one faculty member of each school. This faculty member was selected as a result of and in response to a letter to the school administrator which explained the study, solicited participation, and specified criteria for the selection of a faculty member to complete the instrument. Survey forms were mailed directly to participating faculty members and were coded as to geographic area of the United States. After an elapsed period of time, nonrespondents were contacted again with another letter and survey form.

The data generated in this study includes demographic data that describe the responding schools and data that indicate whether critical care experiences are included within the curricula of that school. Data were also gathered on the schools' decision making rationale and methodology related to the critical care offerings.

In order to treat and present the data in an orderly fashion, specific subproblems, as follows, are used.
**Research question I** is devised to determine what percentage of the surveyed generic baccalaureate nursing programs include actual experience in critical care as part of the curriculum. Data are analyzed and reported to reflect the percentage of schools that do and do not include critical care as well as the actual numbers of respondents in each category.

**Research question II** is devised to determine what demographic differences exist between schools that do and do not include critical care experience in the curriculum. Percentages are used to report the characteristics of location of school, other programs included at the school, number of yearly generic baccalaureate graduates, student-faculty ratio throughout the program, academic rank of faculty as a whole, general preparation of faculty as a whole, academic calendar, type of curriculum, and number of classes graduated per year. The chi square test of independence is used to compare each of these characteristics with whether the school included actual critical care experience in the curriculum.

**Research question III** is devised to determine the major characteristics and methodologies of teaching critical care experience in each generic baccalaureate curriculum. The methodologies described in the survey instrument are analyzed and reported on a percentage basis.
Research question IV is devised to determine the positive and negative results of teaching critical care as perceived by the faculties of the schools that provide these experiences. Both positive and negative results are reported by percentages.

Research question V is devised to determine the prevailing reasons that are perceived by faculty for inclusion of experience in critical care nursing in the generic baccalaureate curriculum. This information is reported by percentages.

Research question VI is devised to determine the prevailing reasons that are perceived by faculty for exclusion of experience in critical care nursing in the generic baccalaureate curricula. This information is reported by percentages.

Summary

The purpose of this study is to investigate the inclusion of actual experience in critical care units within the generic baccalaureate nursing curriculum. Demographic data as well as data regarding decision making rationale, methodologies, and techniques and outcomes of the experience are reported.

The following organizational format is followed for this study. Chapter II presents a review of the literature that is relevant to the study. Chapter III presents the procedures followed for the collection and treatment of data. Chapter IV presents the analysis of the data and
data findings, and Chapter V presents a summary of the study, conclusions, implications, and recommendations for future research.
CHAPTER BIBLIOGRAPHY

1. Adler, Diane, "Critical Care Nursing," *Nursing Mirror*, 142 (July 8, 1976), 54-55.


CHAPTER II

REVIEW OF RELATED LITERATURE AND RESEARCH

Introduction

There is much literature available with which to begin the study of critical care experience in the generic baccalaureate nursing curriculum. This literature describes curricular decision making in baccalaureate nursing education, entry into critical care practice, expectations of the critical care nurse, and stress in the critical care nurse.

Curricular Decision Making in Baccalaureate Nursing Education

The purpose of baccalaureate education in nursing, as defined by the National League for Nursing (NLN) (27, pp. 1-2) is to prepare a generalist in nursing who is able to assume beginning positions in a variety of nursing settings and to serve as a foundation for graduate education in nursing. Within that context, each nursing faculty has a great deal of flexibility in the planning of the students' course of study.

Although guidelines for nursing curricula are quite structured, faculties have much freedom in the choice and arrangement of the curricular components within that
structure. Ideally, according to Wu, (39, p. 14) the nursing curriculum should be developed in a much more organized manner than it often is. The faculty should begin by establishing goals, selecting major topics for inclusion in the curriculum, and then organizing and sequencing the parts to achieve these purposes and goals. Within this framework of developing curriculum in an organized manner, the faculty is free to build upon its philosophy of nursing, conceptual framework and identification of the needs of its students. Regardless of the components chosen, the curriculum should be orderly, logical, and characterized by continuity, sequence, and integration (39, p. 17).

In actuality, nursing curricular decisions are often made "more as a result of political process and historical accident than systematic efforts to plan a coherent education for students" (30, p. 708). A major stumbling block in nursing curricular design is that because the nursing profession has no single, concise definition of itself, it also has no clearcut quantifiable definitions of the curriculum (23, p. 44).

Whatever curricular design is chosen by a nursing faculty, Quiring and Gray (30, p. 43) note that inevitably there are loose ends--concepts that do not fit the design or that are important to a particular faculty member. Since
these are added to the curriculum without regard to the original design or plan, the curriculum becomes unwieldy. The problem is further compounded by the fact that since nursing is based on a variety of sciences, faculty are vulnerable to "trendy approaches originating in any of these science areas" (31, p. 43). As a result, Quiring and Gray (31, p. 44) state, the curriculum may be amended and changed in a haphazard fashion without regard to the effect on student learning. Often, the curriculum becomes a maze in which both student and teacher can become lost.

As described by Levine (23, p. 45) a complicating factor in today's curricular design is the presence of two popular nursing curricular patterns—the traditional curriculum and the integrated curriculum. Generally, the traditional curriculum is considered to be based on the medical model; the studies are organized by specific diseases and blocks of information to be learned. The integrated curriculum, on the other hand, is based on the integration of relationships and concepts rather than specific information blocks. Although many believe that the traditional versus the integrated curriculum is a forced dichotomy, there is actually a great deal of overlap. Often, according to Levine, nursing educators "have jumped on the bandwagon of the integrated curriculum, and it is difficult, if not impossible, to identify specific rationale" for this choice (23, p. 43).
Levine (23, p. 46) asks if it is not strange that while the world is becoming more and more specialized, nursing is preparing generalists who should "know everything." Further, while almost all medical care focuses on disease entities or body systems, nursing faculties appear to consider that this traditional method of organizing nursing education is outdated. The use of the integrated curriculum, which is widely accepted, is, according to Levine, very scantily documented. Nursing educators need to work at more concrete curricular definitions and guidelines if nursing education is to continue to be controlled by nursing rather than an outside body (23, p. 46). The present study is one attempt to provide data in this regard.

Nursing curricular development has been studied by several researchers. One study (30) surveyed seventy-six accredited bachelor of science in nursing (B.S.N.) programs to discover which sciences were typically offered and if there were evidence of systematic inclusion of certain courses in the curriculum. The researchers found that the courses in the cognate (general education) areas represent 59 percent of the total credit, while nursing courses represent 43 percent of the total college credit requirements. Within these percentages, there was a great deal of diversity among program requirements. The choice of content of certain courses often reflects the previous experiences of the
faculty; curriculum development also appears to be influenced
by access to certain courses and educational experiences.
For example, whether or not hospital critical care units
are easily accessible may have great influence on whether
or not a faculty decides to offer critical care experience
to its students. This study led the researchers to con-
clude that nursing cognate requirements seem to reflect
current trends, historical precedents, and traditions
rather than identified student needs (30, pp. 702-708).

Quiring and Gray's (30, pp. 712-713) study also
reveals that there is great variety in the packaging of
nursing courses, which makes it difficult to identify specific
content within these courses. Even though the researchers
found that the requirements are varied and difficult to
identify, they discovered that upon graduation, the nursing
student has typically completed more science courses than a
science major. These researchers, therefore, conclude that
the data reveal evidence of a patchwork rather than a
systematic curriculum design in nursing.

One of the few curricular components that has been
specifically studied is operating room nursing. In discussing
operating room nursing as a curricular element, Kneelder
notes that "the focus of nursing education is preparing a
liberally educated, competent nurse" (20, p. 149).
Kneelder continues,

In light of the rapidity of change and the explosion of knowledge within the health profession, faculty feel that emphasis should not be put on specialties as such. Rather, their objectives for students relate to teaching basic principles that relate to a wide variety of situations... because of the necessity to limit or shorten clinical experience as it relates to the specialty areas of nursing, it is mandatory that each specialty have a sound rationale as to why it should be incorporated... (as) part of the basic curriculum (20, p. 150).

Of 200 schools responding to a survey, seventy-seven did not offer operating room nursing as a specific experience for students. The others offer from twelve to 100 hours of operating room experience, often as observational experience only (20, p. 150).

Nursing electives is another curriculum component that has been studied. In her study, Hipps (13, p. 570-571) defines nursing electives as courses developed by nursing faculty, which carry a nursing prefix, but which are not specifically required of nursing majors. In a survey of all of the accredited baccalaureate schools of nursing, Hipps found that 57 percent offer one to twenty-six electives, with two being the average. There was no statistical association between the presence or absence of electives and demographic data such as regional location; academic calendar; number and types of degree programs offered in addition to the baccalaureate; enrollment; the year the nursing program began; faculty-student ratio; the rank, preparation, or experience of faculty; or number of credits required for graduation.
To discover the rationale for elective offerings, Hipps offered respondents a choice of twelve reasons selected from the literature.

To make the curriculum more flexible;
To make the curriculum more relevant;
To demonstrate that nursing is process rather than content;
To offer a greater degree of specialization;
To take into account the expansion of knowledge;
To provide courses for an innovative calendar;
To take into account the expansion of the role of the nurse;
To provide courses for gifted students;
To provide sufficient experiences for self-actualization of the student;
To introduce new areas of study without threatening the traditional curriculum;
To introduce traditional content and skills in a curriculum that is innovative and nontraditional;
To offer contemporary areas of study not being offered in the total college or university curriculum (3, p. 571).

Of these, several factors were found to be significant: to provide more curricular flexibility and relevance; to enable student self actualization; and to take into account the expansion of knowledge. Another interesting finding of the Hipps study is that the choice of electives more often concerned nursing practice in specialized areas than generalized nursing practice (13, pp. 571-572).

Among the questions for further study identified by Hipps (13, p. 573) are: have electives been randomly added to the nursing curriculum in order to satisfy student demands for relevance or to accommodate faculty interests and expertise, and have the faculties identified a core of nursing content
to which electives are added for enrichment? The format and content of the Hipps study of electives was very helpful in structuring the items and content of the present study.

Critical Care in Baccalaureate Nursing Education

In 1976, the American Association of Critical Care Nurses (AACN) (2) published its "Position Paper on the Roles of Professional Nursing Students and Faculty in Critical Care Units." The organization recommends that each professional nursing student have a minimum of eight hours of critical care experience as part of the student's nursing education. This experience is to be supervised by clinically, theoretically, and educationally qualified faculty who have primary responsibility for the student with assistance from the unit staff. To accomplish this, a student-faculty ratio of four to one is suggested (2, p. 193).

Presently, the inclusion of actual critical care nursing experience in the generic baccalaureate nursing curriculum is controversial and not universally accepted by either educators or staff nurses. There are several postulated reasons for this. ICU nurses are often unwilling to entrust their clients to any unfamiliar or inexperienced hands or they may fear a reduction in efficiency or client safety as a result of the students' presence, (33, p. 944). According to Geels, Brand, and Passos (11, p. 15), some faculty feel that the ICU is threatening and anxiety provoking for faculty, students and staff; they therefore suggest that ICU is a specialty
reserved for graduate students since stress reduces undergraduate learning and increases the chance of errors. Furthermore, the margin for error in the ICU is often considered too small to tolerate students, and another problem is the suggested low and expensive student-faculty ratio that should be maintained. Reuther (33, p. 946) also believes that in the stress of the ICU, the student may lose sight of the client as an individual.

Another possible reason for excluding critical care experience is that present nursing curricula tend to emphasize primary or nonhospital care. In this context, the inclusion of critical care seems incompatible with curricular goals (29, p. 650). Even with the inclusion of critical care experience in the baccalaureate program, Reuther (33, p. 944) believes that the nurse is not prepared to assume the role of a critical care nurse on graduation without further education and orientation.

Many favor the inclusion of critical care experience at the undergraduate level. Adler (1, p. 55), who is a leader in the American Association of Critical Care Nurses (AACN), laments the fact that "nursing students do not spend enough, or in some cases, any time with critically ill patients. Where else can they learn so much from so few?" She continues,

In ICU's, students are forced to look a man's wholeness and develop the ability to change quickly priorities of care with these critically ill persons. Why do educators continue to
deprive students of a valuable integrated learning experience? (1, p. 55)

Geels, Brand, and Passos (11, p. 15) also favor such experience. They state that an important goal of baccalaureate nursing education is to prepare a graduate nurse to work with clients who are experiencing any degree of health or illness. Since critical care is a part of the health-illness continuum, it is appropriate that the care of these patients be included in the curriculum. Also, there is an increasing demand for nurses who have the knowledge, skill, and judgment to work in the ICU. Pierce (29) says that students can meet their learning goals with ICU experiences, and furthermore, critically ill clients need the "planned, comprehensive care fostered in baccalaureate education" (29, p. 650). Reuther (33, p. 946) believes that learning in the ICU can give a student a better understanding of critical care even if he never chooses to work there—thus fostering better long term relationships between ICU and non-ICU nurses.

Reuther (33, pp. 944-946) lists some of the many valuable educational opportunities to be found in the critical care setting. Some of the things to be learned include the opportunity to refine both assessment and nursing diagnostic skills in addition to technical skills. Students can look at the impact of the critical illness on client and family and make plans to carry out interventions. They can see interdisciplinary teams function and interact. In the ICU, students can refine their communication and
psychosocial skills. They can learn to deal with difficult situations and may encounter death for the first time. They can have access to faculty and staff role models. Learning in the ICU also presents opportunities for affective development and for the student to examine his own attitudes, values, philosophy, and ethical beliefs. The ICU can be a place to teach concepts and skills that can be transferred easily to other areas of nursing. Though difficult, ICU experience is valuable to the baccalaureate nursing student, and the student can be a stimulating asset to the unit staff.

Some conditions have been reported (24, p. 42; 33, p. 96) as necessary to make the ICU experience work. Faculty should be knowledgable and expert in critical care. They must be well oriented to the unit, communicate well with the staff, and be closely available to staff and students at all times during the experience. Staff, who must be supportive of the ICU student experience, can help students relax by identifying and communicating with them. There should be a plan by which students can switch from participants to observers in times of crisis in the unit.

Although Reuther (33, p. 945) stresses that students' ICU experience should be participatory rather than observational, she also recognizes that students need ample preparation time and support for learning in the ICU setting. One
reason for student participation in ICU care rather than only observation is that such students are seniors who have been providing care in other settings. Hence, to revert only to observation would not be educationally sound.

Generally, the faculty-student ratio in the ICU should be lower than it is in other learning areas; suggestions range from two-to-one to six-to-one (11, p. 20; 24, p. 42). This low ratio can create a problem in the already congested ICU by adding more faculty members with the students; obviously, the number of persons in the unit should not jeopardize client welfare (11, p. 19). In terms of low student-faculty ratio, it is also expensive for the nursing school. Geels, Brand, and Passos (11, p. 19) warn that students in the ICU should not be ultimately responsible for critically ill clients, nor should the critical care course be the initial place where students learn pathology or nursing care. The course should not pro port to prepare the student to function effectively as an ICU staff nurse.

Sometimes, critical care experience is a part of a more varied experience rather than a concentrated rotation in the ICU. Pierce (29, pp. 651-652) reports on a course that involves the students in following the client through diagnosis, admission, surgery, ICU, and hospital discharge. Together, student and instructor identify the client's apparent major concerns or problems and focus the nursing care on these conceptual themes. The experience enables
the student to apply theory to nursing practice while also increasing technical skills. Pierce found that the students who were unable to meet their clients before the ICU experience, and who were unable to set goals before providing care, were ultimately more easily overwhelmed by the technical environment and equipment of the unit.

Generally, positive responses to critical care experiences have been reported by students (24, p. 42). Students are able to relate past experiences to new ones, to have the opportunity to plan and carry out the care of the critically ill client, and to encounter the multitude of events that occur in the critical care unit.

In general, authors and researchers conclude that although the ICU experience for undergraduate nursing students is costly, it is well justified (11, p. 20). Matthew and Goodwin quote one nursing graduate who began her career as a critical care staff nurse who said that "without the critical care practicum she could not have withstood the stress of orientation" (24, p. 41).

Research regarding students and critical care experience generally focuses on students' plans for employment after graduation and their perceptions of their preparation to begin a career in critical care nursing. One study (18, p. 688) surveyed new graduates of all three types of nursing programs (baccalaureate, associate degree (AD), and diploma). In
the group surveyed, baccalaureate graduates were greatly overrepresented. About one-third of the sample group reported a high interest in working in a critical care area.

The study also asked the new graduates to report how much exposure to critical care had been included in their curricula. About three-fourths reported some exposure to critical care units, with a range of from 6 to 320 hours. Average reported exposure was forty-six hours. All but five per cent reported that they had cared for an acutely ill client at some point in their education. However, only 3 per cent reported that they had planned and carried out care for more than one acutely ill client at a time. Reported activities include observation, carrying out selected procedures, and assisting the staff nurse (18, p. 688).

These students were asked if they felt prepared to work in a critical care area upon graduation. Fifty-eight per cent felt unprepared to work in this setting. Reasons cited for this feeling of inadequacy are summarized as not enough theory (3%), not enough practice (36%), and not enough theory or practice (17%) (18, p. 688).

Feldbaum and Levitt (9, pp. 70-74) asked students to report where they anticipate employment after graduation. Most said they would work in hospitals. A high percentage reported interest in working in a critical care setting.
Nearly 93 per cent of the white student respondents planned to work in a hospital setting as did over 96 per cent of the black students. Almost 75 per cent of the white students reported an interest in working in the ICU and emergency room, while over 71 per cent of the black students were interested in working in these areas.

Knopf (21, p. 15) studied baccalaureate nursing graduates as to actual areas of employment. A high number of graduates actually worked in hospital settings, although fewer worked in critical care areas than had anticipated they would do so. One year after graduation, 77 per cent of the nurses surveyed worked in hospital nursing; five years after graduation, over 64 per cent were in hospital nursing. One year after graduation, only 2.7 per cent reported working with critically ill clients; five years after graduation, 7.5 per cent were working with critically ill clients.

Graham and Gleit's study is based on the assumption that "appropriate clinical sites are critical to the preparation of nurses" in baccalaureate nursing programs (12, p. 291). The study found that while many nontraditional clinical settings are used, most schools continue to use the traditional settings (hospitals, public health agencies, and other secondary care agencies) for teaching baccalaureate nursing students. Hospitals are used by over 95 per cent of
the schools, while over 92 per cent report using public health agencies. No attempt was made to identify what areas within the hospitals (such as critical care) are used. The researchers suggest that the chosen clinical sites should reflect the skills that students will use upon graduation (12).

Entry into Critical Care Practice

Bertram (4, p. 61), who is a recent past president of the AACN, describes the situation in critical care for the National Commission on Nursing in early 1981. She states that while 4938 United States hospitals have critical care facilities, 51 per cent have acute shortages of critical care nurses. Some hospitals must limit critical care services because of this shortage.

In attempting to identify causes of the shortage, Bertram describes the evolution of the critical care nurse. The nurse spends the first year becoming proficient; the second year, she functions at an optimal level; then she leaves. This creates a cycle in which half of the nurses in a critical care unit are always orienting and therefore functioning at a sub-optimal level. Among the reasons for these problems, Bertram believes that "the new graduate's exposure to critical care may be limited and the basic clinical skills necessary for critical care are lacking" (4, p. 5). Of new graduates at one hospital, 53 per cent
could not monitor neurologic vital signs, 63 per cent
could not administer oxygen via a face mask, 78 per cent
could not perform cardiopulmonary recuscitation, and 95
per cent could not insert an airway (4, p. 5).

Bertram concludes that since the academic setting
has failed to address the problem of critical care to the
necessary degree, the nursing services setting must be
responsible for teaching these basic skills. Unfortunately,
though, 75 per cent of the hospitals must send their nurses
to other institutions for this training. In some regions,
critical care orientation programs are not available at
all. Hospital educational programs, however, are rapidly
expanding in an effort to deal with the problem (4, p. 5).

Millar (25), who is another past president of the AACN,
agrees with Bertram. She states that the distress of the
new critical care nurse is accentuated because students
rarely care for more than two clients at a time and never
gain enough familiarity with hospital procedures or routines.
Additionally, she states, "perhaps because nursing has not
yet defined what we expect nurses to do, we increasingly
distress new graduates because we expect them to be every-
thing to everyone in all nursing settings" (25, p. 977).
As a current problem, she cites nursing education's failure
to emphasize practice to an adequate degree as part of the
nurse's education. A possible solution is to define the
competencies clearly which are expected of new graduates, to follow a four-year, theory-based educational program that has an additional one year's internship, and to demand clinical competence of all nursing educators (25, p. 978).

Part of the problem of orienting and retaining the critical care nurse may be the initial awe experienced by anyone who enters an ICU for the first time. Boller (5) says that the new critical care nurse initially is sensory overloaded and spends her time staring in awe at all of the equipment and activity. It is only after this stage passes that the nurse can be taught the things she needs to know in order to function as a critical care nurse. Even then, she may feel deluged with information and pressured to be an instant expert on everything. She, therefore, needs a resource person readily available for the first six to twelve months of employment in the ICU.

Since such a continuous resource is often unavailable, the new graduate nurse's needs are often inadequately met (37, pp. 12-13). This viewpoint is supported by one portion of a study (35) that deals with staffing and training in the ICU. Although many new graduate nurses begin their careers on night duty, staffing on this shift is generally only about 70 per cent of the day shift, which creates a heavier work load concomitant with fewer experienced resources for the inexperienced nurse. The availability of another critical resource, the physician, varies greatly.
About one-third of the units have physician coverage in the daytime, but this varies with hospital size; the larger the hospital, the more likely it is that there will be physician coverage on any given shift. Only about 14 per cent of the small hospitals (under 50 beds) have daytime physician coverage, and only 12 per cent of the small hospitals report evening physician coverage. Night coverage varied from 11 per cent in the small hospitals to 46 per cent in the largest. Newborn ICU units consistently had the highest amount of physician coverage of the ICUs (35, pp. 237-240).

Treloar (37, pp. 12-13) writes that many agencies are attempting to improve orientation by providing critical care orientation programs and internships. These range from brief and casual programs to very ambitious ones. Often, the critical care orientation course is haphazard and fragmented, which leads to disillusioned and frightened nurses who are ultimately lost to critical care. Although larger institutions often conduct brief orientation programs of two to eight weeks, service often takes precedence over education.

One ambitious program, according to Treloar (37), is offered jointly by a nursing service department and a university. In this course, the new nurse spends six months in a critical care theory course and three months in a combination theory and clinical practice course. The
Internship, which is educationally sound, is intended to be a true apprenticeship in critical care nursing; however, it is also expensive, very difficult, and still does not produce a nurse who is expert in critical care nursing. It is, nevertheless, the beginning of an ongoing learning and growing process which strives to smooth the transition of the nurse from the student role to that of a functional and knowledgeable critical care nurse (37, pp. 13-14).

Orientation programs, critical care programs, and internship programs take on more importance when viewed in light of one study (10, p. 538) which found that 35 per cent of the ICU nurses surveyed had not taken any courses specifically related to the areas in which they were working. "Optimal clinical proficiency among critical care nurses is not as prevalent as one would hope," according to Cantor (6, p. 17). "Considerable evidence suggests that expert clinical competence has not consistently followed the efforts to educate and train critical care practitioners" (6, p. 17). There is now increasing emphasis on acquisition of knowledge for the critical care nurse. A major problem is that although critical care nursing is very specialized, many critical care courses, if the nurse is able to take them, remain generalized. This does not prepare the nurse to function adequately in a specialty area. Another
problem is that it is assumed that theoretical knowledge assures clinical competency, which may not be true (6, pp. 17-19).

Sullivan and Breu (35, p. 39) report that another problem is regional differences in the availability of orientation programs. The New England and Middle Atlantic regions have the highest incidence of such programs, while the West North Central, West South Central, and Mountain regions report the lowest incidence. There are also differences in the availability of inservice education programs for critical care nurses. The West North Central region reports the lowest incidence of such programs with the Middle Atlantic, New England, and South Atlantic having the highest incidence.

One report (15, p. 115) on critical care nursing internships contends that although the turnover rate for critical care nurses is about 70 per cent, it is not appreciably higher than the turnover of nurses as a whole. The report attributes critical care nursing turnover to high stress and low job satisfaction, problems which may be due, in part, to the difficulty of the new graduates' transition from nursing student to critical care staff nurse. The transition is made more difficult, according to this report, because of the gap between the new graduate's knowledge and skills and the expectations of the employment
situation. The report further states that critical care is often an entirely new experience for the nurse. This attitude is supported by Matthew and Goodwin (24, p. 38) who describe a critical care elective that is based on the premise that "the lack of both participatory experience and opportunities to plan client care contributes to the 'student to employee' gap or 'reality shock'."

Several authors discuss the problems of assisting the new graduate to make the transition to critical care staff nurse. Treloar (37) emphasizes the need for better preparation in both knowledge and skills as a way of dealing with the critical care nurse shortage. She notes that the physician who specializes in critical care has one or two years added to his residency while nurses barely gain the most basic knowledge before being expected to practice. "If [nurses] are lucky enough to enter the [critical care] area while still a student, they are among a few fortunate exceptions. Comprehensive critical care practice in undergraduate nursing programs is sadly lacking. . . ." (37, p. 12).

Some characteristics of new graduate nurses in the ICU have been identified (26, p. 533). Concerns about new ICU nurses include the fact that many new graduates are unable to deal with the stress of the first few weeks in the ICU (as evidenced by crying episodes and persistent thoughts of quitting). The idealism of the new graduate seems to be quickly shattered, which is a particular problem when adequate
support systems are unavailable. The stress is compounded by the new graduate's lack of understanding of hospital bureaucracy. Another concern is that the new graduate often has had no opportunity to gain confidence as a graduate nurse prior to entering the specialized and stressful role of critical care nurse. An important problem is reported to be the new graduate's lack of ability to organize and prioritize the many stimuli and client needs that bombard her. Clough (7, pp. 24-26) reports that critical care nursing orientees who are new graduates are known to need longer orientation programs than experienced nurses. Reasons for this seem to include differences in learning needs, in the ability to organize the care of the complex acutely ill client, and in the ability to perform psychomotor tasks.

The critical care area can be a place to learn the technology and skills required of today's nurse. Problematic is the diversity and constant change in the required skills as well as the lack of agreement as to what skills should be taught to the nursing student. One research group which studied these essential skills for baccalaureate graduates, says "there seems to be general agreement that newly graduating nurses need to be proficient in manual skills, despite the fact that the specific skills (they need) have not been clearly identified" (36, p. 39).

The study compared the ideas of nursing educators and nursing service personnel as to what skills are needed by
new graduates. From a list of 291 skills, faculty chose only 32 per cent as essential, while service personnel felt that 74 per cent are essential; only 30 per cent of the skills were mutually selected. The fact that there was little consensus between the two groups as to the necessary skills shows the need for further dialogue and joint educational research and course planning. Such a tactic should reduce the problem of a new graduate who is expensive to the employer because, although the nurse has a strong theory base, the nurse also "usually lacks experience in applying this to the clinical setting" (36, p. 40).

According to DeVisser (8), although some nursing programs are de-emphasizing technology and skills, the number who do so seems to be decreasing. As a result, the technology to which critical care nursing is becoming more bound may be a new experience to the new critical care staff nurse. The critical care nurse needs "a thorough understanding of the therapies ordered, their effects and side effects, and be able to tie this information to her assessment and observations of the client. . . . [this ability is] generally not a characteristic of the new critical care nurse" (8, p. 28). Another problem with building this specific expertise into the new graduate is that the half-life of current specialized knowledge is extremely short. The nurse's intelligent decision-making skills comes therefore "from a solid knowledge base
and good clinical judgment which develops through experience" (8, p. 28). Because of technology, the nurse must also deal with serious ethical issues, must be a client advocate, and must work to prevent fragmentation of the very complex care needed by the client. To cope with this, the author suggests that the best tool for the nurse is the acquisition of knowledge on a continual basis after nursing school graduation (8, p. 29).

When nurses first encounter the technology of the ICU, they may find it difficult to see the client as a person in spite of the technology. The first step in removing this focus on technology may be to understand it; however, "it is generally recognized that nursing academic preparation does not and cannot keep pace with the technological advances of our time" (8, p. 27). Instead, since most nursing programs emphasize the biological and social sciences and the humanities, the nurse must learn technology in a hospital orientation program. This leads to a predictable struggle with technology, and when mastery is accomplished, the nurse wants to maintain this expertise, so may continue to "nurse the machines" (8, p. 27). The agency must then work to bring the nurse back to her knowledge of theory, humanities, and "the personhood of the client," which is important since the nurse provides ongoing twenty-four hour care for the critically ill client while other health team members make only brief bedside visits (8, p. 27).
Expectations of the Critical Care Nurse

The advent of critical care nursing has led to a "phenomenal improvement in the delivery of patient care" (1, p. 54). It is sophisticated, diversified, and involves combining both a broad knowledge base and technical skills. Adler (1, pp. 54-55) maintains to the client, the single most important factor in the ICU is the nurse and her management of his care.

The critical care nurse must possess both knowledge and skill in a wide variety of complex areas. One standard for critical care nursing is established by the major accrediting body for hospitals—the Joint Commission on Accreditation of Hospitals, or JCAH (19). To achieve accreditation, hospitals must conform to the JCAH standards. Those guidelines that are pertinent to this study describe what the JCAH expects of critical care nurses and of nursing. One guideline states, "Nursing department/service personnel shall be prepared through appropriate educational and training programs for their responsibilities in the provision of nursing care" (19, p. 119). A second guideline states, "Each special care unit shall be properly directed and staffed according to the nature of the special needs anticipated and the scope of services offered" (19, p. 182).

Within the discussion of the second standard, the JCAH also states that "the nursing staff shall be knowledgable about [all] aspects of the special care unit patient and shall be capable of applying therapeutic interventions" (19, p. 183).
Other sources delineate the expectations of the critical care nurse in more detail. Adler (1) states that the unstable critically ill client requires from eighteen to twenty-four hours of direct nursing care daily. It is important that the nurses who care for these clients are clinical experts. Simply to group the critically ill clients together in a geographic area without providing the specialized staff is a "disservice to both patient and nursing staff" (1, p. 54). The requirements for a critical care nurse as developed by the AACN include the following:

1. Have a broad scientific base of requisite knowledge;
2. Be able to assess, intervene, and evaluate the critically ill and their responses to care;
3. Be able to work with the technology of the space-computer era;
4. Develop skills that demonstrate a high degree of integrated head-to-hand function;
5. Be a compassionate practitioner who fully realizes that people are more than the sum of their parts;
6. Have a well developed sense of humor;
7. Expect the unexpected;
8. Develop skills for crisis intervention for use with patients, family members, and colleagues;
9. Enjoy working as part of a team dedicated to the delivery of excellent patient care (1, pp. 54-55).

Bertram (4, p. 4) summarizes the duties of the critical care nurse as technologic management of equipment, assessment, client teaching, and more other responsibilities than any other category of personnel.

Stress and the ICU Nurse

The concept of stress as it affects the ICU nurse has been studied by several researchers. Many conclude that
differences in the undergraduate nurse's education affects the way the staff nurse handles the stress of ICU nursing.

Stephen and Baily (34, p. 27) studied AACN members to determine sources of stress and satisfaction in ICU nursing. They found that the aspects which initially attracted nurses to critical care include a low ratio of clients to nurses, the intellectual challenge and opportunities to learn, the excitement and variety of the area, the chance to become proficient in their skills, to be a member of the critical care team, to gain respect and recognition, to learn to handle emergencies, and finally, the chance for an ICU pay differential.

Their reasons for leaving include many of those that also affect non-ICU nurses. Stress, or inability to cope, is fourth among the personal reasons for leaving, while desiring more challenging experiences was the first of the two professional reasons cited (34, pp. 27-28).

Sources of satisfaction for the critical care nurse are many including the low client-staff ratio; the opportunity to give quality care and to see clients improve; the autonomy and decision-making opportunities; and the opportunities for interacting with the client and his family. Nurses also cited as satisfiers the acquisition of knowledge and skills; recognition and respect; teamwork; the challenge; pace; and excitement (34, pp. 28-29).
Stressors identified include problems in interacting with administration, physicians, and other departments; problems in management of the unit; death; emergencies; uncooperative and chronic clients; responsibility; and decision making. Inadequate knowledge and skills is cited by 7.9 per cent of the nurses as a stressor. Problems in this category include inadequate inservice; lack of experience and skill; generalized lack of orientation; and unfamiliar situations. Other ICU stressors are related to problems in the work environment; personal problems and stamina; and the lack of adequate rewards and pay. The authors conclude that "sources of stress and satisfaction may be different aspects of the same reality" (34, pp. 30-32).

Oskins' study of stressors and coping methods of ICU nurses begins with the statement that "the ICU nurse must be able to manage stress in order to [maintain] high standards of nursing care" (28, p. 953). The study is based on the assumption that "poor management of stress results in poor nursing care, job dissatisfaction, and diminished potential for further professional development" (28, p. 953).

This study presents some pertinent data with regard to the nurse's educational background. Of the sample, 41 per cent had never completed a course in death and dying; 61 per cent had never participated in a course dealing with stress; and 64 per cent had not studied crisis intervention
The most stressful situations perceived by the nurses sampled in this study are poor staffing patterns; working with a high percentage of inexperienced or floating personnel; threatened lawsuits; counseling the families of dying clients; the busy and congested environment; and personal crises of the nurses (28, p. 957).

Hoffman (14), in a review of the literature regarding stress and the critical care nurse, cites many stressors and their causes. One possible contributor to the problem, according to Hoffmann, is "incongruity between nursing education and practice along with other sources of tensions" (14, p. 21). In order to cope with stress, the nurse must have a realistic perception of stress and an attitude of expecting a resolution. In addition, energy, knowledge, and skills are necessary in order to take action. The knowledge and skills as well as the perception of the stressor could logically be interpreted as being based on education and training (14, p. 22).

Among the implications of this literature review, Hoffman cites the need for training nurses in stress, stress management, and humanistic techniques. There should be a thorough orientation program for the new nurse, development of educational standards for the critical care nurse, and the support of continuing education for nurses (14, pp. 22-23).

Huckabay and Jagla (16) studied nurse stress factors in the ICU with the goals to identify, verify, and rank
order stressors perceived by ICU nurses on the theory that knowledge about the stressor and control over the situation could be used as coping mechanisms. They are able to group the perceived stressors into four categories that include (a) interpersonal communication problems, (b) knowledge base, (c) environmental stressors such as noise level, physical set-up of the unit, and complex equipment, and (d) client care stressors such as death, heavy physical workload, and meeting the tremendous psychological needs of client and family (16, p. 22). They conclude that the stress level of new graduate nurses is higher in the ICU because they do not have adequate knowledge or mastery of skills. Since many new graduates begin their nursing careers in the ICU, these authors call upon schools of nursing to include both theoretical and clinical experience in critical care in their curricula (16, p. 25). A study of stress and critical care nurses by Anderson and Basteyns (3) produced similar results.

Reichle (32), who studied psychological stress in the ICU, says that the nurse, while feeling stressed in a crisis situation, must carry the responsibility for the welfare of clients and visitors in the unit. She must display sharp observation, good judgment, and excellent technical skills while being able to use a variety of very sophisticated equipment. She works in a cramped setting which is filled
with equipment and people and in which there is a sense of urgency for results. Personal conflict problems may be high because the ICU setting attracts independent and aggressive staff members. The nurse is expected to be simultaneously objective and firm, warm and compassionate. Because of what happens to him, the client may never be able to develop rapport with or display gratitude to the nurses who care for him. The nurse is surrounded by catastrophe and suffering and may identify with the clients and their problems, thus intensifying the nurse's own stress (32, p. 15).

Wagner (38) discusses burnout in the ICU nurse, from both her own experience and her research. She cites many factors that lead to the burnout and subsequent demise of the ICU nurse. Several reasons for the young nurse's initial interest in working in an ICU setting are "the challenge, the primary care setting, the feeling of . . . equality with the medical staff, and [the opportunity for] independent decision making" (38, p. 4). She points out that for optimal functioning, the ICU should have "a large, well-trained permanent core of competent nurses," but what is often the case is a "relatively small core" of these nurses with a "large migrating semi- or untrained staff" (38, p. 4). As a result, care is not optimal and stress is high. Educational opportunities are only one of many suggestions that Wagner makes for reducing the stress and burnout of ICU
nurses. She does not address the nurse's educational background prior to entering the ICU as a staff nurse.

Hudak, Gallo, and Lohr (17) rank-order sixteen components of stressful factors in the critical care unit. Of these, the amount of knowledge needed to work in the unit ranks tenth. The other listed factors are similar to those found in other cited research.

Lewandowski and Kramer (22) made a comparative study of role transformation of special care unit nurses. They observe that the stresses and demands of ICU nursing are different from those encountered in other nursing areas. The study involved a program designed to help new graduate nurses make the role transformation from student to critical care nurse. Since nurses tend to move out of the ICU after some experience, these researchers felt assistance in role transformation would create a more stable ICU nurse.

The researchers report that not only are nurses in ICUs exposed to different situations and stressors than non-ICU nurses, they also have an aura or mystique attached to them which is not attributed to nurses in other areas. The study "found that the type of unit on which a nurse works made little difference in any of the variables tested except for self-actualization" (22, p. 172). The amount of specialization required, however, did affect nurses scores in self esteem, integrative role behavior, and bureaucratic role
behavior. The authors speculate that high bureaucratic role behavior results from the fact that ICU nurses are rewarded for their technical and functional skills rather than for their attention to the client as a whole or his and his family's specific needs. Thus, they learn early to be functional and technical nurses.

Lewandowski and Kramer postulate that new graduates enter critical care nursing so as to prove themselves in what they perceive to be the toughest testing conditions possible. Hence, this leads to the higher self esteem ratings in these nurses at the beginning of the study. Interestingly, though, the non-ICU nurses raised their self-esteem scores the most by the end of the study. Could it be that those who did not begin their careers in the ICU had lower self esteem to begin with and the two groups simply evened out with experience? Or, perhaps, the ICU nurses experienced situations that kept them from feeling comfortable and successful even after nine months of experience; thus, they saw themselves as still in the process of "becoming" (22, p. 177).

Summary

The literature relevant to this study reflects the fact that critical care experience is a controversial issue within the generic baccalaureate curriculum. Curricular planning itself is often not well organized or thought out, partly because no data exists to provide rationale and direction for decisions.
Previous research provides many ideas on which to build this study, including those of a variety of authors and researchers as to why critical care should or should not be a curricular component. They also cite many positive and negative aspects of such an experience.

The review of the literature also provides insight into what is expected of new graduates who begin their careers as critical care nurses, the reasons for that choice, and the typical stresses and problems that they might encounter. This information is important because it aids understanding of the educational needs of the nurse upon graduation and may lead to educational strategies which might fulfill those needs and facilitate the new graduates' transition into critical care nursing, if this is the chosen career.
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CHAPTER III

DATA ANALYSIS METHODS AND PROCEDURES

Introduction

The description of methodology for this study is divided into several sections. These sections include an introduction to and description of the population of the study, procedures used to develop and validate the survey instrument, the data collection process, and the procedures used to analyze the data.

This study is designed to describe the reasons used by generic baccalaureate schools of nursing to decide whether or not to offer actual critical care experience to their students; it also describes how this is being done by the faculties that do so. Finally, the study compares descriptive data to demographic data on the incidence of critical care nursing experience in order to discover if there are differences related to the demographic characteristics.

Population

Currently, the National League for Nursing (1, pp. 338-343) lists 312 accredited generic baccalaureate nursing programs in the United States. Only these schools were invited to participate in the study. Nursing programs not included in the
survey include programs for registered-nurse (R.N.) students only, associate degree (A.D.) nursing programs, and diploma programs in nursing.

Procedures for Developing the Survey Instrument

The survey instrument was developed in a systematic manner. The pool of items for possible inclusion was compiled as a result of a thorough search of the literature (Chapter II) and based on the researcher's extensive experience in teaching critical care nursing.

Once the pool of items was prepared, the potential items were checked for content validity by submitting them, along with a list of the research questions for the study, to five experts who are experienced teachers of critical care nursing at the generic baccalaureate level (see Appendix A). The experts' backgrounds include teaching in the South, Southwest, and Midwest regions of the United States.

The set of items presented to the experts was organized according to the research questions. The judges were asked to assess the relevancy of each item to the research question using a rating scale from valid, invalid, to undecided. Their responses were used to determine the validity of each item for inclusion in the final survey instrument. If three of the five experts agreed that an item was valid, it would be included in the final survey instrument. The experts
agreed that all items were valid. Though they were given
the opportunity to make suggestions for item revision, they
did not do so. Had that been the case, revised items would
have been resubmitted to the experts for re-evaluation.

The list of items which was submitted to the experts
was somewhat long for a final survey instrument. It had
been anticipated that the deletion of non-validated items
would shorten the list. Even though all items were vali-
dated, one was removed on the basis of low priority, and
a few others were combined and shortened. The item which
was removed requested the school's academic calendar; the
items which were combined and shortened were re-evaluated on
the basis of remaining readable, understandable, and credible,
in the interest of making the instrument shorter. An
example: the items, "faculty who are well prepared in
critical care are available" and "faculty members interested
in critical care are available" were combined to read, "our
faculty members are interested in and/or prepared for critical
care." The revised items were then submitted to and approved
by the experts. The questionnaire that was submitted to the
judges comprises Appendix B.

The preliminary survey form was then constructed so as
to have a completion time of approximately thirty minutes;
this completion time was based on the assumption that a
longer form would become tedious and provide less reliable
results due to respondent disinterest. In order to further encourage respondent interest and to make it appear as attractive and easy to complete as possible, the instrument was set up in four-column format on two sides of a single sheet of blue legal sized paper. Respondents were further encouraged to participate by the offer of an abstract of the results on completion of the study. A separate cover letter for program deans and directors was prepared in order to solicit participation of the appropriate faculty member (Appendix C).

The validation experts plus a panel of three randomly selected faculty members were asked to evaluate the final instrument and cover letters for clarity, courtesy, simplicity, universality, and brevity. All were complimentary in their evaluation of both the instrument and the cover letters.

The sections of the survey instrument (Appendix D) are title, cover letter and directions, demographic data, rationale for including critical care nursing experience, possible outcomes of including the experience, negative outcomes of the experience, methodologies used in teaching critical care experience, and reasons that were considered for exclusion of the critical care nursing experience from the curriculum. Each section is objective and as short as possible. If respondents answered "no" to the first item
("is actual critical care experience a part of your generic baccalaureate curriculum"), the only section other than the demographic data that they were asked to complete is the final one that concerns reasons for exclusion of critical care experience from the curriculum.

Data Collection Process

The final survey instrument was administered by mail to one faculty member of each generic baccalaureate nursing program whose dean or director had agreed to participate. This faculty member was selected as the result of a letter to the dean or director of the school that explained the study, solicited participation, and specified criteria for the selection of the key faculty member to complete the instrument (See Appendix C).

A single key faculty member rather than the administrator was asked to complete the instrument for several reasons. Curricular decisions in nursing schools are usually made, at least on a preliminary basis, by faculty rather than by the administration. Also, the teaching faculty members are more closely involved in clinical laboratory experience, and teachers, more so than administrators, often can better address the outcomes of curricular offerings. Information from faculty, therefore, should be more relevant to the actual situation. All questions which were included on the instrument sought data which is readily available to individual nursing faculty members. A single key faculty member
of each school rather than multiple faculty was asked to respond for ease of administration of the survey instrument and for reduction of faculty workload as much as possible. Also, it was assumed that information received from several faculty members of the same school would probably be similar.

The cover letter states criteria for the key faculty member who would complete the instrument. These are familiarity with the decision-making process which led to the decision to include or exclude critical care experience, the choice of methodology if the experience is included, and the faculty perceptions of the results of its inclusion; key faculty members should be willing to speak for the faculty as a whole rather than only for themselves; if the school teaches critical care experience, the chosen respondent should be a teacher of this experience.

In order to acquire the name of the key faculty member for each school, a form was included at the bottom of the cover letter along with a pre-addressed envelope for use in returning the form. All cover letters and subsequent survey forms were coded so as to keep track of the responses and to use later in coding the responses as to the geographic region. Nonrespondent deans and directors were followed up with a second letter (Appendix E). Several deans and directors responded that they were unable to comply with the
request during the summer (when the initial mailing was made), but would do so in the fall; they were followed up in September with a separate letter and survey form (Appendix F).

Once the name of the participating faculty member was received, the survey instrument was sent directly to him or her along with a pre-addressed return envelope. Those who did not return the instrument within three weeks were mailed a second instrument, another return envelope, and a letter encouraging them to complete the instrument (Appendix G). As a result of all of these mailings, a return rate of 68.9 per cent from the population of schools was achieved.

Treatment of Data

The completed survey instruments were sent to the computing center at a large private Texas university where a program had been developed to analyze the descriptive data. The standard Statistical Package for the Social Sciences (SPSS) (2) program was applied for the chi square computations which were necessary to answer research question two. The responses to each item were tabulated and these data are presented in Chapter IV. Finally, the conclusions and recommendations regarding the results of the study and its implications for faculties of generic baccalaureate nursing programs are presented in Chapter V.
Summary

This chapter presents methods and procedures used for the collection of data for this study. The National League for Nursing's list of accredited generic baccalaureate nursing programs provides the population for the study. After extensive research, a preliminary set of survey items was developed which was tested for content validity by submission to a panel of experts along with a set of the research questions for this study. After the items were judged as valid, a survey instrument was developed. This instrument was again submitted to the judges before use in the study. The instrument was administered to the participants in the study and computer analyses were made of the responses. The results of the data analyses are presented in Chapter IV.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

PRESENTATION AND ANALYSES OF DATA

Introduction

The purpose of this chapter is to describe and analyze the findings of this study. Complete data are arranged in such a way as to answer the research questions that are presented in Chapter I and to report the demographic data that were collected.

Analysis of Data

The population for this study is the 312 generic baccalaureate nursing programs that were accredited in the United States at the time the survey was made. A letter of explanation and an invitation to participate in the study were sent to the dean or director of each school. The deans or directors of those schools who participated identified an appropriate faculty member to complete the questionnaire, which was then sent directly to that faculty member. Two mailings resulted in the return of 215 survey instruments for a response rate of 68.9 per cent. Since some respondents failed to answer all items, occasional data are missing from the study results; a "no response" line is included in the statistical tables to cover these data.
Using a specially developed program, a computer was used to analyze and report all data in actual percentages and apply the chi-square test where applicable. These results are used to answer the research questions of the study.

In the interest of brevity, the respondent population of this study—the 215 generic baccalaureate schools of nursing—are hereinafter referred to as the responding GBSNs. Those GBSNs that have an actual critical care curriculum are a subset of the responding GBSNs; these 167 schools that offer a critical care curriculum are hereinafter referred to as CCSNs.

**Demographic Data**

Several variables of demographic data regarding the GBSNs were collected. These data include (a) other types of nursing programs offered by the responding institution in addition to the generic baccalaureate curriculum, (b) the number of graduates per year from the nursing school, (c) the usual clinical student-faculty ratio, (d) the theoretical model that is a base for the curriculum and if the curriculum is integrated (or organized in some other fashion), and (e) the regional location of the school. These data are summarized in Table I.
<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
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<td>Region:*</td>
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<tr>
<td>Northeast</td>
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<td>Midwest</td>
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<td>Mountain</td>
<td>8</td>
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<tr>
<td>Pacific</td>
<td>17</td>
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<tr>
<td>South</td>
<td>62</td>
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<td>Types of Nursing Programs Offered:</td>
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<td>Generic only</td>
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<td>Associate Degree</td>
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<tr>
<td>Separate RN</td>
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<td>Master's</td>
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<td>30.7</td>
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<tr>
<td>51-100</td>
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<td>37.7</td>
</tr>
<tr>
<td>101-200</td>
<td>52</td>
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<tr>
<td>201-300</td>
<td>10</td>
<td>4.7</td>
</tr>
<tr>
<td>300+</td>
<td>4</td>
<td>1.9</td>
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<tr>
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<td>Student-Faculty Ratio:</td>
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</tr>
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<td>0-5:1</td>
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<td>4.7</td>
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<tr>
<td>6-10:1</td>
<td>187</td>
<td>87.0</td>
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<tr>
<td>11-15:1</td>
<td>12</td>
<td>5.6</td>
</tr>
<tr>
<td>Over 15:1</td>
<td>1</td>
<td>0.4</td>
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<tr>
<td>No Response</td>
<td>5</td>
<td>2.3</td>
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<tr>
<td>Total</td>
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<tr>
<td>Theoretical Curricular Model Used:</td>
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<tr>
<td>Stress-Adaptation</td>
<td>29</td>
<td>13.5</td>
</tr>
<tr>
<td>Orem's Self Care Deficit</td>
<td>17</td>
<td>7.9</td>
</tr>
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<td>Roy's Adaptation</td>
<td>16</td>
<td>7.4</td>
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<td>Health-Illness continuum</td>
<td>11</td>
<td>5.1</td>
</tr>
<tr>
<td>Own (school designed)</td>
<td>8</td>
<td>3.7</td>
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<tr>
<td>Nursing Process</td>
<td>8</td>
<td>3.7</td>
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TABLE I—CONTINUED

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<thead>
<tr>
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<tr>
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<td>2.3</td>
</tr>
<tr>
<td>Basic Health Needs</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td>Maslow's Hierarchy of Needs</td>
<td>4</td>
<td>1.9</td>
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<tr>
<td>None</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Man-Health-Society</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Rogers</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Other**</td>
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<td>7.9</td>
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<td>37.2</td>
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<tr>
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Curricular Structure:

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<tr>
<th></th>
<th>N</th>
<th>%</th>
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<tr>
<td>Integrated</td>
<td>139</td>
<td>64.7</td>
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<tr>
<td>Traditional</td>
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<td>17.7</td>
</tr>
<tr>
<td>Other</td>
<td>32</td>
<td>14.9</td>
</tr>
<tr>
<td>No Response</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*States that comprise the regions are listed in Appendix H.

**Other includes one or two each of models not listed in this table: Neuman, energy-coping, high-level wellness, preventive intervention, bio-psycho-social, interpersonal, systems theory, change theory, crisis theory, Chater.

The highest percentage of responding GBSNs are located in the Midwest (32.1%) with GBSNs in the South responding in the second highest frequency (28.8%). The smallest number of responding GBSNs are from the Mountain region (3.7%).

Of the responding GBSNs, the highest percentage (32.1%) also offer a separate program for Registered Nurses. Although 30.7 per cent of the GBSNs offer a Master's Degree in Nursing, only .9 per cent offer the doctorate.

The highest percentage of responding GBSNs graduate between 51 and 100 students per year (37.7%). While 31.2
per cent graduate fewer than 51 nurses, 24.2 per cent graduate from 101 to 200 nurses per year. In regard to the clinical student-faculty ratio, the majority of GBSNs (87%) report that they maintain a ratio of from 6 to 10 students per faculty member.

Of the 14 curricular models suggested on the survey instrument plus those added by respondents under Other, there is no consensus. Although the largest percentage of the schools use the stress-adaptation theoretical curricular model (13.5%), the percentages for the other 13 models are all less than 10 per cent of the responding GBSNs. There is, however, a majority agreement about curricular structure; 64.7 per cent of the responding GBSNs use an integrated curricular structure.

Research Question One

The first research question of this study concerns the incidence of the inclusion of actual critical care nursing experience as part of the generic baccalaureate curriculum in nursing. These data are presented in Table II.

Of the 20.9 per cent of the GBSNs that do not offer a critical care curriculum, only 5.1 per cent plan to offer such a curriculum in the future. The majority of the GBSNs (77.6%) presently offer a critical care curriculum. This subset of the responding population (N=167), which will be
TABLE II

INCIDENCE OF A CRITICAL CARE CURRICULUM WITHIN
THE RESPONDING GENERIC BACCALAUREATE
SCHOOLS OF NURSING (GBSNs)

<table>
<thead>
<tr>
<th>Have Critical Care Curriculum</th>
<th>Do NOT Have Critical Care Curriculum</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>N %</td>
<td>N %</td>
<td>N %</td>
</tr>
<tr>
<td>Present</td>
<td>167 77.6</td>
<td>45 20.9</td>
</tr>
<tr>
<td>Future: Planned</td>
<td>11 5.1</td>
<td></td>
</tr>
<tr>
<td>Not planned</td>
<td>34 15.8</td>
<td></td>
</tr>
</tbody>
</table>

referred to hereinafter as CCSN, is the target population of this study from which the relevant data are gathered.

Research Question Two

The second research question of this study was designed to discover if there are significant differences among the characteristics of the GBSNs that offer critical care experience and those that do not. All items of demographic data were compared with the GBSNs that both do and do not have or plan to offer critical care. These data are presented in Tables VIII through XVII, Appendix I. Only one significant difference was found among the demographic variables. Over 52 per cent of the schools in the northeast region do not offer critical care experience to their students.
Research Question Three

The third research question concerns the reasons for including critical care experience in the generic baccalaureate curriculum. A search of the literature as well as the researcher's experience yielded a pool of possible reasons which might be used by a faculty in support of including actual critical care experiences as part of the generic baccalaureate curriculum. After validation by the judges, this pool of information was refined into items for the survey questionnaire, to each of which the respondents applied a Likert-type scale of responses that includes 5 = very important positive reason, 4 = important positive reason, 3 = not considered or not important, 2 = important negative reason, and 1 = very important negative reason.

Instructions on the instrument encouraged respondents to choose as many reasons (items) as were used by their faculties to support the decision to include actual critical care experience in the curriculum. A complete list of the positive reasons (survey items) is included as Appendix J. The data regarding these rankings are shown in Table III.

The most important positive reasons reported for including actual critical care experience in the nursing curriculum are that critical illness is part of the health-illness continuum, critical care is an integral part of today's nursing, critical care experience facilitates the integration of theory and
## TABLE III
RANKED POSITIVE REASONS FOR INCLUSION OF CRITICAL CARE EXPERIENCE IN THE CURRICULUM OF RESPONDING CCSNs

<table>
<thead>
<tr>
<th>Reason</th>
<th>Rank</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part of health-illness continuum</td>
<td>1</td>
<td>97.0</td>
</tr>
<tr>
<td>Critical care integral in today's nursing</td>
<td>2</td>
<td>96.4</td>
</tr>
<tr>
<td>Experience facilitates integration of theory and practice</td>
<td>3</td>
<td>91.4</td>
</tr>
<tr>
<td>Units are available for student use</td>
<td>4</td>
<td>90.2</td>
</tr>
<tr>
<td>Faculty interested in/prepared for critical care</td>
<td>5</td>
<td>86.1</td>
</tr>
<tr>
<td>Experience improves decision making skills</td>
<td>6</td>
<td>86.0</td>
</tr>
<tr>
<td>Allows student to examine philosophical/ethical views on related issues</td>
<td>7</td>
<td>83.5</td>
</tr>
<tr>
<td>Some behaviors best learned in critical care setting</td>
<td>8</td>
<td>80.0</td>
</tr>
<tr>
<td>Students enjoy/demand critical care experience</td>
<td>9</td>
<td>79.8</td>
</tr>
<tr>
<td>Students work with professional role models</td>
<td>10</td>
<td>78.6</td>
</tr>
<tr>
<td>Experience increases curricular flexibility and relevance</td>
<td>11</td>
<td>78.3</td>
</tr>
<tr>
<td>Experience provides opportunity for professional growth</td>
<td>12</td>
<td>75.0</td>
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<tr>
<td>Experience promotes student self confidence</td>
<td>13</td>
<td>72.4</td>
</tr>
</tbody>
</table>
TABLE III--continued

<table>
<thead>
<tr>
<th>Reason</th>
<th>Rank</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience necessary to keep pace with knowledge</td>
<td>14</td>
<td>69.5</td>
</tr>
<tr>
<td>Critical care demands baccalaureate nurses</td>
<td>15</td>
<td>68.9</td>
</tr>
<tr>
<td>Offering critical care increases curricular innovation</td>
<td>16</td>
<td>60.0</td>
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</tbody>
</table>

*Combined responses for very important positive reason and important positive reason.

practice, critical care units are available; the four highest ranked positive reasons received percentage responses of from 97 to 90 per cent. Lesser ranked positive reasons include faculty are interested in and prepared for critical care, and the experience allows the student to explore his philosophical and ethical views related to critical care issues. One respondent added that "acutely ill clients are available only in the critical care or step-down units."

**Research Question Four**

The fourth research question concerns the reasons for excluding critical care experience in the generic baccalaureate nursing curriculum. All schools, whether or not they include critical care experience in the curriculum, were asked what reasons were considered in the decision to exclude the experience from the curriculum. Several respondents stated
that this option was never addressed because no one ever considered not including critical care experience in the curriculum.

The respondents were asked to rate the negative items listed on the survey instrument using the same Likert-type scale as was used for the positive reasons. A complete list of the negative reasons that were included as survey items is included as Appendix K. The instructions on the instrument encouraged respondents to choose as many reasons (items) as were used by their faculties to support the decision to exclude actual critical care experience from the curriculum. These data are presented in Table IV.

### TABLE IV

**RANKED NEGATIVE REASONS FOR EXCLUSION OF CRITICAL CARE EXPERIENCE FROM THE CURRICULUM OF RESPONDING GBSNs**

<table>
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<th>Reason</th>
<th>Rank</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Student focuses on technology, not individual</td>
<td>1</td>
<td>53.7</td>
</tr>
<tr>
<td>Student focuses on environment, not individual</td>
<td>2</td>
<td>50.0</td>
</tr>
<tr>
<td>Setting too stressful for undergraduates</td>
<td>3</td>
<td>47.8</td>
</tr>
<tr>
<td>Margin of error too small</td>
<td>4.5</td>
<td>44.1</td>
</tr>
<tr>
<td>Student unable to view client as individual</td>
<td>4.5</td>
<td>44.1</td>
</tr>
<tr>
<td>Critical care should be reserved for graduate study</td>
<td>6</td>
<td>39.9</td>
</tr>
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</table>
TABLE IV—continued

<table>
<thead>
<tr>
<th>Reason</th>
<th>Rank</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student/faculty ratio must be too low in critical care</td>
<td>7</td>
<td>39.7</td>
</tr>
<tr>
<td>Critical care not essential curricular content</td>
<td>8</td>
<td>39.6</td>
</tr>
<tr>
<td>Critical care concepts too complex for undergraduates</td>
<td>9</td>
<td>39.0</td>
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<tr>
<td>Interested/prepared faculty unavailable</td>
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<td>37.6</td>
</tr>
<tr>
<td>Baccalaureate programs should prepare generalists</td>
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<td>37.0</td>
</tr>
<tr>
<td>Students interfere with work of unit staff</td>
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<td>33.8</td>
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<tr>
<td>Supervising students in units too stressful for faculty</td>
<td>13</td>
<td>33.2</td>
</tr>
<tr>
<td>Essential concepts learned better in other settings</td>
<td>14</td>
<td>30.4</td>
</tr>
<tr>
<td>Critical care only a series of technical tasks</td>
<td>15</td>
<td>27.3</td>
</tr>
<tr>
<td>Critical care units unavailable</td>
<td>16</td>
<td>17.7</td>
</tr>
</tbody>
</table>

*Combined responses for very important negative reason and important negative reason.

The most important reasons chosen for exclusion of actual critical care experience from the nursing curriculum are the focus on technology to the exclusion of the individual client, the focus on the environment to the exclusion of the individual, the critical care setting is too stressful for undergraduate learning, the student is unable to view the
client as an individual, and the margin of error in critical care is too small to allow student care; the five highest ranked negative reasons received percentage responses of from 54 to 44 per cent—notably lower than those for positive reasons. No additional negative reasons were added by respondents.

Research Question Five

The fifth research question concerns the major characteristics and methodologies used to teach critical care experience within the generic baccalaureate nursing curriculum. In order to investigate the implementation of critical care in the generic baccalaureate nursing curriculum, the CCSN respondents (N = 167) were asked a number of questions regarding techniques and methodologies. The results of responses to these survey items are reported in Table V.

Regarding the techniques and methodologies used by the CCSNs to teach critical care nursing, the majority of the CCSNs (67.7%) report that faculty members are responsible for students during the critical care experience. Several options are used by the CCSNs in scheduling critical care experience in the curriculum; the largest percentage of the CCSNs use the rotation system (38.3%) for scheduling critical care, and the second largest percentage of CCSNs use the block (29.3%) scheduling system.
**TABLE V**

TECHNIQUES AND METHODOLOGIES OF TEACHING CRITICAL CARE NURSING AS REPORTED BY CCSNs

<table>
<thead>
<tr>
<th>Variable</th>
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<td>Responsibility for students during critical care experience:</td>
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<tr>
<td>Faculty</td>
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<tr>
<td>Other</td>
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<td>6.6</td>
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<td>No response</td>
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<td>5.4</td>
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<tr>
<td></td>
<td>167</td>
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<td>Methods of including critical care in the curriculum:</td>
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<td>Block</td>
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<tr>
<td>Rotation</td>
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<tr>
<td>Optional</td>
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<td>4.8</td>
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<tr>
<td></td>
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<td>3.0</td>
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<td>6-10</td>
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<td>26-30</td>
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<tr>
<td>Over 30</td>
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<td>7.8</td>
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<tr>
<td></td>
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<td>Placement of critical care experience:</td>
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<td>Other</td>
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<td>No response</td>
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<td>5.4</td>
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<td></td>
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### TABLE V—continued

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<tr>
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<td><strong>Characteristics of faculty who teach critical care:</strong></td>
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<td></td>
</tr>
<tr>
<td>Critical care expert in practice</td>
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<td>7.2</td>
</tr>
<tr>
<td>Expert in critical care theory</td>
<td>12</td>
<td>7.2</td>
</tr>
<tr>
<td>Expert in critical care theory &amp; practice</td>
<td>104</td>
<td>62.3</td>
</tr>
<tr>
<td>Generalist</td>
<td>29</td>
<td>17.4</td>
</tr>
<tr>
<td>Nonrelated specialist</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>No response</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Academic preparation of faculty who teach critical care:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.S.N.</td>
<td>5</td>
<td>3.0</td>
</tr>
<tr>
<td>M.S.N.</td>
<td>152</td>
<td>91.0</td>
</tr>
<tr>
<td>Doctorate</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>No response</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Academic Rank of faculty who teach critical care:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Instructor</td>
<td>35</td>
<td>21.0</td>
</tr>
<tr>
<td>Asst. Prof.</td>
<td>106</td>
<td>63.5</td>
</tr>
<tr>
<td>Assoc. Prof.</td>
<td>13</td>
<td>7.8</td>
</tr>
<tr>
<td>Professor</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>Adjunct Faculty</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>No response</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Student-faculty Ratio in critical care experience:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5:1</td>
<td>62</td>
<td>37.1</td>
</tr>
<tr>
<td>6-10:1</td>
<td>94</td>
<td>56.3</td>
</tr>
<tr>
<td>11-15:1</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>No response</td>
<td>10</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>Student activities in critical care experience:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical only</td>
<td>19</td>
<td>11.4</td>
</tr>
<tr>
<td>Total client care</td>
<td>137</td>
<td>82.0</td>
</tr>
<tr>
<td>Few concepts only</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>No response</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>167</td>
<td>100.0</td>
</tr>
</tbody>
</table>
In regard to the number of contact hours that are scheduled for CCSNs for the critical care experience, the largest percentage require 30 hours or more of contact experience (42.5%); the next largest percentages (12.5%) each require from 10 to 15 hours and from 16 to 20 contact hours. The majority of the CCSNs include the critical care experience in the senior year (72.5%).

The majority of the faculty members who teach the critical care experience are experts in critical care theory and practice (62.3%). The majority of these critical care faculty members have as their highest degree a Master's of Science in Nursing (91%), and 63.5 per cent have reached the academic rank of assistant professor.

The majority of the CCSNs report that the student-faculty ratio in the critical care area is 6 to 10 students to 1 faculty member (56.3%); 37.1 per cent of the CCSNs report a ratio of 5 or fewer students to 1 faculty member. Concerning
the activities assigned to students during their critical care contact hours, 82 per cent of the CCSNs report that students have the experience of total care of clients; only a few CCSNs limit students' experience to technical aspects only (11.4%). In regard to the responsibilities delegated to students for clients during the critical care experience, the majority of the CCSNs report that students collaborate with the nursing staff in caring for clients (85%). Only 4.8 per cent of the CCSNs allow their students full responsibility for critical care clients.

**Research Question Six**

The sixth research question concerns what outcomes are perceived by CCSN faculty as positive and negative as a result of the inclusion of the critical care nursing experience in the generic baccalaureate nursing curriculum. To explore this question, the CCSNs responded to a variety of items on the survey instrument from which to choose outcomes that they view as being both positive and negative results of the experience.

The survey instrument items from which the responding CCSNs choose positive and negative reasons are included as Appendices L and M. Respondents were encouraged to choose as many outcomes as they perceive or had been expressed by their faculties, ranking them according to the same Likert-type scale used previously. These data are presented in Tables VI and VII.
### TABLE VI

**POSITIVE OUTCOMES OF INCLUSION OF CRITICAL CARE EXPERIENCE AS REPORTED BY CCSNs**

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Rank</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitates integration of theory and practice</td>
<td>1</td>
<td>86.1</td>
</tr>
<tr>
<td>Opportunity to examine philosophical/ethical issues</td>
<td>2</td>
<td>83.2</td>
</tr>
<tr>
<td>Improves decision making skills</td>
<td>3</td>
<td>81.4</td>
</tr>
<tr>
<td>Opportunity to work with expert role models</td>
<td>4</td>
<td>79.9</td>
</tr>
<tr>
<td>Promotes professional growth</td>
<td>5</td>
<td>77.5</td>
</tr>
<tr>
<td>Some behaviors best learned in critical care setting</td>
<td>6</td>
<td>76.5</td>
</tr>
<tr>
<td>Promotes student self confidence</td>
<td>7</td>
<td>75.8</td>
</tr>
<tr>
<td>Helps keep pace with technical and specialty knowledge</td>
<td>8</td>
<td>74.8</td>
</tr>
<tr>
<td>Experience allows student self actualization</td>
<td>9</td>
<td>57.9</td>
</tr>
<tr>
<td>Allows for development of gifted students</td>
<td>10</td>
<td>54.1</td>
</tr>
<tr>
<td>Experience reduces reality shock</td>
<td>11</td>
<td>53.4</td>
</tr>
</tbody>
</table>

*Combined responses for important positive result and very important positive result.*

The highest ranked positive outcome of the critical care experience is that the experience facilitates the integration of nursing theory and practice; the five highest ranked positive outcomes received percentage responses of from 86 to 78 per cent.
Other highly ranked positive outcomes include the fact that the experience provides students with the opportunity to examine their philosophical and ethical views on issues related to critical care, improves their decision-making skills, provides students with the opportunity to work with expert role models, promotes professional growth, and provides students with the opportunity to learn certain behaviors that are more likely to be found in the critical care area.

TABLE VII
NEGATIVE OUTCOMES OF INCLUSION OF CRITICAL CARE EXPERIENCE AS REPORTED BY CCSNs

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Rank</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on technology rather than individual</td>
<td>1</td>
<td>61.8</td>
</tr>
<tr>
<td>Focus on environment rather than individual</td>
<td>2</td>
<td>57.6</td>
</tr>
<tr>
<td>Environment too stressful for student</td>
<td>3</td>
<td>55.7</td>
</tr>
<tr>
<td>Student is unable to view client as individual</td>
<td>4</td>
<td>47.0</td>
</tr>
<tr>
<td>Experience is too stressful for faculty</td>
<td>5</td>
<td>39.3</td>
</tr>
</tbody>
</table>

*Combined responses for important negative result and very important negative result.

The highest ranked negative outcomes for inclusion of the critical care experience in the nursing curriculum are notably less strong than the positive reasons; the five
highest ranked negative outcomes received percentage responses of from 62 to 39 per cent. The CCSN respondents report that the most important negative reasons revolve around the focus in critical care units on technology and the environment instead of on the client.

Summary of Data Findings

Following is a summary of the important data findings of this study.

1. Of the responding 215 generic baccalaureate schools of nursing (GBSNs), the majority (60.9%) of the schools are located in the Midwest (32.1%) and Southern (28.8%) regions of the United States. In addition to the generic baccalaureate nursing programs, the majority (68.9%) of these GBSNs graduate 100 or fewer baccalaureate degree nurses per year. The majority (87%) of the GBSNs report a student-faculty ratio of from 6 to 10 students per faculty member. Although there is no consensus regarding the theoretical curricular model used by the GBSNs, the majority (64.7%) use an integrated curricular structure.

2. Of the responding 215 generic baccalaureate schools of nursing (GBSNs), 176 (77.6%) offer a critical care curriculum. Eleven schools (5.1%) plan to include critical care in their curricula in the future.

3. Only one significant difference was found among the GBSNs that do and do not offer the critical care experience and the demographic variables; over 52 per cent of the schools in the northeast region do not offer critical care to their students.
4. The two highest ranked positive reasons for offering the critical care experience are that it is part of the health-illness continuum and critical care is an integral part of nursing today.

5. The two highest ranked negative reasons for excluding the critical care experience are that students focus on the technology, not on the client, and students focus on the environment, not on the client.

6. In regard to the techniques and methodologies used by the GBSNs that teach the critical care experience (hereinafter CCSNs, N = 167), the following data were recorded.

   a. In the majority of the CCSNs (67.7%), faculty members are responsible for students during critical care contact hours;

   b. Critical care is most often scheduled by the CCSNs on a rotation system (38.3%) or on the block scheduling system (28.3%);

   c. Over 30 hours of critical care contact experience is scheduled by 42.5 per cent of the CCSNs;

   d. The critical care experience is scheduled during the senior year by 72.5 per cent of the CCSNs.

   e. The faculty members who teach the critical care experience are chosen because they are experts in critical care theory and practice (62.3%); the majority of these CCSN faculty have a Master of Science in Nursing (91%) and have reached the academic rank of assistant professor (63.5%).
f. The student-faculty ratio in the critical care area is 6 to 10 students to 1 faculty member, according to the majority (56.3%) of CCSNs.

g. The activities of students during their critical care contact hours include the total care (82%) of clients; in regard to responsibilities assigned to students during these contact hours, however, in 85 per cent of the CCSNs, the responsibilities are shared with the nursing staff.

7. The two highest ranked positive outcomes of offering the critical care experience in the curriculum are that it facilitates integration of theory and practice and offers the opportunity for students to examine philosophical and ethical issues.

8. The two highest ranked negative outcomes of offering the critical care experience in the curriculum are that there is a focus on technology instead of upon the client and that there is a focus on the environment instead of upon the client.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

Summary

The problem with which this study is concerned is an investigation of the inclusion of actual critical care experience in the generic baccalaureate curriculums of nursing schools in the United States. A survey instrument was designed to answer six research questions (see Chapter I) as well as to elicit selected demographic data. After the content and format of the survey instrument were evaluated by a panel of experts, the instruments were sent to the 215 respondents who are faculty members selected by the deans and directors of generic baccalaureate schools of nursing. Of these schools, 167 offer the critical care experience.

All data from the returned survey instruments were computed in frequency percentages. Chi square analysis was used to answer research question II.

Summary of Data Findings

Following is a summary of the important data findings of this study.

1. Of the responding 215 generic baccalaureate schools of nursing (GBSNs), the majority (60.9%) of the schools are
located in the Midwest (32.1%) and Southern (28.8%) regions of the United States. In addition to the generic baccalaureate nursing degree, 73 per cent of the schools offer various other nursing programs. The majority (68.9%) of these GBSNs graduate 100 or fewer baccalaureate degree nurses per year. The majority (87%) of the GBSNs report a student-faculty ratio of from 6 to 10 students per faculty member. Although there is no consensus regarding the theoretical curricular model used by the GBSNs, the majority (64.7%) use an integrated curricular structure.

2. Of the responding 215 generic baccalaureate schools of nursing (GBSNs), 167 (77.6%) offer a critical care curriculum. Eleven schools (5.1%) plan to include critical care in their curriculums in the future.

3. Only one significant difference was found among the GBSNs that do and do not offer the critical care experience and the demographic variables; over 52 per cent of the schools in the Northeast region do not offer critical care to their students.

4. The two highest ranked positive reasons for offering the critical care experience are that it is part of the health-illness continuum and critical care is an integral part of nursing today.

5. The two highest ranked negative reasons for excluding the critical care experience are that students focus on the technology, not on the client, and students focus on the environment, not on the client.
6. In regard to the techniques and methodologies used by the GBSNs that teach the critical care experience (hereafter CCSNs, N = 167), the following data were recorded.

   a. In the majority of the CCSNs (67.7%), faculty members are responsible for students during critical care contact hours;

   b. Critical care is most often scheduled by the CCSNs on a rotation system (38.3%) or on the block scheduling system (28.3%);

   c. Over 30 hours of critical care contact experience is scheduled by 42.5 per cent of the CCSNs;

   d. The critical care experience is scheduled during the senior year by 72.5 per cent of the CCSNs.

   e. The faculty members who teach the critical care experience are chosen because they are experts in critical care theory and practice (62.3%); the majority of these CCSN faculty have a Master of Science in Nursing (91%) and have reached the academic rank of assistant professor (63.5%).

   f. The student-faculty ratio in the critical care area is 6 to 10 students to 1 faculty member, according to the majority (56.3%) of CCSNs.

   g. The activities of students during their critical care contact hours include the total care (82%) of clients; in regard to responsibilities assigned to students during these contact hours, however, in 85 per cent of the CCSNs, the responsibilities are shared with the nursing staff.
7. The two highest ranked positive outcomes of offering the critical care experience in the curriculum are that it facilitates integration of theory and practice and offers the opportunity for students to examine philosophical and ethical issues.

8. The two highest ranked negative outcomes of offering the critical care experience in the curriculum are that there is a focus on technology instead of upon the client and that there is a focus on the environment instead of upon the client.

**Discussion of Data Findings**

Some notable similarities and differences should be pointed out between the findings of this study and findings reported in the literature. A discussion follows.

Quiring and Gray (5, pp. 7-8) found that the choice of curriculum content reflects the interests of faculty members. This is obviously true for the respondents to this study; in both instances regarding positive or negative reasons for and outcomes of teaching critical care, the enthusiastic positive replies of the respondents indicate their commitment to and interest in the inclusion of critical care in a nursing curriculum.

Among the negative reasons for not including the critical care experience in nursing school curriculums are that the margin for error is too small in critical care
nursing and that critical care nursing is too stressful an experience for undergraduates (3, p. 15). Although it is certainly true that the margin for error is small for nurses on a critical care unit, the CCSN respondents to this study appear to feel confident that the supervision for faculty and staff is more than adequate since they do not perceive this as an important reason for exclusion or as a negative outcome. There is, however, some degree of agreement that the environment of the critical care unit is too stressful for students; this is the third-ranked negative outcome of teaching the critical care experience as perceived by CCSNs.

The American Association of Critical Care Nurses (1, p. 193) reports that the recommended student-faculty ratio for critical care contact hours is four students to one faculty member. This study, however, found that the majority (56%) of the 167 responding CCSNs use a ratio of between six to ten students to each faculty member. Inflation could account for this discrepancy as could the fact that all schools of nursing are trying to control expenses in the face of rising attrition rates.

Although the AACN (1, p. 193) recommends that schools of nursing include eighty contact hours of critical care experience, the results of this study indicate that thirty or more hours is the norm. It is possible, of course, that
the "or more" includes a number of schools that schedule as much as eighty contact hours in this area.

DeVisser (2, p. 27) believes that the critical care student nurse must learn to deal with the ethical issues that arise from time to time in this unit with clients and their families. The responses to this study indicate that the second highest ranking positive outcome for including the critical care experience is that students have the opportunity to examine the philosophical and ethical issues during the course of the critical care contact hours.

DeVisser (2, p. 27) also believes that one negative aspect of the critical care experience for undergraduate students is that they find it difficult to see the client as a person because of the pervasive technology of the unit. The CCSN respondents to this study agree that this is a negative outcome; it is in fact, the highest ranking perceived negative outcome of the critical care experience.

Student nurses may be somewhat less than valuable additions to a critical care unit because, according to Joint Commission on Accreditation of Hospitals (4, p. 182-183), critical care nursing demands knowledge and skill on the part of the nurses working on the unit. The CCSN respondents to this study, however, feel very strongly that the critical care experience gives student nurses the opportunity to apply theory to practice; this reason is the highest ranking perceived positive
outcome of including the critical care experience in the nursing curriculum.

The data from this study is important in that it shows that critical care is considered as an important curricular component by many generic baccalaureate nursing faculties in the United States. This information can now be utilized by collegiate nursing faculties to make curricular decisions regarding critical care nursing. Before these data were available, faculties had no basis in fact to guide curricular decisions about the critical care experience.

Profile of the Generic Baccalaureate School of Nursing that Offers the Critical Care Experience

The major findings of this study may be used to create a profile of the typical generic baccalaureate program in nursing with regard to the inclusion of critical care nursing experience.

The school is located in a midwestern state and graduates between 51 to 100 nursing students yearly. The school offers a separate baccalaureate program for registered nurse students in addition to the generic program and it may offer a master's program as well. The nursing curriculum is possibly based on an adaptation model and is taught through an integrated structure.

This typical school offers critical care nursing to all of its students as a portion of a rotation that also
includes other experiences. Senior nursing students in this school will experience at least thirty contact hours in the critical care unit, during which time they will participate in all aspects of client care and share collaborative responsibility for the client with staff nurses. A faculty member who is expert in critical care theory and practice is responsible for the student during the experience. The student-faculty ratio for this experience is one faculty member for six to ten students, which is no different from the ratio for other nursing laboratory experiences.

This typical school's nursing faculty believes that the important reasons for offering critical care experience to its students are that critical illness is part of the health-illness continuum; and it offers students not only the opportunity to integrate theory and practice but also to explore philosophical and ethical issues related to critical care. Critical care is considered to be an integral part of nursing today. Both critical care facilities and interested, prepared faculty are available for this experience. If the typical school had considered reasons for not including the experience, it would have objected on the grounds that students focus on technology and environment instead of the client and that the unit is too stressful for undergraduates.

The typical nursing school faculty believes that the positive outcomes of the critical care experience are that
students are able to work closely with expert role models, to improve their decision-making skills, and to grow as professionals. They have the opportunity to integrate theory and practice and to examine their philosophical and ethical views regarding critical care issues. The faculty also believes that some nursing behaviors are best learned in the critical care area. However, the typical school acknowledges that the stressful environment is a negative outcome of the critical care experience. Other negative outcomes include the focus on technology and environment rather than on the client as a person.

Conclusions

As a result of the data findings of this study, the following conclusions appear to be warranted.

1. The generic baccalaureate nursing schools that do not have a critical care curriculum appear to be remarkably concerned with student attitude in that they believe that the critical care experience causes students to focus on both technology and the environment, not on the client; in most instances, it is primarily the way in which a subject area is presented and taught, not the appurtenances or environment of the subject, that affect attitude. Since it is acknowledged that faculty interests affect course offerings and programs, the lack of faculty who are trained and
experienced in critical care could also affect the attitude of the nursing faculty as a whole toward such a curriculum.

2. Critical care nursing is, relatively speaking, one of the newer specialty areas; this could also be one reason why such a curriculum is not universally accepted. It is notable that most critical care faculty are assistant professors, who are among the younger members of a faculty; this could lead to the conclusion that critical care is one of the newer areas that may not yet be accepted in the older conventional schools of nursing.

3. Faculty members who teach critical care seem to be well aware of the responsibilities of taking students into a critical care unit. Although students may have total care activities with clients, they appear to be closely supervised by faculty and staff.

4. The fact that over 37 per cent of the respondents from the generic baccalaureate schools of nursing did not answer the question about type of theoretical curricular model used could lead to the conclusion that they do not know if their schools have a model, do not know the name of the model, or that the schools do not have a model. The wide diversity among theoretical models used by nursing schools certainly must lead to problems among transfer and graduate students.
Recommendations for Future Research

Based on this study of actual critical care experience in the generic baccalaureate curriculum in nursing, the following recommendations for further study are made:

1. It is recommended that the impact of the presence of the student nurse on the critical care unit be investigated.

2. It is recommended that a comparison study be made of the differences resulting from initial critical care educational experiences being offered at the undergraduate level versus the effect of having no such undergraduate experiences.

3. It is recommended that an investigation be made of the differences between critical care nurses who did and did not have actual critical care experience in their basic educational experiences regarding variables that include longevity on the job.

4. Ways to maximize learning and minimize stress for undergraduates in the critical care area should be investigated.

5. Ways to build on the undergraduate experience in the orientation of the new graduate to critical care nursing should be investigated.

6. The findings of this study should be compared with findings of similar studies involving nursing students, nursing graduates, and consumers (both agencies and individuals).
7. Similar studies of other curricular components should be conducted.

8. Systematic curricular decision-making models in nursing should be investigated and developed.


5. Quiring, Julia D., and George T. Gray, "Is Baccalaureate Education Based on a Patchwork Curriculum?," *Nursing Outlook*, 27 (November, 1979), 708-713.
APPENDIX A
APPENDIX A

Panel of Experts

1. Elizabeth Farren, Assistant Professor, Baylor University School of Nursing, Dallas, Texas.

2. Melissa Spurr, Cardiovascular Clinical Specialist, Methodist Hospitals of Dallas, Formerly Assistant Professor, University of Alabama School of Nursing, Birmingham.

3. Cheryl Stewart, Assistant Professor, Baylor University School of Nursing, Dallas, Texas.

4. Cheryl Tom-Nelson, Medical Clinical Specialist, Methodist Hospitals of Dallas, Formerly Assistant Professor, University of Illinois School of Nursing, Chicago.

5. Elizabeth Wise, Assistant Professor, Baylor University School of Nursing, Dallas, Texas.
APPENDIX B

Content Validity

The following materials were submitted to three experts:

I. Statement of the purpose of the study;
II. Directions for scoring and commenting on items;
III. Sample items grouped according to research questions.

Directions:

In keeping with the purpose of this study, faculty respondents from accredited baccalaureate generic nursing programs will be asked to complete a questionnaire which includes demographic data, data on methodologies of teaching critical care experience, and data on decision making regarding that experience. Your responses on this form will help to choose the questions to be included in the final survey form. It is important to note that, for the purpose of this study, critical care experience is defined as the care of an acutely ill client of any age within the setting of a unit which has been especially set aside for the care of such clients.

Beside each question, please rate it with reference to its validity for answering the stated research question. A space is also provided to make comments which might make the question more clear. The rating scale to be used is:
Appendix B--continued

1. Valid;
2. Undecided;
3. Invalid.

Research question #1: What is the incidence of critical care experience being included as part of the generic baccalaureate curriculum in nursing?

Items:
Rating: Comments

___ Is actual critical care nursing experience a component of your generic baccalaureate nursing curriculum?

Research question #2: Are there differences between the characteristics of schools which offer critical care experience and those which do not?

Rating: Comments

___ Which item most nearly describes your academic calendar?
   a. Semester
   b. Quarter
   c. Trimester
   d. Other (specify)

___ Check all that apply: Which types of nursing programs does your institution offer in addition to the generic baccalaureate nursing degree?
   a. Associate degree in nursing
   b. Separate articulation program for R.N.'s
   c. Masters and/or Post-masters in nursing
Appendix B—continued

<table>
<thead>
<tr>
<th>Rating</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>______</td>
<td>______</td>
</tr>
</tbody>
</table>

Which most nearly describes the enrollment of your generic baccalaureate program per graduating class?

| a. 0-100 |
| b. 101-200 |
| c. 201-300 |
| d. Over 300 |

Do the statistics in the previous question reflect

| a. One graduating class per year |
| b. More than one graduating class per year |
| c. More than one campus |
| d. Both b and c above |
| e. Both a and c above |

What is your usual student/faculty ratio for clinical courses? One faculty member to ___ students.

| a. 0-5 |
| b. 6-10 |
| c. 11-15 |
| d. 16-20 |
| e. Over 20 |

Specify the curricular model that is the base for your program. ______
Appendix B--continued

Rating: 

___ Is your curriculum
a. Integrated
b. Traditional medical model or block
c. Other (specify ____________________________)

Research Question #3: What are common rationales for including critical care nursing experience in the generic baccalaureate curriculum in nursing?

Rating: 

___ Critical care units are available for use in student experiences.
___ Faculty members interested in critical care are available.
___ Faculty who are well prepared in critical care are available.
___ Critical care experience will increase curricular flexibility.
___ Critical care is an integral part of today's nursing.
___ Students enjoy/demand critical care experience.
___ Such offerings increase curricular relevance.
___ Such offerings allow us to offer more specialty content.
___ Such offerings allow more innovation in the curriculum.
___ Such experience introduces the student to critical care nursing and facilitates interest in it as a career.
Such experience promotes future understanding and communication between critical care nurses and nurses in other settings.

Consumers and hospital agencies demand the inclusion of critical care experience in the curriculum.

The type of care given in critical care units demands baccalaureate prepared nurses.

Critical illness is part of the health-illness continuum and therefore should be included in the curriculum.

Research Question #6: (These questions relate to both research questions #3 and #6). What are seen by faculty as positive and negative outcomes of the inclusion of critical care nursing experiences in the generic baccalaureate nursing curriculum?

Such offerings allow for the development of gifted students.

Such offerings allow for student self actualization.

Critical care experience allows students to work closely with professional role models.

Critical care experience facilitates integration of theory and practice.

To keep up with the current proliferation of technical and specialty knowledge.
Appendix B—continued

Rating: Comments

_____ Some behaviors can best be learned in critical care settings.

_____ Critical care experience provides opportunity for professional growth.

_____ Such experience reduces reality shock.

_____ Such experience improves decision making skills.

Rating: Comments

_____ Such experience allows the student to examine his own views on philosophical and ethical issues related to critical care.

_____ Such experience promotes self confidence in the student.

Research question #4: What are common rationales for not including critical care experience in the generic baccalaureate nursing curriculum?

Rating: Comments

_____ Baccalaureate nursing programs should prepare generalists rather than specialists.

_____ Essential concepts can be learned better via experiences in settings other than critical care.

_____ Critical care units are unavailable for students.

_____ Critical care experience is not essential content.

_____ Critical care concepts are too complex for the undergraduate student.
Appendix B—continued
Rating: Comments

_____ Critical care experience should be reserved for graduate level education.

_____ Students would interfere with the work of the critical care unit staff.

_____ Interested or prepared faculty are unavailable.

_____ Supervising students in critical care areas is too stressful for faculty.

_____ The margin of error in critical care is too small to allow students in the unit.

_____ The student-faculty ratio in critical care must be too low to be cost effective.

_____ Critical care is only a series of repetitive, technical tasks.

These items relate to both research questions #4 and #6, which have been previously stated.

Rating: Comments

_____ The critical care setting is too stressful for undergraduate learning.

_____ In the critical care setting, the student is unable to view the client as an individual.

_____ In the critical care setting, the student focuses on the environment rather than the individual.

_____ In the critical care setting, the student focuses on technology to the exclusion of individuality and nursing process.
Research question #5: What are the major characteristics and methodologies of teaching critical care experiences in the generic baccalaureate curriculum in nursing?

Rating: Comments

Who is primarily responsible for the student in the critical care laboratory experiences?
- Faculty
- Unit Staff
- Other (specify)

Do you include critical care nursing experience in your curriculum as: (Check all that apply)
- Elective
- Block of experience in curriculum (excluding elective) for all students
- Incorporated in a rotation that also includes experiences in other areas.
- Students may choose the experience if they desire it as part of the basic curriculum, but are not required to do so.

If you chose option "d" above, approximately what percentage of your students choose an experience in critical care?
- 0-20%
- 21-40%
- 41-60%
- 61-80%
- 81-100%
If you chose option "d" in the question prior to the one immediately preceding this one, is there a limit to the number of students who may elect a basic experience in critical care nursing?

a. Yes
b. No

If you chose "yes" in the previous question, what is the approximate limit of students who have access to a critical care experience?

a. 1-20%
b. 21-40%
c. 41-60%
d. 61-80%
e. Over 80%

Are your students' experiences in critical care nursing limited to the senior year?

a. Yes
b. No

Which most nearly describes the characteristics of the majority of faculty who are currently teaching critical care laboratory experiences?

a. Expert in critical care practice
b. Expert in critical care theory
c. Both of the above
d. Generalist in practice and theory
Which statement most accurately describes the educational preparation of the majority of faculty who teach critical care nursing labs?

- BSN
- MSN or post-masters education
- Doctorate

Which most nearly describes the academic rank of your faculty who teach critical care labs?

- Lecturer
- Instructor
- Assistant Professor
- Associate Professor
- Professor
- Adjunct faculty

What is your usual student/faculty ratio in critical care lab experiences? One faculty to ___ students.

- 0-5
- 6-10
- 11-15
- Over 15

When in critical care lab experience, is the student

- Totally responsible for the client
- Working collaboratively with the staff nurse
- Limited to basic care while the staff nurse provides complex care
Rating: 

d. Not responsible for any aspect of client care 

e. Other (specify) ________________________________

___Is the focus of the student's activity in critical care labs (check all which apply) 

a. Technical 

b. Total patient care, including nursing process 

c. Limited to a focus on a few concepts 

d. Other (specify)
Dear Dean or Director,

As part of a doctoral program, I am conducting a research study which proposes to describe the current status of actual critical care nursing experience as part of the generic baccalaureate nursing curriculum. Your school's participation in this study will make a valuable contribution to nursing education's body of knowledge regarding this curricular issue. The results of the study should prove valuable to all of us as nursing faculty who are constantly facing such curricular decisions. In order to make this study as meaningful as possible, I need your participation whether or not your school includes actual critical care nursing experience in your curriculum.

The study will be conducted as a single survey instrument to be completed by one representative member of your faculty. Even though summer is a difficult time to secure faculty participation, I will appreciate your effort to secure this participation. The faculty member who is selected to complete the form should meet certain criteria. She should be able to do it this summer and willing to complete it in a way that reflects the views of your entire faculty. The faculty member should be someone who is familiar with the rationales which were considered at the time the decision of whether to include critical care experiences in your curriculum was made. She should also be familiar with the strategies and methodologies which are being employed if you are teaching critical care experience and the positive and negative outcomes of this experience as perceived by your faculty.

Please place the name and home address of the participating faculty member on the form below and return it in the enclosed return addressed envelope. The survey instrument will be sent directly to that faculty member for completion within two weeks after receipt. Confidentiality will be maintained in the study.

Your participation in this study is greatly appreciated. Should you wish an abstract of the results, check the line on the form below.

Sincerely,

Carol A. Stephenson
The participating faculty member from my school is:

Name

Street address

City, State, Zip

School code # Administrator wishes abstract ___
APPENDIX D

CRITICAL CARE EXPERIENCE IN THE GENERIC BACCALAUREATE NURSING CURRICULUM

Dear Faculty Member,

I am conducting the above named study as part of a doctoral program. Your name has been supplied by your administrator as someone who is willing to participate. I appreciate your willingness to give the time necessary to complete this survey form. As a fellow faculty member, I can appreciate how busy you are.

The purpose of this study is to describe decision making strategies and teaching methodologies which are currently used in the teaching of critical care experience in the generic baccalaureate curriculum. Your participation can help this study to be a valuable contribution to faculties as they make future curricular decisions.

The completion of the survey form will be regarded as evidence of your agreement to participate in the study. Confidentiality will be maintained. Please respond to the questions as you believe the thinking of your faculty to be. Do not call them or discuss the items, just use your judgment, experience, and knowledge of the issue within your faculty as you answer the questions.

The key definition for this study is:

Critical care nursing: the care of an acutely ill client of any age within the setting of a hospital unit which has been especially set aside for the care of such clients.

Please return the form in the enclosed envelope within two weeks. If you wish a summary of the data obtained in the study, check the appropriate blank on this form.

Thank you for participating.

Sincerely,

Carol A. Stephenson
1853 Lemonwood Circle
Mesquite, Tx. 75149

School Code ________
I wish an abstract ___
Appendix D—continued

Directions:

If your school currently teaches actual critical care experience within the generic curriculum, answer all items on this form.

If your school is in a new curriculum which plans to include critical care experience but which has not yet implemented it, answer the items in part A, B, C, and F.

If your school does not include actual critical care experience, answer only parts A and F.

Any written comments which you wish to include will be appreciated.

PART A

To be completed by all participants.

1. Is actual critical care nursing experience part of your generic baccalaureate curriculum?
   a. Yes
   b. No

2. Is yours a new curriculum in which critical care experience is planned, but has not yet been implemented?
   a. Yes
   b. No

3. Circle all that apply: Which types of nursing programs does your institution offer in addition to the generic baccalaureate nursing degree?
   a. Associate degree (nursing)
   b. Separate program for R.N.'s
   c. Masters or post-masters in nursing
   d. Doctoral degree (nursing)
   e. Generic program only

4. Which most nearly describes the number of graduates of your program per calendar year?
   a. 0-50
   b. 51-100
   c. 101-200
   d. 201-300
   e. Over 300

5. What is your usual student/faculty ratio for clinical courses? One faculty to ___ students.
   a. 0-5
   b. 6-10
   c. 11-15
   d. Over 15
6. Specify the curricular model that is the base for your program.

7. Is your curriculum
   a. Integrated
   b. Traditional medical model or block
   c. Other (specify)

PART B

To be completed by participants whose schools include or plan to include critical care experience.

Rate each statement as to its importance as rationale for deciding to include critical care experience in your curriculum. Use the following scale:

5—Very important positive reason
4—Important positive reason
3—Not considered or not important
2—Important negative reason which was considered
1—Very important negative reason which was considered.

___1. Critical care units are available for student use.
___2. Our faculty members are interested in and/or prepared for critical care.
___3. Critical care experiences increase curricular flexibility and/or relevance.
___4. Critical care is an integral part of today's nursing.
___5. Students enjoy/demand critical care experience.
___6. It is important to include specialty content in the curriculum.
___7. Such offerings allow more curricular innovation or creativity.
___8. The experience facilitates interest in critical care nursing as a career.
___9. The experience promotes future understanding and communication between critical care nurses and nurses in other settings.
___10. Consumers and hospital agencies demand the inclusion of critical care experience in the curriculum.
___11. The type of care given in critical care units demands baccalaureate prepared nurses.
___12. Critical illness is part of the health-illness continuum and therefore should be included in the curriculum.
PART C

To be completed by participants whose schools include or plan to include critical care experience.

Each item has two blanks. On the top one, use the scale described in part B to rank it with regard to its importance in deciding to include critical care in the curriculum. In the second blank, rank it as to your faculty's opinion of that item as a positive outcome of the critical care experience. Use the same scale as described in Part B.

1. The critical care experience allows for the development of gifted students.
2. The experience allows for student self actualization.
3. The experience allows students to work closely with professional role models.
4. Critical care experience facilitates the integration of theory and practice.
5. The experience is necessary to keep pace with the current proliferation of technical and specialty knowledge.
6. Some behaviors can best be learned in critical care settings.
7. Critical care experience provides opportunity for professional growth.
8. The experience reduces reality shock.
9. The experience improves decision making skills.
10. The experience allows the student to examine his own views on philosophical and ethical issues related to critical care.
11. Such experience promotes the student's self confidence.

PART D

To be answered by participants whose schools include critical care experience.

Which of these have been found to be negative outcomes of the critical care experience for your students? Use the scale described in part B.

1. The critical care setting is too stressful for students.
2. The experience is too stressful for faculty.
3. In the critical care setting, the student is unable to view the client as an individual.
4. In the critical care setting, the student focuses on the environment rather than the client.
5. In the critical care setting, the student focuses on technology to the exclusion of individuality and nursing process.

PART E

To be answered by those whose schools include the critical care experience.

What are the major characteristics and methodologies which your school uses to teach critical care experience? Unless otherwise specified, circle the one best answer.

1. Who is primarily responsible for the student in the critical care laboratory experience?
   a. Faculty
   b. Unit staff
   c. Other (specify)

2. Do you include critical care nursing experience in your curriculum as: (check all that apply)
   a. Elective
   b. Block of experience (excluding elective) for all students
   c. Incorporated in a rotation that also includes experience in other areas
   d. Students may choose the experience if they desire it as part of the basic curriculum, but are not required to do so.

3. If you chose option "d" above, approximately what percentage of your students choose experience in critical care?
   a. 0-20%
   b. 21-40%
   c. 41-60%
   d. 61-80%
   e. 81-100%

4. If you chose option "d" in question #2, is there a limit to the number of students who may elect a basic experience in critical care nursing?
   a. Yes
   b. No

5. If you chose "yes" in item #4, what is the approximate limit of students who have access to a critical care experience?
   a. 1-20%
   b. 21-40%
   c. 41-60%
   d. 61-80%
   e. Over 80%
6. Approximately how many contact hours of critical care experience does your average student have?
   a. 0-5
   b. 6-10
   c. 11-15
   d. 16-20
   e. 21-25
   f. 26-30
   g. Over 30

7. Are your students' experiences in critical care nursing limited to the senior year?
   a. Yes
   b. No

8. Which most nearly describes the characteristics of your faculty who are currently teaching critical care laboratory experiences?
   a. Expert in critical care practice
   b. Expert in critical care theory
   c. Both of the above
   d. Generalist in practice and theory
   e. Specialist in a nonrelated area of nursing

9. Which statement most accurately describes the educational preparation of the majority of faculty who teach critical care nursing labs?
   a. BSN
   b. MSN
   c. Doctorate

10. Which most nearly describes the academic rank of your faculty who teach critical care labs?
    a. Lecturer
    b. Instructor
    c. Assistant Professor
    d. Associate Professor
    e. Professor
    f. Adjunct faculty

11. What is your usual student/faculty ratio in critical care lab experiences? One faculty to ____ students.
    a. 0-5
    b. 6-10
    c. 11-15
    d. Over 15
12. When in critical care laboratory experience, is the student
   a. Totally responsible for the client
   b. Working collaboratively with the staff nurse.
   c. Limited to basic care while the staff nurse provides complex care.
   d. Not responsible for any aspect of care.
   e. Other (specify) ___________

13. Is the focus of the student's activity in critical care labs (check all which apply)
   a. Technical
   b. Total patient care, including nursing process
   c. Limited to a focus on a few concepts
   d. Other (specify)

PART F

To be answered by all participants.

Which of the following are reasons that were considered for not including critical care experience in your curriculum? Use the scale described in part B for your responses.

___ 1. Baccalaureate nursing programs should prepare generalists rather than specialists.
___ 2. Essential concepts can be learned better via experiences in settings other than critical care.
___ 3. Critical care units are unavailable for our school.
___ 4. Critical care experience is not essential content.
___ 5. Critical care concepts are too complex for the undergraduate student.
___ 6. Critical care experience should be reserved for graduate level education.
___ 7. Students would interfere with the work of the critical care unit staff.
___ 8. Interested or prepared faculty for critical care are not available.
___ 9. Supervising students in critical care areas is too stressful for faculty.
___10. The margin of error in critical care is too small to allow students in the unit.
___11. The student-faculty ratio in critical care must be too low to be cost effective.
___12. Critical care is only a series of repetitive, technical tasks.
___13. The critical care setting is too stressful for undergraduate learning.
14. In the critical care setting, the student is unable to view the client as an individual.

15. In the critical care setting, the student focuses on the environment rather than the individual.

16. In the critical care setting, the student focuses on technology to the exclusion of individuality and nursing process.
APPENDIX E
APPENDIX E

Followup Letter for Nonrespondent Administrators

Dear Dean or Director,

All of us are quite busy these days and most of us have difficulty keeping abreast of the demands and obligations which are made on our time. Those little extras may inspire the best intentions, but then in the press of time, they get laid aside.

A few weeks ago, you should have received a letter regarding a study of the state of the art of teaching critical care experience in the generic baccalaureate curriculum. As of now, I have not received your reply. Perhaps you laid it aside. If it has already been mailed, you have my appreciation.

In any event, I am again requesting your participation in this study, the results of which should be valuable to all of us as nursing faculty who are constantly facing such curricular decisions.

The study will be conducted as a single survey instrument to be completed by one representative member of your faculty. The faculty member who is selected to complete the form should meet certain criteria. He should be available to complete it now and should be willing to do this in such a way that it reflects the views of your entire faculty. The faculty member chosen should be someone who is familiar with the rationales which were considered at the time the decision of whether to include critical care experiences in your curriculum was made. He should also be familiar with the strategies and methodologies which are being employed if you are teaching critical care experience and the positive and negative outcomes of this experience as perceived by your faculty.

Please place the name and home address of the participating faculty member on the form below and return it in the enclosed return addressed envelope. The survey instrument will be sent directly to that faculty member for completion. Confidentiality will be maintained in the study.
Your participation in this study is greatly appreciated. Should you wish an abstract of the results, check the blank on the form below.

Sincerely,

Carol A. Stephenson

The participating faculty member from my school is:

Name ____________________________________________________________

Street address ____________________________________________________

City, State, Zip _________________________________________________

School Code # ____________ Administrator wishes abstract __
APPENDIX F

1853 Lemonwood
Mesquite, Texas 75149
August 28, 1982

Dear Dean or Director,

During the summer, you received an inquiry as to whether your school would participate in a study of critical care in the generic baccalaureate nursing curriculum as part of my doctoral dissertation. I realize that in the hustle and bustle of summer and the beginning of a new school year, it is easy to lose such an item.

Since I have not heard from you, I am again soliciting your participation in the study. Your experiences can provide valuable information on the topic in question. If you are willing to participate, please ask one faculty member to complete the enclosed survey form, which will take only a few minutes. The participating faculty member should be someone who is willing to complete it in a way that reflects the views of your entire faculty. The faculty member should be someone who is familiar with the rationales which were considered at the time the decision of whether to include critical care experiences in your curriculum was made. She should also be familiar with the strategies and methodologies which are being employed if you are teaching critical care experiences and the positive and negative outcomes of this experience as perceived by your faculty.

The form should be returned in the enclosed envelope within two weeks. Confidentiality will be maintained throughout the study and reporting of the results.

I appreciate your participation and cooperation. If you wish an abstract of the results, please check the appropriate line on the study form.

Sincerely,

Carol A. Stephenson
APPENDIX G
Dear Faculty Member,

All of us are quite busy these days and most of us have difficulty keeping abreast of the demands which are made on our time. Those little extras may inspire the best intentions, but then in the press of time, they are laid aside.

A few weeks ago, you should have received a survey form regarding a study of teaching critical care nursing in the generic baccalaureate nursing curriculum. As of now, I have not received your form. Perhaps you laid it aside. If it has already been mailed, you have my appreciation.

In any event, I am enclosing another copy of the questionnaire. I am sure that you will find time to complete it and return it very soon. Another stamped, addressed envelope is enclosed for your convenience.

I appreciate your cooperation in this important matter.

Sincerely,

Carol A. Stephenson
## APPENDIX H

### GEOGRAPHIC REGIONS IDENTIFIED FOR THIS STUDY

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APPENDIX I

TESTS FOR CHI-SQUARE SIGNIFICANCE BETWEEN DEMOGRAPHICS AND VARIABLES
TABLE VIII
STATISTICAL COMPARISON BY REGION OF REPORTED INCLUSION OR EXCLUSION OF THE CRITICAL CARE EXPERIENCE IN THE CURRICULUM OF RESPONDENT NURSING SCHOOLS (N=215)

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*Chi square = 28.32413 with 5 d.f.; Significant at 0.00003.
TABLE IX

STATISTICAL COMPARISON BY REGION OF REPORTED PLANNED BUT NOT IMPLEMENTED CRITICAL CARE EXPERIENCE IN THE CURRICULUM OF RESPONDENT NURSING SCHOOLS (N=215)

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*Chi square = 0.90704 with 5 d.f.; Significant at 0.96971.
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*Chi square = 6.57860 with 4 d.f.; Significant at 0.15990.
TABLE XI

STATISTICAL COMPARISON BY ACADEMIC DEGREE OF REPORTED PLANNED BUT NOT IMPLEMENTED CRITICAL CARE EXPERIENCE IN THE CURRICULUM OF RESPONDENT NURSING SCHOOLS (N=215)

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<td>N</td>
</tr>
<tr>
<td>Associate degree</td>
<td>.</td>
<td>.</td>
<td>19</td>
</tr>
<tr>
<td>Separate RN</td>
<td>2</td>
<td>0.93</td>
<td>63</td>
</tr>
<tr>
<td>Masters degree</td>
<td>7</td>
<td>3.26</td>
<td>56</td>
</tr>
<tr>
<td>Doctorate</td>
<td>.</td>
<td>.</td>
<td>2</td>
</tr>
<tr>
<td>Generic only</td>
<td>2</td>
<td>0.93</td>
<td>46</td>
</tr>
<tr>
<td>No response</td>
<td>18</td>
<td>8.37</td>
<td>.</td>
</tr>
<tr>
<td>Totals</td>
<td>29</td>
<td>13.49</td>
<td>186</td>
</tr>
</tbody>
</table>

*Chi square = 5.85049 with 4 d.f.; Significant at 0.21060.
TABLE XII

STATISTICAL COMPARISON BY NUMBER OF YEARLY NURSING GRADUATES OF REPORTED INCLUSION OR EXCLUSION OF THE CRITICAL CARE EXPERIENCE IN THE CURRICULUM OF RESPONDENT NURSING SCHOOLS (N=215)

<table>
<thead>
<tr>
<th>Number of Yearly Nursing Graduates</th>
<th>Critical Care Experience*</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Included</td>
<td>%</td>
<td>Excluded</td>
</tr>
<tr>
<td>0-50</td>
<td>54</td>
<td>25.12</td>
<td>11</td>
</tr>
<tr>
<td>51-100</td>
<td>63</td>
<td>29.30</td>
<td>17</td>
</tr>
<tr>
<td>101-200</td>
<td>36</td>
<td>16.74</td>
<td>16</td>
</tr>
<tr>
<td>201-300</td>
<td>10</td>
<td>4.65</td>
<td>.</td>
</tr>
<tr>
<td>Over 300</td>
<td>3</td>
<td>1.40</td>
<td>1</td>
</tr>
<tr>
<td>No response</td>
<td>4</td>
<td>1.86</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>170</td>
<td>79.07</td>
<td>45</td>
</tr>
</tbody>
</table>

*Chi square = 6.25772 with 4 d.f.; Significant at 0.18071.
TABLE XIII

STATISTICAL COMPARISON BY NUMBER OF YEARLY NURSING GRADUATES OF REPORTED PLANNED BUT NOT IMPLEMENTED CRITICAL CARE EXPERIENCE IN THE CURRICULUM OF RESPONDENT NURSING SCHOOLS (N=215)

<table>
<thead>
<tr>
<th>Number of Yearly Nursing Graduates</th>
<th>Critical Care Experience*</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Planned</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>0-50</td>
<td>1</td>
<td>0.47</td>
<td>65</td>
<td>30.23</td>
<td></td>
</tr>
<tr>
<td>51-100</td>
<td>6</td>
<td>2.79</td>
<td>71</td>
<td>33.02</td>
<td></td>
</tr>
<tr>
<td>101-200</td>
<td>4</td>
<td>1.86</td>
<td>47</td>
<td>21.86</td>
<td></td>
</tr>
<tr>
<td>201-300</td>
<td>.</td>
<td>.</td>
<td>9</td>
<td>4.19</td>
<td></td>
</tr>
<tr>
<td>Over 300</td>
<td>.</td>
<td>.</td>
<td>3</td>
<td>1.40</td>
<td></td>
</tr>
<tr>
<td>No Response</td>
<td>9</td>
<td>4.19</td>
<td>.</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>20</td>
<td>9.31</td>
<td>195</td>
<td>90.70</td>
<td></td>
</tr>
</tbody>
</table>

*Chi square = 4.13539 with 4 d.f.; Significant at 0.38799.
TABLE XIV

STATISTICAL COMPARISON BY FACULTY-STUDENT RATIO OF REPORTED INCLUSION OR EXCLUSION OF THE CRITICAL CARE EXPERIENCE IN THE CURRICULUM OF RESPONDENT NURSING SCHOOLS (N=215)

<table>
<thead>
<tr>
<th>Students per faculty member</th>
<th>Critical Care Experience*</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Included</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>0-5</td>
<td>7</td>
<td>3</td>
<td>1.40</td>
</tr>
<tr>
<td>6-10</td>
<td>148</td>
<td>36</td>
<td>16.74</td>
</tr>
<tr>
<td>11-15</td>
<td>8</td>
<td>4</td>
<td>1.86</td>
</tr>
<tr>
<td>Over 15</td>
<td>1</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>No response</td>
<td>8</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Totals</td>
<td>172</td>
<td>43</td>
<td>20.0</td>
</tr>
</tbody>
</table>

*Chi square = 2.09289 with 3 d.f.;
Significant at 0.55335
TABLE XV

STATISTICAL COMPARISON BY FACULTY-STUDENT RATIO OF REPORTED PLANNED BUT NOT IMPLEMENTED CRITICAL CARE EXPERIENCE IN THE CURRICULUM OF RESPONDENT NURSING SCHOOLS (N=215)

<table>
<thead>
<tr>
<th>Students per faculty member</th>
<th>Critical Care Experience*</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Planned</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>6-10</td>
<td>8</td>
<td>3.72</td>
<td>171</td>
</tr>
<tr>
<td>11-15</td>
<td>.</td>
<td>.</td>
<td>12</td>
</tr>
<tr>
<td>Over 15</td>
<td>.</td>
<td>.</td>
<td>1</td>
</tr>
<tr>
<td>No response</td>
<td>13</td>
<td>6.05</td>
<td>.</td>
</tr>
<tr>
<td>Totals</td>
<td>21</td>
<td>9.77</td>
<td>194</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Not Planned</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Chi square = 1.07032 with 3 d.f.;
Significant at 0.78424.
TABLE XVI

STATISTICAL COMPARISON BY TYPE OF CURRICULUM OF REPORTED INCLUSION OR EXCLUSION OF THE CRITICAL CARE EXPERIENCE IN THE CURRICULUM OF RESPONDENT NURSING SCHOOLS (N=215)

<table>
<thead>
<tr>
<th>Type of Curriculum</th>
<th>Critical Care Experience*</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Included</td>
<td>Excluded</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Integrated</td>
<td>109</td>
<td>50.70</td>
<td>27</td>
</tr>
<tr>
<td>Traditional</td>
<td>31</td>
<td>14.42</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>10.70</td>
<td>9</td>
</tr>
<tr>
<td>No response</td>
<td>9</td>
<td>4.19</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>172</td>
<td>80.01</td>
<td>43</td>
</tr>
</tbody>
</table>

*Chi square = 1.24292 with 3 d.f.;
Significant at 0.53716
TABLE XVII

STATISTICAL COMPARISON BY TYPE OF CURRICULUM OF REPORTED PLANNED BUT NOT IMPLEMENTED CRITICAL CARE EXPERIENCE IN THE CURRICULUM OF RESPONDENTS NURSING SCHOOLS (N=215)

<table>
<thead>
<tr>
<th>Critical Care Experience*</th>
<th>Planned</th>
<th></th>
<th>Not Planned</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Integrated</td>
<td>5</td>
<td>2.33</td>
<td>130</td>
<td>60.47</td>
</tr>
<tr>
<td>Traditional</td>
<td>1</td>
<td>0.47</td>
<td>36</td>
<td>16.74</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0.93</td>
<td>27</td>
<td>12.56</td>
</tr>
<tr>
<td>No Response</td>
<td>14</td>
<td>6.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>22</td>
<td>10.24</td>
<td>193</td>
<td>89.77</td>
</tr>
</tbody>
</table>

*Chi square = 0.83040 with 2 d.f.; Significant at 0.66021.
APPENDIX J
APPENDIX J

Survey Items Regarding Positive Reasons for Including Critical Care in the Generic Baccalaureate Nursing Curriculum.

1. Critical care units are available for student use.
2. Our faculty members are interested in and/or prepared for critical care.
3. Critical care experiences increase curricular flexibility and/or relevance.
4. Critical care is an integral part of today's nursing.
5. Students enjoy/demand critical care experience.
6. It is important to include specialty content in the curriculum.
7. Such offerings allow more curricular innovation or creativity.
8. The experience facilitates interest in critical care nursing as a career.
9. The experience promotes future understanding and communication between critical care nurses and nurses in other settings.
10. Consumers and hospital agencies demand the inclusion of critical care experience in the curriculum.
11. The type of care given in critical care units demands baccalaureate prepared nurses.
12. Critical illness is part of the health-illness continuum and therefore should be included in the curriculum.
13. The critical care experience allows for the development of gifted students.
14. The experience allows for student self actualization.
15. The experience allows students to work slowly with professional role models.
17. The experience is necessary to keep pace with the current proliferation of technical and specialty knowledge.
18. Some behaviors can best be learned in critical care settings.
19. Critical care experience provides opportunity for professional growth.

20. The experience reduces reality shock.

21. The experience improves decision making skills.

22. The experience allows the student to examine his own views on philosophical and ethical issues related to critical care.

23. Such experience promotes the student's self confidence.
APPENDIX K
APPENDIX K

Survey Items Regarding Reasons for not Including Critical Care in the Generic Baccalaureate Curriculum.

1. Baccalaureate nursing programs should prepare generalists rather than specialists.

2. Essential concepts can be learned better via experiences in settings other than critical care.

3. Critical care units are unavailable for your school.

4. Critical care experience is not essential content.

5. Critical care concepts are too complex for the undergraduate student.

6. Critical care experience should be reserved for graduate level education.

7. Students would interfere with the work of the critical care unit staff.

8. Interested or prepared faculty for critical care are not available.

9. Supervising students in critical care areas is too stressful for faculty.

10. The margin of error in critical care is too small to allow students in the unit.

11. The student-faculty ratio in critical care must be too low to be cost effective.

12. Critical care is only a series of repetitive, technical tasks.

13. The critical care setting is too stressful for undergraduate learning.

14. In the critical care setting, the student is unable to view the client as an individual.

15. In the critical care setting, the student focuses on the environment rather than the individual.

16. In the critical care setting, the student focuses on technology to the exclusion of individuality and nursing process.
APPENDIX L

Survey Items Regarding Positive Outcomes of the Inclusion of Critical Care Experience in the Curriculum.

1. The critical care experience allows for the development of gifted students.
2. The experience allows for student self actualization.
3. The experience allows students to work closely with professional role models.
4. Critical care experience facilitates the integration of theory and practice.
5. The experience is necessary to keep pace with the current proliferation of technical and specialty knowledge.
6. Some behaviors can be best learned in critical care settings.
7. Critical care experience provides opportunity for professional growth.
8. The experience reduces reality shock.
9. The experience improves decision making skills.
10. The experience allows the student to examine his own views on philosophical and ethical issues related to critical care.
11. Such experience promotes the student's self confidence.
Survey Items Regarding Negative Outcomes of the Inclusion of Critical Care Experience in the Curriculum.

1. The critical care setting is too stressful for students.
2. The experience is too stressful for faculty.
3. In the critical care setting, the student is unable to view the client as an individual.
4. In the critical care setting, the student focuses on the environment rather than the client.
5. In the critical care setting, the student focuses on technology to the exclusion of individuality and nursing process.
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