**Caring Practices of Clinical CRNA Instructors in Clinical Student Instruction**

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Caring Practices of Clinical CRNA Instructors in Clinical Student Instruction

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Field Study
Master of Science in Nursing

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Abstract

Caring Practices of Clinical CRNA Instructors

Caring and the ability to demonstrate caring behavior within a teacher-student relationship is deemed necessary in nursing education today. The purpose of this study was to assess the degree to which clinical Certified Registered Nurse Anesthetist (CRNA) instructors incorporate caring into their clinical student instruction. A quantitative questionnaire was developed (alpha coefficient =.936). Analysis compared demographics of age, sex, years of practice, level of education in anesthesia and marital status with caring scores. Three qualitative statements were also included. Using nonprobability convenience sampling, 286 surveys were distributed. Response rate was 57% (N=156). Gender was the only variable to show a significant relationship and was able to explain only 3% of the variation in caring scores with p<.05. Two male outliers were deemed the cause of this and the results were not interpreted as truly significant. Qualitative responses validated quantitative scores. Responses listed methods clinical CRNAs use to: (a) develop a helping trust relationship, (b) provide a supportive environment and/or, (c) promote interpersonal teaching-learning. Qualitative results showed caring as an integral part of the majority of clinical CRNAs practice. Teaching requires a supportive environment, development of a caring student-teacher relationship and effective teaching behaviors.
Chapter 1

Introduction

Change is occurring in nursing education today. We are in the midst of a curriculum revolution that espouses caring as its central tenet. It is being promulgated by many nursing leaders (Bevis, 1989; Leininger, 1977; Watson, 1979) and disseminated by the National League for Nursing.

A caring student-teacher relationship is the cornerstone for this revolution (Symonds, 1990). While analysis shows caring constructs have been incorporated into many curricula and evaluations of student caring skills have occurred, caring as an attribute of faculty has not been subject to investigation (Slevin & Harter, 1987).

On the other hand, a number of recent studies have assessed the effectiveness of clinical instructors (Bergmann & Gaitskill, 1990; Byrne, McKnight, Roberts & Rankin, 1989; Zimmerman & Westfall, 1988). The author’s analysis of quantitative studies that defined attributes of effective clinical instructors and phenomenological studies that described caring attributes in student/teacher relationships demonstrates that similarity between these two levels of analysis exists. This congruence permits the classification of characteristics of effective clinical instructors as caring attributes. It also supports the use of these characteristics in the assessment of caring and in the development of a caring instrument.

Nurse Anesthesia programs emphasize learning in a clinical setting. A minimum of 800 hours of case time is required to take the National Certification Exam. In fact, programs encourage maximizing the number of hours in clinical. In most clinical settings, one student is assigned with one Certified Registered Nurse
Anesthetists (CRNA) to an operating room. The student works the entire shift with the CRNA, managing whatever cases are assigned to the room with the CRNA's assistance. The importance of CRNAs as clinical instructors was emphasized by Scott Gray, President of the American Association of Nurse Anesthetists, at the National Convention in Denver (August 11, 1992). This important role is assumed without the benefit of any formal instruction in clinical teaching skills. Clinical instructors are not given any assistance in developing their teaching skills, nor are they rewarded for their ability to teach (Byrne, McKnight, Roberts & Rankin, 1989). Students nationwide discussed amongst themselves at the National Convention (August 9-12, 1992) the influence CRNA clinical instructors had on their personal and professional lives. This emphasis on the clinical setting and the amount of time spent in clinical makes the relationship between the student RNAs and clinical CRNA instructor paramount. “A humanistic climate that supports the process of learning is dependent on a caring relationship between teacher and student. The success of any clinical learning experience rests heavily on this relationship as learners pursue educational goals leading toward their development as professional practitioners” (Reilly & Oermann, 1992, p. 145). Examination of this relationship and the impact of this relationship on the quality and effectiveness of learning in the clinical setting has not been undertaken.

**Purpose Statement**

The purpose of this study is to explore the degree to which clinical CRNA instructors incorporate caring practices into their clinical student instruction.

**Theoretical Framework**

In her theory Watson (1979, 1985) described 10 primary “carative” factors that
form the foundation for nursing as the science of caring. These factors have been developed from a humanistic philosophy and have human activity as their core. These "carative" factors form the basis of nurses' daily practice. Watson's theory purports that caring can be effectively demonstrated and only interpersonally practiced. These carative factors are:

1. The formation of a humanistic-altruistic system of values. It is a qualitative philosophy that guides one's life. It includes kindness; concern; respect for and knowledge and appreciation of the whole person; love of self and others; commitment to and satisfaction of receiving through giving.

2. The instillation of faith-hope. It incorporates believing in the other and believing in one's self. It includes the therapeutic effect of the power of suggestion. The interaction in a personal relationship is an important part of this carative factor since it draws from a humanistic-altruistic value system.

3. The cultivation of sensitivity to one's self and to others. This factor stresses the importance of recognizing and actually feeling feelings. It acknowledges that the source of development to achieve one's potential is from within. It encourages honesty, genuineness and authenticity in dealing with one's self and others. Sensitivity enables a nurse to understand, accept and encourage growth of others.

4. Development of a helping-trust relationship. This relationship begins with getting to know the other person and viewing this person as a separate thinking, feeling human being. The quality of one's relationship with another has the most significance in determining the helping effectiveness of the relationship. Elements of establishing a helping-trust relationship are congruence, empathy, non-
possessive warmth and effective communication. Congruence involves being genuine, open and authentic. Empathy is essential and is the ability to perceive what the other is feeling and to respond to their feelings. It includes the ability to be non-judgmental. Non-possessive warmth provides a safe, non-threatening atmosphere and is generated from an unconditional positive regard for the other. Effective communication includes both verbal and non-verbal means. Attending to another is demonstrated by open posture, eye contact, and psychological attending. Listening to the other is also essential to the effective communication.

5. The promotion and acceptance of the expression of positive and negative feelings. This factor is inherent in the helping-trust relationship. It emphasizes the need to focus on feelings, not just thought and opinions. Awareness of feelings may eliminate irrational feelings. Feelings can change thoughts and influence behavior.

6. The systematic use of the creative, scientific problem-solving method for decision making. This systematic usage allows the nurse to practice the science of caring. Decisions are based on principles and knowledge obtained from the same data base. The nursing process and research process both include assessment, planning, intervention, and evaluation.

7. The promotion of interpersonal teaching-learning. It involves learning the other’s perceptions before giving information, and so focuses on learning rather than teaching. The facilitation of learning depends on the quality of the relationship between teacher and student. A caring interpersonal relationship promotes learning.

8. The provision for a supportive, protective and (or) corrective mental,
physical, sociocultural and spiritual environment. It involves appraisal of stress in one’s life, one’s view of stress and whether stress is considered a threat or a challenge. Anxiety produced by stress can be reduced by listening, accepting and understanding. Comfort can be provided by manipulating variables in the external environment to included assuring privacy and safety. Acknowledgment of the importance of sociocultural and spiritual meaning in a person’s life is also a part of this carative factor.

9. Assistance with the gratification of human needs. Humans must meet lower order biophysical and psychological needs before higher order integrative needs can be met. Integrative needs include psychosocial needs and needs for achievement and affiliation. Affiliation incorporates the needs for inclusion, control, and affection. Once integrative needs have been met, the fulfillment of growth-seeking needs can be initiated. These include higher order intrapersonal and interpersonal needs and finally the need for self-actualization

10. The allowance for existential-phenomenological forces. This acknowledges that each person has a unique and separate identity. “Dealing with another person as he or she is in relation to what he or she would like to be or would be is a matter of existential-phenomenological concern for the nurse who practices the science of caring” (Watson, p. 205). It incorporates the individual’s frame of reference and brings meaning into one’s personal and professional life. It accounts for unrecognized courage and miraculous happenings.

Application of these carative factors to this study began with their analysis. The formation of a humanistic-altruistic system of values is the foundation for caring. The ultimate goal of a caring student-teacher relationship is the promotion
of interpersonal teaching-learning. This is brought about by first developing a helping-trust relationship. Elementary to the development of this helping-trust relationship is: (a) the instillation of faith and hope, (b) the cultivation of sensitivity to one's self and to others, and (c) the promotion and acceptance of positive and negative feelings. Provisions for a supportive, protective and/or corrective mental, physical, sociocultural, and spiritual environment are also necessary for the promotion of interpersonal teaching-learning. To create such an environment the individual must be assisted in gratifying their human needs. This gratification necessitates the allowance for existential-phenomenologic forces. The creative, scientific problem solving method is utilized in the decision making processes of teaching/learning. Reilly and Oermann (1992) are in agreement with this perception, believing teaching effectiveness is based on two dimensions: creating an intellectual environment for learning and developing positive rapport with students (see Figure 1).
Figure 1. Application of Watson's theory

Humanistic-Altruistic System of Values

Development of a Helping - Trust Relationship
- Instillation of Faith - Hope
- Cultivation of Sensitivity to one's Self and Others
- Promotion and Acceptance of Positive and Negative Feelings

Promotion of Interpersonal Teaching - Learning
- Systematic Use of Creative, Scientific Problem-Solving Method for Decision Making

Provision for a Supportive, Protective, and/or Corrective Mental, Physical, Socio-cultural and Spiritual Environment
- Assistance with Gratification of Human Needs
- Allowance for Existential-Phenomenologic Forces
A review of the literature revealed many caring attributes. After analysis, thirty-seven caring attributes were selected that promote interpersonal teaching-learning through the development of a helping-trust relationship and the provision for a supportive, protective and/or corrective mental, physical, sociocultural, and spiritual environment. The gray portions are the caring attributes. This figure categorizes the selected attributes according to the carative factors they epitomize. The presence of these attributes and the degree to which they exist in clinical CRNA instructors will be the basis for analysis of the degree of caring (see Figure 2).
Figure 2. Analysis of Watson's theory & caring attributes (shaded areas)

**Humanistic-Altruistic System of Values**

**Development of a Helping - Trust Relationship**
- Instillation of Faith - Hope
- Cultivation of Sensitivity to one's Self and Others
- Promotion and Acceptance of Positive and Negative Feelings

**Promotion of Interpersonal Teaching - Learning**
- Systematic Use of Creative, Scientific Problem-Solving Method for Decision Making

**Provision for a Supportive, Protective, and/or Corrective Mental, Physical, Socio-cultural and Spiritual Environment**
- Assistance with Gratification of Human Needs
- Allowance for Existential-Phenomenologic Forces

**Caring Practices**
- Comfort
- Camaraderie
- Enthusiastic
- Environment Restructuring
- Humor
- Intuition
- Nurturance
- Protective Behaviors
- Stimulative Behaviors
- Stress Alleviation
- Surveillance
Research Questions

The research questions being examined are:

1. To what degree do clinical CRNA instructors incorporate caring into their clinical student teaching?

2. Is there a relationship between gender of CRNAs and their degree of caring in student clinical teaching?

3. Is there a relationship between age of CRNAs and their degree of caring in student clinical teaching?

4. Is there a relationship between level of education of CRNAs and their degree of caring in student clinical teaching?

5. Is there a relationship between marital status of CRNAs and their degree of caring in student clinical teaching?

6. Is there a relationship between years of practice of CRNAs and their degree of caring in student clinical teaching?

7. Is there a relationship among specific demographic variables and the subscales of caring: (a) relationship, (b) environment, and (c) teaching?

8. What demographic variables are the greatest predictors of caring among CRNA instructors?

Conceptualization of terms

Caring is a process of focusing one's thoughts, words, feelings, and actions on another in order to benefit the other and meet the other's needs. It involves knowledge of the other's needs and the evaluation of one's actions in meeting that person's needs. Its basis consists of respect for the other as a human being with
rights and dignity. Caring is the essence of nursing since it involves the assessment, planning implementation and evaluation necessary to benefit the other and meet the other's needs.

**Student RNAS:** A student who is a registered nurse attending a program in nurse anesthesia.

**Clinical CRNA instructor:** A Certified Registered Nurse Anesthetist who functions as a clinical instructor in addition to being a practicing CRNA.

**Clinical student teaching:** Instruction of an RNAS in a clinical setting that involves actual administration of anesthesia to patients under the direct supervision of a CRNA.

**Operationalization of terms**

*Caring* will be measured by the Clark Clinical Faculty Caring Self-Assessment (CCFCSA). Caring will be analyzed according to overall score and subscores of caring: (a) relationship, (b) environment, and (c) teaching.
Chapter II

Review of the Literature

Caring has been described as the essence of nursing (Leininger, 1977; Watson, 1979). Caring is a complex concept with many facets. It goes beyond tenderness and sympathy. Morse, Solberg, Neander, Bottorff & Johnson (1990) identified five categories of caring in nursing literature: (a) caring as a human trait, (b) caring as a moral imperative or ideal, (c) caring as an affect, (d) caring as an interpersonal relationship, and (e) caring as a therapeutic intervention. Jean Watson's nursing theory (1979) describes caring in nursing as a moral ideal. Her theory is based on caring as an essential human value, expressed as affect in an interpersonal therapeutic relationship.

Caring is central to the curriculum revolution occurring in nursing education today (Bauer, 1990; Bevis, 1989; Noddings, 1984). One resolution for curriculum change espoused at the National League of Nursing’s biennial convention in June 1989 was for the enhancement of caring practices through faculty-student and faculty-faculty relationships that are egalitarian and characterized by cooperation and community building. In addition to changing nursing curriculum, nursing practice is being refocused from curing to caring (Slevin & Harter, 1987).

Characteristics of caring have been identified in many phenomenological studies. Ray (1984) identified a variety of characteristics by interviewing caregivers and making observations in a hospital setting. Dietrick (1992), utilizing open ended questions, interviewed four Registered Nurses and described a nurse in a caring nurse-nurse relationship as being sensitive, open, understanding, supportive, and offering help, acknowledgment, and camaraderie.
Caring can be evaluated since it consists of an ordered series of actions that include the setting of goals to bring about a positive change in the one being cared for and the choice of tactics for achieving those goals (Gaut, 1986). Tripp-Reimer and Cohen (1990) stated that while most research done on caring has been qualitative, they believe that there are research situations involving the measurement of caring where qualitative and quantitative methods can be combined. A review of the literature revealed one study that used quantitative methods to evaluate caring. This was the development of a caring instrument by Nkongho (1990).

Cronin and Harrison (1988) in a quantitative study, utilized Watson’s theory of caring and ten carative factors as the theoretical framework to identify nursing behaviors perceived as indicators of caring by patients who had a myocardial infarction. The authors listed sixty-one nursing behaviors, ordered in seven subscales based on Watson’s carative factors. They grouped the first three factors together to form one subscale, which they felt was conceptually congruent with Watson’s model. Their subscales included: (a) human needs assistance, (b) teaching/learning, (c) humanism/faith-hope/sensitivity, (d) existential/phenomenological/spiritual forces, (e) supportive/protective/corrective environment, (f) helping/trust, and (g) expression of positive/negative feelings. They assumed the sixth carative factor of creative problem-solving to be inherent to all aspects of nursing care and therefore omitted it from their scale. Their survey of questions was based on their subscales.

Sithichoke-Rattan (1989) used Watson’s ten carative factors as the basis for nursing interventions to meet the needs of preterm infants and parents. For example, she utilized the carative factors of assisting with gratification of needs,
providing a supportive, protective, or corrective environment and the use of creative problem solving method for decision making in analyzing the problems of altered fluid balance, altered activity/inactivity status, ventilation, infection, pain, and discomfort in preterm infants.

While most of the research done on caring has focused on nursing practice, caring in education is beginning to be examined. Hughes (1992) interviewed nursing students to learn their description of a climate for caring as experienced within faculty-student and peer group interactions. Noddings’ conceptualization (1984) was the framework for this study. Students reported behaviors as caring that convey presence, personal interest, sensitivity, professional credibility and ethical responsibility. They described empowering interactional episodes that allowed them to focus on their nursing role expectations, rather than their student role expectations. Students experienced caring when their future potential as a nurse was recognized. Student vulnerability was a recurring theme in the participants’ description. This sense of vulnerability created a need to experience a climate of caring in their interactions with faculty.

Appleton (1990) probed the meaning of human care and the experience of caring during a program in nursing education. Her analysis identified caring as being communicated by many means, the crux of which is a person-oriented approach. A caring relationship allows the freedom to be, and caring teachers guide, support, encourage, and confirm the value of each student.

Halldorsdottir (1990) investigated students’ perspective of a caring student-teacher encounter. Students described a caring teacher as being professionally competent, showing genuine concern for the student, having a positive personality,
and having a professional commitment. These attributes, in addition to mutual trust, created a professional teacher-student working relationship. The student responses to professional caring included: a sense of acceptance and self-worth; personal and professional growth and motivation; appreciation and role-modeling; and long term gratitude and respect.

Bush (1988) identified six concepts that constitute a model of the caring teacher in nursing. They include: knowledge and love of self and others, presence, mutual respect, sensitivity, communicating with the other, and the organization of the teaching-learning situation.

Miller, Haber and Byrne (1990) interviewed six nursing students and six faculty and asked them to describe caring in a teaching-learning interaction. The students described a caring interaction as one that is characterized by support and concern for the student, both personally and academically. A caring instructor was identified as being nonjudgmental, respectful, patient, available, dependable, flexible, supportive, open, warm, genuine, trusting, and willing to share. The students reported that their reaction to a caring relationship was increased self worth, self esteem, and self confidence. Faculty perceived their function as that of role model and that a caring instructor should demonstrate empathy, sensitivity, openness, warmth, and respect. In addition, within a nonjudgmental climate of support, faculty's validation of students' feelings and self worth was listed as an integral component of being a caring instructor. "By providing unbounded availability, follow-up and acceptance, they protect students from pitfalls, while empowering them through encouragement of self exploration, self discovery, and expansion of perceptual boundaries." (p. 130) The faculty also described the
development of a mutual simultaneous dimension of trust, respect, openness, reciprocity, sharing, acceptance, sincerity, and genuineness in a caring interaction. Faculty reported feeling good, comfortable, and effective after such an encounter.

The development of caring student-teacher relationship forms the basis for the curriculum revolution that is occurring in nursing (Bevis & Watson, 1989; Symonds, 1990). Caring is the focus of this change since it is the essence of a student-teacher relationship and teacher-student interactions are critical to the success of teaching and education (Murray, 1989). A caring relationship is instrumental in producing caring practitioners with the critical thinking skills necessary to be effective today and in the future (Bevis, 1989; Bevis & Watson, 1989). Incorporating caring into nursing education creates an alliance between teacher and student and shifts importance from content to critical thinking and active learning (Bevis, 1989). Caring must be present to create an environment that enables self actualization and fulfillment. Caring in education acknowledges students as human beings and equals. This distribution of power empowers both students and teachers (Bevis, 1989; Symonds, 1989). A caring educational environment respects students' values and involves mutual sharing of feelings and ideas. A caring instructor treats students as having value, worth, and the potential for growth (Bauer, 1990). In addition to being vital to the success of teaching and education in nursing, caring teacher-student interactions are an essential component of any adult learning situation (Knowles, 1969; Tough, 1971).

This emphasis on caring and developing a caring student-teacher relationship includes the clinical as well as academic setting. Instruction in a clinical setting has always been the focus of nursing education (Infante, 1985). Caring is an essential
element of creative learning in a clinical setting (Carpenito, 1985). Caring in a clinical environment is expressed by showing compassion, internalizing feelings of empathy or sympathy and tenderness. A caring environment provides a safe place for students to disagree without jeopardizing their position. Carpenito further states a meaningful student relationship in the clinical setting must be established if creative learning is to exist. This relationship is based on mutual respect and understanding.

The effectiveness of clinical instructors has been analyzed quantitatively by multiple researchers (Bergmann & Gaitskill, 1990; Wong & Wong, 1987; Zimmerman & Waltman, 1986). Instruments have been developed by several researchers (Brown, 1981; Byrne, McKnight, Roberts, & Rankin, 1989; Zimmerman & Westfall, 1988) to assess the clinical effectiveness of instructors. Many of the characteristics or attributes assessed by these instruments incorporate aspects of caring. Hedin, in her 1989 review of literature on clinical teaching, cited the early work of Jacobsen, done in the sixties, as an example of evaluation of clinical effectiveness of instructors. This study identified an effective instructor as being available, competent, skilled in interpersonal relationships, showing competence in and respect for the student; offering appropriate guidance; demonstrating personal characteristics of warmth, sympathy, enthusiasm, and other human emotions; and evaluating students fairly.

As previously mentioned, review of the literature revealed only one instrument that measures caring quantitatively. It is the Caring Ability Inventory developed by Nkongho (1990). This instrument measures one's ability to care when involved in a relationship with others. It is a survey inventory with
responses keyed on a Likert scale. It is not targeted for any specific population. In developing the tool, a group of college students caring abilities scores were compared to a group of nurses caring scores. The college students scores were correlated with gender, but the nurses scores were not. No instrument was found that measures caring quantitatively in a clinical teaching setting.

A review of the literature revealed one study (Ramsborg & Holloway, 1987) that evaluated clinical teaching of nurse anesthesia students. They assessed the congruence of student RNAs’ and faculty CRNAs’ perceptions of what constitutes a positive and a negative learning experience in the clinical setting. A total of 163 CRNA clinical instructors and students were surveyed regarding characteristics of specific positive and negative learning experiences. Results suggested there was a high degree of congruence among students and CRNA instructors perceptions of positive and negative teaching/learning experiences. Their results suggested that instructors may assume that students will respond to their efforts to improve clinical instruction by setting goals and expectations, motivating, stimulating memory, gaining attention, communicating effectively, providing opportunities for practice, and evaluating performance.

Ramsborg and Hollowasy (1987) did not specifically assess the student-teacher interaction. The relationship of the student RNA and clinical CRNA instructor has not been investigated. In light of the importance of this relationship, and the caring change occurring in nursing, the focus of this study will be assessing caring as an attribute of clinical CRNA instructors.

Summary

Caring is an important aspect of nursing education. It has created a change in
the educational environment and a refocusing of efforts. Prime importance is being given to promoting a caring student-teacher relationship. Most of the research done on caring has been qualitative, using in-depth interviews as the method of investigation. Quantitative evaluation of clinical faculty caring skills has not been explored. An instrument was developed to measure caring practices of clinical CRNA instructors.
Chapter III
Methodology

Design
The design of this study is descriptive research utilizing a survey questionnaire with structured and open-ended questions to assess caring as an attribute among CRNAs in a clinical teaching situation. This level of research was chosen since no previous studies have been undertaken that address this concern.

Sample
Nonprobability convenience sampling was used. This method of sampling was chosen rather than a random sampling of CRNAs in order to sample just CRNAs who are clinical instructors. The estimated effect size is moderately small. With alpha set at .05, and power at .80, a sample size of 126 was needed (Polit & Hungler, 1991).

The survey was personally delivered or distributed by clinical coordinators to 10 hospitals where CRNAs are clinical instructors. The surveys were presented at a weekly CRNA meeting at each hospital so that instructors could be recruited for the study. A total of 286 surveys were distributed and 162 returned, giving a response rate of 57%. One hundred sixty surveys were completed accurately and used in the statistical computation. Demographics of age, sex, level of education, years of practice, and marital status were gathered from the sample. Descriptive statistics allow comparison with available national CRNA demographics. The respondents are all CRNAs who instruct RNAs in the clinical setting. Age, years of practice, and gender were compared with AANA membership demographics. Other national demographic data was not available.
Table 1 indicates the study’s sample was representative of the national mean when retired CRNAs were taken into account for the demographics of age and years of practice. Gender of respondents was also representative of national CRNA demographics. The sample is representative of CRNAs belonging to the American Association of Nurse Anesthetists (AANA).

Table 1  

Demographics of Sample Versus National CRNAs

<table>
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<tr>
<th></th>
<th>Sample Mean</th>
<th>Sample Range</th>
<th>National Mean</th>
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<tbody>
<tr>
<td>Age</td>
<td>36.9 years</td>
<td>27-60 years</td>
<td>40 years</td>
</tr>
<tr>
<td>Years of Practice</td>
<td>7.2 years</td>
<td>1-27 years</td>
<td>&gt;10 years</td>
</tr>
<tr>
<td>Level of Education in Anesthesia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>16.25%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>18.75%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters</td>
<td>65%</td>
<td></td>
<td></td>
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<tr>
<td>Marital Status</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>18.1%</td>
<td>NA</td>
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<tr>
<td>Married</td>
<td>75.6%</td>
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<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>6.25%</td>
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<tr>
<td>Sex</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>37.5%</td>
<td></td>
<td>41%</td>
</tr>
<tr>
<td>Female</td>
<td>62.5%</td>
<td></td>
<td>59%</td>
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Note. National demographics include retired CRNAs.
Setting

The surveys were distributed to ten hospitals in the metropolitan area of a large city in the Midwest where CRNAs are clinical instructors. The institutions included clinical sites of the other three nurse anesthesia programs in addition to the author's own program. The number of CRNAs varied at each clinical site, ranging from 4-55.

Instruments

The survey distributed is the Clark Clinical Faculty Caring Self-Assessment (CCFCSA). It was developed by the researcher after a review of the literature on caring and review of the literature on evaluating clinical instructor effectiveness. Forty five attributes of caring were initially identified from the literature. Each attribute was designated descriptive of a certain carative factor. Statements were developed that evaluated these attributes. Each statement in the survey was developed to assess one attribute. Prior analysis of the carative factors created a 3 part system that describes the teaching process. A humanistic-altruistic system of values lays the foundation for (a) developing a helping-trust relationship, (b) providing a supportive, protective, or corrective physical, sociocultural and spiritual environment, and (c) promoting interpersonal teaching-learning (Refer to Figure 1).

The clarity of the statements and the adequacy of the statements in evaluating the concept of caring in the clinical setting were analyzed. Peer suggestions were used to make changes. After analysis of the instrument to determine its representativeness of the attributes and after redundant questions were eliminated, the number of statements was reduced to 40. These 40 statements evaluated 37
attributes. The revised questionnaire was submitted to two clinical CRNA
instructors for review. They felt the statements were clear, neutral, and assessed
the concept of caring. In addition to supporting content validity through literature
review, peer review, and review by CRNA instructors, content validity was further
supported by review of the instrument by nursing faculty knowledgeable about the
concept of caring.

Cronbach's alpha was conducted after return of all 160 questionnaires in
order to support reliability through internal consistency. The overall Cronbach's
alpha initially was .9221, when all 40 statements were included. Based on
computer generated data, items were deleted to improve the alpha coefficient. The
optimal overall alpha coefficient obtained was .936, which included 33 statements.
Questions were grouped according to the carative factors each represented: (a)
developing a helping-trust relationship, (b) providing a supportive, protective, and/
or corrective mental, physical, sociocultural and spiritual environment, and (c)
promoting interpersonal teaching-learning. Cronbach's alpha was then conducted
on each of these groupings or subscales: (a) relationship, (b) environment, and (c)
teaching (Refer to Table 2).
Table 2

**Alpha Coefficient: Subscales**

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Initial Alpha</th>
<th>Initial # of items</th>
<th>Optimal Alpha</th>
<th>Final # of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship</td>
<td>.8034</td>
<td>15</td>
<td>.8337</td>
<td>11</td>
</tr>
<tr>
<td>Environment</td>
<td>.7458</td>
<td>13</td>
<td>.7971</td>
<td>5</td>
</tr>
<tr>
<td>Teaching</td>
<td>.8763</td>
<td>14</td>
<td>.8763</td>
<td>14</td>
</tr>
</tbody>
</table>

One question assessing equality (item 18 in the CCFCSA), was assigned to all 3 carative factor subscales and analyzed accordingly since this attribute depicts the overall carative factor of a humanistic-altruistic system of values.

**Procedures**

The author's program director obtained permission from the clinical director at four facilities to personally present the survey at each facility's weekly meeting of CRNAs. When feasible the opportunity for personal presentation of the survey was taken in the hope of maximizing response rates. The staff were requested to complete the survey and the opportunity was made for any questions to be answered. No details of the study were given. Participation was voluntary and anonymous. At six other area hospitals where attendance at the weekly CRNA meeting was not feasible, surveys were mailed to clinical coordinators after their assistance was obtained by phone, by the program director. The clinical
coordinators then distributed the surveys to the CRNAs at their institutions. If the surveys were completed at the meeting, they were collected by the author. If time was not allotted for the completion of the surveys at the meeting and for those surveys distributed by the clinical coordinators, respondents were asked to return the completed surveys to their clinical coordinator. After three weeks, clinical coordinators returned completed surveys to the author. The responses to all the surveys were kept anonymous. The surveys were not coded to show hospital of origin, and were not analyzed until all 162 responses had been received.

**Data Analysis**

Demographic data was summarized by computing the mean, range, and percent for each response. Comparison was made of sample demographic data to nationwide figures from the American Association of Nurse Anesthetists (AANA). Scatterplots and graphs were designed to show any correlation between subjects caring scores and demographics. Frequency distributions were conducted. Correlation coefficients were computed to assess the degree of the relationship between caring scores and each demographic variable (age, gender, marital status, years of practice, and level of education). Demographics of sex, marital status and level of education were dummy coded. Multiple regression and an analysis of variance (ANOVA) was conducted. CRUNCH (version 4, CRUNCH Software Corp, Oakland, CA) was utilized to run these analyses. Significance was set at \( p < .05 \).

Analysis of the qualitative data was conducted utilizing content analysis by themes. The same model was used for analysis. (See Figure 1 and 2.) The following themes were identified: (a) developing a helping-trust relationship, (b)
providing for supportive, protective, and/or corrective mental, physical, sociocultural and spiritual environment, and (c) promoting interpersonal teaching-learning.
Chapter IV
Results

Quantitative

Scatterplots revealed no relationship, neither linear nor curvilinear between overall caring scores and demographics analyzed. (Refer to Figures 3, 4, 5, 6, and 7). Frequency distributions were constructed to further analyze the data. Overall caring scores and subscale caring scores were compared by gender since this was the only demographic variable to show a significant relationship with caring. As shown in Table 3, the overall caring scores and the subscale caring scores showed little variation between men and women. This is especially true when median scores are compared, since these scores are the least influenced by the 2 male outlier scores. The two male outlier overall scores of 71 and 77 were considerably lower than the male mean overall score of 190. The 2 male outliers demographics show they are married, have masters degrees, and are between 30 and 43 years old, with 2-8 years of experience. Pearson Product Moment Correlation was performed to analyze research questions two through seven. Multiple regression was performed to analyze research question eight.
Figure 3
Caring Score by Gender

Bars=25th to 75th percentile
Figure 4
Caring Score by Education

Bars=25th to 75th %ile
Figure 5

Caring Score by Marital Status

Bars = 25th to 75th %ile
Figure 6
Caring Score vs Age
Figure 7
Caring Score vs Experience

Caring Practices
### Table 3

**Median, Mean, Standard Deviation, & Range of Overall Caring Scores and Subscales.**

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>200</td>
<td>198</td>
<td></td>
<td>152-228</td>
</tr>
<tr>
<td>Male</td>
<td>198</td>
<td>190</td>
<td></td>
<td>71-223</td>
</tr>
<tr>
<td>Total</td>
<td>199</td>
<td>195</td>
<td>21.4</td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>66</td>
<td>65</td>
<td></td>
<td>51-76</td>
</tr>
<tr>
<td>Male</td>
<td>64</td>
<td>62</td>
<td></td>
<td>25-77</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>64</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>37</td>
<td>37</td>
<td></td>
<td>27-60</td>
</tr>
<tr>
<td>Male</td>
<td>49.5</td>
<td>47</td>
<td></td>
<td>13-56</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>48</td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>84.5</td>
<td>83.8</td>
<td></td>
<td>67-97</td>
</tr>
<tr>
<td>Male</td>
<td>82</td>
<td>79</td>
<td></td>
<td>30-98</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>82</td>
<td>9.8</td>
<td></td>
</tr>
</tbody>
</table>

**Research question #1:** To what degree do clinical CRNA instructors incorporate caring into their clinical student teaching? This question was examined quantitatively by analysis of caring scores. Table 4 shows the median and mean overall caring scores obtained as compared to the maximum obtainable score and the percentages of the sample that achieved these scores.
After conducting Cronbach’s alpha on the survey, the number of items evaluated was decreased to 33. This made the maximal score obtainable 231. Analysis of caring scores obtained to the maximal score possible shows 50% of the sample to have a caring score of 86% or better. Research question 1 was further explored by reviewing qualitative responses. Only 13 of the 160 respondents did not complete the qualitative section of the questionnaire.

The research questions that asked if there exists a relationship between age, years of practice, level of education, marital status, and gender, and the degree of caring of CRNAs in student clinical teaching were first examined by running Pearson correlations comparing demographics and overall caring scores. As shown in Table 5, gender is the only variable showing any significant relationship with overall caring scores.

<table>
<thead>
<tr>
<th>Score</th>
<th>% Caring Score</th>
<th>% Sample Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Score Obtainable</td>
<td>231</td>
<td>100%</td>
</tr>
<tr>
<td>Median</td>
<td>199</td>
<td>86%</td>
</tr>
<tr>
<td>Mean</td>
<td>195</td>
<td>84%</td>
</tr>
</tbody>
</table>
Research question #2: Is there a relationship between gender of CRNAs and their degree of caring in student clinical teaching? This question was analyzed by use of a Pearson correlation ($r = .1768$, $p = .0288$). As shown in Table 5, the zero order correlation indicated a small significant relationship between gender and overall caring scores. It accounts for 3% variance in the dependent variable.

Research question #3: Is there a relationship between age of CRNAs and their degree of caring in student clinical teaching? This question was analyzed by Pearson correlation ($r = .0199$, $p = .8072$). As shown in Table 5, the correlation was not statistically significant.

Research question #4: Is there a relationship between level of education of CRNAs and their degree of caring in student clinical teaching? This question was analyzed by use of Pearson correlation ($r = .0611$, $p = .4528$). As shown in Table 5,
no significant correlation was seen.

The Spearman Rho Correlation was also conducted on the three levels of education ($r = 0.0836, p = 0.2993, N = 156$). No relationship was seen.

Research question # 5: Is there a relationship between marital status of CRNAs and their degree of caring in student clinical teaching? This question was analyzed by the use of a Pearson correlation ($r = -1.011, p = 0.2138$). As shown in Table 5, no significant relationship was seen.

Research question # 6: Is there a relationship between years of practice of CRNAs and their degree of caring in student clinical teaching? This question was examined by the use of a Pearson correlations ($r = -0.0038, p = 0.9630$). As shown in Table 5, no significant relationship was seen.

Research question # 7: Is there a relationship among specific demographic variables and the subscales of caring: (a) relationship, (b) environment, and (c) teaching? Pearson correlations were used to analyze gender and subscale caring scores (refer to Table 6). A significant relationship was seen with caring and the relationship subscale ($r = 0.17, p = 0.030$), and the teaching subscale ($r = 0.19, p = 0.015$). No significance was found with the environment subscale.
Table 6

Correlations Between Gender and Caring Subscale Scores.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Subscale</th>
<th>Multiple R</th>
<th>R square</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Overall</td>
<td>.17</td>
<td>.031</td>
<td>.028</td>
</tr>
<tr>
<td>Gender</td>
<td>Relationship</td>
<td>.17</td>
<td>.037</td>
<td>.030</td>
</tr>
<tr>
<td>Gender</td>
<td>Teaching</td>
<td>.19</td>
<td>.038</td>
<td>.015</td>
</tr>
</tbody>
</table>

*No relationship between gender and environment

Research question #8: What demographic variables are the greatest predictors of caring among CRNA instructors? This question was examined by use of multiple regression and analysis of variance (ANOVA). Refer to Tables 7, 8, and 9.
Table 7

Multiple Regression of Demographics and Overall Caring Scores

<table>
<thead>
<tr>
<th></th>
<th>Squared Partial</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.0021</td>
<td>.5790</td>
</tr>
<tr>
<td>Years of Practice</td>
<td>.0002</td>
<td>.8544</td>
</tr>
<tr>
<td>Level of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>.0033</td>
<td>.4811</td>
</tr>
<tr>
<td>Bachelor's</td>
<td>.0023</td>
<td>.5609</td>
</tr>
<tr>
<td>Master's</td>
<td>.0000</td>
<td>.9467</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>.0111</td>
<td>.1892</td>
</tr>
<tr>
<td>Married</td>
<td>.0089</td>
<td>.2404</td>
</tr>
<tr>
<td>Divorced</td>
<td>.0000</td>
<td>.9504</td>
</tr>
<tr>
<td>Gender</td>
<td>.0312</td>
<td>.0288</td>
</tr>
</tbody>
</table>

Note: Independent variables of gender, level of education and marital status were dummy coded. Age and years of practice were entered unchanged.

As shown in Table 7, only the variable of gender was significant. The squared partial for gender was .0312 with p = .0288. This correlation can be interpreted as the proportion of variance of the dependent variable that is uniquely explained by the predictor variable. Table 8 shows the results of the analysis of variance for the variable of gender on caring. The same level of significance was seen (r = .0312, p = .0288).
Table 8
Multiple Regression (ANOVA)/Variable of Gender on Caring

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Sum of Squares</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>2209.948</td>
<td>2209.948</td>
<td>4.970</td>
<td>.0288</td>
</tr>
<tr>
<td>Residual</td>
<td>151</td>
<td>68515.555</td>
<td>453.745</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 9, no significance was obtained when all demographic variables were compared collectively to the overall caring score by the use of analysis of variance ($r=.0457$, $p=.2252$). With R-square being .0457, only 4% of the variance can be explained by the demographic variables analyzed.

Table 9
Multiple Regression(ANOVA)/Combined Demographics on Caring

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Sum of Squares</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5</td>
<td>3229.301</td>
<td>645.860</td>
<td>1.407</td>
<td>.2252</td>
</tr>
<tr>
<td>Residual</td>
<td>147</td>
<td>67496.202</td>
<td>459.158</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Qualitative

There were 3 open-ended questions at the end of the CCFCSA instrument that requested written responses. Of the 160 returned surveys which were completed accurately, 147 had at least 2 of the questions answered. The responses were analyzed by the author according to which of the following areas they referred to in describing caring in clinical teaching: (a) developing a helping-trust relationship, (b) providing for supportive, protective, and/or corrective mental, physical, sociocultural and spiritual environment, and (c) promoting interpersonal teaching-learning. Most respondents only addressed one area. Most wrote a more lengthy response to question 1, which was: What does caring in clinical teaching of RNAs mean to you? Thirty seven percent described attributes used in developing a helping-trust relationship, 18% described attributes that provide supportive, protective and/or corrective mental, physical, sociocultural or spiritual environment, and 44% described attributes that promote interpersonal teaching-learning. Eight respondents (5%) included more than one area.

The following is a synopsis of responses to question 1 that described attributes used to develop a helping-trust relationship:

Caring involves the realization that the student is in a new situation both in the field of anesthesia and in the particular hospital setting. It involves being empathic and supporting. It means acknowledging the stress created by the "student role". It means that I truly want them to grow as a professional and become the best anesthetist they can become. It involves caring about the whole person, not just their level of skills, but caring about their personality and attitude. Caring is being honest with the student if they are right or
wrong. It means letting the student know I still remember being a student myself and can empathize with their fears and frustrations. It means respecting the RNAS as an established professional (in Nursing) who has chosen to study a new area. We need to acknowledge that students enter our field with a solid knowledge base and that they are adults. It means being available and showing concern and compassion. Caring means doing the best you can to treat students like human beings with feelings. It is being sensitive to the student’s needs that day, emotional and instructional. It involves helping a student to focus on his or her deficiencies and develop possible strategies to deal with these deficiencies, while praising and encouraging proper approaches to clinical problems. It means allowing the RNAS to be an individual and respecting them as another person. It means remembering the only difference between myself and them is the time spent in anesthesia, everything else doesn’t matter. It involves treating students like I would have liked to be treated while a student, with kindness, respect, and understanding. It means being a support system for the student and treating the student as a person, not someone who is there doing the CRNA’s assignment. It means being critical, not insulting. It means a better quality of CRNA when the student graduates. If the student has been treated with respect and caring then hopefully they will carry that on in their professional life.

The following is a synopsis of responses to question 1 that describe attributes used to provide a supportive, protective and/or corrective mental, physical, sociocultural and spiritual environment:
Caring means cooperating to enhance safe anesthesia with the patient in mind. It involves acknowledging that it is very difficult to learn in a hostile, uncaring atmosphere. It means not only meeting knowledge needs, but also the psychological needs of the student to help maintain self esteem. It means providing a comfortable, receptive learning environment for the student, in a nonthreatening milieu, while at the same time providing a safe anesthetic for the patient. It means offering support, encouragement, praise, humor, and an open attitude to allow students to concentrate on the anesthetic, rather than on their evaluation. It means creating a nonthreatening atmosphere where learning can occur without fear of appearing “stupid” or unknowledgeable and setting a good example. It involves orientating the student to clinical, personnel, and political issues. It involves being a strong student advocate and being flexible, in order to create a low stress environment to maximize learning.

The following is a synopsis of responses to question number 1 that describe attributes used to promote interpersonal teaching-learning:

Caring means understanding the level a student is at and helping them attain the next level of practice. It involves having a willingness to accept responsibility for the RNAS. It means facilitating the students learning and promoting independence. It means being flexible to new ideas, which may in turn create a learning experience for the instructor. It means recognizing a student’s learning needs and individualizing your teaching to the student’s level of expertise and past experiences. It involves allowing the student autonomy with clinical decisions and keeping confidential the student’s
communication and clinical development. A caring instructor keeps updated and open to new anesthetic practices. Patience, patience, patience is the cornerstone to being a caring instructor. Caring is providing the absence of threat; constructive criticism, and praise for a job well done. It involves taking that extra effort to make the student’s experience a positive one, working as a team, and seeking out learning experiences for students. It means treating them as adult professionals (adult learners) and not talking down to them. It means helping students to grow and develop in the profession by understanding their strengths and weaknesses and trying to improve their weaknesses in a gentle way. It means taking and “active” as well as a passive role in working with the student. Caring is shown by offering positive feedback daily and delivering objective criticism carefully. Caring shapes a professional peer and is demonstrated by one’s willingness to share techniques and knowledge. Caring influences the way the way students will turn out as anesthetists. It involves guiding students through a safe clinical experience. It means being concerned with the student’s educational development and taking time to listen and explain. It means wanting the student to learn and augmenting the students ability to learn from the present situation by offering one’s own experiences. Caring means hoping the student comes away from the clinical setting, after a positive learning experience, motivated and excited to learn more.

In responding to question 2: What to you is the difference between a caring and noncaring CRNA instructor?, 42% described attributes used in developing a
helping-trust relationship, 16% described attributes that provide a supportive protective and/or corrective mental, physical, sociocultural or spiritual environment, and 42% described attributes that promote interpersonal teaching-learning. One response (.7%) included 2 areas.

The following is a synopsis of responses to question 2 that address attributes used to develop a helping-trust relationship:

The caring instructor sees the student as an opportunity to grow as a clinician. He/she is attentive, available, flexible, empathetic, and takes a genuine interest in the student as a person, as a future CRNA, and as a mature adult who has family, possibly children and another life outside anesthesia. A caring instructor feels a student's frustration and fears and helps them work through them. He/she develops a collegial relationship with the RNAs and treats them as adult learners. A caring instructor shows concern, compassion, patience, kindness, respect, and understanding. He/she puts themselves in the student's place and treats the student as they would want to be treated. The caring instructor takes a more personalized interest in the student, not just in the clinical setting, but in their personal lives. The caring then shows in the quality of the student graduated.

The noncaring instructor sees the student as an imposition and as an opportunity to have an easy day. Often it is a powertrip at the expense of the student, to stroke one’s ego. A noncaring instructor is unavailable, rigid, and critical. A noncaring instructor “gossips” about the student’s weaknesses and judges, rather than accepts, the student’s personality and clinical strengths. A noncaring instructor tends to feel inadequate about their own practice which
tempers their interaction with the student. A noncaring instructor subordinates students and doesn’t refer to student as they would another coworker. He/she is threatening, belittling and makes the student feel as though they’ve been walking on broken glass for 8 hours. A noncaring instructor is sarcastic, intimidating, impatient, and someone who doesn’t keep up with new techniques and theories. A noncaring instructor teaches as if attempting to program a computer and has little regard for a student’s emotional state. The difference between a caring and a noncaring instructor is the difference between respecting the student as an adult and not respecting him/her.

The following is a synopsis of responses to question 2 that describe attributes used to provide a supportive, protective and/or corrective mental, physical, sociocultural and spiritual environment:

A caring CRNA enjoys what they do and wants to pass it on to students and make a pleasant day for everyone. A caring instructor provides an environment conducive to learning, looks for and provides stimulating situations. He/she makes clinical experience relaxed and a fun place to learn.

A noncaring CRNA does not like their job and keeps others around them as miserable as they are. Noncaring instructors insist on doing things only one way—their way. They provide little opportunity for independence. A noncaring instructor is one who does not provide, or wish to provide a positive environment for learning or achieving any of the student’s personal goals toward graduating.

The following is a synopsis of responses to question 2 that describe attributes
used to promote interpersonal teaching-learning:

A caring instructor imparts knowledge and techniques that allow students to provide safe and effective anesthesia care in the future. A caring instructor takes the time to assess the students level of knowledge/expertise and augmenting the students ability to learn from the present situation by adjusting to their experiences and offering his/her own experiences. A caring instructor believes they can make an impact in educating future CRNAs. He/she asks students what they think and what they want to do and listens to their responses. A caring instructor is open minded and enjoys helping the student improve from past experiences as well as classroom objectives. The caring instructor’s primary concern is the development of an excellent CRNA. A caring instructor is willing to ask questions, offer advice and does not intimidate students. A caring instructor makes sure each student gains the maximal positive experience possible for that particular assignment. A caring instructor shows respect for the adult learner. He/she is patient, flexible, understanding, and really wants to help the student learn, while realizing the student is a person with specific needs and an individual personality.

A noncaring instructor only cares about completion of the day’s assignment. Noncaring instructors just put their time in, don’t spend extra time talking to students and teaching them. They leave them alone too much or take their frustrations out on the students by being too hard and harsh. They ask too many questions and are overly critical. Nonteaching, not patient, non informing is an example of noncaring CRNA. A noncaring CRNA instructor is rigid, uninterested, not committed to promoting the
profession, and is in teaching for self gratification. Their emphasis is removed from the student’s needs and placed on their own needs, skill, knowledge, and abilities.

The difference between a caring and noncaring instructor is directly related to the amount or level of involvement by the instructor. It is the difference between someone practicing a profession and just doing a job.

In analysis, Question 3: How would you characterize your instructors? was ambiguous as determined by the responses. Some responded describing their current co-workers. The majority of respondents described the instructors they had in school. They described them as mostly caring and a few not caring, or as a percentage describing caring versus noncaring in number form. Six respondents (3.75%) described their former instructors as noncaring: "rigid, inflexible, not student advocates, not friendly, insulting, inconsistent, critical in front of others, personally insulting, disrespectful, horrible, treated us like dogs, did not respect us as people."
Chapter V
Discussion

The purpose of this study was to explore the degree to which clinical CRNA instructors incorporate caring into their clinical student instruction. A tool was developed to specifically measure caring in this situation. The question remains as to whether the construct of caring is actually measured by this tool. The qualitative aspect of this study helps validate the tool. They corroborate that caring is being assessed by the quantitative statements of the questionnaire because they described the same attributes of caring that were assessed in the quantitative statements.

Clinical CRNA instructors responded that for the majority caring is an important part of their practice in instructing RNAs. This study also indirectly validates and helps strengthen the theory of caring and the ten carative factors of Jean Watson. Analysis of her theory provided a useful foundation for development of an instrument to measure caring and also provided an ideal framework for analysis of caring in clinical CRNA instruction. Further study utilizing this tool is needed.

The caring score cannot be predicted from demographics. Gender was the only demographic that showed any significant relationship with caring scores. Gender demonstrated a significant relationship (p=.028) with overall caring scores, and in the subscales of developing a helping-trust relationship, and promoting teaching-learning; but only 3% of the variance in overall caring score can be explained by gender. This is statistically significant, but analysis without the 2 male outliers equalizes the responses of the 2 groups. Their scores of 71 and 77 were more than five standard deviations away from the overall male mean score of 190. (Refer to Table 3). These results are in contrast to the quantitative caring
study of Nkongho (1990) who quantitatively assessed caring in a group of college students and in a group of nurses and compared scores between the male and female college students and between the students and nurses. She found a difference in caring scores between male and female college students. Her assessment of caring in nurses did not differentiate between gender, if indeed both genders were evaluated. An explanation may be that nurses, whether male or female, are more caring than the general public. In the present study age, years of practice, level of education and marital status showed no relationship to caring scores. Demographics showed no significant ability to predict caring among CRNA clinical instructors.

The response rate of 57% was much better than expected. The respondents may simply have been interested in filling out surveys or may have been demonstrating their degree of caring by completing the questionnaire. CRNAs that are not caring possibly chose not to participate. This self selection may have resulted in CRNAs that have a greater degree of caring being the majority of respondents. There was no difference in response rates when comparing personal distribution versus distribution of surveys by clinical coordinators.

A high level of caring, as measured by this instrument, was demonstrated by the majority of clinical CRNA instructors. Being a self assessment could influence the actual representation of caring in these CRNAs. The desire to report a socially desirable response might have also influenced the representation of caring in this sample. The author was advised by a number of respondents to remember that responses would be from the subjects perception and might not be a true picture of his/her actual practice. It would be helpful in the future to compare CRNA self
perceptions of their caring practices with students perceptions.

Another possible limitation of the study is the ambiguity of qualitative question number 3 which states: How would you characterize your instructors? In addition, the fact that analysis of the qualitative data was conducted solely by the researcher and not validated with a second opinion, may be a limitation.

Qualitative data demonstrate that the majority of respondents feel caring is part of the practice of a CRNA in a clinical teaching setting. Even respondents who only listed safety as a primary concern demonstrated caring by focusing on creating the appropriate environment. The thought and emotion involved in the majority of written responses were clearly evident and very moving. That the majority of clinical CRNAs care about instructing students is evident. The majority of responses listed attributes that describe one particular subscale. They either wrote of attributes that develop the relationship, attributes that provide for the environment or attributes that promote teaching. This narrow scope of focus may be reflective of the lack of formal education in clinical teaching. "Teaching in the clinical setting requires a supportive learning environment, development of caring relationships with learners and use of effective teaching behaviors" (Reilly & Oermann, 1992, p. 148). The knowledge needed to become a caring clinical CRNA instructor is not presented in nurse anesthesia education. It must be learned through the individuals own endeavors, which may be either formal or informal education, or through experience. Caring and being able to demonstrate caring behaviors within a teacher-student relationship is deemed necessary in nursing education today (Reilly & Oermann, 1992). A tool that measures this, such as the one developed, may prove valuable to institutions that employ CRNAs as clinical
instructors. Institutions may want to hire CRNAs that have a high degree of caring, in order to promote education and learning in their institution. They may find it of interest that demographics had no bearing on caring scores and this too may affect their hiring practices. It also might be utilized as an instructor evaluation tool and completed by students giving their perception of the instructor.

With the emphasis on instruction in a clinical setting in nurse anesthesia, the role of instructor is paramount. "In the dynamic phenomenon of teaching-learning, it is the teacher who must assume the primary responsibility for the quality of the learning environment relative to the prevailing climate, availability of resources and process of goal-directed learning." (Reilly & Oermann, 1992, p. 44). The primary responsibility is the instructors. But the academic and clinical institutions involved need to provide the necessary resources to accomplish this. This should include classes in effective teaching, time allocation for instruction in effective teaching techniques, and incentives for instructors. Becoming a clinical CRNA instructor should be a conscious, deliberate decision. It requires attributes and education that go beyond that of an capab practitioner. It requires a dedicated commitment to the continuation of the profession.
References


In M. Leininger (ed.), *Care: The essence of nursing and health*. Detroit, Michigan: Wayne State University Press.


Zimmerman, L. & Waltman, N. (1986). Effective clinical behaviors of faculty: A

Appendix A

Clark Clinical Faculty Caring Self-Assessment

Please circle the appropriate response.

1. Do you instruct RNASs in a clinical setting?
   Yes  No

2. Your age: _____

3. Your sex:
   M   F

4. Number of years of practice as CRNA: _______

5. Highest level of education in anesthesia:
   Certificate  Bachelor's degree  Master's degree

6. Marital Status:
   Single  Married  Divorced  Widowed

Please answer the following statements about your practice in the clinical setting with student RNASs. There are no right or wrong answers. Use the scale listed to record your response.

1  2  3  4  5  6  7
   strongly disagree  strongly agree

1. I make myself easily accessible to students.  strongly disagree  strongly agree

2. I ask students if they need any assistance before they have to ask me.  1  2  3  4  5  6  7

3. I evaluate students consistently, according to their level of learning.  1  2  3  4  5  6  7

4. I make a real effort to make students feel at ease.  1  2  3  4  5  6  7

5. I find it difficult to make students feel part of the group.  1  2  3  4  5  6  7

6. I think students feel vulnerable in clinical.  1  2  3  4  5  6  7
7. I feel I am a good role model.

8. I assess the clarity of my communication by asking for feedback from students.

9. I'm not concerned with how students are coping with school/clinical.

10. I talk to students in the same tone of voice I use to talk to co-workers.

11. I don't feel I should have to take the time to explain new procedure to students.

12. There's little I can do to help a student improve their practice.

13. I remember how it feels to be a student.

14. I let students take the initiative in handling the case.

15. I really like working with students.

16. I don't help a student think through processes/options.

17. I don't receive any gratification from working with students.

18. I realize students have previous nursing experiences that may be different from my own.

19. I think orientation to the physical environment is not part of my duties.

20. I offer practical suggestions to students while they're doing procedures.

21. I welcome new students into the field of nurse anesthesia.

22. There's nothing I can do to make a student have more faith in himself/herself.
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<tr>
<td>23.</td>
<td>I help students develop goals for the day, based on their level of learning, and help them achieve them.</td>
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<td>24.</td>
<td>I say what I mean in my interactions with students.</td>
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<td>25.</td>
<td>I try to make clinical a fun place to learn.</td>
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<td>26.</td>
<td>I feel there’s no place for humor in a clinical setting.</td>
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<td>27.</td>
<td>I let students know that I’ve developed a “sixth sense”, or sometimes go by my “gut feeling”, when making a clinical decision.</td>
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<td>28.</td>
<td>I realize the importance of the role I play in educating students.</td>
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<td>29.</td>
<td>I don’t think I influence students’ learning.</td>
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<td>30.</td>
<td>I usually make assumptions about students needs without asking for their input.</td>
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<td>31.</td>
<td>I don’t feel it’s necessary to let students know when they’ve done a good job.</td>
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<td>32.</td>
<td>I realize it may take students longer to do things then it takes me.</td>
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<td>33.</td>
<td>I don’t believe I should inform a student about a surgeon’s unique personality.</td>
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<td>34.</td>
<td>I don’t like to relate other experiences in my practice to students.</td>
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<td>35.</td>
<td>I question students the same as I question patients or co-workers.</td>
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<td>36.</td>
<td>I’m flexible as far as the anesthetic plan is concerned, as long as it’s safe.</td>
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<td>37.</td>
<td>I ask students permission before I leave them alone.</td>
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38. I’m more concerned with what a student does than how he/she feels.  

39. I feel uneasy touching a student’s shoulder or arm when offering praise/comfort.  

40. I trust students to tell me when they need help.  

Please answer the following with short responses.

1. What does caring in clinical teaching of RNAs mean to you?

2. What to you is the difference between a caring and noncaring CRNA instructor?

3. How would you characterize your instructors?